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On the Distance Between Traditional and DH-Based Genre Theory

Introduction

›Distant reading‹ approaches to investigating literary genre are relatively new but flourishing. Not only are new methods explored but it is also assumed that some problems that have engaged literary studies and some neighboring disciplines such as philosophical aesthetics or linguistics for some time can be fruitfully tackled with these new methods. In this paper, we take a closer look at two influential studies that employ DH-methods (›distant reading‹) on genre theory: Andrew Piper's »Fictionality« (2016) and Ted Underwood's »The Life Cycles of Genres« (2016). Each study identifies certain research topics that have been tackled by the theory of genre, and within these topics certain explanatory targets are singled out and addressed by certain methods and with certain results. We thus start by asking the following two questions:

(1) What is the traditional research topic that is addressed, and what are the explanatory targets?
(2) How are the explanatory targets addressed, and what results do they offer?

Our focus in this paper is then on answering the following question:

(3) Do these studies really answer to the questions they (explicitly) set out to answer, and are they successful in doing so?

Answering this question amounts to clarifying whether the methods employed really do promise to address the designated explanatory targets, and to assessing whether they are successful in doing so. In our discussion, we shall not go into any details concerning the methods employed (including corpus selection, statistics, computational modeling, i.e., the peculiarities of ›distant reading‹ as a cluster of computational methods). Rather, we shall explain in some detail what we take to be the gist of the traditional explanatory targets identified; these include answering the questions »What is fictionality?« or »Does a particular literary genre persist in a certain period?« Being clear about these questions and the success conditions of their answers is important because otherwise you would not know what counts as an answer.

Two precautionary notes before we begin: First, the two studies we have selected for scrutiny are considerably rich in scope, and we do not take issue with all their topics/targets. However, we do think that the topics/targets we single out are not only somewhat central to the studies under discussion (as they are explicitly addressed by their authors) but also to DH-based genre theory more generally (although we shall not try to prove this point by giving a comprehensive survey of the field). Thus, our main goal is not to quibble with the two studies in particular, but rather to work out something more general about the potentials of DH-methods when it comes to (traditional) genre theory.

Second, by ›genre theory‹ we rather generously refer to any theory that tries to answer the questions (a) »What is *G* or what are the constitutive properties of *G*?«, where *G* refers to a genre like for instance the historical novel or fiction; (b) »How does *G* develop over time?«; and/or (c) on a more abstract level »What do the questions (a) and (b) mean and how can we answer them?«. In asking questions (a) to (c), we moreover subdivide the broad and multifaceted field of genre theory into DH-based approaches on the one hand, and all other approaches on the other hand. These other approaches are, for purely pragmatic reasons, labelled ›traditional‹ genre theory. While this way of lumping together putatively diverse approaches may initially strike one as hopelessly imprecise, it is precisely one task of this paper to identify *particular* research questions (›explanatory targets‹) within this broad and diverse field, and see whether, or to what extent, DH-approaches can be said to further our understanding concerning them. (This will include addressing the million dollar question »What is genre?«. In some sense our considerations could be said to center around this question.) In any case, however, it will not be our goal here to systematize the aims, methods, or disciplinary units of (what we call) ›traditional‹ genre theory.[1]

1 Andrew Piper: »Fictionality« (2016)

1.1 Traditional Research Topics

In his paper »Fictionality« (2016), Piper addresses several different research topics: the history of the novel, realism, cultural functions of fiction and questions concerning the emergence of fictionality. In our discussion we shall leave these topics aside and focus on genre theory more narrowly construed, i.e., research into the conceptual apparatus that allows for the classification (distinction, grouping) of texts, the genre in question being fiction.[2] In what follows, we shall briefly explain what we take to be the main explanatory targets regarding this topic. We take it that there are at least three such targets: (i) the nature of fictionality; (ii) signposts of fictionality; and (iii) textual markers prompting (rather than justifying) a reader's classificatory practice. Let's briefly explain each of these in turn:

(i) As a look into encyclopedias, handbooks, introductory textbooks etc. quickly reveals, understanding the nature of fictionality is a much debated explanatory target in literary studies and philosophical aesthetics. Talk about the ›nature‹ (or ›essence‹) of something (X) amounts to answering a »What is X?« question. Any fictional representation will have many features that have nothing much to do with its being fictional. But there are other features which constitute its being fictional and hence are part and parcel of the ›nature‹ of fictionality. Now, while talk of the ›nature‹ of something may sound metaphysically dubious, »What is X?« questions can be fruitfully understood as requesting a definition of the corresponding concept ›X‹. Thus, the question »What is fictionality?«

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1 | Thanks to the editors, and to Michael Vauth, for pressing this point.

2 | For an explicit discussion of ›fiction as a genre‹, see our note 68 below. When Friend speaks of »fiction as a genre«, she refers to texts which are fictional, i.e., possess the property of fictionality. It is this usage of ›fiction‹, ›fictionality‹, and ›fictional‹ that we employ in this paper. (Stacy Friend: »Fiction as a Genre«. In: *Proceedings of the Aristotelian Society* 112 (2012), pp. 179–209) With the rare exception of so-called ›pan-fictionalist‹ approaches, pretty much everybody seems to agree that some texts are fictional while others are not (for discussion, see Eva-Maria Konrad : »Panfiktionalismus«. In: Tobias Klauk and Tilmann Köppe (eds.): Fiktionalität. Ein interdisziplinäres Handbuch. Berlin / Boston 2014, pp. 235–254.).

amounts to giving a definition of the term ›fictionality‹ in terms of necessary and sufficient criteria – criteria, that is, which single out the features that constitute the fictionality of some representation (such as a text) and thus allow for the differentiation of representations that are fictional from entities that are not. Note that talk of a ›definition‹ is just a convenient way of making sense of claims on the ›nature‹ of something; it does not mean that one shifts one's interest from the ›thing‹ to an interest in designating that thing by means of words.[3] To repeat, an interest in the definition of ›fictionality‹ is an interest in fictionality, and a successful definition of ›fictionality‹ encapsulates a theory of fictionality, i.e., what one takes to be its ›nature‹. We adopt talk of a definitional project here simply because it is both metaphysically innocuous and allows us to be fairly clear about what counts as success in this project.

Now, Piper is explicit that his research is meant to contribute to clarifying the nature of fictionality. He thus claims that his discussion pertains to the question of »whether there are inherent features of being fictional«,[4] and he claims that »here I want to study the particular features that are indicative of fictional writing and what those features have to tell us about the nature of fictionality […]«.[5]

(ii) The second explanatory target that we've identified in the study concerns what is often called signposts of fictionality. Signposts of fictionality are textual (or contextual) markers bearing a certain normative status: they serve as (defeasible) reasons for classifying a stretch of discourse as being fictional. Thus, in trying to justify the classification of a stretch of discourse (such as a text) as being fictional, one may point to certain markers. These would then speak in favor of the classification being correct.

There are several formulations in Piper's study which suggest that signposts of fictionality are what he is after: »How do we know when a text is signaling that it is ›true‹ or, by extension, not true?«[6] Or: »This article is about understanding the differences between fictional and nonfictional texts, the signs that signal to readers when a story is true or not-true«.[7]

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3 | Cf. Richard Robinson: *Definition*. Oxford 1954, pp. 32–33.

4 | Andrew Piper: »Fictionality«. In: *Journal of Cultural Analytics* 2.2 (2016), pp. 1–29, here p. 1. DOI: 10.22148/16.011.

5 | Ibid., p. 4, note 4. See also p. 7: »What I ultimately hope to better understand here then is this center of gravity, the ways in which fiction distinguishes itself as a kind of writing«. References to the ›nature‹ of fictionality are also made on pp. 6 and 9. See also p. 27, where he speaks of his project as »trying to distinguish fiction from non-fiction« and »locating what makes fiction and the novel unique as types of writing«. There are also some remarks that are consistent with the goal of specifying the ›nature‹ of fictionality, such as talk of »the space of fiction's apartness« (p. 29), which suggests a reference to what distinguishes fiction from non-fiction, hence, to defining features.

6 | Ibid., pp. 1–2. Note that Piper has explicitly framed this question as being about our knowledge about the »signaling« of some text. This suggests a setting where the subject is in a position to justify his or her assumption (as knowledge is traditionally assumed to involve a subject's access to what counts in favor of the respective proposition). On a side note, we should mention that it is certainly not correct to equate ›not true‹ and ›fictional‹. Most notable theories of fictionality maintain that the distinctions fictional/non-fictional and true/not true (or, as Piper also has it, ›imaginariness‹) do not match. While ›true‹ is predicated of sentences (or contents of sentences), ›fictional‹ is also predicated of utterances (of sentences). What is more, a work of fiction can contain true sentences that are to be imagined (i.e., form part of the content of the fiction), hence these sentences are both true and fictional. We shall not take further issue with this problem here; for some discussion, see Stacy Friend: »Fiction as a Genre« (ref. 2). See also Piper's note 3 on p. 2, for an attempt at clarification.

7 | Ibid., p. 3. Similarly, on p. 6 Piper speaks of the »powerful and extensive ways that texts mark themselves for their readers according to their fictional nature«.

(iii) Contrasting with signposts of fictionality, there are also textual markers that prompt a reader's classification of a text as being fictional. These textual markers operate at a sub-personal level. Thus, they pertain to a causal story underlying a reader's perception/classification of a text as fictional (or non-fictional). Readers typically are not aware of these causal processes, or of whatever serves as their input, and likewise they are unable to point to them in order to justify their classification. Quotes from the text that give support to the idea that this is Piper's explanatory target include:

> Fictionality is a feeling we get as readers from the likelihood of seeing all of these words flash across the page, words like ›feeling‹, ›knowing‹, ›seeing‹, ›remembering‹, ›almost‹, ›possibly‹, ›vaguely‹, and a variety of forms of negation, of the not. This is the space of fiction's apartness.[8]

Also, Piper translates identified quantitative differences between fiction and non-fiction into page- and work-relative numbers in order to make their influence on human readers' experience plausible:

> Because percentages are somewhat opaque in terms of a reader's experience, I will generally be translating these numbers into page and work equivalents in the discussion that follows. This allows us to imagine our way into a reader's experience and surmise which features occupy more of a reader's attention.[9]

1.2 Methods

Now, having identified three traditional explanatory targets from within the topic of fictionality, let's turn to our question (2): With what methods does Piper address these explanatory targets, and with what result?

It's hard to do justice to Piper's complex approach in one or two paragraphs, because he thoughtfully combines predictive modeling with descriptive methods. While description – Piper tells us – »is in many ways much closer to the traditional task of literary criticism than prediction«, it is the combination of descriptive and predictive modeling that »allows us to think both categorically – about the relative coherence of writing under certain conditions – as well as qualitatively about the specific aspects of writing regardless of drawing definitive boundaries around things«.[10]

Piper's main weapon is predictive modeling, a form of supervised machine learning that is used to predict outcomes or classifications. Specifically, he uses large collections of documents labeled as ›fiction‹ or ›non-fiction‹ to predict which category a document belongs to. The features that serve as input to his models are »drawn largely from the LIWC software«.[11] LIWC (Linguistic Inquiry and Word Count) is a tool which analyzes syntactic and semantic features of texts in order to describe them quantitatively with more than 80 categories. Concerning the semantic categories, LIWC compares each word in the text against a user-defined dictionary and assigns the words found to semantic, often psychologically significant categories.[12] Piper uses a machine learning algorithm known as SVM

8 | Ibid., p. 29. Talk of »signal« (pp. 3, 6, 27, 29) may both be read in a normative (justificatory) or non-normative (causal) way.

9 | Ibid., p. 15.

10 | Ibid., p. 9.

11 | Ibid., p. 11.

12 | Cf. Yla R. Tausczik a. James W. Pennebaker: »The Psychological Meaning of Words: LIWC and Computerized Text Analysis Methods«. In: *Journal of Language and Social Psychology* 29.1 (2010), pp. 24–54 and the LIWC-website: https://liwc.wpengine.com/how-it-works/ (accessed October 16, 2020).

(Support Vector Machine) and 10-fold-cross-validation, so randomly dividing his corpus ten times into training data and test data, in order to train the model and test its reliability. Depending on the corpus used he is able to predict the right classification (›fiction‹ vs. ›non-fiction‹) with a probability from 91% to 99% percent.[13] He further shows that it is possible to train a model on fiction from one period (the 19th century) and still accurately predict the labels of documents from another period (20th and 21st century).

Beside predictive modeling Piper uses what he calls descriptive models to gain insights into the most distinctive features between the two text classes. Specifically, he calculates the median frequency of every LIWC-feature in the fiction collection and in the non-fiction collection – a process he repeats for different corpora and sub-corpora. By comparing the differences between these two values he aims at identifying the most distinctive features for fiction vs. non-fiction. His most general finding is that »the features that are most indicative of fictionality are driven by dialogue – exclamation marks, question marks, quotation marks, first and second person pronouns like ›I‹ and ›you‹, assent words like ›yes‹, ›okay‹, and ›oh‹, and finally the word ›said‹«.[14] Along with features related to dialogue he finds that the frequent occurrence of third person pronouns, reference to family members, and body words are among the most distinctive features of fiction.[15]

1.3 Discussion

Now let us turn to our question (3): Do the results of these studies answer, or help to answer, the traditional research questions identified?

We start with topic (i), the nature of fictionality. It is convenient to start our discussion with Piper's qualms with Searle's take on the matter. Piper claims that

> fictionality emerges as a highly legible category at the level of linguistic content (lexis in Aristotelian terminology). Such legibility is what allows us to build predictive models that can identify works of fiction with greater than 95% accuracy, and it should be added, that allow human readers to do the same (as in my initial experiment above). Contrary to the beliefs of the philosophers of language or different schools of literary critics from poststructuralists to postclassical narratologists, truth claims in language (or their opposite fictionality) are a highly recognizable linguistic aspect of texts. What appeared to be the case at the level of the sentence or ›utterance‹ (what Searle rather vaguely called a ›stretch of discourse‹), no longer holds when we observe writing at a different level of scale. Placing all of the emphasis on the reader's activity, whether as cognitive predisposition or interpretive freedom, overlooks the powerful and extensive ways that texts mark themselves for their readers according to their fictional nature.[16]

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13 | Cf. Piper: »Fictionality« (ref. 4), p. 14, table 3.

14 | Ibid. pp. 15f.

15 | Cf. ibid. pp. 16f.

16 | Ibid., pp. 5f. Piper takes these findings to pertain to the following questions: »Are there indeed no syntactic or semantic properties, as Searle contends, that allow us to predict whether something is intended fictionally? Is fictionality exclusively a function of communicative context, the intentionality of the writer and the belief-system of the reader? Or are there features that appear with a high degree of regularity in fictional texts that do not appear in non-fiction such that even a computer can make accurate guesses as to the nature of the text?« (pp. 12f.) – We note in passing that this misconstrues Searle's point. Searle does not claim that one cannot predict on the basis of the text whether something is intended as fictional or not. His claim is rather that particular textual features are neither necessary nor sufficient for something to count as fiction (see below). Also, the gist of Searle's

Piper seems to think that his results challenge Searle's claim that »[t]he utterance acts in fiction are indistingiushable [sic] from the utterance acts of serious discourse, and it is for that reason that there is no textual property that will identify a stretch of discourse as a work of fiction«.[17] Thus Piper claims (to repeat): »What appeared to be the case at the level of the sentence or ›utterance‹ (what Searle rather vaguely called a ›stretch of discourse‹), no longer holds when we observe writing at a different level of scale«.[18]

Now, in order to assess whether Piper's findings may indeed count as a challenge to Searle's claim, we need to remind ourselves what Searle is up to in the first place. As becomes clear from his »The logical status of fictional discourse«, Searle wants to give an answer to the question ›What is fiction?‹, thus supplying a definition of ›fiction‹ in terms of necessary and sufficient criteria. ›Necessary‹ means that a »stretch of discourse« must have the relevant feature in order to count as fiction; ›sufficient‹ in turn means that once a stretch of discourse exhibits the feature, it thereby does count as fiction. Taken together, necessary and sufficient criteria capture the ›essence‹, or ›nature‹, of something in the sense that they specify what all things belonging to some category, and only they, have in common. Note that if one can find counterexamples to one's attempt at definition, that's not a minor inconvenience, something to be neglected due to its statistical insignificance (in that it may become virtually invisible if you consider larger amounts of text), but it indicates that one has not touched the heart of the matter – the very nature of the thing in question, that is – yet.

Searle's claim that »there is no textual property that will identify a stretch of discourse as a work of fiction« has to be read against this backdrop: there is no textual property that is either a necessary nor a sufficient criterion for a text to count as fictional. Since Piper has found no textual property that contradicts this thesis, he has not (successfully) challenged Searle's thesis. Now, leaving the debate with Searle aside for the moment, do we have reason to believe that Piper has specified the nature of fiction?

First, one must be careful not to conflate reliable means of identifying something with being able to specify the ›nature‹ of that thing. Consider an analogy: A reliable means of identifying cars consists in simply looking. If you see something that is driving in the street and looks like a car, then you have a high chance that what you see is indeed a car (as there are currently very few mock cars out there, if any). But the feature of looking like a car arguably does not get us to the ›essence‹ of cars. Why not? One answer is that something may look like a car and be something else (say, a mock car). Having a car-like appearance is therefore not sufficient for being a car. And it's also not necessary. Some avantgarde experimental cars may look entirely different, like flying saucers, say. Another answer would be that this definition is practically useless. It locates cars amongst the visible things as their genus proximum, and it specifies them as having a particular (car-like) outward appearance. We can think of no real (as opposed to thought-experimental) context in which this would be a useful classification. Now, if we transfer this consideration to our problem, a similar result is rather obvious: a reliable means of identifying fiction

account of fiction is not to be seen as pertaining to psychological factors such as »intentionality of the writer and the belief-system of the reader« but rather to certain rules or conventions of language. See our note 23 below.

17 | Ibid., p. 4.

18 | Ibid., pp. 5f. Although we shall not go into this matter here, there is a rather simple way of refuting this claim. Quotation is a linguistic means that can be used in non-fictional (hence ›serious‹ in Searle's sense) discourse. Any fictional utterance (irrespective of its length) can be quoted and thus turned into serious discourse. Hence Searle's observation holds true at any »level of scale«.

is asking your expert librarian for her judgment. But since she may be wrong, her classificatory judgment is not sufficient for the text in question being fictional.[19] Similarly, a reliable means of identifying fiction is using one of Piper's predictive models. But since these models can be wrong, the classification done by the model is not sufficient for the text in question being fictional.

A related argument that undermines the assumption that Piper's methods have revealed the nature of fiction takes the usefulness of a definition as starting point. Somewhat generally speaking, concepts can be thought of in terms of their functional role in thought and language. They structure reality for us by grouping things in ways which are useful. As Austin has it, »our common stock of words embodies all the distinctions men have found worth drawing, and the connexions they have found worth marking, in the lifetimes of many generations«.[20] The connections in question can be spelled out in terms of interesting generalizations that hold true over class members: if two items *A* and *B* fall in some common class (i.e., if they satisfy the criteria necessary and sufficient for some concept) then it is true of both *A* and *B* that they have feature f.[21] Now, a definition is useful if the defining features it lists in the definiens capture the connections concept users »have found worth marking« regarding the items in question, i.e., if they reflect features that are the subject of interesting (useful) generalizations. Think of ›water‹, defined as a clear, drinkable, tasteless liquid; here the term is defined in terms of features which place some item relative to the interests belonging to the ingestion of food; or think of ›water‹ defined as H_2O; here the term is defined in terms of features being subject to the generalizations of modern chemistry. Whether or not a generalization is ›interesting‹ will, generally, depend on some human practice (the practice of eating and drinking, say, or the practice of investigating into the molecular structure of small particles).

In a nutshell, a definition is useful if, by way of its defining features, it locates members of the category relative to a particular context of use, where ›use‹ is defined by the practice or practices of a community of language users. This is, to echo a phrase from Strawson, »the background of theoretical or practical concern from which [concepts] derive their life and their force«.[22] In the case of literary studies in particular, a definition of a theoretical term (such as ›fictionality‹) is useful if it locates the term relative to the interests of an established practice (i.e., if it specifies features of items that have been deemed interesting by the people who act according to the practice).

Now, Searle's definition of fictionality does precisely that. Searle's idea is that ›fictionality‹ is a communicative (contextual) feature of rule-governed language use, something that essentially concerns the norms governing the attitudes of speakers and hearers.[23] His

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19 | And, again, neither is it necessary. There will be many fictional texts that are never classified by this very librarian.

20 | J. L. Austin: »A Plea for Excuses«. In: *Proceedings of the Aristotelian Society* 57 (1956/57), pp. 1–30, here p. 8. Austin speaks of vernacular concepts here, but the same is true of the vocabulary of literary studies, see Stein Haugom Olsen: *The Structure of Literary Understanding*. Cambridge 1978, p. 124.

21 | Cf. Rudolf Carnap: *The Logical Foundations of Probability*. Chicago 1962, pp. 5f.

22 | Peter Strawson: »Categories«. In: *Freedom and Resentment and Other Essays*. London / New York 2008, pp. 119–146, here p. 126.

23 | See Alberto Voltolini: »The Nature of Fiction/al Utterances«. In*: Kairos. Journal of Philosophy and Science* 17 (2016), pp. 28–55. Searle is sometimes rephrased as giving an account of fictionality in terms of the psychological feature of pretense (see Peter Lamarque a. Stein Haugom Olsen: *Truth,*

idea is that we need to understand the pragmatic rules that allow for fictional speech in order to understand the nature of fictionality. The accordant definition thus locates fictionality amongst other features of language that have been the subject of prolonged interests of linguists and philosophers (namely the rules governing language use).

Arguably, it is hard to identify something similar in the case of a definition of ›fictionality‹ in terms of quantitative (or probabilistic) features of some textual item (such as the word ›say‹, or the probability of the word ›say‹ to appear on the page). These features and their quantities do not reflect any connections among items language users have »found worth marking« (or so it seems).[24] Moreover, it is hard to see why there would be this very concept of fiction in the first place, as it doesn't seem to reflect any distinction worth making (such that there is a practice that draws on, or otherwise involves, making just these distinctions).[25] The features in question (word frequencies, or probabilistic features such as the probability of a certain lexical item to appear in a work of fiction, or on a single page) are perhaps never the features that are of particular interest to either laymen or literary scholars such that those features will make them want to put certain items in a class and distinguish them from members of other classes. In any case, they do not motivate a distinction between fictional and non-fictional texts, nor are they explanatory of this very distinction. The quest for the nature of fictionality is a quest for what makes fictionality special as a social (linguistic) practice – i.e., special in terms of the notable features of the linguistic practices we know and engage in. Searle's paper owes its reputation as a landmark to the fact that he locates fictionality relative to precisely this, thereby furthering our understanding of some significant aspects of (the workings of) our language. Fictionality, we come to see thanks to his account, concerns the dos and don'ts of language users, i.e., things they are committed to and accountable for. These are some highly important features of language use, and consequently they have received a lot of attention from linguistic theory and philosophy. The account of the ›nature‹ of fictionality that emerges from Piper's study does not achieve any of that.[26]

We conclude that Piper's approach to answering the question »What is fictionality?« (resp. specifying the nature of fictionality resp. supplying a definition of the term ›fictionality‹) is not helpful. By relying on countable (hence syntactically available) features only, it neither reflects some interesting features of the items in question nor does it explain why they are lumped together under a concept in the first place.

So, let us turn to our discussion of explanatory target (ii), signposts of fictionality. To repeat, signposts of fictionality are something you can point to in order to justify

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Fiction, and Literature. A Philosophical Perspective. Oxford 1994, pp. 62–64), but this clearly misses the point. The explanatory work of his account is done in terms of rules of language.

24 | Leaving aside elevenies, there seem to be not many literary genres based on word quantities.

25 | What would the accordant *genus proximum* look like, anyway?

26 | One final note: If Searle is right in locating fictionality in the normative structure of language, i.e., if the *genus proximum* in question (of which fictionality is a particular instance) is our rule-governed language use, then Piper's attempt at spelling out fictionality on the level of countable (hence syntactically available) syntactical and semantic features would be *categorically* wrong. – We hasten to add that this does not mean that Piper's findings are uninteresting *tout court*. Quite the contrary, they are highly interesting both in themselves and when it comes to explaining, say, the cultural functions of the novel. However, as we have noticed at the outset of this paper, this is not what we are concerned with here. Rather, our concern here is with the relevance of Piper's findings to the ›nature‹ of fictionality. More generally we are trying to get a clearer picture of the applicability of DH-based results to research topics in traditional genre theory, the ›nature‹ of fictionality being amongst them.

a classificatory judgment (hence epistemic criteria). Signposts of fictionality have their place in a context where you want to know of a particular text whether it is a piece of fiction or not. (Typically, you want to know how to read this text, i.e., what counts as understanding it properly.) How do Piper's findings fare regarding this research topic?

One obvious result is that Piper does come up with a list of signposts: »exclamation marks, question marks, quotation marks, first and second person pronouns like ›I‹ and ›you,‹ assent words like ›yes,‹ ›okay,‹ and ›oh,‹ and finally the word ›said‹«.[27] In itself, however, coming up with a list of signposts is hardly an impressive result, as it is very easy to come up with further textual items which also serve as signposts – words like ›dragon‹ or ›wizard‹, phrases like ›once upon a time‹ or ›they lived happily ever after‹, grammatical constructions like free indirect discourse and, last but not least, paratextual labels such as ›novel‹ or ›one-act play‹. Signposts, after all, are meant to be signposts, i.e., easily detectable clues that help us categorize texts.

Also, we need to carefully validate Piper's statement that the above-mentioned features are »the features that are most indicative of fictionality«.[28] »Most indicative« arguably does not mean that these features bear the strongest normative force, i.e., that they outweigh the reason-giving force of other (or even any other) textual or paratextual feature. Think of a sociological transcript of a dialogue. Here, you may find all the features from Piper's list, but their presence is outweighed by other features.[29] Epistemic criteria are defeasible – and so are the signposts from Piper's list. The only exception to this is epistemic criteria which are also sufficient criteria for fictionality. If someone truthfully claims that he or she speaks in accordance with the norms that govern the institution of fictionality, and if there is no reason to assume that he or she has been unsuccessful in doing so, then we do know that what we are dealing with is a piece of fictional discourse. These epistemic criteria, however, are unavailable to Piper, as his methodology precludes him from considering paratextual signposts of fictionality. Arguably, in most contexts the textual features mentioned on Piper's list are comparatively weak in normative force. They are easily outweighed by any features that are more revealing of the speaker's intentions of speaking in accordance with the norms of the institution of fiction. Again, the most common, and also most obvious, way of doing so is paratextual labelling or other means of contextual/situational signaling. Novels are called such on their title page, jokes are announced as such or part of a joking session, the actor on stage is part of a theatrical performance, and so on.

This brings us to our second point. »Most indicative« (in the phrase »the features that are most indicative of fictionality«)[30] should be taken to refer to the highly artificial perspective of computational analysis only. The computer is trained to ›read‹ the fictionality of a stretch of discourse from the page alone, as it were, i.e., without any situational (contextual, paratextual) information. This is highly artificial in that the texts are bereft of their communicative context. If you are dealing with these ›data‹ alone, then the items on Piper's list are indeed »most indicative« of fictionality (or so we assume). In other words: when, and only when, all the usual means of identifying a work as fiction are unavailable (or else fail), then you may resort to the items on the list. We take it that the occasions on

27 | Piper: »Fictionality« (ref. 4), pp. 15f.

28 | Ibid., p. 15.

29 | Or think of p. 16, or many other pages, of Piper's text, for that matter.

30 | Ibid., p. 15.

which one is present with a text that is accordingly truncated are rather rare.[31] What is more, beyond such rare occasions there simply is no reason for human readers to apply these computational strategies when it comes to backing up one's judgment that a text is fictional (or not).

From the foregoing we conclude that we also shouldn't credit Piper's methods for having validated signposts of fictionality (for human readers, that is). Such a validation should refer to assessing the normative strength of signposts, and there is not much reason to believe that this is what the studies show. What is in the background, of course, is this: The computer does not deal with normative issues, nor does it need to, and it is bad at providing help with assessing the normative status (i.e., the reason-giving force) a feature may have or not have in a particular context. We conclude that regarding the traditional research topic of signposts of fictionality, Piper's findings are not of much help.

Now let us turn to the third topic we have identified above: (iii) textual markers prompting (rather than justifying) a reader's classificatory practice. The basic idea here is that a reader's classification may be a sub-personal level process that is prompted by something that is not consciously accessible to the subject. Presumably, this is the case with many classifications based on sense experience. If you see something and know it is a bird, you may do so despite the fact that you have no idea on what grounds you see that thing as a bird. Do Piper's results answer to the question of what textual markers prompt a reader's classificatory practice?

The answer is: We do not know. In order to check whether some features of some object are causally efficacious by prompting classifications, you need to conduct experiments with the feature in question as independent variable, say, and check whether it exerts the hypothesized causal influence. But none of this is part of the methodology employed; the methods employed have nothing to do with answering questions concerning sub-personal level processes involved in human readers' classifications.

However, at this point one might argue that Piper's findings may serve as the basis of an inference to the best explanation: We are able to tell fiction and non-fiction apart, this must be due to typical features of the items in questions, and the methods employed identify those very features.

The problem with this kind of argument is that there is no reason to assume that the features that are identified as typical by computational modeling are the very features that are causally efficacious in human perception and/or classificatory practice. There is ample reason to assume that the causal processes involved – human perception and classification vs. computational modeling – are vastly different. The computer mimics the results of a classificatory practice (and is remarkably good at this), but it does so by employing an entirely different ›strategy‹ (or ›methodology‹). So why should we assume that it operates on the same causal input (or anything that counts as ›causal input‹ anyway)?[32]

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31 | What contexts might that be? One might think of archaeological contexts, but here we face the additional problem that it is unclear whether the results that have been attained with training on ›modern‹ corpora will work for ancient texts too. Next: experimental or avantgarde novels (such as Wolfgang Hildesheimer's *Marbot*, or Truman Capote's *In Cold Blood*). But here too, further consideration is required. For texts which are produced *in order to* challenge established genre boundaries might constitute the very cases (probably even borderline cases) for which the computational modeling does not yield the correct results.

32 | As we cannot go into any detail here, suffice it to say that there is some indication that human classificatory practice often does not rely on typical features (let alone features that are reliable in a statistical sense). See Stephen Laurence and Eric Margolis: »Concepts a. Cognitive Science«. In: Stephen Laurence a. Eric Margolis (eds.): *Concepts. Core Readings*. Cambridge / London 1999, pp. 3–81, here p. 34 (*passim*) on ignorance and error in the application of a concept.

Moreover, it is not clear whether the items that are found to be typical, i.e., most frequent, are also most salient, i.e., those we notice and consequently pick up on. To use yet another analogy: Suppose you sit by the window with your eyes closed and wonder whether there are any cars in the street. Ten electric cars may quietly go unnoticed, but you will immediately hear the first roaring diesel truck, and this one will prompt your judgment concerning the traffic outside. Something similar might be true for the features identified by Piper: They are proven to be typical, but that doesn't imply that they have other properties, such as salience, that make them prompters for a reader's perception/classification. Clearly, more needs to be done to back up an assumption to this effect. More computational modeling, however, will not help in this regard.

So, let us briefly conclude. In Piper's study, we have identified three explanatory targets relating to the topic of fictionality: (i) specifying the nature of fictionality, and explaining how one can tell fictional and non-fictional texts apart, either (ii) in terms of a reader's reasoned judgment or (iii) in terms of a reader's (sub-personal level) perception (resulting in a classification). We also briefly reviewed Piper's research method and immediate result, i.e., the ability to reliably identify a stretch of discourse as fictional by computational means.

While it is certainly impressive that the results of the computational distinction between fictional and non-fictional texts match (and hence also predict) the reader's distinction, it is far from clear what we are to do with this result in terms of traditional explanatory targets that are part of the theory of genre. The computational methods do not really bring us any closer to answering the question »What is fictionality?«, nor do they give us a decisive answer to the questions of how readers tell fictional from non-fictional texts apart – or so we have argued. The computational methods mimic a classificatory practice and predict the distinction made by humans – but they are not able to make sense of it: They do not tell us why drawing the distinction between fiction and non-fiction matters (i.e., why there should be such a distinction in the first place, and why it is drawn in precisely this way rather than in any other), nor what interesting features the items in either category have in common, nor to what ›family‹ of related distinction they belong (i.e., what is their genus proximum), nor on which features we either in fact do, or otherwise should, rely in telling them apart. These, we take it, are important questions from received (›traditional‹) genre theory when it comes to fictionality as a genre, but they are merely invoked, rather than answered, by Piper's study.

To repeat, being able to computationally model a classificatory practice and predict its outcome is an impressive result. But at the same time, it is not easy to see what to do with this result. It is a bit like being able to show that summer shoes and winter shoes differ in weight. ›Ah, they do?‹, we will be disposed to answer, not knowing what we are to do with this very information: for one, what is of interest concerning the differentiation of summer shoes and winter shoes is not their weight but rather features like warmth, water resistance, etc. and, for another, no one ever felt the need to tell summer shoes and winter shoes apart by exotic means such as respective weights. – To repeat, that does not mean that all and any quantitative findings regarding summer and winter shoes are uninteresting. Suppose we find that the class of summer shoes called »sneakers« have predominant features like thick, white soles and bright colors on the instep. This may support the hypothesis, say, that sneakers work as status symbols thereby fulfilling a certain social function. Something similar may be true of Piper's finding that, from the 19th century onwards, the novel contains features which suggest that »the sensual experience

of a sensing being«[33] is its cultural function. As exciting as this finding is, it is important to note that what is at issue is not a defining feature of fictionality, and hence we are not dealing with any straightforward contribution to quest for the ›nature‹ of fictionality.

Interestingly, our conclusion that Piper's study does not really contribute to the three research questions identified above is somehow reflected by the uptake of the study in the literature. For instance, Piper's study is approvingly brought up in Compagno/Treleani (2019) as an example of how one can bring »new perspectives on old questions«, but the authors do not tell us what these old questions actually are. Gerhard Lauer claims that Piper's findings show that the received opinion in literary studies – according to which there is no way to objectively tell fictional and non-fictional texts apart, and that this distinction is a mere social convention – may be wrong.[34] Assuming that by »objectively« Lauer means something like ›by means of syntactically available features (such as word frequencies)‹,[35] this first and foremost repeats the immediate result of Piper's study. However, it is somewhat harder to see what exactly the received opinion is supposed to be that is called into question by this result. As we have argued at some length above, there is not much reason to think that Piper's study calls into question a Searle-inspired way of maintaining that (the nature of) fictionality has to do with the (normative) conventions of language use.[36]

Now, it could of course be that being able to ›replicate‹ and predict the distinction between fictional and non-fictional text by computational means is an end in itself, which in turn suggests that we need not ask for any further applications of the result. That, however, also suggests that traditional genre theory need not be impressed by this result, as it answers to none of the questions that have engaged it so far.

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33 | Piper: »Fictionality« (ref. 4), p. 18.

34 | The German original reads thus: »Während in den literaturwissenschaftlichen Fächern noch die Meinung dominiert, dass sich fiktionale und faktuale Texte nicht objektiv unterscheiden ließen, sondern auch dies nur eine soziale eingeübte gesellschaftliche Konvention sei, hat die computergestützte Forschung von Andrew Piper beispielhaft gezeigt, dass es dazu mindestens gegenläufige Befunde gibt« (Gerhard Lauer: »Ist da eine Veränderung in den Geisteswissenschaften? Infrastrukturen und ihre Folgen für die Praxis der Geisteswissenschaften«. In: Martin Huber, Sybille Krämer a. Claus Pias (eds.): *Forschungsinfrastrukturen in den digitalen Geisteswissenschaften: Wie verändern digitale Infrastrukturen die Praxis der Geisteswissenschaften?* Frankfurt / M. 2019, pp. 27–38, here pp. 32f.). Lauer continues: »Academic disciplines such as English literature can easily ignore findings such as these, and this is what they in fact do« (»Solche Befunde können Fächer wie die Anglistik problemlos ignorieren und tun das auch«). As becomes clear from another statement Lauer seems to hold that Piper has refuted Searle, see Gerhard Lauer: »Lob der digitalen Philologie«. In: *FAZ,* June 23, 2018. https://www.faz.net/-gyl-9bdd6?printPagedArticle=true (accessed October 30, 2020).

35 | We note in passing that these conventions on the one hand and whether or not they are acted upon in any particular instance is as ›objective‹ a fact as any, if one takes ›objective‹ to mean something like ›not in the eye of the beholder‹.

36 | A more cautious, albeit also brief, discussion is to be found in Gunther Martens: »Fiktionalität und Gattungen«. In: Lut Missinne, Ralf Schneider a. Beatrix T. van Dam (eds.): *Grundthemen der Literaturwissenschaft: Fiktionalität.* Berlin / Boston 2020, pp. 231–253. Martens seems to have some doubts concerning what we have called the (immediate) result of Piper's study, namely the ability to distinguish fictional from non-fictional texts. He claims that his doubts concern the distinction ›as it is drawn by literary studies‹ (»im literaturwissenschaftlichen Sinne«, p. 248), which might suggest worries similar to ours. Martens, however, goes on to suggest that there might be counterexamples to a definition of ›fiction‹ based on syntactically available features.

2 Ted Underwood: »The Life Cycles of Genres« (2016)

2.1 Traditional Research Topics

The research topic Ted Underwood addresses in his »The Life Cycles of Genres« is (mainly) the diachronic persistence of certain genres, namely detective fiction, science fiction, and Gothic fiction. In a recapitulatory section (»What have we learned?«), Underwood claims that »the evidence gathered in this article challenges three existing theories of genre«: (i) The first theory has it that »genre is a generational cycle«. (ii) The second theory claims that »genre boundaries gradually ›consolidate‹ in the early twentieth century«; (iii) and the third one claims that »histories of genre are merely a genealogical thread linking disparate cultural forms«.[37] We shall look at these theories a little closer in a minute. For now, let us note that in claiming that his findings »challenge« said theories, Underwood explicitly relates his findings to existing research, thus locating his explanatory target within ›traditional‹ genre theory. His own research questions are easily enough identified. Basically, they amount to: »Are said theories correct?«

2.2 Methods

By means of what methods does Underwood go about answering his research questions, and what are the results at display? Although Underwood relies on predictive modeling, he is – in contrast to Piper – not interested in the definition of the genres he studies.[38] He considers it a strength of predictive modeling that it »bracket[s] the quest to identify underlying factors that really cause and explain the phenomenon being studied«.[39] Consequently, he uses predictive modeling in a creative fashion (later called »perspectival modelling«)[40] running a bunch of model comparisons that do not aim at maximizing the predictive accuracy.[41] The objectives of these model comparisons are very different, but before we go into detail, we want to steer our readers' attention to the rationale behind them: Although Underwood wants to avoid claims that spell out the definitions of the genres studied, he assumes that predictive models embody the implicit or explicit definition of the labeled data they have been trained with.[42] Comparing the performance of two models for detecting detective fiction, for instance, he concludes that he deals with

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37 | Ted Underwood: »The Life Cycles of Genres«. In: *Journal of Cultural Analytics* 2.2 (2016), pp. 1–25, here p. 23. DOI: 10.7910/DVN/XKQOQM.

38 | He tells his readers: »[O]ur goal is no longer to define a genre, but to find a model that can reproduce the judgements made by particular historical observers« (ibid, p. 6).

39 | Ibid. p. 5.

40 | Ted Underwood: *Distant Horizons: Digital Evidence and Literary Change*. Chicago / London 2019, p. 36.

41 | For this reason, Underwood uses only lexical features (word frequencies) and one and the same machine learning algorithm (L2-regularized logistic regression) for all of his models. See Underwood: »The Life Cycles of Genres« (ref. 37), pp. 6–8.

42 | In his book Underwood makes this point more explicit although he expresses it in slightly different metaphorical terms: »Textual similarity will enter this chapter's argument only because it turns out that texts can in fact be used to predict readers' responses. A model trained on a sample of texts that reviewers labeled »detective fiction« can identify other books that the same reviewers labeled the same way. In other words, text will function here as a medium, *registering definitions of genre* that are in themselves fundamentally social«. (Underwood: *Distant Horizons* (ref. 40), p. 38; *our emphasis*).

»largely congruent definitions«[43] of the genre. And on another occasion, he tells us that »competing definitions of the Gothic (created at different times and embodied in entirely different lists of works)«[44] could be compared by predictive modeling.

Many of Underwood's model comparisons follow a specific test scheme.[45] He trains model 1 to distinguish *A* from *C* (e.g., »Library of Congress detective fiction« from a randomly selected background) and tests whether the same model can distinguish *B* (e.g., detective fiction according to a certain exhibition catalog) from *C*. In order to assess the performance of model 1, he compares its accuracy to a second model that has been trained to distinguish *B* from *C* right away. If the same model can distinguish *A* from *C* and *B* from *C*, Underwood draws conclusions concerning the similarity of *A* and *B*. These conclusions are expressed in terms of definition (e.g., »largely congruent definitions«, p. 13), in terms of textual coherence (e.g., detective fiction is »textually coherent across a period«[46]), or in terms of »boundaries of the genre«.[47]

Concretely, Underwood makes three types of model comparisons: Firstly, comparing models that incorporate classifications from different historical observers. The example just given is such a case: one model trained to detect detective fiction according to the Library of Congress metadata, the second model to detect detective fiction according to a specific exhibition catalog.[48] Secondly, comparing models that have been trained on text sets from different time periods: For instance, Underwood builds two models in order to distinguish detective fiction from a random background. In one case he uses texts from 1930–1989 (model 1), in the other case works from 1829 till 1930 (model 2). Comparing the performance of the two models on the works from the second time period (1930–1989) he finds that model 2 (the one trained on the texts from the earlier time period) performs almost as good as model 1 (the one trained on the later period). He concludes that »[t]he verbal differences that mark detective fiction up to 1930 largely continue to characterize it afterward«[49] and goes on claiming that »[t]he boundaries of the genre are stable«.[50] Finally, comparing models trained to distinguish different genres: Since he deals with several different genres, Underwood can show that the respective predictive models perform very differently. While detective fiction and science fiction can be modeled successfully using texts from a long period of time, »century-spanning samples of Gothic fiction perform remarkably poorly for their size; they are no easier to model than a mixture of all genres included in the project«.[51] The performance of the models is interpreted as indicator of the textual »coherence«[52] of a genre.

Having presented Underwood's approach in a general manner, we need to highlight which specific findings he marshals as evidence against the three aforementioned claims in traditional genre research:

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43 | Underwood: »The Life Cycles of Genres« (ref. 37), p. 13.

44 | Ibid., p. 2.

45 | See Ibid., pp. 10f and 12f for the following example.

46 | Ibid., p. 15.

47 | Ibid., p. 14.

48 | Cf. ibid., pp. 12f.

49 | Ibid., p. 14.

50 | Ibid., p. 13.

51 | Ibid., p. 17.

52 | Ibid.

(i) To refute the hypothesis put forward by Moretti that »temporal cycles« that usually last a generation […] determine the rise and fall of literary genres«.[53] Underwood compares what he calls »chronologically-focused genres« (the sensational novel, »country house« mysteries, etc.) to a random sample from detective fiction drawn from 1829–1989. After having standardized the sample sizes, the ›textual coherence‹ of the detective fiction sample (again measured by the model performance) is roughly the same as the ›textual coherence‹ of the genres with a much shorter life span (ca. 20–40 years). Therefore, he concludes, not all genres seem to have generational lifespans.

(ii) Concerning the claim that »genre boundaries gradually ›consolidate‹ in the early twentieth century«, Underwood mainly scrutinizes science fiction which has been described as »an inchoate phenomenon (scattered across utopias, planetary romances, etc.)« that got »a new shape and direction by particular pulp magazines and anthologies between 1925 and 1950«.[54] Since he can model science fiction using texts from the period 1771–1989 with 88% accuracy and the model does an equally good job in predicting early works of science fiction as in the 20th century, Underwood concludes that any consolidation of the genre, if such there is, does not manifest itself on the linguistic level.[55]

(iii) Finally, the comparison of models that have been trained on text sets from different time periods is used to put doubt on the theory that histories of genre are merely a ›genealogical thread linking disparate cultural forms‹. If a model trained on detective fiction from an earlier period is able to detect detective fiction from a later time period, then there must be a similarity between the two groups of text, and the link between the two cannot be merely constructed ex-post by literary historians.

2.3 Discussion

In his assessment of theories (i) to (iii) from traditional genre theory, Underwood draws conclusions concerning the persistence of genres from observations concerning the behavior of carefully designed computational models. In what follows, we shall start by highlighting what we take to be a potential weakness of this approach more generally. In doing so, we concentrate on questions of genre membership, thereby paving the way for a discussion of genre persistence. (Roughly, the temporal persistence of a genre *G* can be thought of as the continuous growth of the class of texts that fall under ›*G*‹, in other words more and more texts get accumulated under the label of *G*.) Next, we shall turn to an application of our findings to theories (i) to (iii).

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53 | Franco Moretti: *Graphs, Maps, Trees: Abstract Models for a Literary History*. London / New York 2005, p. 92.

54 | Underwood: »The Life Cycles of Genres« (ref. 37), p. 22.

55 | Cf. ibid., pp. 22f.

A potential weakness of Underwood's approach emerges from what we may dub ›contextualism‹ about genre membership.[56] To begin with, there is the simple observation that there are many genre terms that embody what we may call relational properties of a text. Genre terms such as ›post war novel‹, ›pastiche‹, ›parody‹, or ›modernist fiction‹ relate the members of some class to some aspect of their context. Thus, in case of the post war novel, texts are situated relative to a historical event, while the label ›modernist fiction‹ situates texts relative to an art historical periodization; ›pastiche‹ in turn situates a work relative to at least one other previous work, as does ›parody‹.

Pastiche and parody are particularly interesting because examples of these genres show that even a very close textual resemblance of two works does not entail that they belong to the same genre. It may be the very point of either a pastiche or a parody to closely imitate the linguistic features of their targets. But neither does this close textual resemblance turn the original target texts themselves into pastiches or parodies,[57] nor is it the case that the texts that do count as pastiches or parodies must also share the original genre membership of their targets. Rather, a classification as ›pastiche‹ or ›parody‹ is reserved for the texts bearing the relational property of temporal succession to the originals. Also, a work that is being written today as a pastiche of a famous 18th century science fiction novel arguably does not count as a science fiction novel simpliciter; and it is at least likely that a parody of a horror story is not a horror story at all, simply because it does not feature a necessary feature of horror stories, namely an earnest disposition to horrify. Now, ›pastiche‹, ›parody‹, and ›horror story‹ are systematic genre terms in that they are applicable to any work from any period; but similar considerations apply to genre terms that involve literary historical genres, such as ›post war novel‹ or ›modernist fiction‹. Arguably, a text that does not originate from the relevant period does not get classified as ›post war novel‹, or ›modernist fiction‹ respectively, no matter how close its textual resemblance to paradigm examples of these genres may be.[58]

What these considerations show is that, for some genres, there is more to genre membership than linguistic features. More precisely, it is not the case that, for all texts and all genres, the syntactically available features of the texts are sufficient for determining their genre membership. Underwood's models draw on linguistic features (that do or do

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56 | The idea of ›contextualist‹ criteria for work identity is widely discussed in the literature; see Gregory Currie: »Work and Text«. In: *Mind* 100 (1991), pp. 325–340; Stephen Davies: *The Philosophy of Art*. Malden / Oxford 2006, pp. 64–77; Peter Lamarque: *Work and Object: Explorations in the Metaphysics of Art*. Oxford 2010, pp. 56-77. For a discussion of contextualist aspects of genre, see Gregory Currie: *Arts and Minds*. Oxford 2004, pp. 43–62. For a defense of a contextualist approach to defining ›fiction‹, see Friend: »Fiction as a Genre« (ref. 2). Rachael Scarborough King claims that »a form alone cannot define a genre; a genre that is usually associated with a particular form could include texts that do not follow the form« (Rachael Scarborough King: »The Scale of Genre«. In: *New Literary History* 52.2 [2021], pp. 261–284, here p. 263). Her reasoning to this conclusion differs considerably from ours.

57 | Note that this would be the case if linguistic features were sufficient for genre membership: If a certain linguistic makeup were sufficient for membership in some genre *G*, then any text that exhibits this linguistic makeup counts as *G*. Note also that an accurate quotation of a text that belongs to the genre of defamation usually does not transfer the genre membership of the quoted text (›defamation‹) to the quoting text. This shows that two texts which are linguistically indistinguishable may nevertheless belong to two different genres. For more on this, see below.

58 | Compare also Currie: *Arts and Minds* (ref. 56), p. 43: »Jacobean tragedies are related by complex patterns of mutual influence, with a common cause in the related genre of Senecan tragedy; something Jacobean-like but outside this causal-temporal nexus is not in the genre«. For another example, see ibid., p. 51.

not amount to ›textual coherence‹ between the members of some set) alone to predict genre membership – given his methods, there simply are no ›non-textual‹ features to be considered. Accordingly, if the models that have been trained to reliably identify members of some class *c* at t_1 continue to identify sufficiently many members of *c* at t_2, then this merely means that there is, at t_2, a certain number of texts that exhibit the textual features that members of *c* exhibit at t_1. However, if the presence of these textual features is not sufficient for membership in the respective genre *G*, then we must not conclude that said texts are correctly classified as members of *G*.

A possible line of defense against this conclusion amounts to the claim that Underwood's sophisticated procedures (as summarized in section 2.2) do ensure that any contextual features that may be necessary conditions for genre membership are somehow also represented by (possibly complex) textual features, thereby making these features sufficient for membership in the respective genres. In Distant Horizons (2019), Underwood claims accordingly that »genre is expressed redundantly on many different levels«.[59] This could be taken to mean that genre membership is overdetermined by texts, such that each member of the genre will satisfy many different sufficient criteria for genre membership, with these sufficient conditions located at different ›levels‹ of the text, including the ›linguistic level‹.

To this line of defense, one may reply two things. First, one can point out that the thesis that genre in general (i.e., any particular genre) is also expressed at the textual level such that a particular set of textual features is sufficient for genre membership is question-begging in its argumentative context. Underwood merely shows that some genres can be ›modeled‹ (even over longer periods of time), that is, that they exhibit the ›textual coherence‹ he is looking for. But the very fact that this does not work equally well for all genres might suggest that genre is not always expressed at the textual level. (For example, the limited textual coherence of century-spanning samples of Gothic fiction might suggest that the highly contextual property of texts to evoke chills is part of the concept.) Similarly, one must not simply assume that a model that has been successfully trained on a literary genre is extensionally equivalent (or equivalent to a certain degree) to the concept of the genre.[60] Extensional equivalence concerns all (past, present, and future) members of the respective classes. Since the computational model does not rely on necessary and sufficient criteria for genre membership, it does not ensure that the extensional equivalence established for one period carries over to another period. While some features (namely linguistically available features) of genre members may persist such that further texts exhibit these features (thereby being ›textually coherent‹ with established genre members), the genre may be dead because other important features have changed. Consider an analogy: Horse carriages have the features of carrying goods and people. This is a feature they share with cars. Does that mean that what populates our streets today are horse carriages? No. What amounts to a reliable indicator for membership in the category ›horse carriage‹ at one time may fail to indicate category membership at another time. The same

59 | Underwood: *Distant Horizons* (ref. 40), p. 42.

60 | The extension of a concept is the class of things to which the concept applies. Two classes are extensionally equivalent if they have the same members. We believe that talk about the ›extension‹ of a model indeed makes sense: In picking out certain elements from a group of elements, a model fulfills the essential function of a concept. Especially models that have been trained on dichotomously labeled data (*X* or not-*X*) perform the same function as a concept – namely a division of the world into elements that fall under it and elements that do not (in the case of the model each with a certain probability). Of course, a model is applied to limited data sets respectively corpora in practice, but this is only a pragmatic limitation. The extension of a model can be understood as the totality of all elements that the models classified or would classify as *X* if it made predictions about them.

may be true of genres: According to some scholars, the functional feature of the German »Bildungsroman« to address complex issues of an individual's development was, in the 18th century, still the domain of adventure novels in the style of Defoe's Robinson Crusoe.[61] Although the two genres can be seen to share this feature, one would be certainly mistaken to count every adventure novel (or, more precisely, every »Robinsonade«) in the 18th century as »Bildungsroman«.

Second, it may be replied that it is implausible to assume that relational features of a text such as its temporal relation to a precursor can be mapped by textual features alone. Any computational modelling that relies solely on textual features will at some point fail at predicting genre membership for these texts. The qualification ›at some point‹ may, however, be crucial. Suppose that you have identified a work W_p as a pastiche of some original work *W*. If you manage to show, by computational means, that some other work W_x is ›textually coherent‹ with W_p, then this may allow us to conclude that W_x is a pastiche too.[62] This suggests that textual features allow for genre classification if any contextual features necessary for genre membership are taken care of otherwise. In other words, we may, in any particular instance, rely on purely textual features for genre classification, given that we have established that contextual features cannot rebut our results. We doubt, however, that computational means alone can secure this in any given instance. At this point, it seems that we can do (at least) two things in defense of the computational approach to determining the persistence of genres.

First, we could drop the assumption that textual features are sufficient for genre membership and, by extension, for the persistence of some genre. A high amount of ›textual coherence‹ between works that originated at different times would, then, suggest that these works belong to the same genre (hence indicating that the genre persists), but we may draw this conclusion only if we have checked that there are no interfering ›contextualist‹ conditions.

Second, we could restrict the assumption that textual features are sufficient for genre membership to particular genres – namely to those genres where ›textual coherence‹ with established members of the genre is indeed sufficient for genre membership, for either there are no contextual necessary conditions to begin with, or they are ›taken into account‹ by textual conditions for genre membership. For the latter, one may think of the horror story. A disposition to horrify is a relational property of a text, hence a feature that involves the reading context. Recent studies indicate that an accordant reading experience can be reliably induced by certain (complex) textual features.[63] Given that the correlation between these textual features and the disposition to horrify is robust, we

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61 | Cf. Wilhelm Voßkamp: »Gattungen als literarisch-soziale Institutionen. Zu Problemen sozial- und funktionsgeschichtlich orientierter Gattungstheorie und -historie«. In: Alexander Bormann a. Walter Hinck (eds.): *Textsortenlehre, Gattungsgeschichte*. Heidelberg 1977, pp. 27–42, here pp. 35–38.

62 | This conclusion, however, rests on the assumption that there are no other contextual features necessary for being a pastiche (other than being a close imitation of a precursor, that is). This may be doubted, however. A pastiche is a work that *celebrates* some other work it imitates, and no work that just happens to have the relevant features of the imitated work (i.e., a work that resembles the target by pure chance) can be said to ›celebrate‹ its target. This suggests that the genre of pastiche requires further contextual constraints including certain intentions on the side of the artist (namely the intention to celebrate by imitating an existing target work). Note also that this conclusion does not evade the problem identified in note 53 above: If textual coherence is sufficient for genre membership, then not only W_x counts as a pastiche but also *W*, which is clearly inadequate.

63 | See the project of Mark Algee-Hewitt: http://markalgeehewitt.org/index.php/main-page/projects/the-machinery-of-suspense/ (accessed February 15, 2021).

can assume that said textual features are sufficient for genre membership. Hence, we may conclude that the genre of the horror story persists, given that we can identify sufficiently many texts that have the accordant textual features.[64]

Both strategies, it should be noted, seem to indicate that traditional definitions of genre terms do matter. For how could you check that there are no contextual features to be considered – if not by consulting some definition of the genre term? In what follows, we shall discuss the bearings of these more general considerations for Underwood's critique of theses (i), (ii) and (iii) from traditional genre theory.

Underwood bases his critique of the thesis (i) that all genres have a ›generational lifespan‹ on his ability to produce a counter example: Since the genre of detective fiction has persisted for more than a ›generational lifespan‹ (1829–1989), it is not true that all genres have a ›generational lifespan‹. This is a conclusive argument:

1. No genre persists for more than a ›generational lifespan‹.
2. The genre of detective fiction persists for more than a ›generational lifespan‹ (1829–1989).
3. Not all genres have a ›generational lifespan‹.

Obviously, the soundness of this argument depends on whether premise 2 is true. As we have argued above, only given that ›textual coherence‹ is sufficient for membership in the ›detective fiction‹ genre, Underwood can be said to have established the truth of the premise.

As to thesis (ii), i.e. the claim that »genre boundaries gradually ›consolidate‹ in the early twentieth century«, Underwood restricts his criticism to observing that any such ›consolidation‹, if such there is, does not manifest itself on the linguistic level. As this fully acknowledges that there may be some ›consolidation‹ on levels other than the linguistic level, we see no reason to dispute Underwood's claim.

Finally, there is the thesis that histories of genre are merely a ›genealogical thread linking disparate cultural forms‹, as thesis (iii) has it. Underwood's refutation of this thesis heavily relies on the thesis that the (complex) linguistic features he takes to constitute the persistence of the genres is indeed sufficient for establishing membership in the respective genres. As it stands, then, both the original thesis (iii) and its refutation are too sweeping to allow for scrutiny. We have to look at individual genres and see whether backing up (or disputing) the thesis of their persistence on the grounds of ›textual coherence‹ is reasonable or not.

3 Concluding Remarks

We conclude our discussion by highlighting three more general points. In this paper, we have been concerned with the impact of ›distant reading‹ approaches on research questions from traditional genre theory. Generating new explananda is, on the face of it, something different. However, the first addendum to what we have said so far is that, obviously, ›distant reading‹ approaches to genre research have the most welcome effect of generating new data that require an explanation. Two such explananda immediately come to mind:

64 | There is a theoretical possibility, however, that textual features lose their propensity to induce certain reactions on the side of the reader. Detecting this would be an interesting thing in itself, of course.

- Piper's success in distinguishing fiction from non-fiction based on linguistically available features of texts surely calls for an explanation. As Piper indicates, a promising explanation may involve the cultural functions of fiction.[65] We may hypothesize that the need to understand human behavior may play some role in explaining both the emergence of fictionality and the textual features detected in Piper's study: In other words, there may be a *common cause* to both the linguistic makeup and the fictionality of said texts. However, that does not imply that there is a direct explanatory link between textual features and fictionality, as Piper seems to assume, and neither does it involve the refutation of traditional theories of fiction.
- Underwood's sophisticated use of predictive modeling generates findings which are much more diverse. We have pointed out that their evidence against theses of more traditional genre theory depends on debatable background assumptions and is often limited in scope (to specific genres or specific time periods). In contrast to Piper's study where we need an explanation for the success of the predictive modeling, in Underwood's study it seems to us more difficult to explain why the modeling fails. For instance, why is it not possible to model century-spanning samples of Gothic fiction with similar success as detective fiction or science fiction, and what should we conclude from this? Should we say that the Gothic did not exist as a genre over centuries, or should we say that the human categorizations as reflected in the metadata is not coherent, or should we say that »language just changes too much in two centuries for genre to be modeled linguistically across that distance«,[66] or should we conclude that the Gothic is not (always) expressed on the textual level? Since Underwood establishes the crucial premise that »genre is expressed redundantly on many different levels«[67] only *ex post* for the genres where he finds textual coherence, it remains unclear what to conclude about the genres for which establishing textual coherence is not successful.

Second, a common feature of both Piper's and Underwood's approach is that they deal with questions of genre membership by exclusively using linguistically available features of texts. While it is remarkable how successful the corresponding models are in recognizing certain types of texts it seems that the underlying idea of a genre as something manifest at the textual level is at odds with traditional notions of genre which often involve relational (contextual) properties of texts (such as dispositions to evoke a certain reaction or attitudes of persons towards texts, or references to the historical context of origin of the text). For now, it is hard to see how this basic difficulty can be overcome. Even more sophisticated approaches to genre classification using topics as features may

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65 | »I have in the process been attempting to gain insights into their larger social function, to answer that perennial question of ›why literature matters‹. According to the results presented here, if we focus on the quantitatively distinct qualities of novels in particular – of what separates them off from nonfictional or ›true‹ writing – we can say that the novel's mattering since the nineteenth century appears to be less a matter of social realism and more one of phenomenological encounter, a kind of social imbedding in the world«. (Piper: »Fictionality« [ref. 4], p. 27).

66 | Underwood rejects this explanation and leaves the question open, see Underwood: »The Life Cycles of Genres« (ref. 37), p. 18f.

67 | Underwood: *Distant Horizons* (ref. 40), p. 42.

be of little help.[68] While these may work for genre definitions which involve conditions regarding the thematic content of texts, they still offer no solution to the contextualist problem.[69] In any case, it seems that being satisfied with the results of digital genre research would mean to stop halfway through the journey. It remains a curious task for future research to relate the historical categorizations and reactions of text consumers on the one hand and the results of computational text analysis on the other.[70]

Third, ›distant reading‹ approaches to genre classification feature what we may dub an exclusively ›extensional‹ approach to genre: while the linguistic data that determine whether or not some text does belong to a particular genre or not may be quite complex and uninteresting in themselves,[71] what matters is the resulting genre membership of texts, i.e., whether or not a particular text is part of the extension of some genre concept. For traditional genre theory, however, ›intensional‹ aspects of genre matter, and greatly so. By ›intensional‹ aspects we mean the defining features of traditional genre terms. These features matter because they may, and often do, play an important role in directing our attention towards texts. As Kendall Walton explains, perceiving a work in a category (i.e., as member of a genre) involves certain assumptions concerning standard, non-standard or variable features of the work, and these in turn strongly influence which feature or features of the work will come to our attention, or be found remarkable, or flawed, etc.[72] A particular text may be perceived entirely different depending on whether

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68 | Cf. Christof Schöch: »Topic Modeling Genre: An Exploration of French Classical and Enlightenment Drama«. In: *Digital Humanities Quarterly* 11.2 (2017); Christof Schöch: »Computational Genre Analysis«. In: James O'Sullivan (ed.): *Digital Humanities for Literary Studies: Methods, Tools & Practices*. College Station / TX 2020.

69 | A further road one may take is to model not genres but to build several models that recognize each the fulfillment of one condition of a traditional genre concept *G*. Taking into account the disjunctive or adjunctive connection of the conditions within the definition of *G* (e.g. text *T* has to be classified as *X* by M_1 and M_2 or M_3), one would have not only a *set of models* that together embodies a traditional genre concept, but textual correspondences of individual genre features, namely the respective models. This approach could also be very useful to model the history of a genre, whose definition changed in the course of its development.

70 | See the reflections on the relation between »text type« and »genre« in Benjamin Gittel: *Fiktion und Genre. Theorie und Geschichte referenzialisierender Lektürepraktiken 1870–1910*. Berlin / Boston 2021, pp. 47–53, 166-169 and 358–362; and the talk of text analysis as a »second reference point« in Ted Underwood: »Genre Theory and Historicism«. In: *Journal of Cultural Analytics* 2.2 (2016), p. 5. DOI: 10.22148/16.008.

71 | Compare Underwood: »words just happen to be convenient predictive clues, allowing us to trace the implicit similarities and dissimilarities between different practices of selection. We could use other features of the text if we preferred«. (see Underwood: »The Life Cycles of Genres« (ref. 37), p. 6) And »the particular features we use to model genres are not all-important« (Underwood: *Distant Horizons* (ref. 40), p. 42).

72 | Cf. Kendall L. Walton: »Categories of Art«. In: *The Philosophical Review* 79.3 (1970), pp. 334–367. For an overview over the ensuing discussion of Walton's influential paper, see the contributions to the symposium »›Categories of Art‹ at 50«. In: *The Journal of Aesthetics and Art Criticism* 78.1 (2020), pp. 65–84. For an account of ›fiction‹ as a ›genre‹ in Walton's sense, see Friend: »Fiction as a Genre« (ref. 2). Remarkably, Friend outlines the notion of genre as »a way of classifying representations that guides appreciation, so that knowledge of the classification plays a role in a work's correct interpretation and evaluation« (p. 181) or, for short, an »appreciative kind« (p. 196). This conforms to our suggestion that in any case traditional genre theory is *not solely* concerned with questions of genre membership (and, by extension, genre persistence). Rather, since much traditional genre theory is motivated by questions of interpretation and evaluation, it is reasonable to ask of any new theory of genre membership (such as the ones provided by ›distant reading‹ approaches) whether and in what ways it contributes to questions of interpretation and evaluation – or so it seems to us.

it is perceived, say, as a pamphlet or a parody. Different definitions of ›pamphlet‹ or ›parody‹ in turn can be seen as attempts at answering the question of what the standard, non-standard or variable features of pamphlets or parodies are. So even if two competing definitions of a genre term are in fact extensionally equivalent, an intensional difference between them may greatly matter, for each definition – by highlighting different features – asks us to perceive some texts differently, i.e., as members of a different category. It seems that, in transferring the problem of identifying members of a genre to computational means, ›distant reading‹ approaches to genre have nothing to say about all this. If, for dramatic reasons, we may overstate our case a little, we may conclude that computers may be good at counting pamphlets (or detective fictions, for that matter); but, for now, they remain silent as to what matters about what's counted.[73]

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Bibliography

Austin, J. L.: »A Plea for Excuses«. In: *Proceedings of the Aristotelian Society* 57 (1956/57), pp. 1–30.

Carnap, Rudolf: *The Logical Foundations of Probability*. Chicago 1962.

Compagno, Dario and Matteo Treleani: »Introduction to Meaningful data/Données signifiantes«. In: *Semiotica* 230 (2019): pp. 1–17. DOI: 10.1515/sem-2018-0141.

Currie, Gregory: »Work and Text«. In: *Mind* 100 (1991), pp. 325–340.

Currie, Gregory: *Arts and Minds*. Oxford 2004.

Davies, Stephen: *The Philosophy of Art*. Malden / Oxford 2006.

Friend, Stacy: »Fiction as a Genre«. In: *Proceedings of the Aristotelian Society* 112 (2012), pp. 179–209.

Gittel, Benjamin: *Fiktion und Genre. Theorie und Geschichte referenzialisierender Lektürepraktiken 1870–1910*. Berlin / Boston 2021.

King, Rachael Scarborough: »The Scale of Genre«. In: *New Literary History*, 52.2 (2021), pp. 261–284.

Konrad, Eva-Maria: »Panfiktionalismus«. In: Tobias Klauk a. Tilmann Köppe (eds.): *Fiktionalität. Ein interdisziplinäres Handbuch*. Berlin / Boston 2014, pp. 235–254.

Lamarque, Peter: *Work and Object: Explorations in the Metaphysics of Art*. Oxford 2010.

Lamarque, Peter a. Stein Haugom Olsen: *Truth, Fiction, and Literature: A Philosophical Perspective*. Oxford 1994.

Lauer, Gerhard: »Lob der digitalen Philologie«. June 23, 2018. https://www.faz.net/aktuell/karriere-hochschule/computer-und-sprache-lob-der-digitalen-philologie-15647082.html-?printPagedArticle=true#pageIndex_2 (accessed October 30, 2020).

Lauer, Gerhard: »Ist da eine Veränderung in den Geisteswissenschaften? Infrastrukturen und ihre Folgen für die Praxis der Geisteswissenschaften«. In: Martin Huber, Sybille Krämer and Claus Pias (eds.): *Forschungsinfrastrukturen in den digitalen Geisteswissenschaften. Wie verändern digitale Infrastrukturen die Praxis der Geisteswissenschaften?* Frankfurt / M. 2019, pp. 27–38.

Laurence, Stephen a. Eric Margolis: »Concepts and Cognitive Science«. In: Stephen Laurence and Eric Margolis (eds.): *Concepts: Core Readings*. Cambridge / London 1999, pp. 3–81.

Martens, Gunther: »Fiktionalität und Gattungen« In: Lut Missinne, Ralf Schneider a. Beatrix T. van Dam (eds.): *Grundthemen der Literaturwissenschaft. Fiktionalität*. Berlin / Boston 2020, pp. 231–253.

Moretti, Franco: *Graphs, Maps, Trees: Abstract Models for a Literary History*. London / New York 2005.

Olsen, Stein Haugom: *The Structure of Literary Understanding*. Cambridge 1978.

Piper, Andrew: »Fictionality«. In: *Journal of Cultural Analytics* 2.2 (2016), pp. 1–29. DOI: 10.22148/16.011.

Robinson, Richard: *Definition*. Oxford 1954.

Schöch, Christof: »Topic Modeling Genre: An Exploration of French Classical and Enlightenment Drama«. *Digital Humanities Quarterly* 011.2 (2017).

Schöch, Christof: »Computational Genre Analysis«. In: James O'Sullivan (ed.): *Digital Humanities for Literary Studies: Methods, Tools & Practices*. College Station / TX 2020.

Searle, John: »The Logical Status of Fictional Discourse«. In: *New Literary History* 6.2 (1975), pp. 319–332.

Strawson, Peter: »Categories«. In*: Freedom and Resentment and other Essays*. London / New York 2008, pp. 119–146.

Tausczik, Yla R. a. James W. Pennebaker: »The Psychological Meaning of Words: LIWC and Computerized Text Analysis Methods«. In: *Journal of Language and Social Psychology* 29.1 (2010), pp. 24–54.

Underwood, Ted: »The Life Cycles of Genres«. In: *Journal of Cultural Analytics*, 2.2 (2016), pp. 1–25 DOI: 10.7910/DVN/XKQOQM.

Underwood, Ted: »Genre Theory and Historicism«. In: *Journal of Cultural Analytics*, 2.2 (2016), pp. 1–6 DOI: 10.22148/16.008.

Underwood, Ted: *Distant Horizons: Digital Evidence and Literary Change*. Chicago / London 2019.

Voltolini, Alberto: »The Nature of Fiction/al Utterances«. In: *Kairos. Journal of Philosophy and Science* 17 (2016), pp. 28–55.

Vosskamp, Wilhelm: »Gattungen als literarisch-soziale Institutionen. Zu Problemen sozial- und funktionsgeschichtlich orientierter Gattungstheorie und -historie«. In: Alexander Bormann a. Walter Hinck (eds.): *Textsortenlehre, Gattungsgeschichte*. Heidelberg 1977, pp. 27–42.

Walton, Kendall L.: »Categories of Art«. In*: The Philosophical Review* 79.3 (1970), pp. 334–367.

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