Science Fiction Ontology

By

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Review of existing Ontology

- There aren’t any literary ontologies
- Libraries use Library of congress subject headings
- Digital libraries use Dublin Core Metadata standards (DCMI http://dublincore.org/) and Metadata Object Description Schema (MODS http://dublincore.org/)
The Star Trek ontology was written as part of Paulo Costa's PhD Dissertation, as a means to have a case study on probabilistic ontologies.

There are four basic entities in this toy ontology: Starship, Zone, TimeStep, and SensorReport. In the ontology, those entities are modeled as subclasses of the class pr-ow:ObjectEntity.
Classification of Entities

- **Starship** is the designation for a large type of space vessel with warp drive.
- A **zone** can be either a deep space, a planetary system, or the boundary of a Black Hole.
- **TimeStep** is a special class that is used to model dynamic nodes, and there are quite a few in this domain.
- Starship detection is performed by the *Enterprise’s* suite of sensors, which can correctly detect and discriminate starships with an accuracy of 95%. The product of those sensors are individuals of the class **SensorReport**.
The OWL Ontology for Star Trek

http://www.pr-owl.org/basics/ontostartrek.php
Science Fiction Ontology

- What is the difference between fiction and science fiction?
- Fiction - The species of literature which is concerned with the narration of imaginary events and the portraiture of imaginary characters; fictitious composition.
  Oxford English Dictionary, [http://bert.lib.indiana.edu:2055/cgi/entry/50084316](http://bert.lib.indiana.edu:2055/cgi/entry/50084316)

- Science Fiction - n. A literary or cinematic genre in which fantasy, typically based on speculative scientific discoveries or developments, environmental changes, space travel, or life on other planets, forms part of the plot or background.
Classification Entities

- **Biopunk** - uses elements from the hard-boiled detective novel, film noir, Japanese anime, and post-modernist prose to describe the nihilistic, underground side of the biotech society.

- **Steampunk** - denotes works set in (or strongly inspired by) an era when steam power was still widely used — usually the 19th century, and often set in Victorian England.

- **Gothic science fiction** - a subgenre of science fiction that involves gothic conventions.

- **Military science fiction** - science fiction in which the principal characters are members of a military service and an armed conflict is taking place, normally in space, or on another planet.
Classification Entities Cont.

- First contact with an alien race - the first encounter with an alien race
- Utopian science fiction - fiction based upon society existing as an ideally perfect place
- Apocalyptic science fiction - stories in which various components bring forth the end of the world or life as a civilization knows it
- Travel Sci Fi – science fiction containing elements of space or time travel
  - Time travel - stories that typically involve traveling to the past or present. These stories are not limited to any one planet, race or universe
  - Space Travel - stories involving some type of travel in outer space
Science Fiction XML File

- XML Syntax file was created in Protégé using OWL (Web Ontology Language)
- [http://mypage.iu.edu/~vmjamers/S604/protege/scifirendering.xml](http://mypage.iu.edu/~vmjamers/S604/protege/scifirendering.xml)
- The file features the Disjoined classes, member classes and individuals

- Click here for information on Protégé [http://protege.stanford.edu/](http://protege.stanford.edu/)
The Science Fiction OWL File
Conclusion

- Successfully created Science Fiction Ontology in Protégé