Nineteenth-century palingenesis. An epistemocritical approach

French biologist and historian of science François Jacob remarked that in the eighteenth-century natural sciences "the history of the earth appears as a series of catastrophes". Discoveries of ancient fossils of unknown animals shook commonly held beliefs at the time about the age of the earth and the immutability of species since their divine creation. Reflecting on the causes of the impermanence of life forms, naturalists considered the hypothesis that the face of the earth was subject to change as a result of great catastrophes, such as the Deluge or a comet impact. Already in the eighteenth century, long before Charles Darwin and his theory of evolution, naturalists formulated first theories suggesting that life forms may undergo transformation over time. While they were far from discovering the biological laws of reproduction, heredity and natural selection, they introduced into natural history the idea of mutability of species brought about by global disasters. These theories led to questions about the past and the future of humankind as one of the species in the system of nature. Although still at the top of the chain of being, from that time on, humankind had to contemplate its history as one of evolving life forms. Among such theories aiming to explain the mutability of life was the philosophy of palingenesis formulated by the Swiss naturalist Charles Bonnet (1720-1793). He used the concept of palingenesis in the sense of a rebirth after a catastrophe to articulate his belief in the constant physical and moral improvement of all living creatures: humans, animals, and even plants, as Bonnet attributed sensitivity, rudimentary awareness and the possibility of improvement to all living beings.

Bonnet's thought strongly influenced the entire nineteenth century: scientists, who often argued with the idea of mutability of species, as well as philosophers and writers, who were inspired by the fascinating vision of progress through catastrophe. Palingenesis was translated from biology to philosophy and served to impart a metaphysical meaning to catastrophic events such as the French Revolution (1789-1799): the painful experience of the Terror was, in this approach, a providential crisis paving the way to social progress. However, in contrast to today's apocalyptic discourses predicting the impending end of the world (the climate crisis, the spectre of World War III), the nineteenth-century idea of a catastrophe brought hope for a possible regeneration and improvement of the world. This is the way in which nineteenth-century French philosophers such as Pierre-Simon de Ballanche and Jules Michelet saw the logic of history. The messianic promises of palingenesis were also close to religious or socialist thinkers who saw the meaning of suffering — of Christ or the people, respectively — in the spiritual or social revolution. Each failure was the promise of a possible change. In this way, palingenesis provided a model for thinking about the biological evolution of life and the evolution of society in the nineteenth century. Writers as diverse as Honoré de Balzac, Victor Hugo, George Sand, to name only the most famous, were sensitive to optimistic promises of palingenesis. This project aims to describe different varieties of nineteenth-century palingenesis in French literature, philosophy and science, as well as in Polish Romanticism, because Adam Mickiewicz and Juliusz Słowacki drew inspiration from the French philosophy of palingenesis.

The project will involve computer-assisted exploration of the body of over 1,000 19th-century texts mentioning 'palingenesis' and available in digital libraries and databases. It will be the first systematic study of the concept of 'palingenesis' with an aim to enable a more complete understanding of how the term functioned in various scientific, philosophical and literary discourses of the nineteenth century. This study will seek to further the understanding of the foundations of contemporary catastrophism and environmentalism, which both have their roots in the palingenetic thought of the nineteenth century. The project will also aim to extend the knowledge of how scientists envisioned the origins and evolution of life long before Charles Darwin's theory. Lastly, the scope of this research will also include the contribution of palingenetic theories to the development of science fiction as a genre, since the question of the beginning and the possible end of humankind as a species already fascinated philosophers and writers in the nineteenth century.