In *Knowledge Power* (2010), Prof. Alan Wilson introduces the notion of ‘superconcepts’ and hence defies the common postulation that knowledge is applied to one discipline only. Superconcepts “cross disciplines and [which] contribute to both our depth of understanding and help to navigate the breadth [of knowledge].” (Wilson 2010:4). Through their interdisciplinary approach, superconcepts aid in the understanding of more than one topic by offering applications outside their original discipline. Evolution embodies this notion as its principles can be affected to more than the scientific domain. In this essay I will exclusively focus on Darwin’s theory of evolution. Rooting in biological science, this theory advocates that all species share a common ancestor among other principles. I will explain how the principles of Darwin’s evolutionary theory can be applied to the creation and transformation of animated cartoons. Various scholars agree on the idea that cartoons, as a derived version of the ancient myth, do evolve according to Darwin’s evolution theory as they root in a common ancestor and follow a specific transformation path. On the other hand, some, with C.G Jung used here as the main reference, support the idea that myths and thus cartoons do not evolve following the evolution patterns as they originate in the human imagination and subconscious, present in different geographies. Finally, I will analyse how the cartoon is a form of art which evolves according to society’s evolution, which implies to a certain extent that it does follow Darwin's train of thought.

Charles Darwin published *On the Origins of Species* in 1859 and radically altered the past beliefs on mankind’s evolution. In his book, Darwin introduced the theory that populations evolve following the process of natural selection. He states that all species posses a common ancestor and that their evolution follows a branching pattern of evolution. Natural selection is described by Darwin as the “preservation of favourable variations and the rejection of injurious variations” (Darwin 1859:131). It thus explains that species evolve by developing the assets that will insure their survival. This process is due to genetic mutations as organisms accumulate and preserve minor mutations (Darwin 1859). The key principles of the evolutionary theory are the following: population gradually evolve over time, speciation occurs as well as branching, natural selection and environmental adaption.

Evolution can be used as a superconcept as it presents many features which help understand various events and patterns. In this essay, the theory of evolution is applied to the evolution of cartoons. Scholars such as D’Huy have studied the evolution of myths and folklore.
A myth is a “traditional story of ostensibly historical events that serves to unfold part of the world view of a people or explain a practice, belief, or natural phenomenon” (Merriam-Webster 2018), while folklore is “the traditional beliefs, customs, and stories of a community, passed through the generations by word of mouth” (Oxford Dictionary 2018). A cartoon is a “simple drawing showing the features of its subjects in a humorously exaggerated way […]” (Oxford Dictionary 2018). However, the cartoons studied here are animated and children oriented meaning that they do present some explanations of the world with morals as well as stories of communities passed down. Hence, according to the definitions, I will agree that animated cartoons are a type of myth as they tend to exaggerate and modify reality while trying to explain it.

While drawings and cartoons emerged early in society, animated cartoons only appeared in the 20th century and greatly evolved since then. Fantasmagorie (1908) by Emile Cohl is considered by film historians to be the first animated cartoon as it used hand-drawn animation and not stop-motion photography. In 1919, Felix the cat sees the day in the United States, created by Otto Messmer and Pat Sullivan and becomes for a couple of years the main star of animated cartoons. Walt Disney begun producing short animated series in 1923, creating the first animated sound cartoon featuring the emblematic Mickey Mouse: Steamboat Willie. The sequence was a huge success and Mickey Mouse begun his ascent. Beginning in the 1960s, the American television era starred cartoon stars such as Donald Duck, Bugs Bunny, Popeye. In Europe, French artist Grimault rises in the 30s and quickly becomes nationally and internationally renowned, opposing Disney’s youthful creations. Grimault creates a new type of cartoons targeting not only children but also adults with a more philosophical scenery. The creation of Marvel in the 40s bolstered a new type of cartoon shows featuring a new type of character: the superhero. From then on, animated cartoons continued to evolve towards children computer-based animation.

Proponents of the theory which advocates that cartoon shows’ evolution can be studied using Darwin’s biological evolution theory believe that similar to living species, evolution in cartoons occurs through “progressive changes in heritable traits (genes/mythemes) over successive transmissions” (D’Huy 2013). Indeed, Darwin holds that species’ evolution gradually transpires with genetic changes following a branching pattern with a common ancestor. D’Huy’s studies supposes that myths are composed of mythemes, which are unchanging elements of myths. These literary genes evolve according to the population manipulating them: language and
geographic proximity represent the factors that administer possible variations. This analysis can be applied to cartoons. In fact, when looking at cartoon history, we can observe that different populations employ the same mythemes of cartoons but that modifications occur mainly due to geographic changes. Furthermore, the concept of a common ancestor is applicable here. As explained above, Felix the cat was the first popular cartoon character. Mickey Mouse then appeared with features resembling those of Felix. Both characters display cheerful optimism and a certain childish goofiness. Felix’s name is said to be the combination of two Latin words: *felis* (cat) and *felix* (happy) (Saskatoon Symphony Orchestra 2018) while Mickey Mouse is also characterized by happiness. In order to make the cat more likable, animator Bill Nolan redesigned him by attributing rounder and cuter traits to the said character. This evolution goes hand in hand with Darwin’s genetic variation through natural selection: in order to ‘survive’ Felix remodels his appearance. Moreover, after Mickey Mouse’s success, major characters such as Donald Duck came to life, displaying different attributes in order to offer a larger scope of personalities. Mickey Mouse can thus be considered as the common ancestor of cartoon characters. Following him, came personalities such as Minnie Mouse (1928), Betty Boop (1930) and Bugs Bunny (1940). This topic will be explored further in depth at a later time.

Other schools of thought disagree on the fact that animated cartoons evolve like organisms. To begin with, the archetypal literary criticism school contests the evolutionary principle of common ancestors. According to them, individual literary plots display series of various archetypes formulas (Archetypal/Myth Criticism n.d.). Archetypes are found in all major works and this is not due to the fact that they originate from the same ‘common ancestor’ but rather because they are naturally incorporated in us. The leader of this movement is C.G Jung. He argued that archetypes are the ‘psychic residue’ of types of experiences which are inherited in the ‘collective unconscious’ (Jung 1969: 112). This means that there are no links between two myths or literary works even if they have similar plots because of this unconscious that all humans share. Due to this and according to Jung, it is thus normal that some resembling myths, here cartoons, can be published at the same time. In other words, animated cartoons do not posses a common ancestor or a common plot line ancestor as the collective unconscious determines the fact that similar ideas emerge at same times in different geographical locations.
In order to illustrate his theory, we can analyse the rise of animes in Japan in the commencement of the 20th century. To begin with, it is important to indicate that many of the Japanese films were lost in a 1923 earthquake or destroyed in the World War II bombings, hence implying that information might differ from the unknown reality (Cooper n.d.). Many date the first Japanese animated film *Dekobo Shingacho- Meian no Shippai*, to be released in 1917, a year in which many more short animated clips were also released (Cooper n.d.). However, the first anime using entirely cel animation with sound appeared in 1934 and is named *Chagama Ondo*. This type of animated show also features lively music and cheerful characters with a quest and a hero. The shapes are, similarly to *Steamboat Willie* or Felix the cat, mostly round and the music evokes a resembling tone. This proves to be interesting as it reflects the idea that similar pieces may be created at the same time and in different locations, certainly due to Jung’s ‘collective unconscious.’ Indeed, it is certain that at the time cinema was not yet international, hence suggesting that the creators did not enter in contact. The parallel between the first animes and the first animated cartoons thus illustrates the idea that animated movies’s evolution does not follow that of organisms: the scheme does not follow the branching idea of common ancestors.

Finally, I will argue that cartoons evolve according to their environment, following the Darwinist idea that organisms adapt according to their environment and thus adhering to the principle of genetic mutation. When looking at cartoon history and human history we can notice simultaneous changes. For instance, it is suggested that Betty Boop, the first animated sex symbol, embodies the liveliness of the 20s, reminding people of the carefree past whilst in the Great Depression (Staff 2008). More can be extracted from Betty Boop than the fact that she was a strong symbol. Indeed, her physical evolution goes hand in hand with Darwin’s biological evolution theory. Betty Boop was originally a dog-like woman with features like floppy ears or poodle-like hair. There is here a resemblance with Mickey Mouse or even Felix the cat, all animals with human features — Betty Boop would be the opposite. Changes were made to her physique in 1932 when a series of cartoon was created for her. This change is similar to the one of natural selection: in order to please the public and to ‘survive’ she went through mythemes changes, or gene mutations. Betty Boop also represents the idea that cartoons evolve according to their environment. This theory is backed up by J.Carroll’s work. In *Evolution and Literary theory* (1994), Carroll argues that ‘cognitive and linguistic categories have evolved in adaptive relation to
their environment’ (1994: 123). This thesis can be applied to the evolution of the superhero character in cartoons. To begin with, the article mentions an interesting fact for our analysis: the term superhero would originate from Nietzsche’s concept of ‘Übermensch’ (‘superhuman person’) in *Thus Spake Zarathustra* (1883) (Bland 2016). This means that the notion of superhero would have a common ancestor. Furthermore, superman showcases how characters evolve in accordance with society. Created by two Jewish immigrants in the thirties, his ‘myth is inextricable from the catastrophe that was beginning to unfold for Jews in Europe’, states Bland in his Guardian article (Bland 2016). Bland also argues that the superhero figure evolved throughout history, going from ‘uncomplicated stories of good guys prevailing over evil’ to the postmodernism complicated and morally compromised hero. Superheroes would thus evolve according to their environment, going hand in hand with Darwin’s evolution theory.

Rooting in biology and following intricate scientific processes, evolution can be employed as a superconcept. The principles of Darwin’s theory may indeed be used in order to better unravel the transformation and rise of animated cartoons. While scholars argue that myths — here cartoons— evolve like organisms due to mytheme changes, a parallel to genes, the archetypal literary criticism school firmly maintains that literary works are the product of our ‘collective unconscious.’ Cartoons also evolve in parallel to society’s evolution, hence showcasing the principle of evolution according to the environment.
Bibliography:


