

Introduction and “Fictive Novums”

Science Fiction (SF) presents an interesting contradiction. It is immediately recognizable but nearly impossible to define. What, exactly, is SF? Throughout the genre's history, SF hasn't even always been called science fiction. Stories we now recognize as science fiction were called--and continue to be known by--such terms as "the scientific romance," "the science fiction utopia," "future-war storytelling," "scientifiction," "post-gothic," "technothriller," "alternate history," "sci-fi," "skiffy," "speculative fiction" and even "structural fabulation." The only sure thing most of these terms have in common are the letters S and F.

Writers, for their part, have been interested in representing the subjects of science fiction—the future, space travel, new technologies and societies—since long before there was such a thing called “science fiction.” Historians of the genre locate the origins of science fiction in numerous sources, some going back to the beginnings of civilization. Amongst the list of progenitors they include Mary Shelley’s *Frankenstein*, Thomas More’s *Utopia*, Jonathan Swift’s *Gulliver’s Travels*, Cyrano de Bergerac’s *Voyage dans la Lune*, Horace Walpole’s *The Castle of Otranto*, George Chesney’s *The Battle of Dorking*, Francis Bacon’s *The New Atlantis*, and even the ancient epic of Gilgamesh—to name just a few.

So what is science fiction? You know science fiction when you read it or see it. Bookstores have shelves dedicated to it. Fans dress up in costumes and go to conventions about it. Yet for every term and every definition one can easily identify counterexamples, stories that clearly are science fiction but that don’t fit this or that definition of science fiction.

Perhaps it is best to start with the man who first coined the term "science fiction": legendary American pulp editor Hugo Gernsback. In the early 20th century Gernsback published the first magazines to focus exclusively on this kind of storytelling. In the first issue of his pulp magazine *Amazing Stories*, he defined science fiction thusly: “a charming romance intermingled with scientific fact and prophetic vision.” Gernsback identified five distinct qualities which combined in varying degrees to create the kind of fiction he was publishing in *Amazing*: a spirit of melodrama and travel; a sense of gothic horror; a dark satirical intent; and a utopian vision.

Gernsback saw science fiction as a global form of literature (hence this class!) and built his history of the genre out of three major and noteworthy authors from three different countries: the American author Edgar Allan Poe, the French author Jules Verne, and the British author H.G. Wells. Gernsback regularly republished these three authors in his own science fiction magazines. These three authors represent two forms of literature that are precursors of science fiction: the American gothic (Poe) and the European scientific romance (Verne and Wells).

We will study the “pulp” science fiction of the “Gernsback era” of science fiction next week. For this first unit this week, we are going to engage in a trans-atlantic survey of the roots of science fiction, starting with Hawthorne’s gothic tale, “Rappacini’s Daughter,” today, and moving on to Wells’s scientific romance, “The Star,” and Verne’s extraordinary adventure, *Journey to the Center of the Earth*, on Thursday.

For each unit, I recommend that you read a chapter from Istvan Csicsery-Ronay's *The Seven Beauties of Science Fiction*. Like Gernsback, Csicsery-Ronay identifies seven qualities of science fiction (which he calls "beauties"). If a story has enough of these qualities, it starts to feel like science fiction. I think this is a productive way to analyze science fiction: more through family resemblances than textbook definitions.

This unit you are introduced to the concept of the "fictive novum." As described in the "Second Beauty" section of Csicsery-Ronay, the novum is literally the "new thing" that one finds in a SF story, such as—for this unit's readings—Well's runaway star, Hawthorne's poisonous woman, and Verne's underground world.

But science fiction's fictive novum is not just any new thing. It's newness "entails a change of the whole universe of the tale." The novum must be treated not only factually but also scientifically; the novum must seem possible (even if, like many novums from sci-fi movies, it defies the laws of today's science). The novum is often described with neologisms, technical jargon that establishes it as part of an alternate, possible reality.

"The SF novum is a stone thrown into the pool of social existence, and the ripples that ensue."
"The SF novum is most often a newly discovered or invented object/process that changes the course of history." It is either an invention or a discovery. "The novum provides a 'narrative kernel' from which the SF artist constructs a detailed imaginary alternative reality." Novums are "among SF's most powerful attractions for readers, but their precise contours in a text are variable." There are many new things in science fiction. "SF's novums tend to fall into certain classes that we might as well call archetypes.... They include the classic motifs of SF: extraterrestrial aliens; space travel; cyborgs and robots; artificial intelligence; rapid evolution/devolution; mutants; genetic modification and eugenics; prosthetic self-mastery and mastery over others; time travel; multiple realities; parallel and alternative universes; world catastrophe; telepathy; teleportation; precognition; utopia and dystopia. The archetypes fall into two main classes: plausible extensions of what is known, and fantastic extensions that would require new concepts of both scientific understanding and material laws to be taken seriously."

"The logic of the novum's cause and effect" often "extend[s] beyond the physical world to the ethical and the social." "Each SF novum is a compound of at least two different kinds of radical change. The change usually first appears as a physical-material novelty: change in the material organization of existence. This form is complemented by an ethical novelty: a change in values and mores." Ultimately, the novum is "a device that creates a playful vertigo of free possibility in response to radical imaginary changes in readers' consensus physical and ethical worlds."

"The novum reveals history's contingency: that, at any point, history can change direction, and consequently, it's meaning." We experience novums in our everyday lives. Smartphones, for instance, are a real novum: their invention changed the way we communicate and even behave. "Modernity...is predicated on perceiving the incessant and ubiquitous emergence of newness."
"With industrialization and capitalist rationalization, the new becomes the norm, and there's a novum around every corner." The history of civilization is a history of novums: "the wheel, the longbow, the Venetian banking system, the Inquisition, the steam engine, the Pill, the Bomb"—all these things changed society in profound ways."

Every science fiction story or film will have at least one novum. It will often have several, all of which combine to create a sometimes strange new world. “Especially since the 1960s, more and more SF has been designed around multiple historical lines intersecting in riven novels that have ambiguous implications for future developments. In these works, more than one potentially world-transforming innovation occurs simultaneously, representing distinct logics and histories.”