Marie-Laure Ryan

From Parallel Universes to Possible Worlds:
Ontological Pluralism in Physics and Narratology

Infinite Earths in
PARALLEL
UNIVERSES
Really Exist

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Really Exist
Level 1 Parallel Universes

- Contained in same spacetime as our universe
- Formed by different or similar arrangements of particles
- Follow the same laws of physics

Level 2 Parallel Universes

- Formed by bursting of space bubbles or black holes
- Exist in embedded spacetime
- Follow the same laws of physics but with different constants
Level 4 Parallel Universes

- Correspond to all mathematically describable structures
- Do not exist in space and time
- Follow different laws of physics

Level 3 Parallel Universes

- Postulated as an explanation of quantum phenomena
- Do not require any change in the laws of physics
The Two-Slits experiment

The two slits experiment: expected particle pattern
The two slits experiment: observed wave pattern

Possible Worlds in Narrative Theory

- Proponents: Umberto Eco, Thomas Pavel, Lubomír Doležel, Ruth Ronen, Marie-Laure Ryan

- Inspiration: modal logic (analytic philosophy): Saul Kripke, Nicholas Rescher, Alvin Plantinga, David Lewis
Modal realism

David Lewis
Is a philosopher who is
Crazy enough to insist
That all logically possible worlds actually exist

--Armand T. Ringer

The indexical conception of actuality

“The actual world” means “the world in which I am located”. Its reference varies with the speaker. All possible worlds are actual from the point of view of their inhabitants
In all fictional works, each time a man is confronted with several alternatives, he chooses one and eliminates the others; in the fiction of Ts’ui Pên, he chooses—simultaneously—all of them. He creates, in this way, diverse futures, diverse times which themselves also proliferate and fork. …In the work of Ts’ui Pên, all possible outcomes occur; each one is the point of departure for other forking.
Alternative interpretations for branching stories

- Mentalism: It’s all a dream
- Virtualism: Only one fork is actual
- Allegory and metaphor: Purpose of multiples branches is to illustrate an idea
- Meta-textualism: Branches are drafts of a novel, not actual events

Some types of narrative that create a multiverse cosmology

- Black hole narratives: *Chronicles of Narnia* (C.S. Lewis), *Jack and the Beanstalk*
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- Science fiction stories that show counterparts of the same individual in different worlds: *The Lathe of Heaven* (Ursula K. Le Guin)
Counterpart relations in narrative

Comparing Many Worlds Interpretation of Physics and Possible Worlds Theory in Narratology

- **Indexical theory of actuality**: narratology supports it, physics is indifferent to it

- **Modal realism**: physics supports it, narratology is indifferent to it