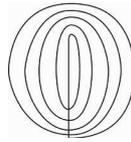


FICTIONALISM

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Fictionalism
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Abstract

In this entry I will offer a survey of the contemporary debate on fictionalism, which is a distinctive anti-realist view about certain regions of discourse that are valued for their usefulness rather than their truth.

Keywords

Fiction, anti-realism, truth, pretence, figurative language

Fictionalism

Fictionalism about a region of discourse D is the thesis that utterances of sentences produced within D are, or should be regarded as, akin to utterances of sentences produced within discourse about fiction. Truth is not an essential feature of fictional discourse. Fictions are valued for other reasons. More specifically, the value that they have does not depend on the entities that would have to exist for them to be true. Typically, fictionalism about D is motivated by ontological concerns about such entities.

For example, consider the following passage from Kurt Vonnegut's *Slaughterhouse Five* introducing its main character, Billy Pilgrim:

Billy was born in 1922 in Ilium, New York, the only child of a barber there. He was a funny-looking child who became a funny-looking youth – tall and weak, and shaped like a bottle of Coca-Cola. (Vonnegut 1991: 23)

Vonnegut utters these sentences to purport to describe Billy as being a certain way, by attributing to him a series of properties such as being born in Ilium, being the only child of a barber, and being tall and weak. We understand that Vonnegut is not aiming at truth: he is not reporting that someone really had these properties. He is merely pretending to do so, or he is prescribing or intending the audience to imagine that this was the case. We can accept, or imagine, what Vonnegut says. But typically we do not believe that this was the case. We know that there was no such person: Billy does not exist. Realists about fictional characters argue that Billy is not a real person, yet he is something: an exotic entity such as a Meinongian non-existent object, a possible object, or an abstract object (see my 2013 entry on FICTIONAL ENTITIES from this Companion for a review of these positions). Anti-realists simply reject ontological commitment to any such entities and straightforwardly recognize that there simply are no fictional entities. So, when engaged in fictional discourse we accept, or imagine, the content of the relevant utterances without aiming at truth. We value the fiction for other reasons.

Similarly, suppose one is a fictionalist about mathematics. According to the standard realist construal mathematics commits us to an ontology of abstract entities, i.e. objects that do not have any

spatio-temporal location and that are causally inert, such as numbers, functions, and similar things. A fictionalist about mathematics will say that mathematical statements cannot be true because there are no abstract entities. Yet, she would accept the content of such statements without really believing them. The value of mathematics is independent from its truth. Mathematics is useful to mediate inferences between claims about concrete objects in deductive reasoning.

Thus, fictionalism should be distinguished from eliminativism. Fictionalism and eliminativism are two distinct varieties of anti-realism about a certain region of discourse. According to both of them, the sentences from D are systematically untrue – or simply false – because they involve apparent reference to certain exotic entities that do not exist, e.g. there are no numbers, or because nothing satisfies its characteristic predicates, e.g. nothing satisfies the commutative property. If we reject the exotic entities and the uninstantiated predicates of D , we might just eliminate D and stop inquiring about it. The fictionalist, however, retains the domain of inquiry because it has some other virtues, e.g. it is good, or it is useful for some purposes.

In what follows I will briefly present some of the most paradigmatic varieties of fictionalism, including some of its main historical precursors (Section 1). I will draw some important distinctions between different contemporary fictionalist approaches (Section 2). And I will discuss some of the main problems facing these contemporary varieties of fictionalism (Section 3).

2 Varieties of fictionalism

The analogy between fiction and other domains of discourse has many historical precursors, although not all of them fit the notion of fictionalism developed in the contemporary debate (see Rosen 2005 and Sainsbury 2009: ch. 7 for two historical surveys of fictionalism). Some classify Pyrrhonism, a radical species of ancient scepticism defended by Sextus Empiricus, as a form of protofictionalism. The pyrrhonist is supposed to suspend any belief about herself and others in favour of some weaker notion of acceptance that would allow her to think and act (cf. Rosen 2005 for a critical discussion). Duhem (1913) argued for the controversial thesis that astronomical fiction-

alism was an important and widely endorsed view since Plato and just until before the advent of 17th century modern physics. Duhem claimed that on this view the main aim of theoretical astronomy was to save the astronomical phenomena rather than to represent their true causes (see Rosen 2005 for a series of critical considerations about Duhem's thesis).

Two examples of astronomical fictionalism that are often cited in the contemporary literature are two 16th century astronomers such as Andreas Osiander and Nicholas Ursus, who claimed that the best way to understand Copernicus's heliocentric hypothesis was to assume it for the purpose of mathematical calculation without really believing that it was true. Osiander wrote the Introduction to Copernicus's *De revolutionibus orbium coelestium*, where he writes: "It is not necessary that these hypotheses should be true, or even probable; but it is enough that they provide a calculus which fits the observations". And similar remarks are made by Ursus in his *De hypothesisibus astronomicis tractatus* where he says that astronomers "should fabricate hypotheses, whether true or false or feigned, of such a kind as may yield the phenomena. . . . and produce a method for calculating them and thus achieve the intended purpose and goal of this art" (reported from Jardine 1984: 39-40).

Here are three more controversial cases. First, George Berkeley's (1710: §51) invitation to "think with the learned, but speak with the vulgar" is often indicated as an example of fictionalism about material objects and causality. Berkeley did not claim, however, that all talk about them would be false. He thought that materialism was an incoherent view, and simply suggested to reinterpret material objects and causality as mind-dependent. Second, Jeremy Bentham is sometimes classified as a fictionalist about law (Ogden 1932). Bentham characterised a legal fiction as "a false assertion of a privileged kind, and which, though acknowledged to be false, is at the same time argued from, and acted upon, as if true" (1989: 267). However, he also defined such fictions as a "syphilis, which runs in every vein, and carries into every part of the system the principle of rottenness" (2001: 170). As a consequence, Bentham did not recognize any particular virtues to these fictions. Third, Nietzsche is sometimes considered as a fictionalist about moral values, because of his remarks about the mistakes involved in our ordinary discourse that would be useful for

our ordinary life (Hussain 2007). However, Nietzsche took the massive falsehood about ordinary life to be a reason for rejecting such discourse, and so it appears that he is not a fictionalist in the modern sense after all (Leiter 2015). Less controversially, Vaihinger (1911) has become the most influential precursor of scientific fictionalism (Fine 1993) because of his emphasis about the importance of fictions in scientific reasoning. But he could also be interpreted as a precursor of moral fictionalism (among other areas) because of his fictionalist interpretation of Kant's moral philosophy: on Vaihinger's view there are no categorical imperatives, i.e. there are no intrinsically motivating moral properties.

More recently three major theories have influenced the contemporary debate on fictionalism: Mackie's moral fictionalism, which he elaborated in his *Ethics: Inventing Right and Wrong* published in 1977, Van Fraassen's constructive empiricism, which he introduced in *The Scientific Image* in 1980, and Field's mathematical fictionalism, which he advanced in *Science Without Numbers* also published in 1980.

Mackie recognized that moral judgments are assertoric, that they involve beliefs in moral truths, and that these would commit us to the existence of moral properties such as goodness and badness, rightness and wrongness, duties and obligations, and more. Yet, there are no such entities and, as a consequence, moral assertions are typically untrue. According to Mackie, there are no moral truths. Since ordinary moral judgments are substantially mistaken, Mackie introduced the notion of an error theory. At the end of his book, Mackie claims that moral discourse is a *useful fiction*, but he does not further develop this idea. Some contemporary upholders of moral fictionalism try to do that in different ways. In particular, Nolan et al. (2005) offers a range of possible resources. And Joyce (2005) claims that morality can be a useful guide to action even if we do not believe it. The decision to adopt morality as a fiction is a sort of precommitment, i.e. a way of thinking that typically guides action in certain contexts. The fictionalist, like the realist, has internalized the same imperatives. However, when pressed to say whether any such moral imperative is really true, the realist will be disposed to assent while the fictionalist will be disposed to deny it. Nevertheless, for all practical purposes, their actions will be guided by the same, or by similar, moral principles. The attitude that the fictionalist will

assume towards such principles, however, will be one of make-believe rather than belief.

Van Fraassen advanced his constructive empiricism as opposed to scientific realism. According to the latter, the aim of a scientific theory is genuine truth, and acceptance of a theory involves genuine belief. Furthermore, realists interpret a scientific theory at face value, hence accepting that the unobservable entities involved in scientific theories exist (e.g. Putnam 1975). According to Van Fraassen's constructive empiricism the aim of a scientific theory is not truth and acceptance of a scientific theory may involve something less than belief that the theory is true or some other attitude. The language of the theory should be construed at face value even though the theory needs not be true. When a scientist proposes a certain theory, she does not assert the theory but rather "*displays it*, and claims certain virtues for it" (1980: 10). The aim of a scientific theory is its empirical adequacy, which consists in an accurate representation of observable phenomena. On this view, science does not permit belief beyond observable phenomena.

Field argues that if taken at face value mathematics commits us to a domain of abstract mathematical entities. According to the indispensability argument put forward by Quine (1948) and Putnam (1975), we ought to believe in the existence of mathematical entities because they are indispensable to our best scientific theories. Field does not believe that there are any such entities and concludes that mathematics is largely false (see Benacerraf 1973 for an argument that influenced Field's scepticism towards mathematical entities and according to which such entities would be unknowable). Yet, Field shows that mathematics can be useful. He reconstructs the Newtonian gravitational theory without quantifying over mathematical objects such as numbers. In this way he offers a nominalistic construal of the mathematical statements involved in the Newtonian theory. On the assumption that such a nominalisation is available, at least in principle, also in other areas of scientific inquiry then one can assume an error theory of mathematics. Thus, mathematics does not need to be true to be good. Instead, its virtue resides in its being useful for making inferences between nominalistic statements. (Other mathematical fictionalists think that mathematics is indispensable to science, yet we can construe mathematical statements in a fictional-

ist way without nominalisation, e.g. Balaguer (1996, 1998a, 2015); and Leng (2010)).

Over the past three decades several fictionalist approaches have been developed and applied to mathematics, scientific theories, modality, truth, propositions, morality, fictional characters, and more. Brock (2002), Everett (2013) and Walton (1985, 1990, 2000) defend fictionalism about fictional characters. Balaguer (1998a), Crimmins (1998) and Kroon (2004) defend fictionalism about propositional attitude reports. Everett (2005) and Kroon (2000) put forward a fictionalist interpretation of negative existentials. Balaguer (1998b), Melia (2000) and Yablo (2000a, 2000b, 2001, 2002) defend different versions of fictionalism about mathematical discourse. Kalderon (2005b) and Nolan et al. (2005) defend moral fictionalism. Van Inwagen (1990) and Dorr and Rosen (2002) advance fictionalism about ordinary objects. Armstrong (1989), Divers (1999), Kim (2005), Nolt (1986) and Rosen (1990) advance fictionalism about modal discourse. Burgess and Burgess (2011), and Woodbridge (2005) defend fictionalism about truth. Finally, in recent years Frigg (2010a,b,c), Godfrey-Smith (2006, 2009), Toon (2012), and Levy (2015) have defended different varieties of fictionalism about scientific models.

3 Distinctions and qualifications

Fictionalists interpret claims made within a region of discourse D at face value. If D involves apparent reference to exotic entities, this can be true only if such entities exist. Ontological scruples prevent us to accept such entities. Hence, D is false. Yet, its virtues are detached from the entities that would have to exist to make it true. This is a rough characterization of fictionalism that can be refined according to some important further distinctions.

A first standard distinction that has been drawn in the contemporary debate is between *hermeneutic* and *revolutionary* fictionalism. (This terminology was originally introduced by Stanley (2001), who was inspired by Burgess's (1983) distinction between hermeneutic and revolutionary *nominalism*. See also Burgess and Rosen 1997). Hermeneutic fictionalism about D is a descriptive thesis according to which when engaging in D we pretend to aim at literal truth and

we pretend to refer to the exotic entities that would be required for *D* to be true. Revolutionary fictionalism, on the contrary, is a prescriptive thesis according to which when engaging in *D* we *ought* to pretend to appeal to literal truth and we *ought* to pretend to refer to the problematic entities.

For example, Van Fraassen's (1980) constructive empiricism might be understood as a form of hermeneutic fictionalism (although Rosen (1994) individuates a difficulty with this interpretation), while Mackie's (1977) moral fictionalism and Field's (1980) nominalism could be understood as a form of revolutionary fictionalism. Van Fraassen argues that acceptance of a scientific theory is normed by its empirical adequacy: when a scientist accepts a theory she does not need to believe that it is true and she does not need to assert it. Mackie, on the contrary, claims that moral discourse involves assertoric claims that, if taken at face value, would commit us to implausible moral properties. Hence, moral discourse ought to be understood as a merely useful fiction. Similarly, Field argues that people who accept and utter a mathematical claim actually believe its content and they assert it, hence committing themselves to an implausible ontology of abstract entities. Thus, mathematical discourse *ought* to be reformed: acceptance of a mathematical claim should be normed by its being deductively useful in mediating inferences between nominalistic statements.

A second important distinction that has been drawn in the contemporary debate is between what I will call *use fictionalism* and *semantic fictionalism*. Use fictionalism is a thesis about the use of sentences involving apparent reference to exotic entities within *D*. Most fictionalists distinguish between a fictionalist or pretend use of sentences and a literal or genuinely assertive use. In fictionalist uses of sentences pretence affects the *force* of the relevant speech act. So, for example, one who rejects numbers might interpret an utterance of 'there are numbers' in a fictionalist spirit, as an act of pretend assertion that does not commit us to the existence of numbers, or she might interpret the same utterance as an act of genuine or literal assertion that would be untrue because there are no numbers.

Semantic fictionalism is a thesis about the semantic content of sentences involving apparent reference to exotic entities within *D*. Some philosophers of fiction argue that when we utter sentences in-

volving apparent reference to fictional characters in the process of story telling or in reporting the content of a story from an internal perspective we do this in a fictionalist spirit. Vonnegut merely pretends to assert that Billy Pilgrim was born in 1922 in Ilium without genuinely asserting that this was really the case. And we, as readers, might pretend to assert that Billy was born in Ilium when reporting the content of the story from an internal perspective. Pretend uses of the name 'Billy Pilgrim' do not commit us to the existence of a referent for the name. Since the name does not have any truth-conditional content, uses of sentences involving them do not express any proposition. When Vonnegut says, in pretence, that Billy was born in Ilium he merely pretends to express a proposition about Billy without really expressing anything. This view was originally put forward by Walton (1990), and was later endorsed by others, including Kripke (2013), Van Inwagen (1977), and Schiffer (1996).

Realists about fictional characters argue that we intend our utterances as genuinely true assertions that would commit us to the existence of fictional entities (e.g. abstracta, possibilia, or Meinongian non-existent entities) when we talk from a real world perspective (e.g., Kripke 2013, Schiffer 1996, Thomasson 1999, Van Inwagen 1977). For example, we might say that Billy Pilgrim is a fictional character, that he was created by Vonnegut in 1969, that he was based on Vonnegut's comrade Edward R. Crone Jr., and so on and forth. Against this interpretation, fictionalists such as Walton (1990), Brock (2002) and Kroon (2000) defend the idea that this kind of discourse also involves pretence and is therefore ontologically non-committal. Only Walton, however, appeals to the notion of semantic pretence for all utterances involving apparent references to fictional individuals. (This semantic interpretation has been strongly criticized, among others, by Richard (2000)).

Third, Yablo (2001) distinguishes four main varieties of fictionalism. First, according to *instrumentalist fictionalism* we pretend to assert that S and we pretend to believe that S for the purpose of simplifying a theory or shortening a proof. Field (1980) would be an example of instrumentalism because he recommends to quasi-assert certain things about mathematical objects for the purpose of shortening certain proofs of statements about ordinary objects. The instrumentalist, however, does not explain what we are really doing

when we engage in pretence and why we do this. When we pretend to assert that S or to believe that S it seems that we pretend to assert something and to believe something, but the instrumentalist does not say what it is that we pretend to assert or pretend to believe. As a consequence, she cannot explain what makes a certain pretend assertion correct (e.g. $2+3=5$) and another incorrect (e.g. $2+3=6$). Also, when we pretend to assert that S and pretend to believe that S it looks like we genuinely assert that S and genuinely believe that S . But the instrumentalist does not explain how quasi-assertion and pretend-belief fall short of genuine assertion and genuine belief.

Second, according to *meta-fictionalism* when we pretend to assert that S we are really asserting that according to the fiction, S . Van Fraassen (1980) would be an example of meta-fictionalism. He thinks of scientific statements as correct if and only if they are part of a theory that is empirically adequate and claims that to quasi-assert that S amounts to genuinely assert that according to an empirically adequate theory, S . Similarly, Field (1989) claims that quasi-asserting that, e.g., $2+3=5$ can amount to genuinely assert that according to standard math, $2+3=5$. One problem for this view concerns the modal properties of mathematical claims. Mathematical statements such as $2+3=5$ are thought to be necessary and a priori, while it is not necessary or a priori that according to standard math, $2+3=5$ since perhaps standard math could have been different. Second, when we say that the number of starving people is rising we seem to care about the people themselves, not about how things are according to standard math. Third, when we say that the number of starving people is rising, our subject matter seems to be the people rather than standard math.

Third, according to *object fictionalism* what is true in a fiction depends upon what is really true, or true in reality. When one pretends to assert that S one is really asserting that the world is in a certain condition, i.e. the one that is needed to make it true in the fiction that S . On this view, S is quasi-assertible if and only if according to the fiction, S . However, the condition that is needed to make it true in the fiction that S is that the real content of S obtains. This variety of fictionalism helps solving the problems faced by the other varieties described above. When we pretend to assert that the number of starving people is rising we are really saying that the number of

starving people is rising, and so the subject matter of our concern are real people that we care about. Furthermore, the content of $2+3=5$ does not involve any explicit reference to standard math, which guarantees that the statement ' $2+3=5$ ' is necessary and a priori. However, Brock (1993) and Rosen (1993) argued against Rosen's (1990) original modal fictionalism by showing that the approach commits the fictionalist to the very entities that she rejects. So, for example, on this view 'necessarily there exist many worlds' is quasi-assertible if and only if according to the fiction of possible worlds there exist many worlds. And the condition that is needed to make it true in the fiction of possible worlds that there exist many worlds is exactly that there really exist many worlds. (See Nolan and O'Leary-Hawthorne 1996 for a generalisation of this objection to other sorts of fictionalism).

Fourth, according to Yablo's preferred approach, or *figuralism*, we should distinguish between two roles that the problematic entities apparently referred within *D* can play. Sometimes they function as *representations*, e.g. 'the number of Martian moons is 2'; some other times they function as the things *represented*, e.g. 'there are numbers'. In the first case the problematic entities function as representations in a figurative description of ordinary objects. In the second case they are the objects represented. Some other times, however, they can function both as representations and as the objects represented. So, for example, a fictionalist says something true (on her own view) when she says that "the number of natural numbers is zero". In this case numbers function as representations ('number') and as the objects represented ('natural numbers'). Thus, figuralism has the advantages of object fictionalism above the other views, but it does not commit us to the existence of the problematic entities apparently referred to within *D*.

A fourth distinction that is often drawn in the contemporary debate on fictionalism concerns the mental attitudes we have towards the problematic claims made within *D*. Some claim that our attitude towards statements made within *D* is one of acceptance rather than belief. Van Fraassen (1980) originally introduced this idea concerning our attitude towards statements made within scientific discourse, while Sainsbury (2009) recently suggested that acceptance would be the appropriate attitude towards discourse about fic-

tion and non-existent objects more generally. Others are inspired by Walton's (1990, 1993) influential account of make-believe, or imagination, as the relevant attitude we have towards fictions. So, for example, Yablo's (1998, 2001, 2002) figuralism exploits Walton's notion of make-believe as involving props such as baby dolls, hobby horses, but also paintings and novels. On Walton's account props are ordinary objects that generate fictional truths in virtue of there being a prescription to imagine something either explicitly stipulated or implicitly stipulated as being in force within a certain pretence. Walton (1993) introduced a notion of prop-oriented make-believe that plays an important role in his account of metaphor and that is endorsed by Yablo. In this case make-believe helps understanding the props themselves by describing them in ways that are different from how they actually are. On this view statements made within *D* are best understood as metaphorical, or figurative. And metaphors involve prop-oriented make-believe. For example, a sentence such as 'Crotona is on the arch of the Italian boot' is not literally true, since Italy is not a boot. But we learn something about the real location of Crotona by imagining of Italy that it is a boot and that Crotona is on its arch. (See Wearing 2012 and Camp 2009 for criticisms to this notion of metaphor). Alternatively, Yablo (2006) suggests that when we engage in mathematical discourse we presuppose that mathematical entities exist without really believing it. Notice, however, that these are technical notions that might be assimilated to one another depending upon their characterisation.

4 Problems for fictionalism

I will conclude this entry by considering some paradigmatic arguments against fictionalism as a general metaphysical strategy. Some contemporary philosophers have questioned the distinction between acceptance and belief (see, O'Leary-Hawthorne 1994; Horwich 2004; and Daly 2008 for a response). Others have noticed that many fictionalists appeal to the notion of abstract objects such as stories, propositions, and more for the purpose of explaining the relevant phenomena (see Walton 1990: ch. 10 for an explicit endorsement of abstract entities that are not fictional characters). One worry one might have is that each different variety of fictionalism about a cer-

tain area should provide specific motivation for scepticism towards some abstract entities but not others. A second worry one might have is that those fictionalists that reject all abstract entities, and in particular revolutionary fictionalists, should not appeal to other entities that by their own standards would be also suspicious (e.g. Daly 2008).

Here are some more specific worries. One argument against revolutionary fictionalism is that it attributes massive error to agents engaged in apparently serious discourse about morality, mathematics, scientific theories and more. For example, Mackie thought that our ordinary moral judgments are systematically mistaken, and Field claimed something similar of mathematical claims. Some have criticized this and similar versions of revolutionary fictionalism about mathematics on charge of philosophical immodesty. It is ridiculously immodest, so the critic argues, to hold that the successful practitioners of a scientific discipline like mathematics would be involved in systematic and massive mistakes (Burgess 2004, Burgess and Rosen 2005; see Leng 2005, and Daly 2006 for different responses).

One classical argument against fictionalism of the hermeneutic variety concerns the phenomenology of pretence. An interpretation of apparently non-figurative literal discourse as involving pretence and make-believe would be implausible. So, for example, realists about fictional characters insist that external discourse about them (discourse performed from a real world perspective) involves genuinely true assertions that commit us to the existence of fictional entities (e.g., Kripke 2013, Schiffer 1996, Thomasson 1999, Van Inwagen 1977). So, it seems that when in his preface to *Martin Chuzzlewit* Dickens wrote that “Mrs Gamp was a fair representation of the hired attendant on the poor in sickness” it seems that he is engaging in genuine assertions that can be valued for genuine truth and falsity. External discourse does not seem to involve any sort of pretence.

One reply that has been offered to this sort of argument is that we engage in make-believe and pretence discourse even when we do not notice it (Walton 1990). A second reply consists in arguing that when it comes to deciding on whether we are engaged in pretence theoretical considerations should prevail on phenomenological considerations (Kroon 2011). Another possible reply is to claim that when we engage in discourse about objects that we know do not ex-

ist we do not need to appeal to pretence or make-believe. Perhaps acceptance is a better notion, one that is involved in fictional discourse but also in non-fictional discourse (Sainsbury 2009). So, for example, when claiming that Vulcan was the planet responsible for the perturbations of Mercury's orbit we accept that Vulcan existed without really believing. Yet, acceptance would be a broader notion possibly encompassing make-believe, but also presupposing, assuming and so on. (This notion of acceptance was originally introduced in Stalnaker 1984).

A second argument against fictionalism of the hermeneutic variety concerns the notion of compositional semantics. The worry is that pretence accounts of *D* do not involve any systematic relationship between different kinds of sentences and their real world truth-conditions (Stanley 2001). For example, on Walton's interpretation of true negative existential claims such as 'Sherlock Holmes does not exist' we use the name 'Sherlock Holmes' to pretend to refer to Sherlock Holmes and then immediately betray this pretence by saying that he does not exist. In other words, Walton does not offer a compositional semantics of negative existential claims. By extension, a similar problem arises also in figurative interpretations of mathematical discourse, moral discourse, scientific discourse and so on. In other words, it is not clear whether a fictionalist account of *D* can explain the compositionality of the language involved in *D*.

The fictionalist can reply by biting the bullet and simply saying that, as Yablo (2001) does, that we can understand many kinds of metaphorical or figurative speech whose semantics does not seem to be compositional, e.g. irony, hyperbole, metonymy and more. By analogy, fictionalist interpretations of *D* do not need to be worried by the lack of a compositional semantics for *D*. A different reply that is compatible with other approaches to the semantics of fictional discourse is simply to reject Walton's semantic pretence and endorse a uniform semantics for fictional discourse and non-fictional discourse. In this way, the problem of compositionality for fictional discourse simply disappears.

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References

- Armstrong, David M. 1989. *A Combinatorial Theory of Possibility*. Cambridge: Cambridge University Press.
- Balaguer, Mark. 1996. A Fictionalist Account of the Indispensable Applications of Mathematics. *Philosophical Studies* 83: 291-314.
- Balaguer, Mark. 1998a. *Platonism and Anti-Platonism in Mathematics*. New York: Oxford University Press.
- Balaguer, Mark. 1998b. Attitudes Without Propositions. *Philosophy and Phenomenological Research* 98: 805–26.
- Balaguer, Mark. 2015. Fictionalism in the Philosophy of Mathematics. In *The Stanford Encyclopedia of Philosophy* (Summer 2015 Edition). Edited by Edward N. Zalta. URL = <<http://plato.stanford.edu/archives/sum2015/entries/fictionalism-mathematics/>>.
- Benacerraf, Paul. 1973. Mathematical Truth. *Journal of Philosophy* 70: 661-79.
- Bentham, Jeremy. 1822. *First Principles Preparatory to Constitutional Code*. Edited by P. Schofield. Oxford: Clarendon Press, 1989.
- Bentham, Jeremy. 1843. *The Works of Jeremy Bentham: Published under the Superintendence of His Executor*. John Bowring (editor). Vol. V. Adamant Media, 2001.
- Berkeley, George. 1710. *A Treatise Concerning the Principles of Human Knowledge*. Dublin: Aaron Rhames for Jeremy Pepyat.
- Brock, Stuart. 1993. Modal Fictionalism: A Response to Rosen. *Mind* 102(405): 147-150.
- Brock, Stuart. 2002. Fictionalism about Fictional Characters. *Noûs* 36: 1-21.
- Burgess, John. 1983. Why I am Not a Nominalist. *Notre Dame Journal of Formal Logic* 24: 93-105.
- Burgess, John. 2004. Mathematics and Bleak House. *Philosophia Mathematica* 12: 18-36.
- Burgess, John and Gideon Rosen. 1997. *A Subject with no Object*. Oxford: Clarendon Press.
- Burgess, John and Gideon Rosen. 2005. Nominalism Reconsidered. In S. Shapiro (editor), *The Oxford Handbook of Philosophy of Mathematics and Logic*. New York: Oxford University Press.
- Burgess, Alexis and John Burgess. 2011. *Truth*. Princeton: Princeton University Press.
- Camp, Elisabeth. 2009. Two Varieties of Literary Imagination: Metaphor, Fiction, and Thought Experiments. *Midwest Studies in Philosophy: Poetry and Philosophy*: 107-130.
- Copernicus, Nicholas. 1543. *Copernicus: On the Revolutions of the Heavenly Spheres*. Translated and edited by A. M. Duncan. Newton Abbot: David & Charles; New York: Barnes & Noble, 1976.
- Crimmins, Mark. 1998. Hesperus and Phosphorus: Sense, Pretense, and Reference. *Philosophical Review* 107: 1-48.
- Daly, Chris. 2006. Mathematical Fictionalism – No Comedy of Errors. *Analysis* 66(3): 208-16.
- Daly, Chris. 2008. Fictionalism and the Attitudes. *Philosophical Studies* 139: 423-40.
- Dickens, Charles. 1844. *Life and Adventures of Martin Chuzzlewit*. Electronic version available at: <http://www.gutenberg.org/files/968/968-h/968-h.htm>
- Divers, John. 1999. A Modal Fictionalist Result. *Noûs* 33(3): 317-346.
- Dorr, Cian and Gideon Rosen. 2002. Composition as a Fiction. In R. Gale (editor), *The Blackwell Guide to Metaphysics*, Oxford: Blackwell.

- Duhem, Pierre. 1913. *To Save the Phenomena: An Essay on the Idea of Physical Theory from Plato to Galileo*. Translated by E. Doland and C. Maschler. Chicago: University of Chicago Press, 1969.
- Everett, Anthony and Thomas Hofweber (editors). 2000. *Empty Names, Fiction and the Puzzles of Non-Existence*. Stanford: CSLI Publications.
- Everett, Anthony. 2005. Against Fictional Realism. *Journal of Philosophy* 102: 624-49.
- Everett, Anthony. 2013. *The Nonexistent*. Oxford: Oxford University Press.
- Field, Hartry. 1980. *Science Without Numbers*. Princeton: Princeton University Press.
- Field, Hartry. 1989. *Realism, Mathematics and Modality*. Oxford: Blackwell.
- Fine, Arthur. 1993. Fictionalism. *Midwest Studies in Philosophy* 18: 1-18.
- Frigg, Roman 2010a. Models and Fiction. *Synthese* 172(2): 251-268
- Frigg, Roman 2010b. Fiction and Scientific Representation. In R. Frigg and M. Hunter (editors), *Beyond Mimesis and Nominalism: Representation in Art and Science*. Berlin and New York: Springer.
- Frigg, Roman 2010c. Fiction in Science. In J. Woods (editor), *Fictions and Models: New Essays*. Munich: Philosophia Verlag.
- Godfrey-Smith, Peter. 2006. The Strategy of Model-Based Science. *Biology and Philosophy* 21: 725-740.
- Godfrey-Smith, Peter. 2009. Models and Fictions in Science. *Philosophical Studies* 143: 101-116.
- Horwich, Paul. 2004. On the Nature and Norms of Theoretical Commitment. In P. Horwich (editor), *From a Deflationary Point of View*. Oxford: Oxford University Press.
- Hussain, Naadem. 2007. Honest Illusion: Valuing for Nietzsche's Free Spirits. In B. Leiter and N. Sinhababu (editors), *Nietzsche and Morality*. Oxford: Clarendon Press.
- Jardine, Nicholas. 1984. *The Birth of History and Philosophy of Science. Kepler's 'A Defence of Tycho against Ursus' with Essays on its Provenance and Significance*. Cambridge: Cambridge University Press.
- Joyce, Richard 2005. Moral Fictionalism. In M. Kalderon (editor), *Fictionalism in Metaphysics*. Oxford: Clarendon Press.
- Kalderon, Mark (editor). 2005a. *Fictionalism in Metaphysics*. Oxford: Clarendon Press.
- Kalderon, Mark. 2005b. *Moral Fictionalism*. Oxford: Clarendon Press.
- Kim, Seahwa. 2005. Modal Fictionalism and Analysis. In M. Kalderon (editor), *Fictionalism in Metaphysics*. Oxford: Clarendon Press.
- Kripke, Saul. 2013. *Reference and Existence: The John Locke Lectures*. Oxford University Press.
- Kroon, Fred. 2000. Negative Existentials. In A. Everett and T. Hofweber (editors), *Empty Names, Fiction and the Puzzles of Non-Existence*. Stanford: CSLI Publications.
- Kroon, Fred. 2004. Descriptivism, Pretense, and the Frege-Russell Problems. *Philosophical Review* 113: 1-30.
- Kroon, Fred. 2011. Fictionalism in Metaphysics. *Philosophy Compass* 6(11): 786-803.
- Leiter, Brian. 2015. Nietzsche's Moral and Political Philosophy. *The Stanford Encyclopedia of Philosophy* (Spring 2015 Edition). Edward N. Zalta (ed.), URL=<<http://plato.stanford.edu/archives/spr2015/entries/nietzsche-moral-political/>>.
- Leng, Mary. 2005. Revolutionary Fictionalism: A Call to Arms. *Philosophia Mathematica* 13: 277-93.
- Leng, Mary. 2010. *Mathematics and Reality*. Oxford: Oxford University Press.

- Levy, Arnon. 2015. Modeling Without Models. *Philosophical Studies* 172(3): 781-198.
- Mackie, John L. 1977. *Ethics: Inventing Right and Wrong*. Harmondsworth. New York: Penguin.
- Melia, Joseph. 2000. Weaseling Away the Indispensability Argument. *Mind* 109: 453-79.
- Nolan, Daniel and John O'Leary-Hawthorne. 1996. Reflexive Fictionalisms. *Analysis* 56: 26-32
- Nolan, Daniel, Greg Restall, and Caroline West. 2005. Moral Fictionalism Versus the Rest. *Australasian Journal of Philosophy* 83: 307-30.
- Nolt, John E. 1986. What Are Possible Worlds? *Mind* 95: 432-445.
- Ogden, Charles K. (Editor). 1932. *Bentham's Theory of Fictions*. New York: Harcourt, Brace and Company.
- O'Leary-Hawthorne, John. 1994. What Does van Fraassen's Critique of Scientific Realism Show? *The Monist* 77: 128-45.
- Putnam, Hilary. 1975. *Mathematics, Matter and Method*. Cambridge: Cambridge University Press.
- Quine, Willard V. O. 1948. On What There Is. *Review of Metaphysics* 2(5): 21-38. Reprinted in *From a Logical Point of View*. Cambridge, MA: Harvard University Press, 1953.
- Richard, Mark. 2000. Semantic Pretense. In A. Everett and T. Hofweber (editors), *Empty Names, Fiction, and the Puzzles of Non-Existence*. Stanford: CSLI Publications.
- Rosen, Gideon. 1990. Modal Fictionalism. *Mind* 99(395): 327-354.
- Rosen, Gideon. 1993. A Problem for Fictionalism about Possible Worlds. *Analysis* 53(2): 71-81.
- Rosen, Gideon. 1994. What is Constructive Empiricism? *Philosophical Studies* 74: 143-78.
- Rosen, Gideon. 2005. Problems in the History of Fictionalism. In M. Kalderon (editor), *Fictionalism in Metaphysics*. Oxford: Clarendon Press.
- Sainsbury, Mark. R. 2009. *Fiction and Fictionalism*. London: Routledge.
- Salis, Fiora. 2013. Fictional Entities. In J. Branquinho and R. Santos (editors), *Online Companion to Problems in Analytic Philosophy*. Lisbon: Centre of Philosophy, University of Lisbon.
- Schiffer, Stephen. 1996. Language-Created Language-Independent Entities. *Philosophical Topics* 24(1): 149-167.
- Stalnaker, R. 1984. *Inquiry*. Cambridge: MIT Press.
- Stanley, Jason. 2001. Hermeneutic Fictionalism. In P. French and H. Wettstein (editors) *Midwest Studies in Philosophy XXV: Figurative Language*. Oxford: Blackwell.
- Thomasson, Amie. 1999. *Fiction and Metaphysics*. Cambridge University Press.
- Toon, Adam. 2012. *Models as Make-Believe: Imagination, Fiction and Scientific Representation*. Basingstoke, Palgrave Macmillan.
- Vaihinger, Hans. 1911. *Die Philosophie des Als Ob*, Berlin. Verlag von Reuther & Reichard. Published in English as *The Philosophy of 'As If'*. 1924. Translated by C.K. Ogden, London: Kegan Paul.
- Van Inwagen, Peter. 1977. Creatures of Fiction. *American Philosophical Quarterly* 14(4): 299-308.
- Van Inwagen, Peter. 1990. *Material Beings*. Ithaca, New York: Cornell University Press.
- Vonnegut, Kurt. 1969. *Slaughterhouse Five*. New York: Dell Publishing, 1991.
- Walton, Kendal. 1985. Fictional Entities. In P. McCormick (editor), *The Reasons of Art/L'Art a ses Raisons*. Ottawa: University of Ottawa Press.

- Walton, Kendal. 1990. *Mimesis and Make-Believe*. Cambridge, Mass.: Harvard University Press.
- Walton, Kendal. 1993. Metaphor and Prop Oriented Make-Believe. *European Journal of Philosophy* 1: 39-57. Reprinted in M. Kalderon (editor), *Fictionalism in Metaphysics*. Oxford: Clarendon Press.
- Walton, Kendal. 2000. Existence as Metaphor? In A. Everett and T. Hofweber (editors), *Empty Names, Fiction and the Puzzles of Non-Existence*. Stanford: CSLI Publications.
- Wearing, Catherine. 2012. Metaphor, Idiom, and Pretense. *Noûs* 46(3): 499-524
- Woodbridge, James A. 2005. Truth as a Pretense. In M. Kalderon (editor), *Fictionalism in Metaphysics*. Oxford: Clarendon Press.
- Yablo, Stephen. 1998. Does Ontology Rest on a Mistake? *Proceedings of the Aristotelian Society* 72: 229-6.
- Yablo, Stephen. 2000a. A Paradox of Existence. In A. Everett and T. Hofweber (editors), *Empty Names, Fiction and the Puzzles of Non-Existence*. Stanford: CSLI Publications.
- Yablo, Stephen. 2000b. Apriority and Existence. In P. Boghossian and C. Peacocke (editors), *New Essays on the A Priori*. Oxford: Oxford University Press.
- Yablo, Stephen. 2001. Go Figure: A Path Through Fictionalism. In P. A. French and H. Wettstein (editors), *Midwest Studies in Philosophy Volume XXV: Figurative Language*. Oxford: Blackwell.
- Yablo, Stephen. 2002. Abstract Objects: A Case Study. *Philosophical Issues* 12: 220-40.
- Yablo, Stephen. 2005. The Myth of the Seven. In M. Kalderon (editor), *Fictionalism in Metaphysics*. Oxford: Clarendon Press.
- Yablo, Stephen. 2006. Non-Catastrophic Presupposition Failure. In J. Thomson and A. Byrne (editors), *Content and Modality: Themes from the Philosophy of Robert Stalnaker*. Oxford: Oxford University Press.