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Natural History, Cultural History, and the Art History of Elie Faure

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Abstract:

The author explores how art historian and scientist Elie Faure assimilated neo-Lamarckian evolutionary theory into his global art series the *History of art* (five volumes published between 1909 and 1927). Faure's main thesis is that art, from different periods and different times, was created by an evolutionary driving force, and thus global art was a reflection of a global culture and a unitary cosmos. Faure's relationship with anarchist Elisée Reclus and Symbolist artist Eugène Carrière are also explored.

Natural History, Cultural History, and the Art History of Elie Faure by Serena Keshavjee

Introduction

For many French and American artists and art historians who came of age around the Second World War, Elie Faure's (1873–1937) (fig. 1) *Histoire de l'art (History of Art)* was mandatory reading. Faure trained and graduated as a medical doctor at the Faculty of Medicine in Paris, but at the turn of the century began writing about art for Parisian journals, including *L'Aurore*, and after the middle of the decade increasingly turned his attention to the arts.[1]





In 1903 Faure helped found the Université Populaire in Paris and presented at that school for adults a course of weekly public lectures on art history that lasted until 1914. These lectures were the basis for his survey of global art, *Histoire de l'art*, composed of five volumes: *L'Art antique (Ancient Art*; 1909), *L'Art médiéval (Medieval Art*; 1911), *L'Art renaissant (Renaissance Art*; 1914), *L'Art moderne (Modern Art*; 1921), and the final volume entitled *L'Esprit des formes (The Spirit of Forms)* from 1927.[2] So popular were the *History of Art* books that they were republished in France well into the 1990s. Through Walter Pach's translations, which were republished into the 1940s, they made an impact in the English-speaking world as well.[3]

Pach suggested that Faure's survey was highly regarded because it moved beyond art and chronicled the development of humanity. He also stated that the *History of Art* was the first global art survey, and although this is not true, Faure's optimism and his open-minded attitude towards non-western art did attract many readers. Certainly, some of the condescending and racist attitudes towards "primitive art" so prevalent in fin-de-siècle France are part of the *History of Art*, but Faure was not interested in pointing out racial and cultural differences through art; on the contrary, he wanted to demonstrate that the correspondences in global art reflected the parallels in global culture.[4] Faure theorized that all art shared a "unity of plan," and expressed formal analogies of "structure, rhythm and accent."[5] While "accent" was associated with historical and social determiners, structure and rhythm much more profoundly revealed universal correspondences, which expressed the unitary nature of the

universe: "Whether one feels it or not, whether one wishes it or not, a universal solidarity unites all the acts and all the images of men, not only in space but also and especially in time."[6] For Faure, art from different periods and from different peoples was progressing towards a unified style that signified a unitary universe (fig. 2).



Fig. 2, Analogies: Occidental Objectivism (France); Oriental Subjectivism (India). From Elie Faure, The Spirit of Forms (1930), figs 178 and 179. [larger image]

Faure's History of Art and Theories of Evolution

Faure's *History of Art* is most notable for his effort to reconcile his two interests—science and art. Faure applied evolutionary theory to the development of art styles. Forms, natural or manmade, organic or inorganic, are, he claimed, shaped by evolutionary laws. He proposed that evolutionary forces directed both species transformation and cultural transformation. When Faure discussed the formal element of rhythm, for example, he went far beyond describing a repeating pattern, and saw instead a reflection of the "great rhythm" of the universe. He emphasized that common patterns and styles in art from around the world indicated a united universal movement. This universal movement or "great rhythm" in art provided a visual representation of the driving force of evolution, and thus of the cosmic order.[7] Faure likened art forms to natural forms in that both types of forms provided evidence of a "universal language."[8] As Faure succinctly put it: "Art is only the humble and marvelous image of the cosmic order itself."[9] The formal elements of art demonstrated the fundamental unity of all species and all forms.

Faure's conception of a developmental evolution, driven by a force and heading towards a state of unification, is not based on Darwinian evolutionary theory, which emphasizes the randomness of natural selection and survival of the fittest. Instead, the progressive elements in Faure's theory are neo-Lamarckian.[10] In this bicentenary year of Darwin's birth, this article proposes to shift the debate away from the reception of Darwinian theory in France, and explore instead the older, deeply entrenched French evolutionary tradition rooted in the works of Jean-Baptiste Lamarck (1744–1829).

Science historians have long demonstrated that Darwin was not the dominant influence on French biologists.[11] Despite what we know about French biological science at the turn of the century, scholarship has focused on how important Darwin and Darwinian theories were to modern French artists.[12] Much less work has been done on the impact of Lamarck and neo-

Lamarckism on art.[13] French evolutionary theory was called Transformism during Lamarck's lifetime, but Lamarck's inroads into that theory fell out of favor under the influence of Georges Cuvier (1769–1832). It was only after Darwin's *On theOrigin of SpeciesbyMeans of Natural Selection* achieved recognition in the 1870s that Lamarck's evolutionary theory was revived and promoted in France. The revival of Lamarck's theories during the fin de siècle, referred to as neo-Lamarckism by contemporary science historians, is understood as combining elements of the theories of Lamarck, Darwin, Etienne Geoffroy Saint-Hilaire, and Ernst Haeckel,[14] and it must be clearly laid out before we can really understand how French art and art history were informed by biology. This article will focus on how neo-Lamarckian evolutionary theory colored Elie Faure's *History of Art*.

The privileging of Lamarck over Darwin was not uncommon in late nineteenth century France, and it prevailed in Faure's scientific-artist circles. Faure's teacher of philosophy, Henri Bergson, is possibly the best-known neo-Lamarckian philosopher. Faure's uncle Elisée Reclus (1830–1905) (figs. 3 and 4), a respected geographer and leader in the French and Belgian anarchist movements, applied the Lamarckian notion of species cooperation to his conception of universal geography. Finally, the art and writings from around 1900 of Symbolist artist Eugène Carrière, Faure's close friend, are infused with neo-Lamarckian precepts regarding the inheritance of acquired characteristics.[15] The writings of Faure and his friends are good examples of how neo-Lamarckism penetrated French culture. These men emphasized cooperation over survival of the fittest, and proposed a connectedness between organic and inorganic forms, all of which implied a united cosmos.



Fig. 3, Eugène Carrière, *Portrait of Elisée Reclus*, 1902. Oil on canvas. Geographical Society of Paris. [larger image]



Fig. 4, Nadar, Élisée Reclus, 1897. Photographs. Bibliothèque publique et universitaire, Neuchâatel. [larger image]

Neo-Lamarckism in Fin-de-Siècle France

As Peter Bowler and Stuart Persell have convincingly argued, Darwinian theory was not universally accepted by biologists between 1870 and 1900.[16] Neglected during the first twothirds of the nineteenth century, as France was under the sway of the ideas of Georges Cuvier, evolutionary theory—and, in particular, Lamarck's theories—began to be studied again in France during the 1870s following the translation into French of On The Origin of Speciesby Means of Natural Selection in 1862. After the loss of the Franco-Prussian war (1870), the emerging Third Republic (1870–1940) encouraged nationalism in all areas of cultural, social, and scientific endeavor. As a result, the leaders of the National Natural History Museum in Paris began to promote Lamarck as the founder of evolutionary theory, and not merely a precursor to Darwin (fig. 5).[17] Neo-Lamarckians rejected Darwin's theory of natural selection as a mechanism of species adaptation and accepted Lamarck's notion that species had the ability to acquire and then pass along characteristics to their offspring in order to better survive in their environments.[18] According to science historians David Depew and Bruce Weber, Lamarckism implied that organisms were able to respond to environmental changes and serve as agents of universal evolutionary progress.[19] Neo-Lamarckians emphasized this notion of progressive evolutionary development in which an internal force responds to external stimuli. [20] This method of adaptation allowed Neo-Lamarckians to reject Darwin's more competitive theories of survival of the fittest or of random natural selection.[21] The debate around natural selection versus acquired characteristics resulted in a discussion about competition versus cooperation as a social system. This less adversarial mechanism of adaptation encouraged neo-Lamarckians to think that evolution enhanced cooperative instincts.^[22]



Fig. 5, Léon Fagel, Jean Baptiste Lamarck, 1908. Paris, Jardin des Plantes. [larger image]

Like social Darwinism, social Lamarckism had widely varying applications, ranging from the sexual regulation and eugenic manipulations proposed during the Third Republic, [23] to the anarchist's notion of mutual aid, [24] all under the banner of reform. The agency of Lamarck's original theories encouraged social Lamarckians to shore up their brand of civil morality and reform with the seemingly natural laws of biology. According to Persell, by the early twentieth-century neo-Lamarckism moved from being a legitimate scientific theory to guiding social policy for Republican reformers. [25]

Natural History and Art History: How Faure applied Neo-Lamarckism to the Development of Art

The titles of Faure's books *Forms and Forces* (1907) and *The Spirit of Forms* demonstrate that he followed the Lamarckian premise of developmental, purposeful evolution and applied it to the "progression" of both art and society.[26] In some of his writings, the art historian uses straightforward analogies from evolutionary theory, in which species develop from the simple to the complex, in order to explain changes in historical styles:

Emerging from the original confusion, one sees them [styles] appear in formless masses, without differentiated organs, then attempt an embryonic order in which the organs shape a rough, inexact form, the members of which seem to be still engaged in the obscure matrix, then, through the more and more complex and harmonious blending of the great instincts rising towards consciousness, the forms acquire, thanks to solidarity of the energies that travel over them, ease and sureness, then an inner wastage attacks the tissues, the organs pass into deliquescence, or, on the contrary, ossify, the mutual relations hesitate and presently are lost.[27]

But Faure also utilized the more complicated and specifically Lamarckian idea of a force, or a "spirit," which guides and shapes the creation of all forms:

It is natural henceforth that the intelligence, after having, through the studies of archaeologists, rigorously classified the forms of art that express it in all places and at all times, tends to find under their divergences a sort of unity of plan, following a labor similar to that which Lamarck accomplished in his connection with the natural forms

differentiated by his predecessors. *The spirit of forms is one.* It circulates within them like the central fire that revolves at the heart of the planets and determines the height and the profile of their mountains according to the degree of resistance and the constitution of the soil [italics mine].[28]

With this geological analogy, Faure aligns the infinite variety of artistic forms with that of natural forms. This spirit, or force, as he called it, directs evolution and through continuous creation shapes matter, humanity, society and art, according to universal laws. The artist's goal, Faure states, is to illuminate this force in the formal elements of art, to find the universal order behind the diversity and variability of the symbols that conceal it.[29]

By the 1890s according to Bowler, the Lamarckian notion of forces shaping forms was thought more of as a non-physical force that could be linked to the expansion of the mind, akin to the will or the mind driving evolution.[30] Henri Bergson's *élan vital* is the best known example of this type of vital force. Bergson taught philosophy to Faure at the *Lycée Henri IV* in 1890, and Faure references his teacher's most famous book, *Creative Evolution*, in his 1909 *Ancient Art.*[31] Faure and Bergson were both immersed in the neo-Lamarckian revival in France, and Faure never lost his initial excitement over the implications of Lamarckian thought: "As of this moment, I looked at the old biologist...like a demiurge and the true creator of the modern spirit, that which opened in us the major sources of the unanimous movement towards the continuous creation of the universe and ourselves."[32] Transformism was more than science for Faure, it was the "poetry" of the universal analogy.[33]

Throughout *The Spirit of Forms*, Faure stresses a morphological philosophy regarding a monist universe. He elucidates Lamarck's role in unveiling the unity of all forms which is implied in the evolutionary notion of common descent: "Lamarck, enlightened by the analogy which he established between universal forms, affirms their original unity, and delegates to Geoffroy Saint-Hilaire, to Darwin to Huxley to Spencer to Haeckel, to Cope, to Samuel Butler to Bergson, to the interminable future, the task of pursuing the proof from form to form, from the protozoan to the spirit."[34] Lamarck himself resisted the idea of a single progenitor or a few common ancestors for living forms, [35] despite what Faure implies. But Lamarck's colleague at the Natural History Museum, Geoffroy Saint-Hilaire, did develop a theory of morphological unity which became associated with Lamarck's theories during the Lamarckian revival. Geoffroy proposed a unity of plan, whereby all vertebrates were modifications of a single archetype. Thus humanity was just another animal, albeit a more evolved one. According to anthropologist Paul Rabinow, Lamarck understood "men as more complex than, but not qualitatively different from, other living beings."[36] Much more so than in neo-Darwinism, in Lamarck's version of evolution, humanity still remained at the top of the chain. But Lamarck's ideas and evolutionary theory in general did challenge the Judeo-Christian Western tradition which set humans apart from nature. In fact some science historians suggest that Lamarck was braver than Darwin in publicly making the association between humans and primates in his 1809 Philosophie zoologique.[37] The article will return to Geoffroy later, but it is important to note that evolution was understood in France through a mix of scientific theories that included the writings of Lamarck, Geoffroy, Haeckel, and Darwin. [38] By the fin de siècle, Geoffroy's unity of composition fused with Lamarck's theories to suggest that all species developed out of a common source. Common ancestry also implied an equivalence of value, which challenged traditional hierarchies between nature and culture.

Adhering to these Lamarckian ideas of a connectedness in the vast array of nature's forms and an equivalence in value, Faure correlated natural forms with man-made forms, including art, as proof that humanity and its products are a part of nature. He provides both literary and visual examples in *The Spirit of Forms*:

Dig in the earth. Pass through a sieve the humus gathered between the little roots where underground insects swarm. Is this triangle of black stone, smooth with sharp edges, the tooth of a vanished monster or a polished flint from some prehistoric atelier? This canine has the look of a vegetable tubercle. This elephant's molar resembles ripples dug by water on some alluvial soil. This pot of copper, silver, clay, this bronze or marble bust has been so stamped with the mark of the damp earth, by dark stains and livid lines, that it seems a fragment of it thrown up from its volcanoes, sleeping under its crust with lava and coal. Go further. Extend the comparison. This stag's horn is like a wing or a flame. These roots like greedy fingers that clutch their prey to feed on it. These leaves spread out in search of their fluid nourishment like lungs or fish-gills. The sap of plants, like the blood of animals, circulates through the veins. The hide of elephants, of rhinoceroses, of hippopotami, of crocodiles, resembles the bark of trees, or the rugged and mossy surface of rocks. The skin, the flesh of women, resemble the flesh of fruits, the down of flowers.[39]

Art Historian Oliver Botar has contextualized the use of these types of nature-culture analogies in early twentieth-century art historical writing as being part of the antianthropocentric view that rejected the dualistic understanding of humanity and nature in favor of the notion that humans are inseparable from nature. He uses the German term *Biozentrik* or biocentric to label this intellectual current, and defines it as Nature Romanticism updated by biologism.[40] Biocentricism developed in part out of Ernst Haeckel's influential interpretation of evolutionary theory, and the notion of a unitary universe that he proposed in his materialistic Monism. In fin-de-siècle France, the attitudes inspired by neo-Lamarckism and Transformism paralleled biocentrism.

Debora Silverman describes Transformism as "the unity of being and the continuum of matter, which joined human and other forms of being in a single metamorphic flow."[41] Indeed, Faure illustrated *The Spirit of Forms* with universal analogies—or correspondences, as he called them—which demonstrated repeated patterns on a macro-and micro-level, as well as the affinities between man-made and natural objects. In these comparisons he noted the visual similarity between a microscopic view of a drop of water and a telescopic view of Jupiter, and between a whale skeleton (probably from the Comparative Anatomy gallery) with the body of a Hydroplane, a cultural product (fig. 6).



Fig. 6, *Skeleton of Cetacean and Body of a Hydro Plane*. From Elie Faure, *The Spirit of Forms* (1930), fig.152. [larger image]

Faure emphasized the correspondence between the natural and man-made forms with the intent of showing that humanity and its productions were a part of nature. Instead of describing human production as cultural, Faure saw it as natural:

I have spoken on the universal analogy, so dear to Baudelaire, in which one finds, in fact, the key to the impressive mystery that gives to the work of art, in whatever tongue it speaks, its spiritual value and, ... its dignity. To surprise this analogy I do not need to explore to their depths the marvelous work of modern physicists who seek, throughout the three kingdoms, for the lines of force and the corresponding molecular equilibrium from which the morphologic formula of the universe will no doubt arise some day. The obviously related analogies suffice, for any one who uses his eyes, to discover in the world of forms a universal architecture that borrows its most forceful poetry from functional logic ...

The forms of the universe are built upon a single plan. Wherever one looks one finds it. He is poor indeed, who does not know how to see in the skull of a man or an animal (fig. 7), for example, not only an admirably ordered landscape with its valleys and hills, its inner movements, its geological unity and its rhythm, but also a perfect piece of sculpture with its asymmetrical balance ... And when man and his works appear on the earth can it be by chance that his weapon is like a claw, like a horn, like an animal's means of protection, that jewelry entwines the neck and arms as a reptile might, that a submarine resembles a fish, an airplane resembles a bird or a gigantic insect, a sail resembles a wing, a boiler or a sewer resembles intestines, and that a motor resembles a beating heart? (fig. 8) [42]



Fig. 7, Natural Sculpture (Skull of a Tiger), from Elie Faure, The Spirit of Forms (1937), fig 148 [larger image]



Fig. 8, Analogies (Skull of Cetacean) from Elie Faure, The Spirit of Forms (1937), fig 152A. [larger image]

Faure accepted that all forms on the planet, including those created by mankind, are adapted through Transformism.

Walter Pach commented that Faure's *History of Art* was as much a survey about mankind as it was about art. Faure's thesis was to demonstrate that the differences in artistic styles are superficial and that, by analogy, human conflicts are insignificant. Just as evolutionary biologists were critiquing George Cuvier's classification of distinct and separate species for not recognizing the essential common ancestry among them, so Faure believed that one could discover unity in the diversity of art styles and, by extension, global societies. "It is our differences that unite us, because we approach one another in order to study them, and because in studying them we discover our resemblances." [43] Faure applied evolutionary theory to art and to life as a method of social reform: [44]

To realize unity in the mind and to transmit it to the work [of art] is to obey that need of general and durable order which our universe imposes on us. The scientist expresses this order by the law of continuity, the artist by the law of harmony, the just man by the law of solidarity. These three essential instruments of our human adaptation—science, which defines the relations of fact with fact; art, which suggests the relations of fact with man; and morality which seeks the relations of man with man—establish for our use,

from one end of the material and spiritual world to the other, a system of relations whose permanence and utility demonstrate its logic to us.[45]

Faure's proposal, that global art forms evolved to be increasingly united in style, promotes his view that global society is moving towards a universal brotherhood, an anarchist position based on social evolutionary ideas developed during the nineteenth century by Faure's uncle, Elisée Reclus.

Neo-Lamarckism in Faure's Social Circle

Although Elisée Reclus was exiled from France because of his anarchist activities for most of Faure's adult life, the Reclus family were close (fig. 9).[46] The death notice Faure sent to the photographer Nadar on Reclus's passing in 1905 reveals, in his tender comments about closing his uncle's eyes after he passed away, something about their relationship.[47] Reclus's desire for the equality of all races, sexes, and species influenced his approach to the land and shaped the development of geography as a discipline. Reclus looked at the globe in a new way: in its entirety as a planet, what he labeled a universal geography. [48] In the frontispiece for Man and the Earth, rather than privileging one type of landscape over another, Reclus and the artist František Kupka depict the earth from space, and emphasize the common patterns of all land forms (fig. 10). Reclus explained: "Seen from above and from afar, the diversity of features intermingles on the surface of the globe—craters and valleys, meandering waters, shorelines, heights and depths, superimposed rocks—presents an image which so far from being chaotic, reveals to him who understands a marvelous picture of harmony and beauty [italics mine]."[49] These diverse landscape features present a "marvellous ensemble of rhythm and beauty."[50] Reclus describes a unity in the variety of natural forms that demonstrates harmony and beauty, and this monist concept clearly resonated with his nephew.



Fig. 10, František Kupka, *frontispiece* from Élisée Reclus, *Man and the Earth*, (*L'Homme et la terre*) vol. 1 (1905). [larger image]

In addition to moving away from nationalistic approaches to geography, Reclus envisioned a more environmentalist position regarding mankind's place in nature. He championed an antianthropocentric concept in which humanity is not only dependent on nature, but integrated within it. Historians John Clark and Camille Martin have recently argued that Reclus's most important contribution to Western thought is not to the discipline of geography or to the anarchist movement, which had been the focus in the literature to date, but to the development of the modern ecological worldview.[51]

Reclus's environmentalist geography rejects the dualistic view of mankind as being superior to nature, and posits instead an interdependent relationship. As early as 1871 Reclus stated that "Man does not only live upon the surface of the soil, he has also sprung from it; he is its son, as we learn from the mythologies of all the nations. We are of the dust, the water, and organized air."[52] And here he updates this biblical allusion with an environmentalist point of view:

We are nonetheless the children of the "beneficent mother," like the trees of the forest and the reeds of the rivers. She it is from whom we derive our substance; she nourishes us with her mother's milk, she furnishes air to our lungs, and in fact supplies us with that wherein we live, move, and have our being.[53]

Reclus saw a symbiotic relationship between the planet and mankind, a view that came out of his anarchist philosophy. Humanity and the earth had a co-operative relationship based on mutual aid, a relationship that led to a state of "harmony"—something he equated with social justice. While he did not hesitate to point out the harm that unmindful human greed can do to nature's "harmony and beauty," he was not against progress, which he felt brought people together through improved communication and travel, benefiting all humanity.[54] Progress, however, had to have a moral dimension, assisting nature, and thus those who live in nature: "The features of the globe will never assume their perfect *harmony* until men are united in one league of justice and of peace. Ere she can become truly beauteous, our 'beneficent mother' must wait until her sons have all embraced as brothers, and have succeeded in establishing the grand confederation of free nations [italics mine]."[55] When humanity has created a more equitable situation for humans, for animals, and for the earth itself, nature will be able to reach its full potential, which will enhance life for everyone and everything. In Faure's assessment of art as a product of natural laws, he, like Reclus, was stating that humanity was a part of nature. [56]

Faure frequently used the terms, "harmony" and "solidarity," to illustrate the progressive development of culture under the natural order.[57] Influenced by his uncle, Faure felt that the law of harmony is the universal order revealed in art.[58] Solidarity is the continuous and united Lamarckian spirit: "the affirmation of this solidarity is by no means the fruit of a mystical intuition. This solidarity really exists. It belongs to the development of universal history of which it was one of the driving forces, perhaps the strongest and most supple of all. The art of all time, the art of every place, grows closer and closer together."[59] For uncle and nephew, harmony represents a moral and just society.

Reclus died in 1905, the year his *Man and the Earth* was published, and the year Faure began his weekly series of public lectures as part of the Université Populaire that led to his *History of Art* books. Faure may have been encouraged by Reclus, who was involved in the Château du Peuple, to help set up the similar Université Populaire as an education center for the working class.[60] Both Reclus's multi-volume, accessible universal geographical survey and Faure's survey are founded on neo-Lamarckian concepts of unity in the diversity of forms; on evolution directing the creation of all forms, organic and inorganic; and on a progressive force, heading towards a union or solidarity in nature, in society and in the universe. These

ideas can all be associated with Reclus, but they are also, according to historian Stuart Persell, part of a politics and culture of the Third Republic. Perhaps, not surprisingly, neo-Lamarckism also informed the tour of the Comparative Anatomy gallery at the National Natural History Museum that Faure's close friend, the Symbolist artist and socialist Eugène Carrière, carried out in 1901.[61]

Faure and Carrière had much in common when they met in 1902. Both worked to broaden access to adult education by participating in programs like the Ecole de la Rue, Musée du Soir, and the Université Populaire. Both shared liberal political views and contributed to the pro-Dreyfus journal *L'Aurore*, for which Carrière designed the inaugural cover of 1897, and where Faure began his art-writing career.[62] Faure was responsible for diagnosing Carrière's throat cancer and he arranged for the prominent surgeon and biologist Eli Metchnikoff, the geographer Léon Metchnikoff's brother, to perform an operation on Carrière, which kept the artist alive for another four years.[63] In his writings on Carrière, including references in *Forms and Forces, The Spirit of Forms*, and his 1908 monograph *Eugène Carrière: Peintre et lithographe* (Eugène Carrière, Painter and Lithographer), Faure consistently cites the artist's philosophical statement regarding universal correspondences which Carrière developed for his tour of the Comparative Anatomy gallery. This museum tour was part of Carrière's socialist-derived lecture-series labeled Ecole de la Rue that invited workers, students, artists, and professionals to join in tours of Parisian museums, which was published in 1903 as *Visionary Man of Reality*. [64]

Standing among thousands of vertebrate skeletons in the Grand Hall of the Comparative Anatomy gallery (fig. 11), Carrière emphasized one key point: that all forms in nature are related. "Before our eyes, in this Museum of Nature, forms follow on from each other and bind together, rich in their endless variety, significant in their common essence."[65] The Comparative Anatomy gallery promoted a clear neo-Lamarckian message: all vertebrates, indeed all things in nature, are associated. Carrière, like Faure, was captured by the philosophical implications of the "continuity of forms."[66]The newly renovated Comparative Anatomy gallery disseminated evolutionary theory to the general public: "At this moment the visitor sees the entire gallery in which the Cetacea, these giants of current and ancient creation dominate, and the gallery has to some extent the vision of the evolution of the organic world."[67] According to science historian Cédric Crémière: "The exhibition demonstrates the unity of composition in the diversity of the living world."[68]



Fig. 11, Comparative Anatomy Gallery at the Muséum d'Histoire naturelle, Paris. Post card, early twentieth century. [larger image]

Although the Cabinet d'Anatomie Comparée was originally set up by Georges Cuvier in 1806, by the time of its 1898 renovation as La Nouvelle Galerie d'Anatomie Comparée et de Paléontologie, the displays summarized the developments of nineteenth-century French natural history, in particular Lamarck's Transformism, and the morphological monism found in the Anatomical Philosophy (1818) of Etienne Geoffroy Saint-Hilaire. Anatomical Philosophy (fig. 12) has been interpreted as more than a scientific theory and closer to a philosophy concerning a unitary nature.[69] Geoffroy proposed that all vertebrates are modifications of a single archetype. One can see the similarities among these four vertebrate skeletons that Geoffroy reproduced in Anatomical Philosophy, and in the marching vertebrate skeletons in the Comparative Anatomy gallery: "It seems that nature is confined within certain limits and has formed all living things on only one single plan."[70] The Comparative Anatomy gallery demonstrates his vision of an ideal unity of structure. As Geoffroy stated, "there is, philosophically speaking, only a single animal."^[71] Lamarck was one of the first biologists to suggest that primates, both humans and apes, developed from a common ancestor, and Geoffroy reinforced this notion.^[72] What is so radical about this idea is that it asserted that in order to understand humanity we needed to study all organic forms.[73]



Fig. 12, Étienne Geoffroy Saint-Hilaire, Anatomical Philosophy, Plate 1. [larger image]

Faure, Reclus and Carrière were each engaged to different degrees in creating a more just society and sought their model in the "natural laws" of Transformism. In choosing evolutionary theory each man consciously challenged Christian doctrine, especially in regard to humanity's place in nature, but they did not totally eschew a theological framework in their conception of evolution. Many neo-Lamarckians, in accepting the progressive development of species, did retain elements of natural theology.[74] Teleological evolution, especially with humans as the most developed species, echoes the eighteenth century concept of a "great chain of being," which described a hierarchy within the universe. Faure went as far as suggesting we call this driving force of evolution God, but a qualified understanding of God:

I ask nothing better than it [the force] should be called God, on condition that its essence remain intangible and only allow one to perceive, from time to time a more or less essential, more or less profound aspect of its being, which it is the unique task of the poet to reveal before it vanishes for ever...Art is only the humble and marvelous image of the cosmic order itself.[75]

In pointing out a unitary composition of forms, Faure was proposing a cosmic order that expressed "the unity of divine knowledge," to which humanity had access. Art is presented as an autonomous process that obeys the cosmic laws, and shares the secrets of the universe with us. The unity that Faure perceived in art forms demonstrated the moral solidarity of humanity.[76]

Conclusion

What I have explored here is one organic model of art history, a model that utilized Lamarckian evolutionary theory. Although neo-Darwinism dominates contemporary scholarship regarding evolution and its cultural impact, French biological science in the nineteenth century did not base itself exclusively on Darwin's theories. Neo-Lamarckism with its teleological approach, progressive forces, and its foundation of mutual aid deeply affected French fin-de-siècle culture. Neo-Lamarckism also imparted a nascent environmentalism with its implication that all forms are equivalent. What is most engaging about the nature-centric paradigm I have laid out, is that the biocentric writings of Faure, Reclus, and Carrière implied a re-evaluation of mankind's place in nature. The awareness of a unitary cosmos, a purposeful nature, and humanity's position as just another biological species encouraged a tradition of art historical writing that sought out the basis for a common global culture.

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Notes

This article began as a presentation at the College Art Association Conference in 2008, in a session organized by Barbara Larson. I thank Barbara for her intelligent and vigilant comments about my paper. I appreciate the support of Petra ten-Doesschate Chu and Gabriel P. Weisberg in turning this paper into an article. Robert Alvin Adler and Martha Lucy were extremely helpful getting this article to publication. Oliver Botar read and critiqued this paper. James Burns and James Hanley commented on my understanding of evolutionary theory. The anonymous reader made many insightful comments. I thank Jean-Paul Morel for sharing both his broad knowledge of Eli Faure, and his personal archive of letters between Faure and Carrière. Sylvie Le Gratiet, director of the Espace Eugène Carrière, was extremely generous with access to the archives, as well as with helping me make contacts. I was aided with translations by Claire Labrecque and Anna Wiebe. Research for this paper was supported by a University of Winnipeg Research Grant and a Social Sciences and Humanity Research Council Grant. I acknowledge the generosity of both institutions.

[1] Faure completed a science degree and then went on to study medicine at the Faculté de Médicine de Paris in 1893. He practiced as an anesthesiologist. His career as an art historian seems to have begun about 1902 when he became the art critic for *L'Aurore*. See the excellent biography by Martine Courtois and Jean Paul Morel, *Elie Faure: Biographie* (Paris: Seguier, 1989), especially the chronology which lays out the publication dates of his books, 282–96. *L'Aurore* was an important political arts journal which published Emile Zola's condemnation of the trial against Captain Dreyfus. Faure began his art-writing career at *L'Aurore* with a 1902 article on Eugène Carrière.

[2] Courtois and Morel, *Elie Faure*, 89–90. Also see the chronology regarding Faure's publications, 295–96.

[3] Ibid., 295–96. Also see The Walter Pach Papers, available on-line through the Archives of American Art, Smithsonian Institution, Washington, DC, <u>http://www.aaa.si.edu/</u> <u>collectionsonline/pachwalt/series2.htm</u> (accessed September 8, 2009) for correspondence between Faure and Pach regarding translating and publishing these books. The first three volumes of *Histoire de l'art* were published by H. Floury between 1909 and 1914. Volume 4, *L'Art moderne* (1921) and volume 5, *L'Esprit des formes* (1927) were published by Georges Crès et Cie. All five volumes were republished many times into the late 1980s by various publishers including Plon and Deneol. *L'Esprit des formes* was republished as late as 1991 by Guimard. Pach's English translation of *Ancient Art* was first published in 1921 by Harper and Brothers which published the rest of the volumes, also translated by Pach, between 1921 and 1930. The English versions were republished in 1937 by Garden City Press, and, in 1948 Dover reprinted the series in two volumes. Citations in this article are to the following editions: Elie Faure, *History of Art: Ancient Art*, trans. Walter Pach (New York: Harper and Brothers, 1921) and Elie Faure, *History of Art: The Spirit of Forms*, trans. Walter Pach (Garden City, NY: Garden City Publishing, 1937).

[4] The *History of Art* series is noteworthy for Faure's integration of non-Western art into the canon, and for his effort to challenge typical turn-of-the-century European racist views. Faure, for example, does not accept the notion, common in the West during the nineteenth-century, that illusionistic art was intrinsically superior to non-illusionistic art. On this point see Laura Scanlon, "Opening the Door to an Absent Elephant: Orientalism and the Aniconic Theory in the Study of Early Buddhist Art," Thamyris 3, no.1 (Spring 1996): 69-101, esp. 82-83. Walter Pach describes the *History of Art* series as the first global art survey, and Faure does include Indian and Chinese art in his medieval survey as well as nineteenth-century African art. Pach commented that Faure was one of the earliest art historians to widen the definition of high art to include non-Western art. There were, however, German language global art histories from the mid-nineteenth century onwards, but Faure's *History of Art* may have been the first global survey in French. See Faure, *Ancient Art*, the translator's preface, ix–xv. On art history surveys see Mitchell Schwarzer, "Origins of the Art History Survey Text," *Art Journal* 55 (Fall 1995): 24–29. It is important to note, however, that despite his efforts, Faure remained mired in primitivist thought. This is most evident in his discussion of the formal quality of rhythm: "If others-the white, for instance—seem to possess before all the moral and social sense of life, the negro has the rhythmic sense to such a degree that he cannot conceive or express it otherwise than according to sonorous rhythms, formal or elementarily coloured, but as irrepressible as the beating of his heart." Faure, *Spirit of Forms*, 90. The captions throughout *Spirit of Forms*, for example "Negro Art: Rhythm," fig. 47 and "Rhythmic Equilibrium (Cambodia)," fig. 136, evidence his prejudices. An example of Faure's efforts to show the essential similarities between European are defined as the fourt are the four direction of the forms and the second state of the sec and African art can be found in Spirit of Forms, xii. Faure does challenge the extreme position of Joseph Arthur Gobineau against the mixing of the races in *Spirit of Forms*, 151–53. As Faure puts it, "it is from the very biological drama aroused by these mixtures that not only civilization is born but the civilizations," at 153.

[5] Faure, Spirit of Forms, xiv. Regarding his explanation of structure, rhythm, and accent see xiii.

[6] Ibid., xii. Faure also published a number of articles on anarchy; see, for example, "De l'anarchie" in *Regards sur la terre* (Paris: Flory, 1936), reprinted in Yves Lévy, *Oeuvres complètes d'Elie Faure* (Paris: Jean-Jacques Pauvert, 1964), 656–58. Barbara Larson and Fae Brauer have both done research on how the term solidarity was used during the Third Republic. Larson has demonstrated that the term solidarity was being used in the medical profession, for example within the field of hygiene, calling for a social solidarity in order to fight contagious disease. In this context solidarism was used to give the state a greater interventionist role and parallels other situations during the Third Republic in France. See Larson, *The Dark Side of Nature: Science, Society, and the Fantastic in the Work of Odilon Redon* (University Park: Pennsylvania State University, 2005), in particular pages 99–100. See Fae Brauer and Anthea Callen, eds., *Art, Sex and Eugenics: Corpus Delecti* (Aldershot: Ashgate, 2008), especially Brauer's article "Eroticizing Lamarckian Eugenics: The Body Stripped Bare during French Sexual Neoregulation," 97–138, which deal extensively with Republican Solidarism. Also important regarding neo-Lamarckism is Fae Brauer's "Wild Beasts and Tame Primates: 'Le Douanier' Rosseau's Dream of Darwin's Evolution," in Barbara Larson and Fae Brauer eds., *The Art of Evolution: Darwin, Darwinisms and Visual Culture* (Lebanon, NH: University Press of New England, 2009), 194–225.

[7] Faure refers to this great rhythm as universal movement as well; see Faure, *Spirit of Forms*, 68.

[8] Faure equates the scientific study of natural forms with the study of artistic forms in *Ancient Art*, introduction to 1909 edition, especially pages xxi, and xxxiii. Both types of forms, natural and man-made, have the power to reveal fundamental laws about the universe. For a further analysis of the power of artistic forms, see xxvi. Faure's approach to art history was taken up by Henri Focillon, *La Vie des formes* (Paris: Presses Universitaires de France, 1934) and René Huyghe, *Formes et Forces* (Paris: Flammarion, 1971).

[9] Faure, *Spirit of Forms*, xv. I understand Faure's use of cosmos to represent a harmonious universe, where chaos is kept at bay. His definition seems to have been influenced by Romantic thought.

[10] Faure, *Spirit of Forms*, xii; Peter J. Bowler, *The Non–Darwinian Revolution: Reinterpreting a Historical Myth* (Baltimore: Johns Hopkins, 1988), chap. 1, esp. 5–7.

[11] See, Bowler, *Non-Darwinian Revolution*, and Yvette Conry, *L'Introduction du Darwinisme en France au XIXe siècle* (Paris: Vrin, 1974).

[12] See Linda Nochlin and Martha Lucy, eds., "The Darwin Effect: Evolution and Nineteenth-Century Visual Culture," special issue, *Nineteenth Century Art Worldwide* 2, no. 2 (Spring 2003) http://www.19thc-artworldwide.org/spring03, (accessed September 10, 2008); Diana Donald and Jane Munro, eds., *Endless Forms: Charles Darwin, Natural Science and the Visual Arts*, exh. cat. (New Haven: Yale University Press, 2008), especially the articles "Mankind after Darwin and Nineteenth-Century Art," by David Bindman, and "Monet and the Monkeys: The Impressionists Encounter with Darwinism," by Richard Kendall; and Pamela Kort and Max Hollein, eds., *Darwin: Art and the Search for Origins*, exh. cat. (Frankfurt: Schirn Kunsthalle, 2009), in particular Kort's article "Picturing Prehistoric Man in France: Fernand Cormon, Léon Maxime Faivre, Xénophon Hellouin, and František Kupka." Barbara Larson's work has been particularly valuable in demonstrating the confluence of Darwin and Lamarck in France. See Larson, "La Génération symboliste et la révolution darwinienne," in Jean Clair, ed., *L'Ame au corps: Arts et Sciences 1793–1993* (Paris: RMN, 1993); "Odilon Redon: Science and Fantasy in the 'Noirs'" (PhD diss., New York University, 1996), and *Dark Side of Nature*, chap. 3, "Evolution and Degeneration."

[13] Art historians are beginning to apply social Lamarckism towards an understanding of French fin-de-siècle culture. See Laurinda S. Dixon, "Emmanuel Frémiet's Gorilla Carrying off a Woman: Beauty, the Beast and their Contexts," in *Twenty-First-Century Perspectives on Nineteenth-Century Art: Essays in Honor of Gabriel P. Weisberg*, ed. Petra ten-Doesschate Chu and Laurinda S. Dixon (Newark, DE: University of Delaware, 2008), 204–11. Dixon outlines the application of one version of social Lamarckism, heading towards eugenics, which critiqued society along the lines of degeneration, due to heredity, at 208. It was this more conservative side of Lamarckism that Max Nordau used to legitimate his theories of degeneration. On eugenics and neo-Lamarckism, see Brauer, "Eroticizing Lamarckian Eugenics," 97–138.

[14] Stuart Persell defines Transformism as the French version of evolution combining elements of Lamarck, Darwin, and Haeckel in Stuart M. Persell, *Neo-Lamarckism and the Evolutionary Controversy in France 1870–1920* (Lewiston: Edwin Mellen, Press 1999), 24–25.

[15] Faure wrote the following articles and books on Carrière: "Eugène Carrière," *L'Aurore* (June 1902), 1; *Formes et Forces* (Paris: Floury, 1907), which has a long article on Carrière; and his monograph, *Eugène Carrière: Peintre et lithogrphe* (Paris: Floury, 1908). Carrière is also discussed in *Spirit of Forms* and *Ancient Art*. Faure's trip to Belgium with Carrière in 1903 is mentioned in the 1908 monograph and noted in Courtois and Morel, *Elie Faure*, 92. I thank Sylvie Le Gratiet

of the Espace Eugène Carrière for telling me about Carrière's portrait of Reclus and for suggesting a date for the portrait—a date confirmed by a reference to this painting in Camille Mauclair, "L'âme d'Eugène Carrière," *L'Art décoratif: Revue mensuelle d'art*, May 1902, 62. On Carrière and Transformism see my lectures "Eugène Carrière and the Unity of Life," presented at the 2006 College Art Association Conference in Boston; "Natural History and Cultural History: The Art History of Elie Faure" presented at the 2008 College Art Association Conference in Dallas-Fort Worth; and "Eugène Carrière, Elie Faure, Elisée Reclus and Universal Geography," presented at the conference *Humanity and the Earth: The Legacy of Elisée Reclus* (1830–1905) in New Orleans in 2006. I thank Mark Antliff for inviting me to this conference. Also important is Shelly Wood Cordulack, *Eugène Carrière: Shadow and Substance* (Decatur: Decatur Area Arts Council and Millikin University, 2006).

[16] Bowler, Non-Darwinian Revolution, 59, and see his analysis of Haeckel's interpretation of Darwin, 84; Persell, Neo-Lamarckism and the Evolutionary Controversy. Also important are John Farley, "The Initial Reaction of French Biologists to Darwin's Origin of Species," Journal of the History of Biology 7, no. 2 (Fall 1974), 275–300, and Conry, L'Introduction du Darwinisme.

[17] The revival of Lamarck's theories was led by the directors and curators of the Muséum National d'Histoire Naturelle (National Natural History Museum), especially Edmond Perrier, the director of the Museum from 1900 to 1919. Perrier was active throughout his career promoting Lamarck over Darwin, and publishing books on neo-Lamarckian Transformism through the1880s and 1890s. See Edmond Perrier, Le Transformisme (Paris: J.B. Baillière, 1888) and Le Philosophie zoologique avant Darwin (Paris: Alcan, 1884). Perrier also wrote a biography on Lamarck in 1925. At the Sorbonne, Alfred Giard also contributed to this revival process by trying to reconcile Lamarck's and Darwin's theories. See Alfred Giard, Controverses transformistes (Paris: C. Naud, 1904), 1-26. Also see Stuart Persell, Neo-Lamarckism and the Evolution Controversy, chap. 2. He cites Giard as being influenced by Haeckel and by Eli Metchnikoff, a friend of Faure's and Carrière's. Persell states that Giard saw little difference between Lamarck's and Darwin's ideas. See also Conry, L'Introduction du Darwinisme. See Bowler's analysis of the French revival of Lamarck in Peter J. Bowler, The Eclipse of Darwinism: Anti-Darwinian Evolutionary Theories in the Decades around 1900 (Baltimore: Johns Hopkins University Press, 1983), 110–12. On the revival of Lamarck in general, see Paula Young Lee, "The Logic of Bones: Architecture and the Anatomical Sciences at the Museum d'Histoire naturelle, Paris, 1793–1889" (PhD diss., University of Chicago, 1999) and Carla Yanni, Nature's Museums, Victorian Science and the Architecture of Display (Baltimore: John's Hopkins, 2000), 34–35. Barbara Larson discusses the leadership at the Museum in The Dark Side of Nature, 56. Regarding the ideology of collecting and display in the nineteenth century, see Nelia Dias, "Looking at Objects: Memory, Knowledge in Nineteenth-century Ethnographic Displays," in Travellers' Tales: Narratives of Home and Displacement, ed. George Robertson (London: Routledge, 1994), chap. 10.

[18] Lamarck was one of the earliest scientists to formulate the idea that species transformed, and to suggest a method by which this adaptation occurs. As science historians David Depew and Bruce Weber explain, Lamarck's early nineteenth-century theory of adaptation held that species could transform themselves to overcome environmental challenges, based on an inherent tendency of living beings to complexity. This theory allowed species and individuals some control over environmental conditions through the mechanism of acquired and inherited characteristics, as well as suggesting a "directional thrust toward higher and higher organisms culminating in humans." See David Depew and Bruce Weber, *Darwinism Evolving: Systems Dynamics and the Genealogy of Natural Selection* (Cambridge MA: MIT Press, 1995), 45–47. Also see Peter J. Bowler, *Reconciling Science and Religion: The Debate in Early-Twentieth- Century Britain* (Chicago: University of Chicago Press, 2001), 142. Darwin's theory for adaptation was natural selection, which unfolded in a completely random manner. This is the clearest and most wellknown difference between Lamarck's and Darwin's theories, but there are other very important differences in the way Darwinism and Lamarckism were interpreted. Lamarck is seen as accepting a theory of progressive species improvement, culminating in humans. Lamarck's theory, that as species become more complex they increase their own scope for action with better morphological articulation and psychological richness is considered by most historians as teleological in nature. That Lamarck's evolution is driven by a force and is purposeful, or at least developmental, aligns it with Romantic science, much of which Darwin eschewed with his nonprogressive theory of natural selection. However, Robert Richards has recently described Darwin as less Darwinian than the literature suggests, and emphasizes the Romantic elements of Darwin's theory, including the bio-genetic law, and a progressive evolutionary trend to improvements in species. Robert J. Richards, *The Tragic Sense of Life: Ernst Haeckel and Evolutionary Thought* (Chicago: University of Chicago Press, 2008), 98–100.

[19] Depew and Weber, *Darwinism Evolving*, 46.

[20] See Bowler, *Non-Darwinian Revolution*, 5 on the developmental model of evolution, and Persell, *Neo-Lamarckism and the Evolution Controversy*, 96–97.

[21] Bowler, Eclipse of Darwinism, 16-18.

[22] Bowler, Non-Darwinian Revolution, 166.

[23] On the social uses of Lamarckian philosophy, see ibid., chap. 7, and Bowler, *Eclipse of Darwinism*, 18–19. One of the best analyses of social Lamarckism is by Persell, *Neo-Lamarckism and the Evolutionary Controversy*, esp. chap. 6. In *Non-Darwinian Revolution*, 158, Bowler notes that social reformers, including anarchists, turned Lamarckism into a utopian vision of mankind's future. Bowler convincingly re-labels Herbert Spencer, known as a social Darwinian, as a staunch Lamarckian in that he believed people could improve, learn new habits, and thus respond to changing social environments. On the regulation of sexuality in France, see Brauer, "Eroticizing Lamarckian Eugenics," 97–138. Also see Depew and Weber, *Darwinism Evolving*, 34. On the associations of Lamarck and Geoffroy with revolutionary ideas, see Toby Appel, *The Cuvier-Geoffroy Debate: French Biology in the Decades before Darwin* (Oxford: Oxford University Press, 1987), 176. Also see Paul Rabinow, *French Modern: Norms and Forms of the Social Environment* (Cambridge, MA: MIT Press, 1989), 135–38.

[24] Anarchists utilized Lamarckian theory to support their utopian vision. Peter Kropotkin's and Elisée Reclus's arguments that cooperation and altruism are more successful adaptive strategies than competition in the animal kingdom was based on their defense of Lamarck's idea of acquired characteristics. Bowler explains that the inheritance of acquired characteristics was seen as less mechanical than natural selection and allowed a mental force to play a creative role in evolution, thus making Lamarckism open to social applications, both conservative and liberal. See Bowler, *Reconciling Science and Religion*, 142. Kropotkin believed that "living structures do have the power to respond in a purposeful way to their environment and that this power was the key to evolution." Bowler, *The Eclipse of Darwinism*, 87. For Lamarckians, a more co-operative human society was understood as the natural end product of the evolutionary trend. Bowler, *The Non-Darwinian Revolution*, 161. Kropotkin wrote in support of Lamarck's theory, and played down Darwin's. See Peter Kropotkin, "The Direct Action of the Environment on Plants," *Nineteenth Century and After* 68 (1910), 58–77 and "Inheritance of Acquired Characteristics," *Nineteenth Century and After* 71 (1912), 511–31. Bowler outlines the differences between Kropotkin and Bergson, although both are Lamarckians. See Bowler, *Eclipse of Darwinism*, 56–57.

[25] Persell, Neo-Lamarckism and the Evolution Controversy, esp. chap. 6.

[26] Faure demonstrated that he was well aware of this version of evolutionary theory when he listed Lamarck, Etienne Geoffroy Saint-Hilaire, Darwin, Thomas Huxley, Herbert Spencer, Ernst Haeckel, Edward Cope, Samuel Butler, and Henri Bergson, *in this order*, as the developers of evolutionary theory. Faure, *Spirit of Forms*, 246. See Bowler's interpretation of Haeckel and Bergson in *Reconciling Science and Religion*, 135–36 and Bowler, *Non-Darwinian Revolution*, 97. *Formes et Forces* (Paris: H. Floury, 1907) was a collection of articles that Faure had published in art journals since circa 1902.

[27] Faure, Spirit of Forms, 77.

[28] Ibid., xiv.

[29] Ibid.

[30] Bowler states that "Lamarck had always claimed the mind was the driving force of evolution and the expansion of the mind the goal." By the fin de siècle, non-Darwinian evolutionary theories suggested progress was a biological force that would enhance mental powers. See Bowler, *Reconciling Science and Religion*, 131–32.

[31] See Faure, Ancient Art, xxvii; the comment in Morel and Courtois, Elie Faure, 36–37; and Henri Bergson, L'Evolution créatrice (Paris: Alcan, 1907). Morel and Courtois note that Faure did not appreciate Bergson until 10 years later, after his 1890 course with the philosopher. Faure was not dependent on Bergson's neo-Lamarckian thesis to learn about the "spirit of system." He went straight to the primary sources, reading Lamarck's *Philosophie zoologique* while studying medicine around 1893, and he published an article on Lamarck in *Portraits d'hier* in 1910. See Richard W. Burkhardt, *The Spirit of System: Lamarck and Evolutionary Biology* (Cambridge, MA: Harvard University Press, 1977). Jane Becker used Bergson's theories to interpret Carrière's dematerializing style in the catalogue celebrating the centennial of Carrière's death. Becker's article was important for me in that it introduced neo-Lamarckian theories into the Carrière scholarship. See Jane R. Becker, "Carrière and Rodin," in *Eugene Carrière 1849–1906*, ed. Rodolphe Rapetti (Strasbourg: Musées de Strasbourg/RMN, 1997), 45–47.

[32] "Dès cet instant, j'ai regardé le vieux biologiste...comme un démiurge et le véritable créateur de l'esprit moderne, celui qui a ouvert en nous les sources profondes du mouvement unanime vers la création continue de l'univers et de nous-mêmes, l'Homère des commencements de la biologie et de la spiritualité dynamiques." Translation mine. Faure to Max Rouché, circa 1937, reproduced in Courtois and Morel, *Elie Faure*, 44.

[33] Faure, Spirit of Forms, 238 and 246.

[34] Ibid., 246. Faure attributes the idea of analogies to Charles Baudelaire's poem *Correspondances*. Pietro Corsi illuminates how Lamarck's theories were adapted as they were taken up during the nineteenth century. See Corsi, *Age of Lamarck: Evolutionary Theories in France 1790–1830* (Berkeley: University of California Press, 1988), esp. chap. 8.

[35] Lamarck suggested multiple lines of evolution at different times, although he did feel these evolutionary lines would develop from the simple to the complex. See Depew and Weber, *Darwinism Evolving*, 46.

[36] Rabinow, French Modern, 135.

[37] Ernst Mayr, *TheGrowth of Biological Thought: Diversity, Evolution, and Inheritance* (Cambridge, MA: Harvard University Press, 1982), 352.

[38] Persell defines Transformism as the French version of evolution which combined elements of Lamarck, Darwin, and Haeckel. See *Neo-Lamarckism and the Evolutionary Controversy*, 24–25. Perrier's book on Transformism lists the above three scientists as the contributors to modern evolutionary theory. He compares Geoffroy and Lamarck and, despite recognizing the differences in their theories, he states: "Etienne Geoffroy Saint-Hillaire completes Lamarck in certain respects. He did not agree in the body of doctrine about genealogical relationships of species. Also [Geoffroy] is more concerned with the laws of the organization of animals, and reports of similarity of beings. But, he is frankly transformist." See Perrier, *Le Transformisme*, 30. The work of the German scientist Ernst Haeckel, whose publications were well respected in France, is also important in the dissemination of the theory of morphological unity. See Richards, *Tragic Sense of Life*, chap. 5. Perrier includes a chapter on Haeckel in his book *LeTransformisme*. Alfred Girard and Perrier can be credited with helping introduce Haeckel's writings into France from the 1870s onwards. In fact, according to Bowler, Perrier and Girard were drawn to Lamarckism through Haeckel's biogenetic law. Bowler believes Perrier's Transformism was heavily indebted to Haeckel. See Bowler, *Eclipse of Darwin*, 110–12. Faure and Reclus both reference Haeckel, Faure in *Spirit of the Forms* and Reclus in *L'Homme et la terre*. Paul Desanges discusses the importance of Haeckel to Faure in *Elie Faure* (Paris: Editions Universitaires, 1966), 20–44. See also Persell, *Neo-Lamarckism and the Evolutionary Controversy*, 25. For a definition of Monism and a discussion of Haeckel in a well known fin-de-siècle Parisian art journal, see Henri Albert, "L'Alliance théosophique allemande," *Le Coeur*, 1st year, no. 2 (May 1893): 8.

[39] Faure, Spirit of Forms, 322.

[40] Oliver A. I. Botar, "Prolegomena to the Study of Biomorphic Modernism: Biocentrism, László Moholy-Nagy's 'New Vision' and Ernő Kállai's Bioromantik," (PhD diss., University of Toronto, 1998), esp. chaps. 1 and 2. Botar has contextualized the intellectual current of Biocentrism, and traced the use and development of nature-culture analogies in the early twentieth century. His discussions on Haeckel, Bergson, and René Huyghe were particularly important for me.

[41] Debora L. Silverman, *Art Nouveau in Fin-de-Siècle France: Politics, Psychology, and Style* (Berkeley: University of California Press, 1989), 291; also see 226, where she compares Transformism to a secular Catholicism. There is no doubt that Transformism was a scientific theory, but it did influence culture.

[42] Faure, Spirit of Forms, 319-20, and 324-26.

[43] Ibid., 116.

[44] Other art historians have applied organic models to the development of art. Johann Winckelmann's assessment of the rise and fall of art styles was derived from the cycle of life and death. Hippolyte Taine used a botanical metaphor in *Philosophie de l'art* (1865–68) whereby art, like plant forms, was derived from the conditions of "race, milieu and moment." According to Mitchell Schwarzer, Hegel was the first to depict a global history of art, which paralleling Faure's, was characterized by a world spirit. Schwarzer, "Origins of the Art History Survey Text," 24–29.

[45] Faure, Ancient Art, xxxi.

[46] See Joseph Ishill, *Elisée and Elie Reclus: In Memoriam* (Berkeley Heights, NJ: Oriole Press, 1927), 27.

[47] See the death notice in Bibliothèque Nationale, Félix et Paul Nadar, Fabre-Fynt, NAF 24270, folio 104. Because the secondary literature is so much better developed on Elisée, I have focused on him for this article, rather than on Elie Reclus, Faure's other important uncle. However, it is important to note that both Elisée and Elie were exiled anarchist leaders, both wrote about and studied "primitive" peoples, and both shared a deep commitment to a humane treatment for all

humans and animals. See Elie Reclus, *Primitive Folk Studies in Comparative Ethnology* (c.1891; London: Hesperides Press, 2006).

[48] Elisée Reclus, Nouvelle geographie universelle: La terre et les hommes (Paris, Hachette, 1876-94).

[49] Elisée Reclus, *The Ocean, Atmosphere and Life: Descriptive History of the Life of the Globe*, (uncredited translation, 1871; New York: Harper and Brothers, 1873).

[50] See Bibliothèque Nationale, Autographs Félix et Paul Nadar XXIII, Raban-Reclus, NAF 24282, folio 620.

[51] John P. Clark and Camille Martin, eds., *Anarchy, Geography, Modernity: The Radical Social Thought of Elisée Reclus* (Lanham, MD: Lexington Books, 2004), preface, and 6.

[52] Reclus, *Ocean*, 434.

[53] Ibid., 434.

[54] Ibid., chap. 29, esp. 523-24, and 529.

[55] Ibid., 530.

[56] Botar has also cast Biocentricism as a nascent environmentalism, and one can trace elements of a new attitude towards humanity's place in nature in the writings of Faure and Carrière, initiated by Reclus's universal geography. The use of nature-centric analogies continued well into the twentieth century in the art historical writings of French art historians Henri Focillon's 1934 *La Vie des formes* and René Huyghe's 1971 *Formes et Forces*.

[57] See for example Faure, Ancient Art, xxxi.

[58] In both *Ancient Art*, xxxii and *Spirit of Forms*, xv–xvi, Faure links the "profound law" of harmony with the universal order. Harmony in art reflects a unity of form.

[59] Faure, Spirit of Forms, xii.

[60] Courtois and Morel, Elie Faure, 23, and 89-90.

[61] Eugène Carrière, "L'Homme visionnaire de la réalité: Conférence faite au Muséum d'Histoire (1901)" (Paris: Ecole de la rue, 1903), reprinted in Jean Delvolvé, *Eugène Carrière: Ecrits et Lettres Choisies* (Paris: Mercure de France, 1907), 27–39.

[62] For more on Carrière's contribution to *L'Aurore*, see Geneviève Lacambre, "Les Idées sociales et politiques d'Eugène Carrière," in *Eugène Carrière 1849–1906* (Paris: Musées de Strasbourg/RMN, 1996), 49–53.

[63] See the correspondence between Faure and Carrière at the Espace Carrière, the archive and study centre outside Paris dedicated to Carrière, as well as the letters between Faure and his wife from this period, reproduced in Lévy, *Oeuvres complètes d'Elie Faure*, vol.3, *Correspondence*. Léon Metchnikoff worked as Reclus's secretary.

[64] Carrière who was one of the founders of the Ecole de la Rue, led two tours, one in the Trocadéro, and one at the Comparative Anatomy gallery in 1901. See Paul Dubois, "Ecole de la Rue: Un idée du peintre Eugène Carrière," *Le Siècle*, April, 1901, front page.

[65] "Sous nos yeux, dans ce Musée de nature, les formes se suivent et se lient, riches de leur infinie variété, éloquentes par leur commune essence." Carrière, "L'Homme visionnaire de la réalité," 37.

[66] Ibid., 27.

[67] "à ce moment le visiteur embrasse d'un coup d'oeil l'ensemble de la galerie au fond de laquelle dominent les cétacés ces géants des créations actuelles et passées, et il a en quelque sorte la vision de l'évolution du monde organique." in Auguste Petit, "La Galerie d'anatomie comparée," *L'Anthropologie* 9 (1898): 325. Translation mine.

[68] "L'exposition montre l'unité de composition d'un monde vivant extrêmement diversifié," see Cédric Crémière, "Mettre en scène l'esprit scientifique: La Galerie d'anatomie comparée du Muséum National d'Histoire Naturalle" (Thesis, Muséum Nationale d'Histoire Naturelle, 1998), 65. Translation mine. For more on the Comparative Anatomy gallery and the Natural History Museum see Lee, "The Logic of Bones," and Maria P. Gindhart "Fleshing out the Museum: Fernand Cormon's Painting Cycle for the New Galleries of Comparative Anatomy, Paleontology, and Anthropology," *Nineteenth Century Art Worldwide* 7, no. 2 (Autumn 2008), <u>http://www.19thcartworldwide.org/autumn08/fleshing-out-the-museum-fernand-cormons-painting-cycle-forthe-new-galleries-of-comparative-anatomy-paleontology-and-anthropology, (accessed September 8, 2009).</u>

[69] Cuvier's system of comparing nervous systems, blood systems and skeleton systems was the dominant organizing factor. See Crémière, "Mettre en scène l'esprit scientifique," for a history of

the Comparative Anatomy gallery. See Appel, *Cuvier-Geoffroy Debate*, 98, and Larson, *Dark Side of Nature*, 54–56.

[70] The natural scientist demonstrated this correspondence by comparing skeletons of a mammals, fishes, birds and reptiles in *Anatomical Philosophy* (1818). See Hervé Le Guyader, *Geoffroy Saint-Hilaire: A Visionary Naturalist*, trans. Marjorie Grene (Chicago:University of Chicago Press, 2003), 3.

[71] Appel, *Cuvier-Geoffroy Debate*, 232, and Geoffroy, *Etudes progressive d'un naturaliste* (Paris, 1835) quoted in Lee, "The Logic of Bones," 221.

[72] William Coleman, *Biology in the Nineteenth Century* (Cambridge: Cambridge University Press, 1978), esp. chap. 4.

[73] Le Guyader, makes this point when he says "Man no longer had more importance than another animal: rather it is through the totality of animals that we try to understand Man." Le Guyader, *Geoffroy Saint-Hilaire*, 24.

[74] I take the term "natural theology" from Bowler and use it in the sense that neo-Lamarckians were not as radical as neo-Darwinians in accepting a random and non-progressive evolution. See Bowler, *Reconciling Science and Religion*, chap. 4.

[75] Faure, Spirit of Forms, xiv-xv.

[76] "La solidarité des formes lui démontrait chaque jour un peu plus clairement la solidarité des actes de notre existence morale." Faure, *Eugène Carrière*, reprinted in Lévy, *Oeuvres complètes d'Elie Faure*, 949.

Illustrations



Fig. 1, Photograph of Elie Faure, 1878. Paris, Bibliothèque Nationale, Nadar Collection. [return to text]



Fig. 2, Analogies: Occidental Objectivism (France); Oriental Subjectivism (India). From Elie Faure, The Spirit of Forms (1930), figs 178 and 179. [return to text]

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Fig. 3, Eugène Carrière, *Portrait of Elisée Reclus*, 1902. Oil on canvas. Geographical Society of Paris. [return to text]



Fig. 4, Nadar, Élisée Reclus, 1897. Photographs. Bibliothèque publique et universitaire, Neuchâatel. [return to text]



Fig. 5, Léon Fagel, Jean Baptiste Lamarck, 1908. Paris, Jardin des Plantes. [return to text]



Fig. 6, *Skeleton of Cetacean and Body of a Hydro Plane*. From Elie Faure, *The Spirit of Forms* (1930), fig.152. [return to text]



Fig. 7, Natural Sculpture (Skull of a Tiger), from Elie Faure, The Spirit of Forms (1937), fig 148 [return to text]



Fig. 8, Analogies (Skull of Cetacean) from Elie Faure, The Spirit of Forms (1937), fig 152A. [return to text]

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Fig. 10, František Kupka, *frontispiece* from Élisée Reclus, *Man and the Earth*, (*L'Homme et la terre*) vol. 1 (1905). [return to text]



Fig. 11, Comparative Anatomy Gallery at the Muséum d'Histoire naturelle, Paris. Post card, early twentieth century. [return to text]



Fig. 12, Étienne Geoffroy Saint-Hilaire, Anatomical Philosophy, Plate 1. [return to text]