

Introduction

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Modern Fictionalism

Modern fictionalism emerged in 1980 with the publication of Hartry Field's *Science Without Numbers* and Bas van Fraassen's *The Scientific Image*. Field maintained that mathematics does not have to be true to be good, and van Fraassen maintained that the aim of science is not truth but empirical adequacy. The suggestion common to each is that the aim of inquiry need not be truth, and that the acceptance of a mathematical or scientific theory need not involve belief in its content.

Field (1980, 1989) claims that mathematics has a platonist interpretation and thus involves commitment to the existence of abstract objects (i.e., objects that do not participate in the causally closed system of spatiotemporal events) such as numbers, functions, and the like. Since there are no abstract objects, mathematics, interpreted at face value, is false. However, mathematics need not be abandoned as a serious intellectual discipline—despite the error involved, mathematics is useful in mediating inferences between claims purely about concreta, and the deductive utility of mathematics does not depend on its truth.

Van Fraassen (1980) claims that scientific theories are genuine representations of unobservable structures in nature. However, the aim of science is not to discover the truth about the unobservable. Rather, given the highest aspirations of the scientific endeavor, an ideally acceptance scientific theory need only have certain non-truth-involving 'virtues' such as empirical adequacy, i.e., the representation of observable regularities. The aim of science is not truth but empirical adequacy.

Thus Field and van Fraassen each, in their own way, suggests that the aim of inquiry need not be the true representation of a putative domain of fact and that the acceptance of a theory need not involve belief in its content. Acceptance is best understood in terms of its role in inquiry. A domain of inquiry, such as biology or astronomy, is associated with a region of discourse that involves a class of public language sentences couched in the distinctive vocabulary of that discipline. Let ‘acceptance’ be the final state of inquiry: in accepting a sentence from the region of discourse, a person considers the matter closed in the sense that he takes himself to have no reason to inquire further. (‘Acceptance’ is a technical term and is explicitly stipulated to be neutral as to whether acceptance is belief in the content of the accepted sentence or is some other attitude. Here I am following van Fraassen’s, 1980, usage.) The distinctive commitment of fictionalism is that acceptance in a given domain of inquiry need not be truth-normed, and that the acceptance of a sentence from the associated region of discourse need not involve belief in its content.

There is an important qualification to be made. But before it can be made, a distinction needs to be drawn between two kinds of acceptance.

Acceptance can be tentative or full (see Harman, 1986: 46–7). Thus, for example, a person who denies the axiom of choice may tentatively accept that axiom in order to work out the implications of conjoining it with a standard set theory. Such a person only has a reason to tentatively accept the axiom of choice while he has reason to inquire after its implications for a standard set theory: once the implications are discovered, he ceases to tentatively accept the axiom. In contrast to tentative acceptance, full acceptance ends inquiry. In fully accepting a sentence, the issue is closed in the sense that there is no reason to inquire further. Tentative acceptance is not limited to supposition. A person may tentatively accept General Relativity considering it to be a very good approximation of the truth but an imperfect approximation nonetheless. Such a person only has a reason to accept General Relativity while there is no significantly more accurate theoretical alternative. Tentative acceptance, while distinct from full acceptance is a matter of degree. The degree of tentative acceptance depends on the extent to which a person is prepared to rely on the acceptance of the sentence in theoretical and practical reasoning and the range of contexts in which a person does so rely. If, over time, and over a wide range of contexts, a person comes to rely sufficiently on the acceptance of the sentence in theoretical and practical reasoning, he may come to fully accept that sentence. Thus, the distinction between tentative and full acceptance is best understood as an approach to a limit.

The distinctive commitment of fictionalism—that acceptance in a given domain of inquiry is not truth-normed and does not involve belief in the content of the accepted sentence—should be understood as a claim about *full* acceptance. Suppose someone’s tentative acceptance of General Relativity falls short of belief. That, by itself, would not establish that scientific acceptance is not belief in the accepted theory. It is the norms that govern full acceptance and the attitudes involved in full acceptance that are relevant to a fictionalist stance towards the given domain of inquiry (see Rosen, Chapter 1, this volume). Henceforth, by ‘acceptance’ I will mean full acceptance.

So the fictionalist claims of a given domain of inquiry that acceptance in the area is not truth-normed and does not involve belief in the content of the accepted sentence. Why describe such an epistemic stance as ‘fictionalism?’ There is an important analogy with fiction—at least on one natural understanding of fiction (see Brock, 2002; Lewis, 1978; and Walton, 1990). In *Moby Dick*, Melville writes:

Yet, when by this collision forced to turn towards home, and so for long months of days and weeks, Ahab and anguish lay stretched together in one hammock, rounding in mid winter that dreary, howling Patagonian cape; then it was, that his torn body and gashed soul bled into one another, and so interfusing made him mad.

The passage describes the onslaught of Ahab’s madness in the aftermath of his initial encounter with the White Whale. Whatever point there was to writing this, Melville is not reporting the truth of some historical episode. The represented events have not transpired—a fact that is at least tacitly understood by both Melville and his reader. Melville literally asserts nothing about Ahab’s madness, and the witting participants of the fiction literally believe nothing about Ahab. In a fictional context, the utterance or inscription of a sentence is not the assertion of the expressed content, and the acceptance of a sentence is not belief in that content. The acceptance and pragmatics of sentences from a fictionalist inquiry thus parallels, at least to this extent, the acceptance and pragmatics of fictional sentences on one natural understanding of fiction.

Two Contrasts: Reductionism and Nonfactualism

The fictionalist stance is further clarified by contrasting it with reductionism and nonfactualism.

As opposed to earlier nominalists, Field does not propose to interpret or reinterpret mathematics in nominalistically acceptable terms. He does not

propose to reduce mathematics to claims about a domain of concreta or potential concreta. Rather mathematics is interpreted at face value as involving reference to and quantification over a domain of abstracta. In this way, Field's fictionalism avoids the controversial semantic claims of earlier nominalists.

Similarly, as opposed to earlier empiricists, van Fraassen does not propose to interpret or reinterpret scientific theories in terms that involve no reference to unobservable entities. He does not propose to reduce scientific theories to claims about the observable states of measuring devices, say. Rather, according to constructive empiricism, science is interpreted at face value as involving reference to and quantification over a domain of unobservable entities. In this way, van Fraassen's fictionalism avoids the controversial semantic claims of earlier empiricists.

Thus, fictionalism stands opposed to a certain kind of reductionism. The fictionalist claims, and the reductionist denies, that the target region of discourse is interpreted at face value.

Not only is fictionalism usefully contrasted with reductionism, it is usefully contrasted as well with nonfactualism. According to nonfactualism, the sentences of the target region of discourse do not have a truth-evaluable content—they are not genuine representations of a putative domain of fact. Thus, for example, according to Ayer (1946), ethical sentences do not represent ethical facts—facts about distinctively ethical objects (such as virtues or rights) and properties (such as goodness or being just); rather, their distinctively ethical content entirely consists in the expression of the emotional attitudes of the speaker. Ayer's nonfactualist expressivism is controversial. One obstacle to it is the so-called Frege–Geach problem (see Ross, 1939: 33–4; Geach, 1958, 1960, 1965; and Searle, 1962, 1969). The problem is that sentences can meaningfully occur in unasserted contexts (such as the antecedent of a conditional, or within the scope of a negation operator, or within propositional attitude constructions), but in such contexts they do not express the relevant attitudes. In uttering the sentence 'It is not the case that lying is wrong' a speaker does not express disapproval of lying. However, if the content of 'is wrong' is exhausted by the use of sentences containing it to express disapproval, then it lacks that content and indeed, by Ayer's lights, any ethical content in unasserted contexts. But that's implausible.

The fictionalist, however, need not claim that the target region of discourse has a nonrepresentational content and so can avoid the problems associated with a nonfactualist semantics. The fictionalist can maintain that the sentences from the region of discourse are genuine representations of a putative domain of fact. Thus Field maintains that mathematical sentences are genu-

ine, truth-evaluable representations of abstract mathematical entities, and van Fraassen maintains that theoretical sentences are genuine, truth-evaluable representations of unobservable entities. It is just that these representations are not being put forward as true and so their contents are not the objects of belief when such representations are accepted. A central cognitive use of a representation is to put forward that representation as true. While a representation might be used in that way, it need not. A representation can be used in all sorts of ways. Using it to claim that the world is the way the representation represents it to be is but one of them. Indeed this is an important insight of Wittgenstein's (1958: section 23):

But how many kinds of sentences are there? Say assertion, question, and command? There are *countless* kinds: countless different kinds of use of what we call 'symbols', 'words', 'sentences' . . . Review the multiplicity of language-games in the following examples, and in others:

- Giving orders, and obeying them
- Describing the appearance of an object, or giving its measurements
- Constructing an object from a description (a drawing)
- Reporting an event
- Speculating about an event
- Forming and testing a hypothesis
- Presenting the results of an experiment in tables and diagrams
- Making up a story; and reading it
- Play-acting
- Singing catches
- Guessing riddles
- Making a joke; and telling it
- Solving a problem in practical arithmetic
- Translating from one language into another
- Asking, thanking, cursing, greeting, praying.

Hermeneutic and Revolutionary Fictionalism

There are two ways to understand fictionalism. Fictionalism can be understood as a *description* of an actual domain of inquiry, or it can be understood as a *prescription* for reforming that inquiry. Following John P. Burgess' (1983) terminology, let *hermeneutic fictionalism* be a description of a domain of inquiry, and let *revolutionary fictionalism* be a prescription for reforming a domain of inquiry.

Van Fraassen's constructive empiricism might be understood as a form of hermeneutic fictionalism (but see Rosen, 1994, for an important difficulty with this interpretation). So understood, given the highest aspirations of science as it is actually conducted, the acceptance of a theory is not in fact truth-normed, it is not evaluated in terms of how accurately it represents the unobservable structure of nature; rather, the norms that actually govern acceptance are such that as long as a theory displays certain non-truth-involving virtues such as empirical adequacy, we have sufficient reason to accept that theory. On this interpretation, when a scientist accepts and utters a theory, he need not believe that theory and he need not be asserting it.

Contrast this understanding of constructive empiricism with Field's nominalism. According to Field, when people accept and utter a mathematical sentence, they believe the content expressed and assert that content. Since mathematical discourse is interpreted at face value and since, so interpreted, it involves commitment to the existence of abstract objects and there are none, our actual mathematical practice involves us in systematic and pervasive error. When Field claims that mathematics does not have to be true to be good, he is not making a claim about the norms that actually govern mathematical acceptance; rather, he is proposing a reform of mathematical inquiry. We should revise our attitudes towards the mathematical sentences we accept and utter. When we accept a mathematical sentence we should believe only that it is deductively useful in mediating inferences between purely nominalistic claims or perhaps that it is true according to standard mathematics, but this falls short of believing the content of that sentence. Field's nominalism is a kind of revolutionary fictionalism. (Field's mathematical fictionalism is thus importantly different from Stephen Yablo's, Chapter 3, 'figuralism'. Whereas Field is a revolutionary fictionalist, Yablo is a hermeneutic fictionalist.)

This contrast is revealing. For while hermeneutic fictionalism is a distinctive kind of irrealism, distinct from both nonfactualism and the error theory, revolutionary fictionalism is a kind of error theory. According to an error theory, such as Mackie's (1977) account of morality, the sentences from the associated region of discourse are genuine, truth-evaluable representations of a putative domain of fact. However, no such facts obtain, and the target sentences are systematically false. There are two attitudes one might take towards an error-ridden discourse. One might take the error involved to be a reason to abandon the domain of inquiry. Thus if we decide there are no witches or phlogiston, we might decide to stop inquiring about them. However, eliminativism is not the only option. We might decide to retain the domain of inquiry despite the error involved because it is good, or useful,

or interesting to do so. Doing so involves revising the attitudes towards the sentences that we accept and utter. (On pain of incoherence. Compare Santayana's notorious remark that there is no God and Mary is his mother.) If the error theorist elects to retain the domain of inquiry despite the error involved, he is a revolutionary fictionalist. So while hermeneutic fictionalism is a distinctive kind of irrealism, revolutionary fictionalism is a distinctive kind of error theory.

This Volume

Since 1980, fictionalist accounts of science, mathematics, modality, morality, and other domains of inquiry have been developed. In metaphysical disputes, the fictionalist option is now widely regarded as an option worthy of serious consideration. It is my hope that the present volume will contribute to this trend. The contributions represent the state of the art drawn from different areas of metaphysical controversy. With the exception of Kendall Walton's (Chapter 2) 'Metaphor and Prop Oriented Make-Believe', none of the contributions has been previously published.

Gideon Rosen's (Chapter 1) 'Problems in the History of Fictionalism', is a selective survey of some of the historical precedents of modern fictionalism. While fictionalism in the modern sense emerged in 1980, there are a number of important historical precedents, notable among them are Nietzsche's remarks about errors necessary for life and Vaihinger's philosophy of 'as if'. Rosen discusses fictionalist themes in pyrrhonian skepticism, ancient and renaissance astronomy, and Bentham's theory of fictions. While no uncontroversial instances of fictionalism in the modern sense are uncovered, Rosen's fascinating survey sheds light both on the relevant intellectual history and on the commitments of modern fictionalism.

Kendall Walton's (Chapter 2) 'Metaphor and Prop Oriented Make-Believe' is an important account of a class of metaphors that has influenced writers developing fictionalist accounts in a variety of areas. Walton observes that games of make-believe sometimes involve props. So when a child plays with a doll make-believing that it is her child, the doll is a prop in this imaginative activity. Sometimes the interest in the props is purely as a guide to the content of the make-believe. Sometimes, however, the interest in the make-believe in which they participate is in understanding the props themselves. Walton calls the former kind of make-believe *content oriented make-believe* and the latter *prop oriented make-believe*. He argues that the interpretation of a class of

metaphors essentially involves prop oriented make-believe. The distinction between content and prop oriented make-believe is important and reoccurs in various guises in the writing of a number of modern fictionalists. In this volume, Yablo (Chapter 3) relies on it in giving a fictionalist account of mathematical inquiry, James A. Woodbridge (Chapter 5) relies on it in developing a novel form of deflationism in the guise of a fictionalist account of truth talk, and Frederick Kroon (Chapter 6) relies on it in giving an account of what we are doing making propositional attitude ascriptions with empty names in the ‘that’-clause.

Stephen Yablo’s (Chapter 3) ‘The Myth of the Seven’ develops a fictionalist account of mathematical inquiry. In contrast to Field’s fictionalism, Yablo’s is a hermeneutic as opposed to a revolutionary fictionalism. According to Yablo, putative mathematical entities such as numbers, functions, and the like, start off life as representational aids in articulating certain first-order logical truths. Yablo describes this as a kind of *Kantian logicism*—*Kantian*, since the necessity of mathematics is understood in terms of its representational role; *logicist*, since the represented facts are logical facts. As the mathematical game of make-believe takes on a life of its own, mathematical entities function both as props and as representational aids helping us to describe the props (a possibility anticipated by Walton, Chapter 2—see especially, his discussion of the second way in which metaphors may be ‘essential’).

Seahwa Kim’s (Chapter 4) ‘Modal Fictionalism and Analysis’ is an in-depth discussion of a kind of problem for modal fictionalism. Modal fictionalism was initiated by Rosen (1990). Talk of possible worlds has proved useful and illuminating in articulating a variety of modal ideas—a fact recognized even by those uncomfortable with David Lewis’ (1986) modal realism and its ersatzist alternatives. Rosen’s suggestion is that one may retain the utility of possible worlds talk without a commitment to possible worlds, if we take a fictionalist attitude towards possible worlds. Drawing on Lewis’ (1978) account of fiction, Rosen proposes that in accepting, say, ‘There are possible worlds in which donkeys talk’ the fictionalist believes only that according to the hypothesis of the plurality of worlds, there are possible worlds in which donkeys talk—a belief that falls short of commitment to possible worlds. Kim raises modal and temporal difficulties for modal fictionalism (difficulties anticipated by Nolan, 1997) and discusses a number of resolutions of these.

James A. Woodbridge’s (Chapter 5) ‘Truth as a Pretense’ deploys Walton’s notion of prop oriented make-believe to develop a novel form of deflationism about truth. Many deflationists do grammatical violence in interpreting the apparent predicate ‘true’ as serving some nonpredicative logical function, say,

as a device of infinite conjunction. According to Woodbridge, ‘true’ functions grammatically and logically as a predicate, just as it appears; however, it is essentially involved in a pretense according to which sentences and the propositions they express instantiate the (nonexistent) property of being true. Woodbridge’s account of truth talk thus importantly parallels Gareth Evans’ (1982) treatment of existence talk also inspired by Walton’s work.

Frederick Kroon’s (Chapter 6) ‘Belief about Nothing in Particular’ deploys Walton’s notion of prop oriented make-believe to address some problems for the direct reference program in accounting for propositional attitude ascriptions with empty names occurring in the ‘that’-clause. According to direct reference theorists, there is nothing more to the content of a name than the object it denotes. However, if there is nothing more to the content of a name than the object that it denotes, empty names—names lacking denotations—must lack a content. This has the apparent and implausible commitment that empty names are intersubstitutable *salva veritate* (but see Braun, 1993, for a defense of this claim). One approach to this problem might be to construe empty names as denoting no existent thing but only nonexistent things. Kroon provides an account of the role of empty names in propositional attitude constructions that avoids a commitment to an implausible pattern of substitution and the ontological profligacy of a Meinongian ontology.

Daniel Nolan’s (Chapter 7) ‘Fictionalist Attitudes about Fictional Matters’ is in many ways complementary to Kroon’s contribution. Whereas Kroon draws upon Walton’s account of fiction in giving a treatment of propositional attitude reports, Nolan draws upon Lewis account of fiction. (See Walton’s, 1990, account of the relation between these two approaches to fiction.) As discussed above, one advantage that certain fictionalists can claim over non-factualist rivals is the problems nonfactualists face in accounting for propositional attitude constructions (this is one aspect of the Frege–Geach problem). Nolan observes that fictionalists themselves face a similar difficulty. Suppose a person is a moral fictionalist. When he accepts, say, the sentence ‘Abortion is wrong’ he does not believe the moral proposition expressed by that sentence. It is natural to claim that such a person believes that abortion is wrong. But reports of moral belief are not claims of morality but claims of descriptive psychology, and so not within the scope of the moral fiction. Nolan discusses how a fictionalist can account for such propositional attitude reports by extending the fiction to include propositional attitudes about the fictional subject matter.

Cian Dorr’s (Chapter 8) ‘What we Disagree about when we Disagree about Ontology’ discusses the nature of persistent metaphysical disagreement with

mereology as the central test case. Though Dorr does not give a fictionalist account of mereology (but see Dorr and Rosen, 2002), he does draw on fictionalist themes in giving a compositional semantics for the claims of rival ontologists in order to give a reconciliationist interpretation of these claims, i.e., an interpretation according to which each is making a true claim. He argues that a reconciliationist understanding of the rival claims of ontology must ultimately fail: with respect to mereology, a reconciliationist understanding ultimately favors nihilism—the view that there are no composite things.

Richard Joyce's (Chapter 9) 'Moral Fictionalism' develops a form of moral fictionalism, albeit of the revolutionary kind. Suppose that morality stands convicted of some error such that the central claims of morality are subject to systematic and pervasive error (see Mackie, 1977). Why might moral talk not be rejected outright like talk of witches or phlogiston? How might we legitimately retain moral discourse? Joyce argues that moral discourse is useful despite the error involved and thus should be retained. Specifically, he suggests that moral talk is importantly useful as a bulwark against weakness of the will and that this utility is sufficient reason to retain the error-ridden discourse.

David Lewis' (Chapter 10) 'Quasi-Realism is Fictionalism' argues that the best interpretation of Simon Blackburn's quasi-realist program in ethics is as a kind of fictionalism. One of Blackburn's avowed aims is to earn the right to say what a 'moral realist' does: that means either being or make-believedly being a moral realist. Another of his avowed aims is to avoid the realist's errors: that means not being a realist. Taking these aims together, Lewis argues, Blackburn must aim to make-believedly be a moral realist. Like the explicit fictionalist, his apparent moral assertions are merely apparent. If that is right, quasi-realism is a variety of moral fictionalism.

In (Chapter 11) 'Quasi-Realism no Fictionalism', Simon Blackburn considers Lewis' suggestion and respectfully demurs. Like Joyce (Chapter 9), Lewis focuses on a variety of errors that morality stands convicted of. Blackburn argues that revolutionary fictionalism is not sustainable the way quasi-realism might be and so the former fails as an interpretation of the latter.

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