Parallel Session 8: The role of books and literature in public communication of science

H.G. WELLS’ SCIENCE FICTION AND SCIENCE COMMUNICATION

LA CIENCIA Ficción de H.G. Wells y La Comunicación de la Ciencia

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Abstract

The aim of this communication is to expound connections between science fiction literature and popularization of science through H. G. Wells’ storytelling, a good example of vulgarization of Science installed in our popular culture. His short fiction stories display strategies of scientific representation, use of jargon, a variety of scientists’ depictions, etc. Reliable scientific information is mixed up with pseudoscientific contents and explanations, extrapolations, and so on. Wellsian literary purposes aimed to think over science social consequences. Wells’ objective was to explore beyond boundaries of his time scientific knowledge, halfway between blind enthusiasm and gloomy portraits of science and technology.

Key Words: science fiction, popularization

Text

Context: Wells is considered one of the founders of science fiction. The readers’ demand for scientific information, mass media and a literary formula—between adventures and detective story—were essential for the success and spreading of these popular romances. Scientific degree in Biology, teacher of that subject and admirer of Charles Lyell and Thomas Huxley, Wells wanted to honor them in his literary work, as well as focus this on science. Furthermore, his involvement on social and politics affairs is reflected on the plots of his stories. Nonetheless, he was influenced by social Darwinism, and used this theory to criticize Victorian English Society.

Objective: The objective has been to analyze how is represented science in Wellsian stories and which strategies and elements are recognized as popularization ones. On the one hand, Science is mainly portrayed by the use of technical vocabulary and explanations based on scientific elements or extrapolations. On the other hand, Wells foresaw early Philosophy of
Technology: social and political reflections about science and technology are depicted through speculative narrations and dystopia formulas. He aimed to make the reader aware of the pervasive consequences and social misuse of science and technology.

Methods: The method has been the analysis of Wells’s selection of plays, approaching from the philosophy of science and technology (scientific and technological culture), and studies of popularization and perception of science.

Results: Reading some Wells’ works is remarkable the knowledge he had about subjects as biology, chemistry or physics. He seemed to be more concern with depicting negative aspects of Science (misleading objectives, ambitions, bad behaviour of scientists, potential risks, threats to the society and human beings). A polarization of attitudes towards science is frequent in science fiction, however Wells cannot be considered ingenuous.

As a man educated on science, Wells managed to introduce a commendable representation of scientific activity such as researching tasks, social and political handicaps, moral objections, ethos of the scientific community, accurate use of scientific concepts, use of reliable scientific sources. On the other hand, he revealed misleading scientific practices, specially through the scientists depictions.

According to Haynes (1994), there are seven stereotypes of scientists, some of them are represented by Wells: the mad, inhuman –Dr. Moreau–, noble and altruist –Ponderevo–, adventurer –the Time Traveller–, helpless –Griffin. These are not fixed archetypes: characters’ evolution illustrates complex context of science, i.e. Ponderevo’s story and bourgeois economical ambition.

Conclusions: Wells combined fiction, scientific fashion theories and non-scientific elements in a successful literary formula seemingly credible. He was careful about the image of science in his stories, but speculative ideas are often presented as scientific arguments.

Nowadays there are popular images of scientists based on Wellsian characters and their behaviour. Many Wellsian professionals of science depict a pessimistic view of science and technology. Each story shatter the confidence on science, but on the other hand, eventually there is no substitute for rationalism and scientific method: superstition, magic, economical pressures or religion among others, are defeated in Wellsian stories (Skal, 1998).

Wells’ concern is with the social, political, human and biological aspects of scientific and technological development. Controversial issues, such as eugenics, animals’ experimentation, working conditions, natural selection applied to society, scientist’s ethics, and so on, are thematized in Wellsian romances. Wells thinks over possible pervasive consequences of science, but his apparently negative vision is not a plain pessimistic one. He always felt confident about science and, far away from a blind enthusiasm, his dystopias and gloomy portraits of the future were metaphorically pieces of advice, just in order to involving reader in the commitment of a control over science and technology (Elias, 1998).
To sum up, Wellsian scientific romances are an excellent instrument for spreading scientific culture, and for arousing curiosity and interest for science. There lurk some risks for a proper communication of science. Although the popular images and stereotypes this genre have created, it offers sources for improving scientific culture, not only by the specific contents but also by the reader’s criticism and comparison with real scientific ideas (i.e. pointing out the groundless ideas or extrapolations). Furthermore, science fiction is a popular way of communicating ideas about science and technology –a popular philosophy– and how they affect society and human beings.

References

Elías, N. (1998). “¿Cuál será en el futuro el papel de las utopías científicas y literarias?”. Er, Revista de Filosofía, 23, 139-164.


