

Terrone, E. (forthcoming, acceptance date: 24 October 2020)

“Science Fiction as a Genre”,

Journal of Aesthetics and Art Criticism

Science Fiction as a Genre

Conceiving of *fiction* as a genre, as proposed by Stacie Friend (2012), surely has been a novelty in the philosophical debate about fiction. Conceiving of *science fiction* as a genre, instead, has always been a very popular stance. Science fiction is so a paradigm genre that Simon Evnine (2015) takes it as his case study in the attempt to build up a new philosophical account of genres. Indeed, claiming, as Friend does, that fiction is a genre amounts to subsuming it under the ontological category to which science fiction belongs, rather than under the category to which things such as mental states or speech acts arguably belong (see García-Carpintero 2013).

Still, as shown by the very works of Friend and Evnine, who conceive of genres in sharply different ways, the notion of genre is controversial. Thus, in order to understand what science fiction is, we need to figure out which sort of genre it is, and its specific way of being a genre. This is the main aim of this paper.

In the first part (§§ 1-3), after introducing the influential conception of science fiction proposed by Darko Suvin (1979) and the criticism of it by Evnine (2015), I will argue that the right conclusion to draw from Evnine's criticism is not to give up Suvin's conception but rather that to amend it. In the second part (§§ 4-7), I will rely on a theory of genres inspired by Friend's (2012) account of fiction in order to propose an amended version of Suvin's conception, whose explanatory virtues I will highlight in my conclusion.

1. Two Conceptions of Genres

According to Suvin, a work of science fiction is “centered on a novum which is to be cognitively validated within the narrative reality of the tale” (1979, 80). I shall say more on the notions of “novum” and “cognitive validation” later. For the time being, I shall focus on the fact that Evnine sees Suvin's view as a paradigm case of the conception of genres as “regions of conceptual space” (2015, 2), to which he opposes his own view of genres as “traditions”, that is, “temporally extended

particulars” (2015, 4) that “comprise, or involve, people, books, objects, places, institutions, styles of music, and many other things” (2015, 5).

Let me dub the former view ‘Genres-as-Concepts’ and the latter ‘Genres-as-Traditions’. These two views agree on the basic fact that genres group works of art. Forms of art (e.g. painting, music, literature) also group works of art, but they are constituted by specific artistic media (e.g. images, sounds, language). Genres, instead, as Catharine Abell (2015, 28) points out, “can cross media”. For example, science fiction can group works that belong to literature, but also works that belong to film or to comics. The same holds true for genres such as comedy, tragedy, detective story or historical fiction. As these examples indicate, and as stressed by Abell (2015, 27), the debate on genres tend to focus on representational arts; more specifically, on narrative arts. This is the notion of genre I will endorse in this paper, in spite of the fact that the term ‘genre’ might be used also to designate media-specific ways of grouping works of art, for example musical forms such as the sonata or literary forms such as the sonnet.¹

That said, the disagreement between Genres-as-Concepts and Genres-as-Traditions concerns the ontological nature in virtue of which genres group works of narrative arts. According to Genres-as-Concepts, a genre groups works of art by specifying the features they share whereas, according to Genres-as-Traditions, a genre groups works of art by incorporating them in the same historical lineage. In Suvin’s Genres-as-Concepts account, for example, works of science fiction are grouped in virtue of having features such as the fictional novum and the cognitive validation whereas in Evinne’s Genres-as-Traditions account those works are grouped in virtue of having their place in a line of descent which, according to Mark Rose (1981, 6), originates with Jules Verne’s and H. G. Wells’ works.² In sum, given a work *W* in a genre *G*, for Genres-as-Concepts *W* belongs to *G* in

¹ Thanks to a referee for leading me to clarify the relevant notion of genre, and to point out analogies and differences between genres and forms of art.

² Likewise, from a Genres-as-Concepts perspective, the works of art that belong to the detective-story genre are grouped in virtue of having features such as the crime and the investigation, whereas, from a Genres-as-Traditions perspective, those works are grouped in virtue of finding their place in a certain line of descent—say, the one that originates with Edgar Allan

virtue of matching the features of G whereas for Genres-as-Traditions W belongs to G in virtue of certain connections to other works in G, and possibly to other things in G (e.g. people, words, institutions; see Evnine 2015, 5).

Genres-as-Concepts, for Evnine (2015, 9-10), involves an immutable essence, which consists in the set of features that constitutes a certain genre as a region of conceptual space. Such an essence freezes a genre into a timeless domain. Hence, Evnine contends, Genres-as-Concepts cannot make room for the historical dimension of genres, which are entities that can change in time. As Abell (2015, 28) puts it, “which features are characteristic of the works in a given genre can differ according to their date of production. In this sense, genres have histories”.

For example, in a 1898 review of H.G. Wells’ *The War of the Words* (1898), science fiction is characterized as “a score of romances which try to put into imaginative form the latest results in science” (quoted in Rose 1981, 6).³ As instances of the genre, in addition to the reviewed novel, the review mentions Jules Verne’s *Twenty Thousand Leagues Under the Sea* (1870) and also Stanley Waterloo’s *The Story of Ab* (1897), which is about a Stone Age boy who faces the many dangers of his times. More recently, a novel like the latter would not be considered science fiction but rather a sort of historical fiction. Yet, assuming that the reviewer of *The War of the Words* is right, a novel such as *The Story of Ab* was science fiction in the late eighteenth century since it tried “to put into imaginative form the latest results in science” (viz. the latest results in paleontology), and that was what science fiction was expected to do at that time.

Here is a sense in which science fiction has a history that Genres-as-Concepts finds it hard to explain. If science fiction was initially a matter of “putting into imaginative form the latest results in science” and only later the key feature of the genre became what Suvin (1979, 63) calls “a fictional

Poe’s *The Murders in the Rue Morgue* (1841).

³ Such conception of science fiction still plays a role in the work of Hugo Gernsback, who in 1926 founded the first magazine dedicated to science fiction, *Amazing Stories*. From Gernsback’s perspective, science fiction is such that “a flimsy narrative provides the excuse for a popular exposition of some technological or scientific point” (Rose 1980, 47).

‘novum’ (novelty, innovation) validated by cognitive logic”, there should be something wrong in casting the latter characterization as the immutable essence of the genre.⁴

Although the alleged historical shift from one key feature of science fiction to another is just a hypothesis, theoretical accounts of science fiction that make room for hypotheses like this are preferable to those which a priori exclude such hypotheses from consideration. Thus, following Evnine (2015, 11), it is tempting to conclude that Genres-as-Traditions should be preferred to Genres-as-Concepts.

Still, this conclusion seems to be too hasty. Perhaps the problem is not Genres-as-Concepts as such but only certain versions of it such as Suvin’s. There can be variants of Genres-as-Concepts that can take historicity into account. In what follows, I will first highlight an explanatory advantage that such variants of Genres-as-Concepts would have with respect to Genres-as-Traditions. Then, I will flesh out one such variant.

2. Comparing the Two Conceptions of Genres

The controversy between Genres-as-Traditions and Genres-as-Concepts is an *ontological* controversy: a controversy about what a genre *is*. Both these approaches assume that in our world, in addition to entities such as particles, molecules, stars, planets, living beings, artifacts and institutions, there are also things like genres, and aim to provide the proper ontological characterization of them. While Genres-as-Traditions casts a genre as “temporally extended particulars” (Evnine 2015, 4), Genres-as-Concepts rather casts a genre as a sort of cultural device which tends to persist over time rather than being extended in time.

⁴ A defender of Suvin’s conception might reply that works such as *The Story of Ab* also have novum and validation since such works portray a subject which does not belong to the author’s epoch and they do so by relying on science. I contend that this reply assumes a too broad notion of novum. Yet, even if we concede, for the sake of the argument, that this notion of novum is appropriate, the fact remains that Suvin’s conception cannot explain why works such as *The Story of Ab* are no longer science fiction nowadays in spite of having novum and validation.

By casting genres as temporally extended particulars, Genres-as-Traditions effectively accommodate their historicity. Yet, a *temporally extended* particular turns out to be an entity that *is* a history rather than an entity that *has* a history. In this sense, Genres-as-Traditions conflates a genre with its history. I contend that the distinction between a cultural entity such as a genre and its history has an explanatory value that it would be worth preserving. In this respect, genres can be fruitfully compared to other cultural entities such as games. The rules of basketball, for example, have significantly changed since the game was first played in 1891. Yet, the right conclusion to draw from this piece of evidence does not seem to be the conflation of basketball with its history but rather the conception of basketball as a collection of rules which can change so that the collection has a history (see García-Carpintero forthcoming). In general, the fact that a cultural entity can undergo changes suggests that it *has* a history rather than it *is* a history. This is a reason to prefer Genres-as-Concepts to Genres-as-Traditions, provided that one can find variants of the former that can cast genres as historical entities which are distinct from their own history.

Another aspect under which it is worth comparing Genres-as-Concepts and Genres-as-Traditions is the role of genres in art appreciation. As scholars have often pointed out (see for instance Currie 2004, 45; Friend 2012, 181; Abell 2015, 25-26), genres allow us to classify works of art thereby helping us to select those works that better match our expectations, and providing us with frameworks in which we can assess works and draw interesting comparisons between them. Genres-as-Concepts can effectively explain such role of genres in appreciation. It can do so by stating that appreciating a work *W* of a genre *G* involves considering whether and how *W* instantiates the features that, according to Genres-as-Concepts, constitute *G*.

For example, assuming that the novum is a key feature of science fiction, the spectator of Stanley Kubrick's *2001: A Space Odyssey* (1968) might appreciate how this film instantiates the novum by modulating it along three different and yet intertwined dimensions, namely, "an alien contact story", "a man-machine encounter", and "a tale of human metamorphosis" (Rose 1980, 34). Likewise, the reader of Ursula K. Le Guin's *The Left Hand of Darkness* (1969) might appreciate how this novel

instantiates the novum by turning the “alien-contact theme” into “a metaphor for any contact between people of different cultures or of different sexes or, indeed, for any kind of human contact at all” (Rose 1980, 81).

In this sense, Genres-as-Concepts fits well with Kendall Walton’s (1970) account of appreciation as guided by categories of art, which he characterizes in terms of “standard”, “variable”, and “contra-standard” features. Appreciators expect that a work belonging to a category has certain features, which are “standard” for that category, and has not certain other features, which are instead “contra-standard”, while there is no specific expectations as regards other features, which are “variable”. Drawing on Friend’s (2012) application of Walton’s (1970) notions to fiction as a genre, one might thus think of a version of Genres-as-Concepts in which the region of conceptual space that individuates a genre is figured out in terms of standard, contra-standard and variable features.

If all this is right, Genres-as-Concepts is an ontological account of genres that effectively matches their pragmatic dimension, that is, their role in appreciation. In general, the ontological dimension and the pragmatic dimension are to be kept carefully distinct.⁵ Even though from an ontological perspective water *is* H₂O, for pragmatic purposes one can have in mind a bunch of features such as ‘liquid’, ‘transparent’ and ‘refreshing’, namely, a “stereotype” (Putnam 1975, 147). However, in the case of cultural entities, the pragmatic dimension can have an ontological relevance that it does not normally have in the case of natural entities like water. Since cultural entities are brought into being by human communities in order to fulfill certain goals, what a cultural entity *is* can—or even should—depend on what that entity *is for* (cf. Thomasson 2005, Davies 2009, Abell 2015).

⁵ We might say that the ontological dimension concerns genres as *things* in the world whereas the pragmatic dimension concerns our *concepts* of genres. Still, it is worth noting that the label ‘Genres-as-Concepts’, as I use it in this paper, concerns the ontological dimension, not the pragmatic one. That is to say that ‘Genres-as-Concepts’ casts a genre as a real thing that is constituted by a collection of features that individuates a region in the conceptual space, not as a concept understood as a representation in one’s mind.

By characterizing a genre in terms of features that appreciators expect works of art to instantiate, Genres-as-Concepts directly connects the ontological dimension to the pragmatic dimension. Genres-as-Traditions, on the other hand, subordinates the pragmatic dimension to the historical one since traditions, as temporally extended particulars, are not the kind of things one has in mind when one appreciates a work of art as a member of a genre. What is crucial to appreciation is rather the collection of features that a work of art is expected to exhibit as a member of the relevant genre, and such features constitute the genre as a region of conceptual space rather than as a tradition.

Nevertheless, Evnine (2015, 6-7) contends that Genres-as-Traditions can account for the role of genres in appreciation: “the theory that genres are traditions will have myriad resources for showing how genres affect interpretation and evaluation”. First, one might state that appreciators can grasp the features that are relevant to the interpretation and evaluation of a work because they have interacted with other works of art (or other related things) in the tradition that constitutes that genre. Moreover, one might rely on the fact that “traditions generate norms and reasons for action” (Evnine 2015, 13), thereby including among such norms those that establish which features the members of the genre are expected to instantiate.

In this way, Genres-as-Traditions can explain the role of genres in appreciation. Yet, for Genres-as-Traditions, such role has no ontological relevance. It is just one thing among the many that a tradition generates along its historical development. A genre generates norms for appreciators just as it generates, say, income for publishers and celebrity for artists.

The point is that Genres-as-Traditions makes genres too cumbersome by including in their ontological nature a boundless variety of things: “readers, writers, works, practices of reading and interpreting, publishing houses, fan organizations, conferences, and so on” (Evnine 2015, 5). An account that can distinguish the key aspects of a genre from other things that are just related to its history would be preferable. In particular, the role in appreciation is a specificity of genres that an ontological account should be able to bring to the fore.

Genres-as-Concepts effectively does so by *defining* a genre in terms of features that are relevant to appreciation. Yet, if genres are historical entities, how can they be *defined*? Evgine (2015, 11) states that they cannot, making reference to Nietzsche's remark that "Only that which has no history is definable". In what follow, I will challenge this conclusion by proposing an approach, namely Genres-as-Clusters, which can account for the historicity of genres while preserving the ontological distinction between a genre and its history.

3. A Third Conception of Genres

In order to build up Genres-as-Clusters as a variant of Genres-as-Concepts that can reconcile definition with history, let me examine the version of Genres-as-Concepts that Gregory Currie (2004) has proposed. He begins with defining genres as sets whose elements are features that works of art can have. Genres, so understood, cannot change because sets do not make room for changes in their elements. If I replace 'C' with 'D' in the set $S = \{ 'A', 'B', 'C' \}$, I do not have changed S but rather individuated a distinct set $S^* = \{ 'A', 'B', 'D' \}$. Hence a genre as a set cannot have a history. Moreover, a genre as a set can be put into play at will. I can now put into play a genre GX whose features are the following: (GX-1) having a 29 year old protagonist, and (GX-2) involving a trip from Scotland to Norway. Which is the difference between GX and a genre such as science fiction whose features, if Suvini is right, are (SF-1) the novum, and (SF-2) its validation? From Currie's (2004, 48) perspective, both GX and science fiction are genres, but only the latter is an "instantiated" genre, a "genre for a community". While a genre, as such, is just a set, a genre for a community is a set that matches "people's tendencies to associate features together via patterns of expectation" (Currie 2004, 50).

Still, a genre for a community remains a *set*, hence it cannot change, hence it cannot have a history. In order to take history into account, Currie thus introduces a third notion of genre, which he calls "dynamical genre" (2004, 60). This is a sequence of sets that are momentary genres for a community. What unifies those sets into one sequence is the development of the patterns of

expectation within the community. In Currie's (2004, 60) terms, "What matters for dynamical genre identity are facts about people's expectations concerning work-features, and facts about how people's expectations at one time are causally related to their expectations at other times".

The notion of dynamical genre makes room for historicity but, I contend, has the same problem that (as argued above) affects Genres-as-Traditions: conflating a genre with its history, which here boils down to a sequence of sets. In order to properly distinguish a genre from its history, a further amendment to the notion is needed: a genre is not a temporally extended sequence of sets of features but rather a collection of features that exists at a given time and can change in time. This is what I call a *cluster*.⁶

The cluster, just like the set and unlike the sequence, can be characterized as a collection of features. Yet the cluster and the set have different identity conditions. The set's identity is determined by the totality of its features whereas the cluster's identity depends on patterns of expectation in the relevant community. That is why a cluster, unlike a set, can preserve its identity despite changes in its features, provided that these changes are grounded in smooth changes in patterns of expectation. Such changes can be made through a (either explicit or just implicit) negotiation that requires both the preservation of a core of preexisting features and the introduction of amendments to the preexisting cluster of features. When a new feature is added to a genre as an amendment to the preexisting cluster, the genre remains the same despite a change in its features.⁷ As an example, let me recall (from Section 1) the hypothesis that the science fiction was initially a matter of "putting into imaginative form the latest results in science" and only later the key feature of the genre became "a fictional 'novum' validated by cognitive logic". One might say that the reference to science has persisted as the core feature of the genre but an amendment has been introduced such that appreciators

⁶ This notion of cluster is inspired by Richard Boyd's (1999) "Homeostatic Property Cluster" conception of a biological kind as a way of grouping organisms that share stable similarities which enable predictions. Such similarities are grounded not only in causal mechanisms but also in shared features which nevertheless are not essential for membership in the kind.

⁷ Thanks to a referee for leading me to articulate this notion of a cluster.

do no longer expect science fiction to illustrate the latest results in science but rather to take cues from science to validate its own inventions.

By combining Currie's claim that genres are grounded in patterns of expectations with Cristina Bicchieri's (2005) account of norms as networks of interlocking expectations, I propose an ontological account of genres as normative clusters. Specifically, I conceive of a genre as a cluster of norms that prescribes certain features to the works that are meant to belong to it. The connection between norms and expectations is such that, when the norms of the genre are in force, the relevant community expects the works in the genre to exhibit certain features. Likewise, when the rules of a game are in force, the relevant community expects the players of the game to abide by those rules.

Cultural entities such as games and genres *have* histories, and yet they *are not* histories, and thus they should not be identified with temporally extended particulars such as traditions or sequences of sets. In this sense, games and genres are like persons, who, as argued by Peter Strawson (1959) and John Perry (1972 and 2019), *have* histories and yet *are not* histories. Even though a four-dimensionalist ontology could convincingly explain that a person fundamentally is nothing but the "historical" sequence of her temporal stages (see Lewis 1976, Sider 2001), from the perspective that Strawson (1979, 127) attributes to "a non-philosophical observer", persons are not conceived in this way. A person, for the non-philosophical observer, does not extend in time but rather persists and can change over time. Although it is controversial whether the perspective of the non-philosophical observer is relevant to the ontology of persons, that perspective is surely relevant to the ontology of cultural entities such as games and genres that are brought and kept into existence by practices constituted for the most part by non-philosophical observers.

According to Perry (1972, 464), the persistence of a person through changes is warranted by the psychological relation (which Locke famously characterized in terms of memory) that connects what a person currently is to what she was. Likewise, I contend, the persistence of a genre through changes is warranted by the social relation (which Currie characterizes in terms of patterns of expectation)

that connects what a genre currently is to what it was. This is the sense in which a genre as a normative cluster has a historical tradition and yet does not coincide with that tradition.

At this point, one might still raise a worry that Evnine (2015, 10) expresses in the following terms: “Whether any sense can be given to the idea that a region of conceptual space itself might have a history, I do not know. Perhaps a genre might not be a region of conceptual space, but be associated with, or realized by, one such region at one time, and a different region at another time, and have a history in that sense. But why we should then think of these different regions of conceptual space as realizations, at different times, of the same genre would be a mystery”. The previous discussion of the analogy between genres and persons enables us to address this issue. Different regions of conceptual space count as realizations, at different times, of the *same* genre because those realizations are connected through a *social relation* that involve patterns of expectations in the relevant community. Thinking of “different regions of conceptual space” as “realizations, at different times, of the same genre” is not “a mystery”, but rather a consequence of the capacity of genres, as normative clusters grounded in patterns of expectations, to make room for amendments and changes.

Interestingly, Friend (2012, 192-193) deploys her conception of genres in terms of standard, contra-standard, and variable features precisely in order to account for the changes that, according to her, fiction as a genre has undergone through history. From this perspective, a genre can be characterized as a cluster of norms of classification that involves standard, contra-standard, and variable features, thereby bearing upon appreciation.⁸ Such an approach can take the historicity of genres into account without conflating a genre with its history. Thus, regardless of whether Friend’s application to the controversial case of fiction succeeds or fails, the characterization of genres that underlies her conception of fiction, namely Genres-as-Clusters, can be fruitfully applied to classic genres such as science fiction. This is what I am going to do. First, I shall reconsider Suvin’s Genres-

⁸ For an explicit normative reading of Friend’s account along these lines, see Stock 2016, 215.

as-Concepts account of science fiction in order to highlight its problems. Then, I will try to solve these problems in the framework of Genres-as-Clusters.

4. Reconsidering Suvin's Account of Science Fiction

According to Suvin (1979, viii), a work of science fiction is “centered on a novum” in the sense that it concerns things that are “*radically or at least significantly different from the empirical times, places, and characters* of ‘mimetic’ or ‘naturalistic’ fiction”, thereby eliciting an impression of “estrangement” from the audience. Moreover, a work of science fiction requires “cognitive validation” in the sense that the things constituting the novum “are nonetheless [...] simultaneously perceived as *not impossible* within the cognitive (cosmological or anthropological) norms of the author’s epoch” (Suvin 1979, viii).

The two features, according to Suvin, are singly necessary and jointly sufficient conditions of membership in science fiction. The main aim of his book precisely consists in distinguishing true instances of science fiction, which succeeds in generating estrangement through the novum and supplementing it with validation, from putative works of science fiction in which “the predominance of anti-cognitive impulses degrades estrangement to surface sensationalism”. The latter works, according to Suvin, do not deserve membership in science fiction.

For example, Suvin tends to exclude from science fiction what he calls “the E.R. Burroughs-to-Asimov space opera”, arguing that novels such as E.R. Burroughs’s *A Princess of Mars* (1912) or Isaac Asimov’s *Foundation* (1951) “mimic SF scenery but are modeled on the structure of the Western and other avatars of fairy tale and fantasy” (1979, 29). Likewise, for Suvin, works by Ray Bradbury such as *The Martian Chronicles* (1950) or *The Illustrated Man* (1951) remain outside science fiction since “plausibility is specifically invoked for most of the story, but may be cast aside in patches at the author’s whim and according to no visible system or principle” (1979, 68). On the other hand, Suvin (1979, 30) states that works such as Karel Capek’s *Krakatit* (1922) and Ursula Le Guin’s *Left Hand of Darkness* belong to “the most significant region of SF”, in which he even includes Franz Kafka’s

In the Penal Colony (1919) and Jorge Luis Borges' *The Library of Babel* (1941) (see Suvin 1979, 65). Ultimately, Suvin proposes a revisionary approach that establishes what science fiction should be in order to better contribute to the elevation of its audience rather than what it is in our cultural practices.

Suvin's approach faces significant difficulties in dealing with the historicity of the genre, as well as with its borderline cases. As for historicity, let me recall again the hypothesis that in the late nineteenth century the key feature of science of fiction was "putting into imaginative form the latest results in science". Borrowing Suvin's terms, one might say that in the late nineteenth century only a sort of "cognitive validation" was necessary to science fiction while the "fictional novum" was just optional. According to Rose (1980, 9-10), the genre changed in the first decades of the twentieth century when there was "an efflorescence of popular writing" such that the fictional novum became paramount whereas the cognitive validation boiled down to feeble references to science. Yet, the genre changed again since John W. Campbell became editor of *Astounding Stories* in 1938. As Rose (1980, 12) points out, "It is usual to identify Campbell's editorship as a crucial moment in the genre's development". Specifically, Campbell brought cognitive validation back to the fore "by insisting upon serious and intelligent stories" (Rose 1980, 12). All this shows that, although Suvin's notions of novum and validation can help us to model the historical development of the genre, casting these notions as necessary conditions for membership in science fiction would prevent us from taking such development into account. Instead of explaining how science fiction develops through history, Suvin's account boils down to a sort of cherry picking along the genre's history.

The inflexibility of Suvin's account is also problematic when it comes to borderline cases of science fiction, that is, works that appreciators are inclined to include in the genre in spite of the awareness that those works are at odds with the core features of the genre. Consider for example Pamela Zoline's short story *The Heat Death of the Universe* (1967), which portrays a day in the life of middle-class California housewife. Although neither the novum nor its validation are features of this work, Zoline deploys the scientific notion of entropy as a metaphor for the vain struggle of the housewife against disorder and breakdown. This reference to science, together with the fact that the

story was published in a science fiction magazine, has led appreciators to cast *The Heat Death of the Universe* as a borderline case of science fiction (see Rose 1980, 1; Evnine 2015, 22). Yet, Suvin's account, which treats the novum and its validation as necessary conditions for membership in science fiction, cannot explain why *The Heat Death of the Universe* belongs to the genre despite lacking these two features.

5. The Cluster Account of Science Fiction

The difficulty in dealing with historicity and borderline cases leads Evnine (2015, 12) to dismiss Suvin's proposal. Although I agree with Evnine's criticism, I contend that Suvin's characterization of science fiction can be amended to deal with historicity and borderline cases rather than rejected. In the framework of Genres-as-Clusters, the novum and its validation turn out to be standard features of the genre as a cluster of features. This amended account remains normative in the sense that a work of the genre should possess these features and is expected to possess them. Yet, a work can belong to the genre despite not possessing these features (or can fail to belong to the genre despite possessing them). The reason is that the possession (or lack) of *other* standard features in the cluster can contribute to the presence (or absence) of a work in the genre.⁹

This account can explain the historical development of science fiction in terms of changes in patterns of expectations that have led to changes in the cluster that constitutes the genre. For instance, the novum and its validation are crucial to the genre as we know it nowadays but, if Rose's (1980, 9-10) historical outline is right, a sort of validation alone was crucial in the late nineteenth century while

⁹ The idea that standard features of genres are not necessary conditions can already be found in a remarkable forerunner of the conception of genres as clusters that I am advocating, namely, Stanley Cavell's (1981) account of the genre he calls "the comedy of remarriage". Consider this passage: "membership in the genre requires that if an instance (apparently) lacks a given feature, it must compensate for it, for example, by showing a further feature 'instead of' the one it lacks" (Cavell 1981, 29). For example, Cavell casts Howard Hawks' *Bringing Up Baby* (1938) as a comedy of remarriage in spite of the fact that that film does not portray a remarriage: "I justify its inclusion in the genre of remarriage by emphasizing the pair's efforts to extricate their lives from one another, in which the attempt at flight is forever transforming itself into (hence revealing itself as) a process of pursuit" (1981, 113).

the novum alone was crucial in the first decades of the twentieth century. The combination of validation and novum became crucial to the genre only during the so called “Golden Age” of science fiction in the Forties (see Rose 1980, 9). Since then, such combination surely has remained a standard feature of science fiction—arguably its core feature. Yet, one cannot a priori exclude that, in the future, the structure of the cluster that constitutes science fiction as a genre might change again.

In the framework of Genres-as-Clusters, Suvin’s characterization ultimately turns out to be science-fiction’s core feature, that is, the standard feature that dominates the genre’s history after an initial settling phase, and tends to remain stable thereby enabling predictions about how new works in the genre will be. Abell (2015, 31) identifies this feature with the genre’s purpose: “the purpose of science fiction is arguably to describe logically coherent alternative worlds”. One can easily match Abell’s characterization with Suvin’s one by casting the novum as what makes the worlds of science fiction “alternative”, and its validation as what makes them “logically coherent”. Still, in the framework of Genres-as-Clusters, such core feature or purpose is not to be understood as an eternal essence. Although the combination of novum and validation dominates the history of the genre, there might be phases in that history in which this feature was (or will be) not as crucial to the genre as it has been for a longtime and still is nowadays.

Borderline cases also can be explained by casting the novum and its validation as standard features rather than as necessary conditions. A work that lacks these features can still belong to science fiction in virtue of the possession of other features of the cluster. Consider a standard feature that we might call ‘the Genre Intention’, which specifies that a work should be intended by its maker to be recognized by the audience as belonging to the genre.¹⁰ The Genre Intention is surely a standard feature of science fiction, and in some borderline cases it might compensate the lack of the novum or of its validation. The same holds true for another standard feature that we might dub ‘the Institutional

¹⁰ The Genre Intention is especially relevant to popular culture, while more sophisticated authors might prefer their works not to be recognized as belonging to any genre. Thanks to a referee for leading me to consider this point.

Clause’, which specifies that a work of science fiction should be accepted by science-fiction-related institutions (e.g. magazines, publishing houses, awards).

Genres-as-Clusters can take borderline cases into account because a science-fiction work can fit the cluster in spite of not having all the clustered features, provided that this work has a subset of those features that satisfies the underlying patterns of expectations. For instance, Zoline’s *The Heat Death of the Universe* fails to satisfy Suvin’s characterization, and yet can be considered a work of science fiction in virtue of satisfying the Genre Intention and the Institutional Clause. Zoline, indeed, intended her short story to be a work of science fiction, and her proposal was accepted by science-fiction magazine *New Worlds*, which thus provided *The Heat Death of the Universe* with a relevant institutional acknowledgment (see Rose 1980, 1-17; Evnine 2015, 22-26).

The Genre Intention and the Institutional Clause, however, are not as crucial to science fiction as features such as the novum and its validation are. First, intentional and institutional features can be found in other genres, arguably in most—if not all—genres.¹¹ Secondly, such features are circular inasmuch as their content makes reference to the genre under discussion, and thus requires the genre to be already constituted by some other feature. Thirdly, the novum and its validation can significantly contribute to the appreciation of a particular work of science fiction by enabling appreciators to consider the peculiar way in which these features are instantiated by that work. Proprieties such as being intended to be science fiction or being accepted as science fiction, on the other hand, are instantiated in the same way by all works that have it. Hence, the Genre Intention and the Institutional Clause cannot contribute to appreciation in the way the novum and its validation do.¹²

At this point, it might be tempting to trace the proposed cluster account of science fiction back to a traditional definition in terms of necessary and sufficient conditions by means of a disjunction

¹¹ For instance, Friend (2012, 193-194 and 203-204) includes a variant of the Genre Intention among the main factors that play a role in genre membership, and so does Abell (2015, 32).

¹² Are there other standard features of science fiction (as it currently is) over and above the novum, its validation, the Genre Intention and the Institutional Clause? I am inclined to give a negative answer to this question, but I want to stress that the cluster account of science fiction that I am advocating would effectively accommodate possible further standard features of the genre.

such as the following: a work is science fiction iff *either* it has a validated novum *or* satisfies the Genre Intention *or* satisfies the Institutional Clause.¹³ I contend that we should resist this temptation because turning the cluster into a disjunction would inappropriately constrain the cultural practice whose patterns of expectation ground the genre. I have argued earlier that the practice expects works of science fiction to have a validated novum, and to satisfy the Genre Intention and the Institutional Clause. Yet, when there are works that fit only partly these expectations, the practice does not establish whether those are science fiction or not by applying a universal criterion that can be expressed by a disjunction. Cultural practices, I contend, are not rigid and explicit enough to act in this way. Rather, a practice such as that underlying science fiction is more apt to respond in a sort of case-by-case manner, considering the peculiar way in which a given work succeeds or fails in instantiating the features of the cluster. Specifically, whether the Genre Intention and the Institutional Clause can or cannot compensate a flaw in the novum-validation system turns out to depend on the peculiarity of such flaw. In this sense, it is worth unpacking Suvin's notions of novum and validation in order to show the different ways in which alleged works of science fiction can succeed or fail in instantiating these core features of the genre.¹⁴ This is what I shall do next.

6. Unpacking the Fictional Novum and Its Cognitive Validation

Suvin (1979, viii) conceives of the fictional novum as something new with respect to a certain historical situation which he identifies with "the author's epoch". For instance, the travel to the Moon

¹³ This objection echoes Robert Stecker's (2000) and Stephen Davies's (2004) objections to cluster accounts of art such as that proposed by Berys Gaut (2000). My reply to this objection is inspired by the notion of openness which Gaut (2005, 287) discusses in his reply to Stecker and Davies. Thanks to the editors of the JAAC for leading me to address this issue.

¹⁴ Unpacking the notions of novum and validation can also show that even the original Genres-as-Concepts version of Suvin's characterization might allow borderline cases in so far as the novum and its validation turn out to be gradable features. Borderline cases would be those having low degrees of these features. Still, the proposed Genres-as-Clusters variant of Suvin's characterization has the explanatory advantage of showing how other features in the cluster (*viz.* the Genre Intention and the Institutional Clause) can compensate very low degrees of novum or validation, or even the total absence of them, as in Zoline's *The Heat Death of the Universe*. Thanks to a referee for pressing me on this point.

in Jules Verne's 1865 novel *From the Earth to the Moon* individuates a novum since that travel was a novelty in the author's epoch, and thus that novel is science fiction in spite of the fact that its novum is no longer a novelty in our epoch.

Still, the novum cannot simply be whatever novelty with respect to the author's epoch. If one conceived of a novum as an individual that appears in a story but does not exist in our world, one might say that most (if not all) fictions have a novum. Hence, the notion of novum is to be refined. Suvin does not say much as regards how to do so. I propose to do so by means of the distinction between individuals and kinds.

In what one might call 'naturalistic fiction' the novum remains at the level of individuals whereas in science fiction it also concerns the relevant kinds (or "sortals", see Strawson 1959, 168) to which individuals belong. For instance, in naturalistic fictions we encounter individuals such as Sherlock Holmes or Emma Bovary who cannot be found in our world *in spite of the fact that* their kind, the humankind, can be found in our world. In science fiction, instead, we encounter individuals such as the monster Alien or the android Roy Batty who cannot be found in our world *because* their kinds cannot be found in our world. That is to say that the novum of naturalistic fiction consists of *new individuals* belonging to ordinary kinds whereas the novum of science fiction consists of individuals belonging to *new kinds*.

Although the distinction between individuals and kinds enables us to distinguish between naturalistic fiction and science fiction, it does not enable us to distinguish between science fiction and other genres in the domain of the fantastic. For instance, in *The Lord of the Rings* we can find new kinds such as hobbits, elves, goblins or dragons, and yet that surely is not a work of science fiction. The distinction between kinds and individuals only allows us to distinguish between naturalistic fiction and what one might call 'fantastic fiction'. The latter is a genus among whose species one can find not only science fiction but also other genres.

Here is where the notion of cognitive validation enters the picture. Following Suvin, we can conceive of validation as the attempt to justify the existence of the novum in scientific terms, or at

least in rational terms. While in other fantastic fictions the novum comes out of the blue, or is just taken for granted, science fiction makes an effort to justify the existence of the novum given our naturalistic framework, or at least to make that existence compatible with this framework. In science fiction, the existence of new kinds should abide by the laws of nature, whereas in other fantastic fictions new kinds can exceptionally evade those laws. For instance, as Suvin (1979, 8) points out, “the stock folktale accessory, such as the flying carpet, evades the empirical law of physical gravity”. In the framework of Genres-as-clusters, however, I reject Suvin’s (1979, 68) claim that *successful* validation is a necessary condition which a work must satisfy in order to belong to science fiction. I contend that a work may belong to science fiction despite failing to cognitively validate its fictional novum, just as a player can keep playing a game in spite of violating its rules.¹⁵

A work of science fiction that tries to validate its novum and yet fails in so doing might remain within the genre. Even a work that does not care about the validation of its novum might remain within science fiction, provided that features such as the Genre Intention or the Institutional Clause can compensate the flaw. For example, the 1939 film serial *Buck Rogers* can count as a work of science fiction in spite of its blatant indifference to cognitive validation which Suvin (1979, 23) deplures.

As a work of science fiction may succeed or fail in the validation of its novum, so it may succeed or fail in the very introduction of that novum. What a certain work of science fiction presents as a novum might fail to be a true novum which warrants that the work is a *proper* instance of science fiction. Yet, the attempt to introduce a novum can still warrant that the work is an instance of science

¹⁵ Borrowing John Austin’s (1962) terms, we might say that the norms of genres, just as the rules of games, make room not only for “misfires”, which prevent works to belong to a genre, but also for “abuses”, which only prevent works from being *proper* instances of a genre, not from being its instances. Manuel García-Carpintero (forthcoming) argues that the Austinian notions of misfire and abuse can be applied not only to speech acts but also to games. In previous works, he applies these notions also to fiction itself, which he conceives of as a kind of speech-act, namely fiction-making (see García-Carpintero 2013). In this paper, I stay neutral on whether fiction should be conceived of as a kind of speech act, just as I stay neutral on Friend’s conception of fiction as a genre. My claim is just that science-fiction, or “science-fiction-making” if one prefers, is a genre to whom the Austinian notions of misfire and abuse can be fruitfully applied.

fiction, though an *improper* one. Science fiction can thus include both proper and improper instances of the genre.

In order to distinguish between proper and improper instances of science fiction—and more generally between different degrees of membership in science fiction—it is worth considering the various categories to which nova can belong. The novum might be a living being, as for example an alien creature, but it can also be an artifact, as for example a spaceship or a ray gun. Among the paradigmatic nova we find artifacts that behave like living beings despite not being so (e.g. robots, androids, cyborgs), as well as artifacts that allow living beings to enjoy new kinds of experiences (e.g. the time machine, the teleportation machine, the virtual reality machine).

Still, there can be works of science fiction that do not introduce concrete nova such as artifacts or organisms, but rather abstract nova such as institutions, as it is the case in dystopian science fiction. Though the latter often introduces new kinds of artifacts, as it happens in Philip Dick's stories *Minority Report* (1956) and *Do Androids Dream of Electric Sheep?* (1968), in works such as Aldous Huxley's *Brave New World* (1932) and George Orwell's *1984* (1948) the relevant novum is rather a new kind of institution.

Treating the dystopian institutions portrayed in such novels as belonging to a brand-new social kind surely is less straightforward than treating aliens as new biological kinds, or androids as new artifactual kinds. One might object that such dystopian institutions are not instances of new social kinds but new instances of a well-known social kind, namely the state. Yet, one might reply that such dystopian institutions individuates a *new kind* of state, a sort of technocracy that is sharply different from the kinds of states that we can currently find in our world.

The issue is controversial, but we are not forced to choose between the objection and the reply. These can both play a role in figuring out the way in which dystopian works such as *Brave New World* and *1984* belong to science fiction. On the one hand, the possibility to sensibly treat dystopian institutions as fictional nova enables us to cast the works portraying them as members of science fiction. On the other hand, the controversy as regards whether such institutions really are fictional

nova helps us to explain why such works, unlike works involving new kinds of organisms or artifacts, are not paradigm works of the genre.

A similar strategy can be used to account for those works of science fiction whose forerunner is H. G. Wells' *The Star* (1897). The novum of those works consists in new kinds of events such as impact events or dramatic climate changes, which characterize what one might call "disaster science fiction" (see Sontag 1965). These kinds of events differ from paradigmatic fictional nova such as aliens or androids since we know that impact events and dramatic climate changes had happened in our universe while we do not have any evidence of the existence of aliens or androids. Yet, one might feel entitled to treat also impact events or dramatic climate changes as fictional nova inasmuch as such happenings are presented by disaster science fiction as bearing upon human history in a way in which, in the actual world, they surely have never done. In such cases, the novelty in intensity is cast as a novelty in kind. This helps us to explain why fictions involving such nova can end up belonging to science fiction and yet are not paradigm cases of the genre but rather borderline cases.

Alongside utopian or dystopian science fiction and disaster science fiction, there is another borderline case which seems to be hard to accommodate. This is what one might call 'counterfactual science fiction', that is, a fiction that explores the way in which history might have developed if certain historical events have had different outcomes. For example, Philip Dick's *The Man in the High Castle* (1962) explores the way history might have developed if Nazi Germany and Imperial Japan had won World War II.

Such difficulty might be taken as a clue of the peripheral place that works such as *The Man in the High Castle* have in the genre—so peripheral that sometime such works are cast as members of a self-standing genre, namely, alternate history (see Prucher 2007). Nevertheless, there is a sense in which such works introduce fictional nova, namely, they introduce *new kinds* of events: historical events which belong to timelines that are different from the one including actual historical events. Once again, there is a sense in which borderline cases have fictional nova, and this explains their inclusion in science fiction. On the other hand, those purported nova, unlike the paradigmatic nova

of science fiction, are not unquestionably new in kind, and this explain why such works are borderline cases of the genre.

A variant of alternate history is what one might call ‘alternate physics’ or, following Quentin Meillassoux (2015), “extro-science fiction”. Just as alternate history explores the way in which history might have been if certain historical events had been different, alternate physics explores the way in which nature might have been if certain laws of nature had been different. The example that Meillassoux considers is René Barjavel’s novel *Ravage* (1943), which portrays a world in which the laws of electricity are no longer in force. The novum, here, is the fictional world itself, which belongs to a kind of possible worlds which is nomologically different from the kind to which our actual world belong. In sum, what is special in the novum of alternate history and alternate physics is that it does not consist in adding something to the ontological furniture of our world but rather in changing something, namely, the historical timeline in the former case and physical laws in the latter.¹⁶

In his characterization of science fiction, Suvin does not limit himself to positing the novum and its validation as key features of a work of science fiction but insists that the work should be “centered” on them (1979, 80). This suggests that we should treat also the *centrality* of the novum and of its validation as a standard feature of science fiction. By so doing, we can explain why certain fictions, as for instance the *James Bond* movies or the *Mission: Impossible* movies, do not belong to science fiction in spite of introducing new kinds of hi-tech artifacts: those “hi-tech fictions” are not *centered* on such fictional nova, which are just gadgets that embellish them. Nevertheless, those new kinds of artifacts contribute to explain why such fictions are considered close to science fiction despite not belonging to the genre.

¹⁶ In other words, alternate history and alternate physics involve a special attitude as regards the hermeneutic norm that Walton (1990) calls “the Reality Principle”, which enables the audience to infer further fictional truths by relying on those actual truths that are compatible with the fictional truths explicitly stated by a work of fiction. While paradigmatic works of science fiction tend to an unrestrained application of the Reality Principle—that is, a full compatibility between fictional events on the one hand, and the historical timeline and physical laws on the other—works such as *The Man in the High Castle* or *Ravage* constrains the Reality Principle by preventing the audience to import the historical timeline and physical laws respectively.

Analyzing the notions of novum and validation, as well as their relationship, sheds light not only on borderline cases but also on the historicity of science fiction. Even if we assume that the novum and its validation dominate the history of the genre, the “narratological” constraint concerning the centrality of the novum and of its validation can change in time, and so can do the “ontological” constraint concerning the novum, and the “epistemological” constraint concerning the validation. For example, hi-tech fictions such as *Mission: Impossible* movies nowadays are not included in science fiction and yet, in the future, the Genre Intention or the Institutional Clause might succeed in casting such works as science fiction if the narratological constraint regarding the centrality of the novum will be weakened. Likewise, disaster movies such as *Armageddon* (1998) or *Deep Impact* (1998) nowadays are included in science fiction and yet might be excluded in the future if the ontological constraint on what counts as a novum will be strengthened. Space operas such as *Buck Rogers* or *Star Wars* also might be excluded in the future if the epistemological constraint on cognitive validation will be strengthened.

7. Learning from Science Fiction

In this paper, I have proposed an amended version of Suvin’s conception of science fiction that clarifies the notions of fictional novum and cognitive validation, and casts them as standard features rather than as necessary and sufficient conditions. I have shown that this amended version allows us to effectively distinguish paradigmatic cases of science fiction from borderline cases, and is compatible with the historical dimension of genres, thereby neutralizing Evnine’s motivation for replacing Suvin’s characterization with an account of science fiction as a tradition.

I think that preserving Suvin’s characterization is worthwhile also because it significantly contributes to explain the special philosophical relevance that science fiction is meant to have in comparison with other genres. Works of science fiction, indeed, seem to be closer to philosophical thought experiments. For example, David Chalmers (2005) points out the analogies between the science fiction film *The Matrix* (1999) and the thought experiment concerning brains in a vat (see Harman

1973, Putnam 1981). In a similar vein, one might compare Derek Parfit's (1984) thought experiments about personal identity with the representation of teleportation in the science fiction TV show *Star Trek*, or Robert Nozick's thought experiment about the experience machine with a science fiction movie such as *Vanilla Sky* (2001). Some philosophers (Grau 2006, Wartenberg 2007) cast another science fiction movie, *Eternal Sunshine of the Spotless Mind* (2004), as an original thought experiment which, just as John Rawls' (1955) "torture" thought experiment, provides us with a counterexample to utilitarianism. Other science fiction stories raise philosophical issues concerning consciousness or responsibility, as it happens in Dick's *Do Androids Dream of Electric Sheep?* and *Minority Report* respectively (see Mulhall 2008). Many other examples might be considered.¹⁷ However, this is not what is at stake here. I am not arguing for the claim that science fiction has special philosophical relevance. I am just assuming this hypothesis in order to show that, if it holds, Suvin's characterization might effectively explain why it does so.

The point is that this characterization captures something crucial that science fiction stories share with philosophical thought experiments. In both cases, it is a matter of supplementing ordinary reality with some relevant novelty, the *fictional novum*. The latter is *cognitively validated* in the sense that it does not contradict the basic laws of reality but just contributes to highlight some unexplored possibilities, which remain compatible with those laws in spite of striking us as exceptional. Both in science fiction stories and in philosophical thought experiments, the novum and its validation contribute to put pressure on our intuitions by making us discover that our reality might contain puzzling situations that we were not considering. In thought experiments this is mainly aimed to philosophical investigation while in science fiction the main aim is rather aesthetic appreciation. Yet, science fiction and thought experiments have a common underlying structure, which the conception of the genre that I have defended in this paper can contribute to figure out.¹⁸

¹⁷ An outstanding repertoire in this sense is Eric Schwitzgebel's website:

<https://faculty.ucr.edu/~eschwitz/SchwitzAbs/PhilosophicalSF.htm>

¹⁸ Many thanks to the two referees and to the editors of the JAAC for extensive comments and insightful suggestions. I am grateful to Luca Bandirali who got me started thinking about science

References

- Abell, Catharine (2015) “Genre, Interpretation and Evaluation”, *Proceedings of the Aristotelian Society*, 115, 1: 25-40.
- Austin, John (1962), *How to Do Things with Words*, Oxford: Clarendon Press.
- Bicchieri, Cristina (2005) *The Grammar of Society: The Nature and Dynamics of Social Norms*. Cambridge: Cambridge University Press.
- Boyd, Richard (1999): “Homeostasis, Species, and Higher Taxa”, in: Wilson R. (ed.), *Species: New Interdisciplinary Essays*, Cambridge, MA: MIT Press, 141-185.
- Cavell, Stanley (1981) *Pursuits of Happiness. The Hollywood Comedy of Remarriage*. Cambridge, MA: Harvard University Press.
- Chalmers, David (2005) “The Matrix as Metaphysics”, in: Grau Ch. (ed.), *Philosophers Explore the Matrix*, Oxford: Oxford University Press, 132-176.
- Currie, Gregory (2004), *Arts and Minds*, Oxford: Oxford University Press.
- Davies, David (2009) “The Primacy of Practice in the Ontology of Art”, *The Journal of Aesthetics and Art Criticism*, 67, 2, 159-171.
- Davies, Stephen (2004) “The Cluster Theory of Art”, *British Journal of Aesthetics*, 44, 297-300.
- Evine, Simon J. (2015), “‘But Is It Science Fiction?’: Science Fiction and a Theory of Genre”, *Midwest Studies in Philosophy* 39 (1):1-28.
- Friend, Stacie (2012), “Fiction as a Genre,” *Proceedings of the Aristotelian Society*, 92, 179-208.
- García-Carpintero, Manuel (2013), “Norms of Fiction-Making”, *British Journal of Aesthetics*, 53: 339-357.
- García-Carpintero, Manuel (forthcoming), “How to Understand Rule-Constituted Kinds”.
- Gaut, Berys (2000) “‘Art’ as a Cluster Concept”, in: Carroll N. (ed.), *Theories of Art Today*, Madison:

fiction as a genre in the first place. Thank you to audiences at EHESS (Paris), LOGOS (Barcelona) and the ECAP10 conference (Utrecht, online); I am especially grateful to Margherita Arcangeli, Sacha Behrend, Elisa Caldarola, Jérôme Dokic, Rob van Gerwen, Tomáš Koblížek, Jacques Megier and Louis Rouillé for their questions and objections in those occasions. Special thanks to Aarón Álvarez González, Filippo Contesi, Manuel García-Carpintero and Merel Semeijn for their helpful comments on an earlier draft.

University of Wisconsin Press, 25-44.

Gaut, Berys (2005) "The Cluster Account of Art Defended", *The British Journal of Aesthetics*, 45(3), 273-288.

Grau, Christopher (2006), "Eternal Sunshine of the Spotless Mind and the Morality of Memory", *The Journal of Aesthetics and Art Criticism*, 64, 119-133.

Harman, Gilbert (1973), *Thought*, Princeton: Princeton University Press.

Lewis, David (1976), "Survival and Identity", in: Rorty A. (ed.), *The Identities of Persons*, Berkeley and Los Angeles: University of California Press, 17-40.

Meillassoux, Quentin (2015), *Science Fiction and Extro-Science Fiction*, Minneapolis, MN: Univocal.

Mulhall Stephen (2008), *On Film: Second Edition*, London-New York: Routledge.

Nozick, Robert (1974), *Anarchy, State and Utopia*, New York: Basic Books.

Parfit, Derek (1984), *Reasons and Persons*. Oxford: Clarendon Press.

Perry, John (1972), "Can the Self Divide?", *Journal of Philosophy*, 69, 16: 463-488.

Perry, John (2019), "Time, Fission, and Personal Identity", *Argumenta* 5, 1: 11-20.

Prucher Jeff (ed.) (2007), *Brave New Words: The Oxford Dictionary of Science Fiction*, Oxford: Oxford University Press.

Putnam, Hilary (1975), "The Meaning of 'Meaning'", *Minnesota Studies in the Philosophy of Science*. 7: 131-193.

Putnam, Hilary (1981), *Reason, Truth, and History*, Cambridge: Cambridge University Press.

Rawls, John (1955), "Two Concepts of Rules", *Philosophical Review* 64, 1: 3-32.

Rose, Mark (1981) *Alien Encounters: Anatomy of Science Fiction*. Cambridge, MA: Harvard University Press.

Sider, Theodore (2001), *Four-Dimensionalism: An Ontology of Persistence and Time*, Oxford: Oxford University Press.

Sontag, Susan (1965), "The Imagination of Disaster", *Commentary*, 40, 4): 42-48.

Stecker, Robert (2000), "Is it Reasonable to Attempt to Define Art?", in: Carroll N. (ed.), *Theories of*

Art Today, Madison: University of Wisconsin Press, 45-64.

Stock, Kathleen (2016), "Imagination and Fiction". In *The Routledge Handbook of Philosophy of Imagination*, edited by Amy Kind, 204-216, London: Routledge.

Strawson, Peter F. (1959), *Individuals: An Essay in Descriptive Metaphysics*, London: Methuen.

Strawson, Peter F. (1979), "Perception and its Objects", in: Macdonald G.F. (ed.) *Perception and Identity: Essays Presented to A. J. Ayer*, London: Macmillan, 41–60. Reprinted in *Philosophical Writings*, Oxford: Oxford University Press, 2011, 125–145.

Suvin, Darko (1979), *Metamorphoses of Science Fiction: On the Poetics and History of a Literary Genre*, New Haven, CT: Yale University Press.

Thomasson, Amie L. (2005), "The Ontology of Art and Knowledge in Aesthetics", *The Journal of Aesthetics and Art Criticism*, 63, 3, 221-229.

Walton, Kendall (1970), "Categories of Art." *Philosophical Review* 79, 3: 334–367.

Walton, Kendall (1990), *Mimesis and Make-Believe*, Cambridge, Mass.: Harvard University Press.

Wartenberg, Thomas E. (2007), *Thinking on Screen. Film as Philosophy*, London: Routledge.