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ONTOLOGICAL RULES

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Ontology, defined by *Webster's Dictionary* as the philosophical study of “the nature of being and of the kind of things that have existence,” provides a useful approach to the classification and differentiation of imaginary worlds. In a possible worlds perspective, imaginary worlds can be situated at variable distances from the world we regard as actual or primary; for instance, the world of a realistic novel such as Jonathan Franzen's *Freedom* (2010) stands closer to the actual world than the world of a fantasy such as *The Lord of the Rings* (1954–1955) because its description requires fewer modifications from the assumed description of reality than the description of the world of *The Lord of the Rings*. We can build the storyworld of *Freedom* by adding a few individuals to the inventory of the real world, while leaving everything else unchanged (physical laws, natural species, history, geography), but we can only build the world of *The Lord of the Rings* by adding species (orcs, elves, hobbits), changing natural laws, and creating a brand new geography. Ontological rules specify what can and cannot exist, what is and isn't possible in a particular type of storyworld, thereby determining its distance, or conditions of accessibility, from the Primary World in which we live. When a number of texts share the same ontological rules, we can speak of genre.

Imaginary worlds, and the ontological rules that describe them, can be classified on various levels of abstraction. Aristotle provides a useful starting point by distinguishing the task of the historian, which is to represent what is, from the task of the poet, which is to represent what could be according to possibility and probability (*Poetics*, 9.2). The domain of the possible, in turn, can be conceived in two ways: in a narrow sense, the possible is what could happen in the Primary World, while in a wide sense, it encompasses every type of world that differs from the Primary World. If we split the possible into “what could happen in the Primary World, given the proper circumstance” and “what can be imagined but cannot happen in the Primary World,” we obtain a three-way typology (Maître, 1983, who adds a category of hesitation between 2 and 3 inspired by Todorov):

Alethic value (= modalities of truth)

1. True/false (= nonfiction)
2. Possible (= realistic fiction, science fiction)
3. Impossible (= fantastic genres)

This rule specifies conditions of truth with respect to the Primary World. However, if we shift perspective from the Primary World to the storyworld, if in other words we immerse ourselves in the storyworld, then the textual assertions become automatically true in the storyworld by virtue of the performative power of fiction, a power that enables fictional texts to

create imaginary objects and worlds by simply referring to them. There cannot, consequently, be a divergence between what the text says about the world it represents and the represented world. In the case of nonfiction, by contrast, we must distinguish the world referred to by the text (i.e., the actual world) from the world described by the text; when the text is true these two worlds coincide; when the text contains falsehoods, these two worlds diverge.

Nonfiction obeys very strict ontological conditions, since for the text to be accepted as true, all the rules that define the Primary World must also define the storyworld. The world of fictional texts, by contrast, can stand at various distances from the Primary World; its description requires, consequently, a wider variety of ontological rules. The main difficulty in postulating rules that measure ontological distance resides in cultural and individual divergences concerning what is possible and what is not in the Primary World; for instance, the entertainment screen of Icelandic Airlines states, probably tongue-in-cheek, that about 50% of people in Iceland believe in elves. While I am skeptical of this claim, if taken literally (but isn't belief a matter of degree?), we should consider the possibility of it being true. Will the people who believe in elves consider stories dealing with these creatures to be possible? Conversely, should Shakespeare's *Macbeth* (1611) be considered impossible on the ground that witches have disappeared from recent ontologies? And just because religious faith was more widespread and more literal than now, did people in the Middle Ages regard hagiographic stories about saints performing miracles and ribald stories about cheating wives as equally possible in the real world? I would rather suggest that medieval people attributed these two kinds of stories to different ontological domains within reality, the sacred and the profane (Pavel, 1986), one of which is no longer eliciting strong belief in a large part of the population of Western civilizations.

In my formulation of rules, I take as standard a minimalist ontology based on scientific observation that excludes empirically non-verified phenomena such as the paranormal and the occult. I assume that people who do believe in elves, in flying objects of alien origin (UFOs), or in communication with the dead will recognize that novels or films that deal with these phenomena differ ontologically from strictly realistic texts such as Jonathan Franzen's *Freedom*. In other words, even users who personally adhere to a broader ontology may invoke the culturally dominant "scientific" ontology as a standard when making judgments of genre. Alternatively, a distinction could be made between what everybody believes (i.e., dogs exist), what some people believe (i.e., UFOs exist), and what no mentally sane person believes (unicorns exist). The corresponding genres would then be realism, the paranormal, and the fantastic (Traill, 1991). As for the witches in Shakespeare's *Macbeth*, their ontological impact depends on how the opening passage is interpreted: do the witches exist objectively in the world of *Macbeth*, are they a figment of a character's imagination, or are they purely allegorical figures? Only the first interpretation is compatible with a fantastic classification. If we cannot decide between the three interpretations, the play remains in limbo between the possible and the impossible.

I propose to account for the ontological variety of imaginary worlds by distinguishing a number of cognitively important semantic domains, and by dividing them according to various degrees of departure from the implicit standard of the Primary World. This taxonomy draws on Ryan (1991) but uses a different formulation of rules. The resulting system should not be taken as definitive nor comprehensive: since new types of imaginary worlds are continually being created, it takes an ever-expanding catalog of rules to describe them, and to draw finer and finer generic distinctions.

Inventory of Individuals

1. Same

2. Augmented
3. Different

The first option means that the storyworld is limited to historical individuals. This does not mean that the work is history, since the individual properties and biography of these individuals could be deliberately altered. For instance, a work of fiction could show Hitler winning the Second World War without introducing a single invented character. The second option is the most common in realistic novels such as *Freedom*. It introduces some imaginary characters into the storyworld, usually as protagonists, but real-world characters exist in the background and form targets of reference. By a principle of solidarity, if only one real-world individual is introduced in a fiction, one must assume that, unless otherwise specified or implied, the entire inventory of the real world is also part of its ontological background. It would take an extensive rewriting of history and personal biography for a novel to include Hillary Clinton but to explicitly exclude Bill Clinton. In the third option, no real-world individual is mentioned, and the cast of characters is entirely original to the storyworld. This situation occurs in most fantastic worlds, but also in some worlds that incorporate aspects of everyday reality, such as Jane Austen's novels: despite the identifiable geographical and historical setting (the latter not explicitly specified but conventionally assumed to correspond to the lifetime of the author), no real-world individual is mentioned. We cannot say that Napoleon exists in *Pride and Prejudice* (1813) though he does in *War and Peace* (1869).

When an inventory obeys 1 or 2, a subrule comes into effect:

Properties of Common Individuals

1. Same, Verified
2. Possible
3. Different

When option 1 holds, and there are no invented characters, the text can be regarded as history. Option 2 is the trademark of fictionalized biographies of historical individuals. Unlike authors of historical works, novelists can attribute to historical characters speech acts, private thoughts, emotions, and reasons for acting that are neither verified nor contradicted by documents. Historical fiction should fill in the gaps in our knowledge of historical figures in a believable way, motivating the reader to think: this *could* be true in the Primary World, in addition to being true in the storyworld. Option 3 is found in any fiction that stages an interaction between fictional and historical characters. It is particularly dominant in a genre that may be called historical fabulation, such as *The Three Musketeers* (1844) by Alexandre Dumas, or in counterfactual history, such as Philip Roth's *The Plot Against America* (2004), where Charles Lindberg is elected President of the United States during World War II and initiates humiliating measures against the Jewish population.

Imaginary worlds can also be distinguished from the real world in matters of biology and physics. I propose the following rules:

Kinds of Natural Species

1. Same
2. Augmented
3. (Different?)

Natural Laws

1. Same

2. Augmented (or: can be broken by magic)
3. (Different?)

These two rules are the principal factor in the distinction of fantastic from realistic story-worlds. Rule 2 of “Natural Species” introduces supernatural and invented creatures such as fairies, ghosts, Nazgul, the undead, elves, dwarves, hobbits, orcs, dragons, vampires, and zombies into fictional worlds, where they interact with natural species such as humans, horses, and snakes. (But if the snakes have magical abilities, they are no longer a natural species.) It is at least theoretically possible to create a fictional world whose inventory of species presents no overlap with that of the real world (option 3), but in practice this is hardly ever done, because readers tend to relate emotionally to the species they know, especially to humans. Even *The Lord of the Rings*, whose main protagonists are hobbits, includes a race of men (and, in fact, hobbits are a subspecies of men, characterized by their small size, but without magical abilities). A remote planet could admittedly contain an entirely different set of species (cf., Pandora in the film *Avatar* [2009]), but narratively interesting situations are typically created when the inhabitants of such remote planets come into contact with the denizens of Earth.

Since species not found on earth are usually associated with magical properties, the two sets of rules normally imply each other. Fairies can turn pumpkins into carriages, wizards can cast spells, and witches know how to manufacture magic potions. If imaginary species present supernatural abilities, this means that natural laws can be broken. Yet the rules governing natural species do not make the rules of “natural law” entirely superfluous because one can imagine a world that breaks natural laws without introducing additional species: for instance, in Kafka’s *The Metamorphosis* (1915), a supernatural event affects an ordinary individual; in most time-travel stories, humans may move back and forth in history without encountering new species. (I take it that time-travel breaks natural laws even though Einsteinian relativity theory suggests that it may be possible for particles.) Conversely, could a world that contains different species entirely respect the laws of nature? This is conceivable, but narratively unproductive. What would be the point of introducing new species if they could not do something different? Option 3, totally different natural laws, seems cognitively improbable, because readers would be unable to rely on their life experience and knowledge of the Primary World to infer causal relations between events. Without causal relations there cannot be a coherent story.

Technology

1. Same
2. More Advanced
3. Absent

This is the feature that distinguishes science fiction from realism on one hand, and from the fantastic on the other. Insofar as science fiction explores the social and environmental consequences of developing advanced technologies, its relevance encompasses both the actual world, where it *could* happen, and the storyworld, where it *does* happen as a matter of (fictional) fact. In standard science fiction, natural laws are observed and there are no additional species. But storyworlds can combine some of the attributes of the fantastic with those of science fiction. The world (or universe) of *Star Wars* blends, for instance, traditional science fictional features such as advanced spaceships and smart robots with new species, such as the Wookiee Chewbacca, or domestic animals resembling dinosaurs and hippopotamuses. It also presents fairy tale elements such as knights (Jedis) and princesses. The new kinds of species could, however, be attributed to the fact that the *Star Wars* universe contains many planets,

representing different climatic environments in which different life forms did evolve. If one accepts this explanation, the world of *Star Wars* is more science fictional than fantastic, though it lacks the predictive (“this could happen”) dimension of the most sophisticated worlds of science fiction. Option 3, absent technology, can be used to describe edenic storyworlds, such as the worlds of Baroque pastoral romances.

For more refinement within the worlds of science fiction (and possibly also within fantastic worlds) we can apply a set of cosmological rules:

Cosmology

1. One world
2. A universe with many celestial objects (planets, stars)
3. Parallel universes

Option 1, represented in most realistic texts, does not exclude the sun, the moon, planets, and stars from the storyworld (after all, the characters of a realistic novel may dream while looking at the moon or read about space exploration); it rather means that the narrative action is physically confined to one world. While science fiction may present the same restriction, option 2 is much more distinctive of the genre, though not exclusive to it: we find stories of travel to the moon (Wolf, 2012) long before the technological conditions of the trip received any consideration. In type 2 cosmologies, celestial objects are unique, and space travel leads to ever-different worlds. Option 3 dramatizes a cosmology that is gaining traction in theoretical physics and popular science, according to which the sum of what exists consists not only of one universe with its myriads of galaxies, stars, and planets contained in a unified space-time, but of multiple, parallel universes existing in their own space-time. The birth of these universes can be attributed to the formation of black holes and wormholes, or to what is known as the many-worlds interpretation of quantum physics. This cosmology inspires stories in which individuals exist in multiple parallel worlds, and where cross-world travel enables characters to meet their counterparts, a situation particularly rich in possible dramatic developments (Ryan, 2006).

Another ontological domain relevant to generic distinctions is the temporal location of the action. Its variations can be captured by the following rule:

Time

1. Historical
2. Future
3. Mythical/Timeless

The first option locates stories in a specific temporal setting, recognizable for the reader through references to real-world individuals and events, or, when none is mentioned, through the kinds of objects and technologies that surround the characters. This does not mean that the past of the imaginary world must be narrowly faithful to the actual past: just as a world can introduce imaginary characters in a historical setting, it can present a counterfactual version of the past, as in alternative history fiction. Option 2 is a distinctive feature of science fiction, as well as of utopias and dystopias that do not make use of advanced technology, such as George Orwell’s *1984* (released in 1949). Mythical time, or timelessness, the temporal setting of medieval fantasy and fairy tales, is often signaled by expressions such as “once upon a time,” “in the time when animals could speak,” or even the *Star Wars* mantra, “a long time ago in a galaxy far, far away.” While the mention of kings and queens, knights and castles, and swords

instead of guns may suggest a medieval setting in fairy tales, *The Lord of the Rings*, or *Game of Thrones*, this setting is de-realized by the presence of supernatural elements.

Genres are not only determined by temporal but also by spatial criteria:

Space / Geography

1. Same
2. Augmented
3. Different

Option 1 locates stories in an actual geographic setting. When imaginary characters are introduced, real-world geography must often be expanded to accommodate their whereabouts: for instance, the Sherlock Holmes stories encompass the geography of the real world, including Baker Street in London, but they add the address 221 (which did not exist at the time of Conan Doyle's writing) as the residence of the famous detective. In this case the addition is minimal, but in the *Harry Potter* novels, most of the action takes place in the augmented part of world geography. Radically different geographies occur in two cases: (1) when the setting is fully invented, as in *The Lord of the Rings*; (2) when there are no place names, or none has reference in the real world, though the setting as a whole can be fairly ordinary (Kafka's novels).

In an overwhelming number of texts, encompassing both realistic and fantastic ones, the geometric configuration of space corresponds to our perception of real world space, but if we want to account for strange worlds, such as Edwin Abbott's *Flatland* (which describes societies existing in two-dimensional and one-dimensional spaces), we must add this rule:

Number of Spatial Dimensions

1. Same (=3)
2. Fewer
3. (More ?)

Option 3 is questionable, because even though mathematics and geometry can describe objects of more than three dimensions, which opens the possibility of a science fiction story taking place in such a space, the human mind is limited to visualizing objects in three dimensions. How, then, would readers imagine such worlds?

The most remote of fictional worlds (so remote that their "worldness" can be called into question) are those that present contradictions. Their description requires the following rule:

Logic

1. Respected
2. Occasionally Violated
3. Systematically Violated

With option 1, the storyworld respects the two fundamental laws of logic: non-contradiction (not p and $\neg p$) and excluded middle (either p or $\neg p$). The rule of non-contradiction is occasionally violated in avant-garde texts, especially in French New Novels. We read, for instance, in Alain Robbe-Grillet's *In the Labyrinth* (1960), "outside it is raining," and a few lines below, "outside the sun is shining" (1965:141), but these two statements are part of the same description and no time passes between them that could explain the change in weather. According to logicians, when a single contradiction enters a system of propositions, anything can be inferred, and it becomes impossible to imagine a world. I believe, however, that this position is too

strong to describe the reader's experience of postmodern texts. While they do not represent a coherent world, these texts make a number of non-contradicted assertions, which readers can use as materials to construct partial world versions. In one version of Robbe-Grillet's text, it is raining at a certain moment, in another the sun is shining in the same moment, but no version will account for the text as a whole. It would take option 3 for the imagination to give up the attempt to construct a world, and to resign itself to the fact that there is nothing but words. This option can be implemented in several ways: through systematic contradiction, as in this translation of a French non-sense poem: "a young old man, sitting on a wooden stone, was reading a newspaper folded in his pocket in the light of a street lamp that had been turned off"; through incoherent content, as in Samuel Beckett's *Waiting for Godot* (1953): "Given the existence as uttered forth in the public works of Punch and Wattman of a personal God quaquaquaqu with white beard quaquaquaqu outside time with extension from the heights of divine apathia divine athambia divine aphasia loves us dearly with some exceptions for reasons unknown" (Beckett, 1954: 141; the sentence goes on for two pages); and through the use of an incomprehensible language, as in Lewis Carroll's "Jabberwocky" (1871): "Twas brillig, and the slithy toves / Did gyre and gimble in the wabe / All mimsy were the borogroves / And the mome raths outgrabe" (Carroll, 1975: 130).

While certain combinations of ontological rules have become canonical, thereby defining culturally recognized genres (summarized in Table 10.1) and creating expectations (we do not anticipate finding computers in fairy tales), nothing prevents storyworlds from implementing original combinations. As already noted, a breaking of physical laws usually comes hand in hand with the presence of supernatural creatures, but in the genre of magic realism, or in Kafka's stories, physically impossible events, such as transformation or levitation, affect ordinary people. Fantastic elements are usually incompatible with an inventory that includes real-world people or a geography that includes real-world places, but in Ariosto's *Orlando Furioso* (1516) we find both supernatural creatures (a hippogriff) and historical characters and institutions (Charlemagne, the Holy Roman Empire), both elements of Greek mythology (participants in the Trojan war) and Biblical figures (the prophet Elijah), both real-world locations (Paris) and imaginary ones (the sorceress Alcina's magic island), and both travel through Europe and travel to the moon in an ontological cocktail that defies established genres. Contemporary

Table 10.1 An ontological description of genres. A=Alethic value; B=Inventory of individuals; C=Properties of common individuals; D=Kinds of natural species; E=Natural laws; F=Technology; G=Cosmology; H=Time; I=Space/Geography; J=Spatial dimensions; K=Logic. Numbers refer to values described in text. *Values are specified for Robbe-Grillet's *In the Labyrinth*.

	A	B	C	D	E	F	G	H	I	J	K
Nonfiction	1	1	1	1	1	1	1	1	1	1	1
Historical fiction	2	1,2	1,2,3	1	1	1	1	1	1	1	1
Realistic fiction	2	2,3	1,2	1	1	1	1	1	1,2	1	1
Fantastic	3	3	n/a	2	2	1,3	1,2	3	3	1	1
Fantastic realism	3	3	n/a	1	2	1	1	1	1,2	1	1
Science fiction	2	2,3	2,3	1,2	1,2	2	2,3	2	2,3	1,2,3	1
Pastoral romance	3	3	n/a	1	1	3	1	3	3	1	1
Storyworlds with local contradictions*	3	3	n/a	1	?	1	1	3	3	1	2
Generalized nonsense	3	1,2,3	?	1,2	?	?	?	?	?	?	3

culture has been intensely involved in the creation of daring ontological combinations; a case in point is the novel (2009) and film (2016) *Pride and Prejudice and Zombies*, which hybridizes two types of worlds normally located far away from each other.

Strict ontological rules are not the only determinants of genre. For instance, within the large group of realistic storyworlds, further distinctions can be made on the basis of thematic content, such as romance, mystery, or thrillers; on the basis of probability (“escapist” storyworlds containing hair-raising events vs. storyworlds focused on the ordinary); and on the basis of emotional impact (tragic, comic). Within the broad domain of the supernatural, Tzvetan Todorov proposes an epistemic distinction between a subgenre that he calls the fantastic, where there is a hesitation between a natural and a supernatural explanation of events, and the marvelous, where the supernatural is an accepted part of the real.

Though ontological rules are only one of the criteria that distinguish genres, they play a major role in determining what types of texts we like. Just as we choose vacation destinations on the basis of what we expect to find in them (landscapes? wildlife? culture? opportunities for physical activities?), we choose the worlds in which we transport ourselves in imagination in a large part on the basis of the ontological rules that predict what kinds of entities we will encounter, and what kinds of experience these worlds have to offer.

References

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- Aristotle (1954[1952]) *Poetics*, trans. and intro. Malcolm Heath, New York: Penguin Books.
- Beckett, S. (1954[1952]) *En attendant/Waiting for Godot*. Bilingual edition translated by the author, New York: Grove Press.
- Carroll, L. (1975[1916]) *Alice's Adventures in Wonderland and Through the Looking Glass*, New York: Rand McNally.
- Maitre, D. (1983) *Literature and Possible Worlds*, Middlesex Polytechnic Press.
- Pavel, T. (1986) *Fictional Worlds*, Cambridge, Mass: Harvard University Press.
- Robbe-Grillet, A. (1965) *Two Novels by Robbe-Grillet: Jealousy and In the Labyrinth*, trans. Richard Howard, New York: Crown Press.
- Ryan, M.-L. (1991) *Possible Worlds, Artificial Intelligence and Narrative Theory*, Bloomington: University of Indiana Press.
- Ryan, M.-L. (2006) “From Parallel Universes to Possible Worlds: Ontological Pluralism in Physics, Narratology and Narrative,” *Poetics Today* 24.7, pp. 633–674.
- Todorov, T. (1975[1970]) *The Fantastic: A Structural Approach to a Literary Genre*, trans. Richard Howard, Ithaca: Cornell University Press.
- Traill, N. (1991) “Fictional Worlds of the Fantastic,” *Style* 25, pp.196–210.
- Wolf, M. J. P. (2012) *Building Imaginary Worlds: The Theory and History of Subcreation*, New York: Routledge.