As Csicery-Ronay writes in "Third Beauty," "most science fictions are futuristic. They are set in a *future history*. They are set in a future time vis-a-vis the author's present, or they include an event—an invention, a discovery, a seed—that will prove to be a history transforming novum." Science fiction stories "don't pretend to predict a future, but to explain a *future past*." Thus, even though they are set in the future, science fiction stories are always written in the past tense.

"SF's completed futures *mediate* the relationship between the human present and the future.... They playfully represent the colonization of the future by the present, through the forceful extension of contemporary trends." At the same time, these "future histories" return to the present, giving us our ideas of what may come, a vision of our hopes, dreams and fears.

SF's future histories *estrange* us from the present. They show us something strange yet also, often, familiar. In this way, SF can help us see the present in a new way. For instance, think about Weinbaum's "Martian Odyssey" in the context of 1930s race relations. Weinbaum, even though writing about an alien, is modeling a new mode of interracial relations in a time of segregation and coming genocide: friendship.

Still, SF is mostly "*imaginary prediction*, drawing on the same sort of historical-projective suspension of disbelief as the real thing, if only to explore, to problematize, and to play with it." The idea of a future that can be radically different from the present originates in the revolutionary politics of eighteenth century Europe. This was a time when people felt "the effects of technoscientific transformations in their daily lives" and heard "predictions of more changes to come." As the ancient monarchies of Europe fell, eighteenth century Europeans felt "that their mode of life were in flux, that they might benefit from changes."

Future-thinking eighteenth century humanity constructed "what Marx, following Hegel, called *second nature*, the creation by human labor and technology of a humanly constructed world." The concepts necessary for this great creation "came from natural history and revolutionary politics." Society has continued to radically change since that time, industrializing, obsoleting, and experimenting with different forms of government and economics. In the 20th century, we name historical eras after the machines that power and structure the "second nature" we increasingly inhabit: the atomic age, the computer age, the space age, the age of the internet, etc. "SF, for its part, engaged in close dialogue with the technosocial experiments and revolutions themselves, offering romantic, playful, and monitory stories of their consequences."

"The SF novum trails its future behind it, transforming the reader's present from just another moment continuous with the past into the prehistory of the future." SF writers "create the past from the perspective of the future." Because the subject of SF is new and strange, its style remains deliberately familiar and unchallenging; SF stories are (usually) easy to read. "In terms of narrative framing, SF is a conservative genre, in two respects. Its writers generally adhere to the conventions of epic world-building, and to the conventions of circumstantial realism." The epic and realism are the two modes we most commonly find in SF—big stories told through realistic, everyday people who inhabit a real, richly detailed (future) history.

Unlike history, which is pulled down by "the gravity of lived experience," SF's future history is not grounded at all. It is free to become anything. Future history "provides a free imaginative space for play." (This is why SF can be so much fun to read; it is a form of literary and historical play.)

When SF writers conceive their future histories, they "have levitated toward three main models, all predicated on collective adaptations to novum-ruptures:" 1) revolutions and utopias; 2) greatly evolved worlds; and 3)randomly dispersed futures.

1. "Utopian/revolutionary sf assumes that the main problems of the human species have to do with gaining autonomy from the impersonal forces of the universe" These are science fiction stories about *invention* and *engineering*. These are stories about how humankind has built, say, a spacefaring society, or created vast global cities, or built armies of robots, or reinvented social relations. They can also be the reverse: dystopias, in which humanity has built its own high-tech cages, as in Orwell's *1984*.

2. "The main alternative to utopian/revolutionary history in SF has been the evolutionary paradigm, which uses elements from the monumental cognitive-mythic project of nineteenthcentury Western thought to reconnect first and second natures, science and politics, in a theory of universal development." Here we have your Darwinian futures, your mutated futures, your cyborgs and othe posthumans, humanity spreading to new environments, new planets and evolving into strange new forms. "In all this, the history of SF parallels that of scientific culture itself." This kind of future history reflects the shift from physics to biology as the world's dominant science. Even technology is thought of as "evolving" like natural beings. "Technology in this frame is the *next step beyond natural evolution*." In these future histories, humans and machines join in a process of "technoevolution."

3. The third, increasingly common kind of future history is "dispersive" histories *[plural]*: "history becomes a variety of path that disperse into disjunct alternatives: parallel worlds, infinite

immanent splittings of world-lines, or futures separated from the present by cataclysmic ruptures." This is the science fiction of our multicultural world. "Cultural anthropology and anti colonial liberation movements gave militant currency tot he idea that different cultures inhabit different conceptual universes, and construct their histories accordingly." Over the 20th century, "faith in revolution [future history 1] and the politicization of Darwinism [future history 2] weakened the popular cultural authority of both paradigms." In postmodern capitalism, we are offered an "ever more complex and intense 'pluralization' of experience." Science fiction is part of that. It has been creating futures for a century, many of which linger around in our culture. "The coexistence of so many different imaginary futures becoming autonomous in time as fantasy worlds leads to a fictive temporal multiverse, densely populated with different models." It is easy for us now to imagine multiple realities, multiverses, alternate worlds. We have seen and read several. "In postmodern technoscientific societies the archive of obsolete futures is growing to match the archive of remembered pasts."

There are many kinds of narratives through which SF writers play with future history. *Time travel stories* "pose the possibility, not only of imagining how the future will come into being, but of intervening in events that have already happened, in order to change their future, our present." *Alternate histories* play with the concept of the novum to rewrite history: what would happen if the US lost WWII? if the computer was never invented? if Native Americans battled off Columbus? if we travelled to the moon in the 1890s, not the 1960s? *Retrofutures* are set in the futures of old science fiction, like the atomic utopias of 1950s America, or the mod moon travel of the 1960s. In *steampunk*, we find sentimental tales of 19th century Victorians inventing computers and space travel. Finally, in *singularity fiction*, we find humanity evolving beyond human history itself: "a suddenly leap by the technosphere into self-interested self-consciousness, sealed off from the human world that created its conditions of possibility." In singularity fiction, artificial life and intelligence has absorbed/replaced humanity, remaking history and evolution alike.