

Materiality, Electricity and the Soul in Edgar Fawcett's Scientific Romances

DOI: 10.7311/PJAS.15/1/2021.01

Abstract: The article discusses two novels by Edgar Fawcett, a prolific poet and novelist active in the 1890s, as examples of materialist representation of psychology. Fawcett's literary materialism was not only a thematic reference to his contemporary science, but a certain convention of characterization, which emphasized mystery and drastic imagery as means of character development. Numerous other examples of this tendency in the 1890s are described as well. The theoretical background is derived from the recent materialist turn in literary criticism.

Keywords: Edgar Fawcett, Gilded Age, science fiction, materiality

Materialist approach in literary criticism is an offshoot of the general interest in materiality in history and cultural criticism. The frequently recognized seminal work in this current seems to be Arjun Appadurai's *The Social Life of Things: Commodities in Cultural Perspective* (1986), a material-history book about the cultural construction of things, their changing value and functions; the book established the general interest in things, rather than matter (and materialist determinism) in material history. Frank Trentman's more recent article is a programmatic manifesto of this approach, announcing that "things are back" ("Materiality" 283) and that they constitute the "material stuff of life" (284). Recent book-length studies in the culture of things include Frank Trentman's *The Consuming Passion: How Things Have Seduced, Enriched, and Changed Our Lives* (2015), and his later monumental *Empire of Things: How We Became a World of Consumers, from the Fifteenth Century to the Twenty-First* (2017). Social history of things has also been merged with literary criticism in Bill Brown's *A Sense of Things: The Object Matter of American Literature* (2003), a study in American realism early in the twentieth century, when American life began to be dominated by consumerism: mass ownership of many things, apparently a new thing, was turning into a "tyranny of things" (21), with fetishism, habit formation, habitual actions shaped by thing ownership, cultural object lessons at museums and exhibitions, and the "misuse value" (120) of things, rather like a negative value of objects when they become detrimental to their owners. Brown's study, however, is a very broad panorama of material culture, unlike some very specific monographic studies. For instance, Mark Noble presented an informed survey of the sources of Walt Whitman's famous reference to atoms ("Whitman's Atoms"), and Paul Gilmore ("Romantic Electricity") related many images from Whitman and other authors to their contemporary scientific revelations about electricity and its links to chemistry.

Materiality-based approach in humanities can lead to a somewhat surprising turn from anthropocentrism to anthropomorphism, for example in Jane Bennett's political-theoretical article which is an attempt to "give philosophical expression to the vitality, wilfulness, recalcitrance possessed by non-human entities and forces"

(347). Bennett, treating things as part of natural environment, demands an ecological approach to matter (and human-made things), and even more, because the critic writes about “thing-power materialism” (348) as a political program.

My view is that while humans do indeed encounter things only in a mediated way, there nonetheless remains something to be said for the naivety of naïve realism. A moment of naivety is, I think, indispensable for any discernment of thing-power, if there is to be any chance of acknowledging the force of matter. A naïve realism (which, in my case functions as an onto-story rather than an apodictic account) allows nonhumanity to appear on the ethical radar screen. Yes, there is a sense in which any thing-power discerned is an effect of culture, and this insight is a valuable counter to moralistic appeals to ‘nature.’ But concentration on this insight alone also diminishes any potential we might possess to render more manifest the world of nonhuman vitality. (357)

The “making manifest” of things is a recognition of a “secret life of things” (358), which Bennett describes with reference to Deleuze and Guattari, and thus indirectly with reference to the contemplative recognition of complex and surprising qualities of matter, that is to the attitude necessary in natural sciences (represented, in the article, by Stephen Jay Gould, Lynn Margulis, and Dorion Sagan). Other than Deleuze and Guattari, the French thinker who most likely has influenced studies in materiality is Bruno Latour, who, apart from his well-known books, presented a programmatic article on “When Things Strike Back: A Possible Contribution to ‘Science Studies’” (2000). Anthropomorphism, as Bennett observes, seems to be a paradoxical antidote to anthropocentrism, as it enables people to tune in with the world of things. In an even more striking recognition of materiality’s secret life, Ian Bogost is amazed at the very existence of every object, a fact as surprising and mysterious as the Big Bang:

The unit reveals a feature of being that the thing and the object occlude. The density and condensation of tiny ontology has a flip side: something is always something else, too: a gear in another mechanism, a relation in another assembly, a part in another whole. Within the black hole-like density of being, things undergo an expansion. The ontological equivalent of the Big Bang rests within every object. Being expands. (26)

Thus, what is perceived as sublime and strange on a grand scale, is present in every humble object, not to mention its humbler raw material, the matter. This kind of fascination is discernible, again, in many of the chemistry-themed texts discussed in the present article. In non-fiction, the confident tone of articles written after the creation of Mendeleev’s periodical table of elements became generally known is exemplified by a triumphant article about meteorites published in *Cosmopolitan* in 1890. Presumably, not only the periodic table, but also advances in chemical analysis have influenced the tone of the following statement:

It is well known that the different compounds which constitute this earth have been resolved into sixty-six elements.... Of these sixty-six elements, thirty four have been recognized among the substances brought to our earth by meteorites. Not one new substance, unknown to us before, has been detected; nor,

excepting in a single doubtful case, has the spectral analysis of the heavenly bodies revealed the possibility of an unknown element.... Moreover, these elements come to us from the infinity of interplanetary space, combined in minerals often identical with, always similar to analogous combinations of like elements on our earth. (Heard 217)

The author then compares meteorites to witnesses, confessing “nothing but truth and only truth” when questioned in the universal language of sixty-six elements. Thus, the “man can stand before God, holding a fragment of a star and say, ‘Lord we understand thy laws!’” (218). The confidence springs from the new habit of thinking about matter, as a set of infinitely varied compound particles that consist of a small number of types of building blocks. As Sarah Alexander observed, the conclusion was received with some misgivings in Victorian culture, as irreligious and confusing, somehow undermining matter as a firm foundation of society (125). This reaction suggests a link between the perceived unholiness of materialism and Darwinism; Boller provided ample evidence that both -isms were mentioned together in the 1890s (12-28). However, this new confidence in a simplified system of matter was, in the 1890s, undermined again by the discovery of natural radioactivity and radioactive decay, and the discovery of new elements.

Consequently, the final decades of the nineteenth century in American fiction saw a wave of interest in what I would refer to as new materialism presented by contemporary chemistry and physics, most importantly by discovery of new elements, especially the radioactive elements. Stories about atoms seem to be rarer than stories about newly discovered, mysterious rays. Their most usual premise is to describe (discovery) of materiality of something that was (and is) commonly regarded as something immaterial, such as personality or memory. The implication of such description seems to be that a chemist can physically manipulate things that were considered non-physical, immaterial, such as spiritual or mental facts. Thus, a number of stories and novels, for example, are chemical versions of “Avatar” (1856), the well-known story by Théophile Gautier; the French story was about mind-swapping effected through magic, and the mind-swapping stories from the 1890s usually employ scientific imagery. Edward Bellamy’s novel about *Dr. Heidenhoff’s Process*, where a German professor uses an electric apparatus to remove bad memories, is probably one the most important and successful examples. Another relatively well known text is Harriet Prescott Spofford’s “Ray of Displacement” (1895). A more exotic text is Cyrus Cole’s novel *The Auroraphone: A Romance* (1890), about an interplanetary telephone left behind by Venusians in the Rocky Mountains. Apart from interesting facts about their history and science, Venusians communicate their discovery that celestial bodies, souls, personalities, are all made of stardust, at various stages of condensation and evaporation. Cole, who seems to have been an informed but isolated amateur, refers directly to Pierre-Simon Laplace and to Poe, who are both known to Venusians and have Venusian counterparts.

Other texts with similar themes seem to be incidental occurrences in commercial fiction: Don Mark Lemon’s “The Mansion of Forgetfulness,” published in *The Black Cat* in 1907, is an imitation of Poe’s “Morella,” with a purple ray that destroys memories, and Epes Winthrop Sargeant’s “Beyond the Banyans” (1909) has

a similar theme, which leaves a very interesting idea undeveloped: it is a story of a slave-owner from antebellum South, who moves to Belgian Congo, re-establishes a plantation, and uses electric mind control to keep slaves in subjection and to rejuvenate his father by moving his soul into a young Black body (the invention kills all, including the inventor, and the slaves are free again). Two more examples are fantasies about new types of food, which affect the relation between matter and life. Alice McGowan's "A Pestilent Vapor" (1903) features an inventor of gas-food, who himself becomes gaseous through eating gas. Materiality becomes the theme when the protagonist discovers that he can, by force of will, become invisible, dissolve, sneak away through keyholes and chimneys, and then re-compose himself as solid matter (but eventually loses control over those abilities, and disappears, as it were, in a puff of gas). In Edward A. Robinson and Geroge A. Wall's *The Disk: A Tale of Two Passions* (1884), the invention of food-purifying gas is only a background device in an erotic melodrama. It seems that at the end of the nineteenth century, such stories seem to be survivals of an earlier time, and occur in relative isolation, either written by cranks and amateurs, or used as background for a different theme, as in novels by Edgar Fawcett.

Edgar Fawcett was a highly successful social satirist, author of numerous novels and poems published between 1871 and 1904. Today he is mentioned, if at all, in historical studies on early science fiction, and in detailed studies on American realism in the 1880s and 1890s, for instance Wasserstrom's (1959) and Harris's (1983) articles about the need for reconsideration of the Gilded Age in American literature. Wasserstrom, for example, observed in the 1950s that

[w]e have long condemned the writers of that generation—Edgar Fawcett, Winston Churchill, Henry B. Fuller, Robert Herrick—for their disregard of the force of sex. Despite the testimony of Henry Adams, none of these novelists did in fact disregard sex. But they were so convinced of its evil that they composed dramas of passion quite unaware that sex, not some notion about conscience or commerce, provided the root of their thought. (494)

Be it as it may, Fawcett's wide range of themes and profuse output in fiction makes it possible to project anything into his work; he was, for instance, described as gritty urban realist by one of his contemporary critics (Delbanco 28), as a science-fiction pioneer by science-fiction critics (Bleiler; Stableford 47), and is remembered as social satirist by general critics today; this versatility is perhaps a mixed blessing in terms of critical recognition today (Harrison 112). Although he published over one hundred poems, published in magazines and seven book collections, his poetry is not mentioned at all today. It seems that he was regarded as an urbane aesthetic authority, as he also published articles on music, interior design, and general social commentary in magazines. It is an interesting emblem of his popularity that on a list of "famous American books and living writers" from 1907 in *The Journal of Education*, Fawcett is not listed, but a brief poem of his is used as a convenient and elegant frame for the list. This seems to be an appropriate description of Edgar Fawcett's position in the history of American literature.

His fantastic novels are slightly satirical too, and scientific speculation in the two novels discussed below is given relatively little attention in the texts. On the other

hand, there seems to be a link between Fawcett's use of matter and the dehumanized, artificial characters he satirically describes. Probably the most important example is *Douglas Duane: A Romance* (1887). In *Douglas Duane*, personality turns out to be of electro-chemical nature, and can be transferred between bodies when they are immersed in two electrolytic vats, connected through vaguely described apparatus invented by the narrator. The protagonist, a selfish and immoral man, uses the vats to get into the body of the husband of a woman he madly desires, which seems to be a direct imitation of Gautier's story. In a slightly different manner, personality is materialized in Fawcett's short novel, *Solarion: A Romance* (1889), where a German chemist discovers the secret of enhancing mental evolution of animals, which leads to creation of a human-like dog, who is then mercilessly treated by the protagonist, a member of the American high society.

Edgar Fawcett's two novels support the hypothesis that scientific romances written after 1860s, were continuations of the antebellum tradition of American romance; this is how Brian Stableford defines Fawcett's science fiction (45). Of course, Fawcett was one of many authors who used the term romance, which was so common that it probably did not have much meaning, other than referring to fantastic content. His fiction, however, represents a successful application of earlier, substantialist representation of matter in satirical fiction; in his two chemical novels he seems to be representing matter like Hawthorne and Poe did, for instance in "Dr. Heidegger's Experiment" or "Facts in the Case of M. Valdemar." Stableford quotes from Fawcett's epistolary romance, *The Ghost of Guy Thyrle*, which opens with a sort of artistic manifesto:

Nowadays we want a different kind of romanticism, a kind that accommodates itself more naturally to our intensified sceptic tastes. It is the actual, the tangible, the ordinary, the explained, that realism always respects. From the vague, the remote, the unusual, the problematic, it recoils. Yet frequently the two forces of realism and romanticism have met, as in Balzac's 'Peau de Chagrin,' which might be called a fairy-tale written by a materialist. To make our romances acceptable with the world of modern readers, we must clothe them in rationalistic raiment. So clothed, my friend, I should name them 'realistic romances'—stories where the astonishing and peculiar are blended with the possible and accountable.... From this point of view I occasionally strive to prove my faith in the unparished charm and potency of romance[.] (48)

Of Fawcett's realistic romances, *Solarion* is of particular interest because of the moralizing intensity of the contrast between two the central characters: a brilliant but selfish American chemist, and his creation, a chemically-enhanced dog who turns out to be more human than people. There is also a noble, disillusioned German chemist, an important secondary character.

Fawcett's two scientific romances, which are more reminiscent of long short stories, are sometimes mentioned as his best work (Bleiler); they reveal keen interest in natural science and German philosophy. Both *Solarion* (1889) and *Douglas Duane* (1889) are social melodramas of passion, but the theme is represented with images of fantastic inventions related to chemistry and electricity. The electric imagery is perhaps related to Fawcett's fine long poem, "The Story of the Lightning" (1872), a

poetic monologue of a female thunderbolt which (who) falls in love with a man. The lightning provides ample descriptions of her exciting life among clouds and storms, aerial seas and continents etc. Although she only wants to “offer” herself on the ground in front of the man, her passion, and her very being, turns out to be an electric discharge that kills the man. Electricity, paradoxically, turns out to be simultaneously material (as lightning) and immaterial (as passion), and the same paradox is represented in Fawcett’s scientific romances. In both texts, the soul is discovered to be a phenomenon of electric nature, liable to control by means of scientific apparatus, which leads to an intellectual conflict between materialism and idealism, parallel to a moral conflict between selfishness and selflessness; Fawcett’s characters associate materialism with selfishness and idealism with selflessness. Thus, Douglas Duane is consumed by selfish, sexual passion for the wife of his friend, Floyd Demotte, but he is also a chemist interested in Faraday’s law, the link between chemistry and electricity (562). Duane invents an apparatus that can transfer the life and soul from one living thing to the dead body of another, electrically. Having revived a few plants, he obviously decides to put his soul into the body of the husband of the woman he loves, which he does successfully. Things go wrong when Duane does not know how to behave, and she realizes that her husband is not himself. The interesting point is that the novel is narrated by Duane, from within his friend’s body, and the frame narrator is listening to Duane in an asylum. The highly unreliable narrator adds numerous comments on philosophy and morality of scientific research.

The descriptions of electricity and chemistry in *Douglass Duane* are intriguing, because the author is interested in the baffling borderline between “ordinary” matter (naively perceived in terms of pebbles, grits, or household objects), the seemingly immaterial effects of electricity, and the material effects of electricity (such as electrocoating, or electric corrosion). For Duane (and presumably for Fawcett and his implied readers) this baffling borderline seems to be the mystery of life itself: “I had so often felt that the sword which should cut the Gordian knot of our human existence lay in this wild, alert, unintelligible ardour, than which nature has none other at once more appalling and more mysterious” (580). This quotation is one of many, and it explains why Fawcett combines images of electricity with melodramatic plots: electricity is, presumably, the semi-material stuff of destructive and selfish passion. The text does not make it clear, however, what is the nature of selfless (and religious) sentiment. Fawcett is evidently fascinated by electricity, and sees it as one of the Gothic aspects of nature, revealed by natural science. Among several reflective passages on the hideous and disturbing aspect of science, the discovery scene, related in a deranged monologue, characteristically combines chemistry, selfishness, materialism, and mysterious scientific discovery. It turns out that electric principle of life can be transferred only between the same species, which corresponds to “the protection of species in animals, concerning which Darwin has so much irrefutably to assert” (582). However, the narrator also discovers that the experiment can transfer vitality only in one direction, from the more “base” Darwinian realm of nature, and not from a more beautiful and higher species. The “destructive bath” has an elective affinity for the base kind of vitality. Once this is clear to him, Duane knows how to revive the baser type of life.

The discovery provokes a series of internal monologues:

I had, in the first place, found a new way of dealing with electricity, and had caught form the mysteries lying beyond all science a new electrical agent was due to my own genius of discovery. This last sentence might seem to flavour of egotism. Let it do so. My genius is to me a mental admission which no dissentient criticism may affect. (582)

There follows a paragraph on egotism and its positive meaning for development of science, and immediately afterwards, Duane peers into mysterious depths of discovery and simultaneously experiences a surge of sexual passion, as if experiencing an electric discharge too:

The night, as I have said, reigned mute around me when this last great conviction of conquest pressed into my mind. An awe had now filled and swayed me. I stood alone with a phantom, as one might say, summoned from unconjectured depths. The very intensity of the silence bore upon me. I thought upon the woman I loved, pierced though I was with other keenly opposite sensations. I could not escape such remembrance. I might hate it, but it was still sure to push itself assertively into my consciousness.... And yet I abruptly asked myself, while I sat there, fatigued and excited in my unquestionable triumph, why should Millicent's face thus intrude upon me? (582)

After a brief monologue on his desire and hesitation, the scientist turns to his scientific apparatus, and, thinking simultaneously about Millicent, electricity, soul, and religion, arrives at the idea of transferring his (base, electric) soul into the body of Millicent's husband. The monologue still is suggestive of electric shocks:

A horrible shudder passed through me at this instant. I rose and tottered weakly towards the still, cold, mechanical evidence of that marvellous law which I, Douglas Duane, had so strangely excavated from the glooms of the unknowable.

Was there a God? I had not proven that there was not, with all my atheistic proclivities. Was there a soul—a human soul? I had neither proved nor disproved a human soul. But I had proved, beyond the last imaginable protest of the materialist, that in lower orders of life vitality was transmissible from one vegetable form to another. (583)

Thus, admitting that there are no reasons to do so, the narrator equates vitality with the soul, and material quality of the soul with a threat to religion. There is also another, related threat, however, which manifests itself when Duane is already in his rival's body, but continues to speak his own voice (625). This is recognized by Demotte's wife, who finds the alien voice abhorrent and scandalous, and refuses to have anything to do with Demotte/Duane. She is, in short, reacting with horror and revulsion to the stranger's voice in her husband's body; when the soul is identified with the material body, its voice becomes horrible.

In *Solarion*, Fawcett's choice of themes is similar, but the situation is somehow reversed and made more complex: the narrator is a materialist who, as a teenager, exposes a fraud spiritualist who claims that the soul is electric and material

(pantheistically). Pantheistic spiritualism, which treats God and the soul as the fabric of the universe, is presented as a naïve form of materialism, a necessary illusion practiced by the protagonist's mother. Later, however, he steals a horrible discovery that animals can be invested with a soul (and thus learn to speak) through application of electricity. Again, as in the earlier novel, Fawcett combines electricity, materialism, evolution, and religion, into a coherent cluster of materialistic images which represent matter as a mysterious and marvelous thing, one of the proverbial "great secrets of the universe" (338). The protagonist, Kenneth Effingham, steals the secret from Dr. Conrad Klotz, a reclusive German scientist. The conversation between Effingham and Klotz is the first focal point of the scientific sub-plot of the story, and it revolves around its central themes in materialistic terms, by comparing thought with vapors and substances:

You see, I refer to your English-speaking philosophers because I have grasped their greatness, their lucidity, their freedom from vapory German mysticism. Kant was a superb dreamer; Hegel was a Locke spoiled by religious fantasy; Fichte was a splendid juggler with shadows he believed substances[.] (*Solarion* 326)

On his dying bed, Klotz reveals that he has "seen how evolution could be pushed forward by means of electrical nursing and stimulations" (337), but bids Effingham to destroy the single remaining copy of the book that describes the discovery. Effingham disobeys and pursues the experiments described in the book, neglecting his love interest, Celia, who marries another man. The descriptions of Effingham's experiments are of Gothic nature, as they "transcended in strangeness and wildness the first throb of momentum given by steam, the first legible word written by telegraphy" (338), and the narrator agonizes, in a few passages, about the hideous and dangerous world, about to be revealed by wonders of modern science. His own experiments are part of the picture, as both Effingham and Klotz are worried about the "hideous injury it might bring mankind" (325) if the soul is created chemically in the process of assisted evolution. Essentially, the experiments consist in giving electric shocks to a dog in order to make it speak. The "exquisite but transient torment" of the dog is an uncanny anticipation of behavioral science in a novel from the 1880s: "Here flashed and withered the new electricity, whose potency dealt in molecular agitations and displacements never dreamt of by the most learned men of Europe. Begotten of a chemical combination hitherto unguessed, its rigors had the stress of half-tamed thunder bolts" (*Solarion* 339).

There follow dialogues between the scientist and his dog, which are the most interesting part of Fawcett's novel, and perhaps the most interesting passages in his entire work. The treatment seems on a par with representation of similar themes by classic science fiction authors: H.G. Wells used speaking animals in *The Island of Doctor Morreau* (1896), and Olaf Stapledon employed the same theme in *Sirius* (1944), a novel about a scientifically-enhanced dog who falls in love with a woman. The dog in Fawcett's novel is worried about being a "monstrosity," and asks "why did you make me as I am" (342), forcing Effingham to recognize and admit his selfishness and unfeeling attitude. The animal character also provides interesting descriptions of

animal emotions and perceptions of life, encouraging Effingham to be more gregarious and romantically involved.¹

'You know why I am so wretched,' exclaimed Kenneth. 'I see that you do! You understand me!'

'Yes,' Solarion answered; 'I understand you. If there is anything I could do to help you! But I am so powerless! It seems me that she must love you as you deserve to be loved. But if she does not, you must force her to do so.'

'Force her, Solarion?'

'Woo her,—win her,—make her love you. She must see, sooner or later, that nature could not have given you such a pulse of passion unless there were corresponding ardour in her.' (*Solarion* 341-342)

As in *Douglass Duane*, things go wrong when the scientific plot meshes with the romantic one: Celia becomes available again when her husband dies, but Solarion falls in love with her too, effectively becoming Effingham's rival. The man bids the dog not to meet Celia, but Solarion disobeys and soon Celia reveals to Effingham that she is strangely influenced by the charm of Solarion's thoughtful and intense gaze. (The novel is perfectly decorous for the 1880s, but Fawcett is trying to give intimations that are tactful and disturbing at the same time). Confronted by Effingham, the dog declares its love to Celia, and denies obedience to Effingham. It also transpires that Celia became Solarion's new mistress (in the sense of a dog owner). The man shoots and kills the dog, but before his death Solarion makes a beastly dash at Effingham's face, and by destroying it, renders the man too ugly to be an eligible bachelor for Celia. Alone in his old age, Effingham muses on the broken promise he made to Klotz.

Materiality of the soul was more obvious in *Douglas Duane*, but in *Solarion* too, the theme is represented in terms of criticism of materialism: Effingham is worried that he effectively created a soul in a dog, and that he has thus proved the material (electric) nature of the soul.

As he entered his laboratory..., Kenneth felt as though he were indeed about to call spirits from the vasty (!) deep. And well might he so have felt. Superstition is fading from the earth; but while men live and awe is an emotion that may be quickened, some adequate substitute will not prove wanting. The Unknowable, as an element in science, will continuously supply this; for until all final causes are comprehended, mystery must never hide at the back of both human knowledge and endeavor. Here will lie all the ghosts of our future 'Hamlets,' the witches of our future 'Macbeths.' Electricity is not the only nimble and fiery demon to be summoned by the unborn sorcerers from the nature's unexplored and shadowy gulfs. Light, heat, optics, chemistry, physics, mineralogy, will all have their weird and perchance blood-curdling messages to deliver, and it may be that aeronautics will surpass even those in grandeur and suggestiveness of tidings. People with 'nerves' will possibly be as much afraid to look through one of our coming telescopes as if they were now requested to walk at midnight through a graveyard. (*Solarion* 338)

1 There is, perhaps, a possibility that the unusual theme influenced Olaf Stapledon's *Sirius*, which elaborates the same themes of dog turned into a human being, a failed romance, human hostility, and reversal to canine life.

In both novels, scientific themes are integrated into a passionate love plot, equating scientific endeavor with irresponsible and destructive sexual passion. For the present study, however, it is striking that both sexual passion and intellectual activity are presented as effects of electricity; the series of images where Fawcett makes the connection are similar to the imagery of his electric poem, "The Story of the Lightning." Electricity, presented as a mysterious and paradoxically non-material property of matter, leads Fawcett's characters to a sort of passionate pantheism which they are not ready to accept. Stableford (53) described this hesitation in terms of transition between religious belief and scientific view of the world: science had undermined religious concepts (creationism, existence of the soul, divine intervention and miracles), but had not, and could not yet replace the functions of religion as source of morality, teleology, and consolation. This interregnum, however, leads to curious descriptions of the matter in chemical terms. As chemistry developed simpler and more definite tables of elements, it became increasingly difficult to describe spiritual phenomena in terms of substances. The shift, as demonstrated by analysis of prose works, was towards gothic representation, in terms of hidden and terrible monstrosities, defined either as unknown forces (new electricity, electromagnetic waves, or mysterious rays), or as arcane formulae, as very unusual chemical compounds.

The representation of matter in Fawcett's novels indicates a major shift in literary characterization, related to the shift in literary and scientific representation of matter. As mentioned in the opening of the article, this shift consisted in the reduction of the number of elements, and the general simplification and systematization of representation of matter. The simplification is apparent, for instance, when one compares Fawcett's material soul to earlier representations of this theme in Poe's and Hawthorne's fiction, e.g. in "Facts in the Case of Ms. Valdemar" or in Hawthorne's well known stories where psychology is related to chemistry, such as "The Brithmark," "Rappacini's Daughter" or "Dr. Heidegger's Experiment." Arguably, Poe and Hawthorne saw spiritual phenomena as a sort of rarefied matter, because matter as such had the potential to "be" a soul; in other words, the soul was described as a substance; hence, they referred to fluids and elixirs, to a great variety of substances which were often endowed with animality and spirituality. In Fawcett's fiction, the diversified, animated and spiritualized matter of the antebellum fiction was replaced by an inanimate and simpler matter that could still "hide" spiritual phenomena as electricity. Spiritual phenomena, however, would no longer be described substantialistically in Fawcett's fiction, as well as in fiction by his contemporaries, and possibly this was a general cultural trend. Consequently cultural representation of the soul often relied on references to one phenomenon, usually electricity or radioactivity. As science promised to explain spiritual phenomena through positivist cognitive regime in non-substantialist terms, monstrosity and mystery became, as exemplified by Fawcett's fiction, the remnants of substantialist representation of mental phenomena (characterization) in literature.

Works Cited

Primary sources

- Bacon, Edgar Mayhew. "Itself." *The Black Cat*, May 1907, pp. 1-14.
- Bellair, Berg. "The Ultimate Inheritors." *Adventure*, vol. 8, no. 4, 1914, np.
- Bellamy, Edward. *Dr. Heidenhoff's Process*. Appleton, 1880.
- Cole, Cyrus. *The Auroraphone: A Romance*. Charles H. Kerr, 1890.
- Dehan, Richard. "Lady Clanbevan's Baby." *Off Sandy Hook and Other Stories*. Stokes, 1915.
- Fawcett, Edgar. *Solarion: A Romance*. J.B. Lippincot, 1889.
- . *Douglas Duane: A Romance*. J.B. Lippincott, 1887.
- . "The Story of the Lightning." *The Aldine*, vol. 7, no. 9, 1874, p. 176.
- Hawthorne, Nathaniel. "Dr. Heidegger's Experiment." *Nathaniel Hawthorne: Tales and Sketches*, edited by Roy Harvey Pearce, Library of America, 1982, pp. 470-479.
- Heard, John. "Fragments of the Stars (Meteorites)." *Cosmopolitan*, vol. 9, 1890, 213-218.
- Herper, Vincent. *The Mortgage of the Brain: Being the Confessions of the Late Ethelbert Croft, M.D.* Doubleday, Page, 1905.
- Lemon, Don Mark. "The Mansion of Forgetfulness." *The Black Cat*, vol. 12, no. 7, 1907, pp. 37-42.
- McGown, Alice. "A Pestilent Vapor." *Argosy*, vol. 44, no. 1, 1903, pp. 74-81.
- Poe, Edgar Allan. "The Facts in the Case of M. Valdemar." *Collected Works of Edgar Allan Poe. Volume III: Tales and Sketches 1843-1849*, edited by Thomas Ollive Mabbott, Harvard UP, 1978, pp. 1233-1243.
- Robinson, Edward A. and George A. Wall. *The Disk: A Tale of Two Passions*. Cupples, Upham, 1884.
- Sargeant, Epes Winthrop. "Beyond the Banyans." *All Story*, vol. 15, no. 2, 1909, pp. 355-375.

Secondary sources

- Alexander, Sarah. *Victorian Literature and the Physics of the Imponderable*. Pickering & Chatto, 2015.
- Appadurai, Arjun. *The Social Life of Things: Commodities in Cultural Perspective*. Cambridge UP, 1986.
- Bennett, Jane. "The Force of Things: Steps toward an Ecology of Matter." *Political Theory*, vol. 32, no. 3, 2004, pp. 347-372.
- Bleiler, Everett F. *Science-Fiction: The Early Years*. The Kent State UP, 1990.
- Bogost, Ian. *Alien Phenomenology, or What It's Like to Be a Thing*. U of Minnesota P, 2012.
- Boller Jr., Paul F. *American Thought in Transition: The Impact of Evolutionary Naturalism, 1865-1900*. UP of America, 1981.
- Brown, Bill. *A Sense of Things: The Object Matter of American Literature*. Chicago UP, 2003.
- Bryant, Levi R., Graham Harman, and Nick Srnicek, editors. *The Speculative Turn: Continental Materialism and Realism*. re.press, 2011.

- Czemiel, Grzegorz. "The Secret Life of Things: Speculative Realism and the Autonomous Subject." *Materiality and Popular Culture: The Popular Life of Things*, edited by Anna Malinowska and Karolina Lebek, Routledge, 2017, pp. 41-54.
- Delbanco, Andrew. "American Literature: A Vanishing Subject?" *Daedalus*, vol. 135, no. 2, 2006, pp. 22-37.
- Gilmore, Paul. "Romantic Electricity, or the Materiality of Aesthetics." *American Literature*, vol. 76, no. 3, 2004, pp. 467-494.
- Harris, Neil. "The Gilded Age Reconsidered Once Again." *Archives of American Art Journal*, vol. 23, no. 4, 1983, pp. 8-18.
- Harrison, Stanley R. *Edgar Fawcett*. Twayne Publishers, 1972.
- Latour, Bruno. "When Things Strike Back: A Possible Contribution of 'Science Studies' to the Social Sciences." *British Journal of Sociology*, vol. 51, no. 1, 2000, pp. 107-123.
- Malinowska, Anna and Karolina Lebek, editors. *Materiality and Popular Culture: The Popular Life of Things*. Routledge, 2017.
- Malinowska, Anna. "Cultural Materialisms and Popular Processes of Late Modernity." *Materiality and Popular Culture: The Popular Life of Things*, edited by Anna Malinowska and Karolina Lebek, Routledge, 2017, pp. 25-40.
- Moore, A.W. *The Evolution of Modern Metaphysics: Making Sense of Things*. Cambridge UP, 2012.
- Noble, Mark. "Whitman's Atom and the Crisis of Materiality in the Early Leaves of Grass." *American Literature*, vol. 81, no. 2, 2009, pp. 253-279.
- Shaviro, Steven. *The Universe of Things: On Speculative Realism*. U of Minnesota P, 2014.
- Stableford, Brian M. *Algebraic Fantasies and Realistic Romances: More Masters of Science Fiction*. Wildside P, 1995.
- Storey, John. "Culture: The Popular and the Material." *Materiality and Popular Culture: The Popular Life of Things*, edited by Anna Malinowska and Karolina Lebek, Routledge, 2017, pp. 13-24.
- Taylor, Walter Fuller. "In Behalf of the Gilded Age." *College English*, vol. 6, no. 1, 1944, pp. 13-17.
- Trentman, Frank. *The Consuming Passion: How Things Have Seduced, Enriched and Changed Our Lives*. Berg, 2015.
- . "Materiality and the Future of History: Things, Practices, and Politics." *Journal of British Studies*, vol. 48, no. 2, 2009, pp. 283-307.
- Wasserstrom, William. "William Dean Howells: The Indelible Stain." *The New England Quarterly*, vol. 32, no. 4, 1959, pp. 486-495.