The Dystopian Quest for Perfection:

Evolutionary Anxieties in Two Early Pulp Science Fiction Stories by Women

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ABSTRACT

Academic studies on the emergence of dystopia in the early twentieth century have tended to focus on canonical works by male authors such as Wells, Forster, Zamyatin, Huxley, and Orwell. Such studies have failed to accord due importance to a rich but ephemeral and largely subjugated body of work where the dystopian imagination frequently made an appearance: the American pulp science fiction magazines, encompassing the period from 1926 to 1950. My objective in this paper is to address this critical gap by focusing on stories by two authors suffering a double marginalisation in SF history on account of being women writers in the male-dominated space of the pulp magazines. Through readings of Sophie Wenzel Ellis's "Creatures of the Light" (1930) and Leslie F. Stone's "The Great Ones" (1937), both published in Astounding Stories in the early phase of the pulps, I aim to explore how female pulp SF authors negotiated the blurred boundaries of the utopia/dystopia dyad to investigate and interrogate two popular scientific discourses of the time: evolution and eugenics. My paper shall also consider how these female authors, despite working within the constraints of a genre that historically privileged male interests, succeeded in foregrounding issues that were of special relevance to contemporary women, such as gender, marriage, reproduction, and motherhood.

KEYWORDS

dystopia, pulp science fiction, American women's writing, evolution, eugenics

> Man always has been, always will be a creature of the light. He is forever reaching for some future point of perfected evolution . . . It is this yearning for perfection which sets man apart from all other life, which made him man even in the rudimentary stages of his development. He was man when he wallowed in the slime of the new world and yearned for the air above. He will still be man when he has evolved into that glorious creature of the future whose body is deathless and whose mind rules the universe.[1]

When the history of women's participation in the genre of science fiction (SF) is considered, a crucial phase that has long suffered academic neglect is the era of the pulp SF magazines—roughly spanning the period from 1926, when Hugo Gernsback launched the first specialty magazine dedicated exclusively to SF, to the immediate post-war years, when the pulps began to be superseded by the digest format of magazine publishing. Printed on cheap and coarse wood pulp paper with untrimmed edges, the pulp SF magazines were a fundamentally ephemeral form of publication, associated with sensational, lurid stories of action and adventure and frequently denigrated as "the literary trash of the early twentieth century."[2] Although the SF pulps were dominated by male authors and undoubtedly catered to a largely male readership, the common preconception that the magazines were inhospitable to female engagement has been thoroughly challenged in recent scholarship. The extensive archival research of Eric Leif Davin reveals that "*203 different women authors—identifiable as women—published almost 1,000 stories in the science fiction magazines*

between April, 1926 . . . and 1960."[3] Pulp SF was thus, in Davin's words, "contested terrain," with the "dominant male paradigm" of the genre constantly being critiqued and challenged by "outsider groups" such as women.[4]

My paper shall draw on this rich and underexplored body of SF writing to investigate the extent to which women writers of the pulps experimented with the form of the dystopian narrative. Jane Donawerth's pioneering scholarship has already established that "the feminist utopia continued in the pulps even though it virtually disappeared in the hardback book trade from the 1920s through the 1950s."[5] I wish to extend the same line of enquiry to the then nascent genre of the dystopia, the precise contours of which were yet to solidify in critical discourse or in the popular imagination, but the spirit of which manifested in the pulp magazines in the form of certain core anxieties revolving around scientific advancement and its implications for humanity. In the following discussion, I shall focus on two early pulp SF stories by women published in *Astounding Stories*—Sophie Wenzel Ellis's "Creatures of the Light" (February 1930) and Leslie F. Stone's "The Great Ones" (July 1937). Both stories deal with overreaching scientific quests for evolutionary progress and perfection, building worlds that are reminiscent of nightmarish Wellsian visions of the distant future. My readings seek to demonstrate how these texts engage with the intertwined and deeply controversial early-twentieth-century debates on evolution and eugenics to ultimately critique the dystopian ramifications of masculinist science, with all its attendant transgressions of the 'natural' order. I also analyse how these early evolutionary dystopias by women writers relate scientific understanding to socio-cultural issues such as gender, marriage, and reproduction, albeit in politically ambiguous ways. It must be noted that I do not use the term dystopia in this article as the binary opposite of utopia. Rather, I follow Lyman Tower Sargent in conceptualising the fictional dystopia (the bad place) as a cautionary complement to the aspirational eutopia

(the good place), with both serving the common imaginative and political function of utopianism as a "process of social dreaming."[6]

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The question of evolutionary progress—defined by Timothy Shanahan as "gradual directional change embodying improvement"—has been vigorously contested ever since Darwinian ideas began to gain widespread scientific acceptance.[7] It is in fact difficult to talk about evolution without resorting to the language of progress, although the corresponding difficulty of establishing uniform epistemic standards by which progress may be reliably measured has been acknowledged. Darwin makes direct reference to this problem in his *Origin of Species*: "I do not doubt that this process of improvement has affected in a marked and sensible manner the organisation of the more recent and victorious forms of life, in comparison with the ancient and beaten forms; but I can see no way of testing this sort of progress."[8] Darwin remained equivocal about progress in his writings: in the concluding passages of the *Origin of Species*, he asserts that "all corporeal and mental endowments will tend to progress towards perfection";[9] whereas in the *Descent of Man*, he qualifies this argument by suggesting that even though "progress has been much more general than retrogression," [10] it is "no invariable rule."[11] Multifarious definitions of progress emerged concurrently in evolutionary biology—as a movement from simplicity to complexity, from homogeneity to heterogeneity, or as the manifestation of greater differentiation, specialisation, and adaptability. However, progress has never been merely a matter of biology; it has undeniable sociological, cultural, theological, and moral connotations. This was particularly the case in early twentieth-century America, where the notion of individual and collective progress held considerable social currency and fuelled the ethos of the American Dream. Progress could also be communally bolstered by concerted state-sanctioned efforts, such as

through the large-scale implementation of eugenic policies aimed at qualitatively improving human 'stock' by promoting the propagation of 'desirable' qualities and the weeding out of 'undesirable' ones. Progressionist syntheses of this nature were possible because evolution remained, to a great extent, "the science of the popular domain"[12] and was therefore constantly present in the public discourse.

Although the marriage of evolution and progress remained an uneasy one, progress was an attractive utopian ideology to SF writers and feminist thinkers, and both groups enlisted evolutionary (and often eugenic) theories in defence of their respective goals. In fact, as Michael Ruse notes, evolution came to be used by many as "a vehicle for thoughts of Progress."[13] SF by women writers would bring these different worlds together to consider the function of science and technology in facilitating human progress, as well as the ways in which scientific/technological and evolutionary progress may affect or alter the lives of women. It was also at the intersection of evolution and eugenics that dystopian anxieties in SF by women often took root. The two stories discussed in this article recognise that while the 'science' of eugenics co-opted and promised to realise eutopian aspirations of evolutionary progress and perfectibility, it could equally yield decidedly dystopian results. Progress is thus situated ambiguously along the continuum of possibility from eutopia to dystopia, and while the rhetoric of progress is not entirely dismantled, both stories seem to espouse a cautious ideology of gradual upliftment, in stark contrast to the myopic and ethically dubious excesses of masculinist science.

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Although Sophie Wenzel Ellis's SF career was limited to a handful of short stories published in the pulp magazines in the early 1930s, she is notable for being the first female writer to appear in the pages of *Astounding Stories* with "Creatures of the Light." The story presents John Northwood, an up-and-coming young scientist who is

both brilliant and extraordinarily attractive, and Emil Mundson, "the electrical wizard and distinguished scientific writer" Northwood has long yearned to meet.[14] Identified as "the hunchback" and described as "singularly ugly," "deformed," and "hideous," Mundson is deeply fascinated by the prospect of human perfectibility and seeks to induct Northwood into his plan "to populate the earth with a new race of godlike people."[15] Northwood is particularly enticed by Mundson's statement that Athalia, a gloriously beautiful girl, was waiting for him. The two eagerly set out in Mundson's unique solar-powered aircraft, headed at astonishing speed towards a previously unexplored part of the Antarctic enigmatically referred to by Mundson as "the new Garden of Eden." Mundson eventually confesses that he has succeeded in his project to accelerate human evolution, thereby creating Adam—a creature snatched from the unborn future "who has reached the Light too soon."[16] Adam views ordinary human beings as "barbarians" and "worms of the Black Age" and seeks to annihilate them. However, he has one human weakness, Athalia, and he intends to take Northwood to Athalia so that she may recognise his evident superiority and reject Northwood. This sets into motion a Darwinian struggle between the two males with the objective of being chosen by the desired female.[17]

Speculative extrapolations charting future trajectories of human evolution were already common in SF by the time Ellis published "Creatures of the Light," and it may be worthwhile to consider earlier examples to identify recurring tropes. The most enduring image of the man of the future was famously established in H. G. Wells's satirical essay, "The Man of the Year Million" (1893). As man is "the creature of the brain," the essay reasons using the Lamarckian evolutionary logic of use and disuse, the man of the remote future would have a large, dome-like head and an atrophied body, owing to the over-development of intellectual capacities at the expense of the physical.[18] Wells probes the same eventuality through the Martians in *The War of the Worlds* (1898), who are described as "heads—

merely heads," with tentacular appendages.[19] This image proliferated in numerous pulp SF stories in the 1920s and 1930s, and Frank R. Paul's illustrations accompanying the 1927 reprint of *The War of the Worlds* in *Amazing Stories* rendered it particularly memorable. G. Peyton Wertenbaker's "The Coming of the Ice," the first original story purchased by Gernsback for *Amazing Stories*, presents a man who attains immortality and lives to see human beings evolve into creatures "with huge brains and tiny shriveled bodies, atrophied limbs, and slow, ponderous movements on their little conveyances."[20] Clare Winger Harris, the first woman to publish in the SF pulps, presents a comparable scenario in "The Evolutionary Monstrosity," where Ted Marston's laboratory experiments with evolution begin with the uncanny metamorphosis of a house cat into a bipedal, talking creature and culminate in Marston's own transformation into "a phosphorescent tarantula":

> The circular, central part was not a body, but rather a head, for from its center glowed two unblinking eyes, and beneath them was the rudiment of a mouth. The appendages . . . were fine hair-like tentacles that were continually in motion . . . I sensed that the repulsive form housed an exceptional intelligence.[21]

Notably, this grotesque narrative of evolution tended to focus on male subjects, as intellectual rationality has traditionally been considered a masculine principle. Hypertrophied brains and phallic tentacles can only be the attributes of the evolved *man*. No explicit female evolutionary pathway is offered that would accommodate the conventional association of the feminine principle with the emotional faculties and the reproducing body. It follows that intellectual overdevelopment is accompanied by loss of emotion and affect, like Wells's Martians who have "intellects vast and cool and unsympathetic."[22] The evolved man also has a propensity to tyrannise, characterised as he is by an amplified but very human thirst for

power and conquest. The promise of evolutionary progress is thus undermined by the concomitant fear of retrogression and a movement from a socially embedded existence to ruthlessly unemotional, even malevolent, self-interest.

While Ellis's evolved man, Adam, does not conform to this large-headed stereotype, the physical descriptions of Emil Mundson are striking in this regard. Mundson's "ugliness" and physical "deformity" are repeatedly highlighted, and Northwood makes note of his "huge, round, intelligent face" and "great, shaggy head." There is the unmistakable suggestion that Mundson's prodigious intellectual gifts, represented quite literally through his large head, have stunted his physical growth. Mundson's portrayal has much in common with Cesare Lombroso's description of the man of genius, characterised by "smallness of the body," "weakness of sexual and muscular activity," and a host of "almost superhuman characters," including "elevation of the forehead" and "notable development of the nose and of the head."[23] In addition, Lombroso remarks that many historical men of genius were "either rachitic, lame, hunch-backed, or club-footed," and that most were sterile, either remaining bachelors or having no children despite being married.[24] Mundson is thus the representative man of genius, whose insanity is manifested in the excessive delight that he takes in physical perfection. He refuses to cure his hump despite having the means to do so: "If I were perfect, I should cease to be so overwhelmingly conscious of the importance of perfection."[25] Like most other fictional mad scientists, Mundson also remains "sterile," eschewing romantic or sexual relationships while seeking out eugenically superior individuals to vicariously perpetuate his perfect race. He approaches Northwood not only because the latter is exceptionally intelligent and attractive, but also because he is "virile."[26] Athalia's description similarly foregrounds her reproductive fitness: she is "tall, slender, round-bosomed, narrow-hipped" and in "splendid health."[27] Mundson dreams that the children from Northwood and Athalia's eugenic marriage will strengthen the new race that he has

illicitly engendered by "usurping both God's and woman's powers of creation" like his literary precursor, Victor Frankenstein.[28]

The New Garden of Eden is presented as tangible evidence of Mundson's hubristic appropriation of the role of divine creator. It is a verdant tropical oasis situated in the Antarctic, its existence rendered possible by the extraction of the "Life Ray" from natural sunlight. The triumphant language Mundson uses when speaking about his seemingly eutopian accomplishment underscores how he has successfully deployed the tools of masculinist science for the subjugation of feminine Nature:

> . . . Nature is often niggardly and paradoxical in her use of her powers. In New Eden, we have *forced* the powers of creation to take ascendancy over the powers of destruction.[29]

Mundson boasts that the Life Ray can rectify the inefficiency of organic creation and evolution by promoting growth and development at a miraculous pace, producing four generations of human beings in a single year. He describes how he has combed the entire world to bring together a number of "perfect couples" whose offspring have become the progenitors of this new race grown in the laboratory. Its members are birthed not by human women but by "the Leyden jar mother":

> The human mother's body does nothing but nourish and protect her unborn child, a job which science can do better. And so, in New Eden, we take the young embryo and place it in the Leyden jar mother, where the Life Ray, electricity, and chemical food shortens the period of gestation to a few days.[30]

Once 'born,' the infant grows rapidly under the Life Ray until (in a few months) it is ready to birth the next generation.

Fitness is a concept that is evoked repeatedly by Mundson, not in the relatively neutral evolutionary sense of reproductive success, but in the eugenically charged sense of superior human stock. Mundson sees himself as promoting "Nature's plan that only the fit shall survive," and this reflects the pervasive belief that if Darwinian natural selection could not ensure progress because of its random and gradual nature, then artificial selection through eugenic breeding must take its place.[31] This viewpoint was further reinforced by the obsessive fear of racial degeneration that plagued Anglo-American thought in the late-nineteenth and early-twentieth centuries, a fear that Mundson also articulates: "modern science is permitting the unfit to live and to mix their defective beings with the developing race."[32] Multiple studies document the legislative measures introduced across American states to promote the agenda of 'race improvement,' including immigration restrictions, marriage regulations, and the forced sterilisation of individuals deemed 'unfit' for reproduction. Ellis's story imaginatively complements these forms of 'negative eugenics' with Mundson's version of 'positive eugenics'—encouraging the perpetuation of traits deemed superior or desirable. The prodigious rate at which the Leyden jar mother "births" human babies may also be read as a corrective to the presumptive failures of white middle-class womanhood. The prevailing cultural anxiety surrounding race degeneration was partially prompted by falling birth rates among white middle-class families, primarily due to greater economic and professional independence for women and improved access to birth control. Mundson's Leyden jar mother can therefore perform the role that properly belonged to white women but had allegedly been forfeited by them—the role of being breeders of good stock—and it can do so far more efficiently than human women, under the scientific supervision of a male patriarch.

In certain ways, the technological advancements depicted in "Creatures of the Light" fit the parameters of what Jane Donawerth has termed "utopian science."[33] In fact, Donawerth cites the Leyden

jar mother as an instance of "the radical revision, even abolishment of childbirth and its dangers," which she identifies as a common theme in pulp SF by women.[34] In addition, human beings in Mundson's New Eden no longer require sleep, as three minutes under a Life Ray projector can heal and rejuvenate all damaged or diseased cells. Athalia informs Northwood that she was working in a New York sweatshop and dying of consumption when Mundson "discovered" her and restored her to health. The Life Ray has also simplified the process of raising children; as growth is rapid, intensive parental (particularly maternal) care and supervision are no longer required. Education is attained through an astoundingly efficient system whereby the children, powered by the Life Ray, are able to go through entire books in minutes and retain the knowledge gained with perfect accuracy. Finally, eating is no longer a cumbersome process involving a host of domestic chores, as nourishment is obtained via chemical tablets. Thus, the Life Ray makes it possible to imagine a potentially eutopian alternative reality where birth, childcare, and domestic duties are scientifically managed and no longer a biological and socio-cultural burden for women.

Yet the text belies these eutopian prospects by having its central characters express deep ambivalence regarding the operations of New Eden. While Northwood is occasionally thrilled by the apparent perfection that pervades there, he is reluctant to commit himself to Mundson's vision:

> When I marry Athalia, I intend to have an old-fashioned home and a Black Age family. I don't relish having my children turned into—experiments.[35]

Athalia echoes the same sentiment in practically the same words. There is here the suggestion that the tools of science are beneficial only when used within judicious limits. The fact that Mundson

turns childbirth into a system of mechanical reproduction akin to factory production is dystopian not because of the technology used but because the human lives being created in large numbers have no organic childhood and no mothers to mould their minds.[36] The text indicates that such rootless, alienated individuals are bound to channel their superior abilities in destructive directions. This perspective may be illustrated through a closer examination of Mundson's crown achievements in the New Eden—the tellingly named Adam and Eve.

Adam is the creature who has reached the light. With his blond hair, blue eyes, and "godlike masculine beauty," he represents the Nordic model of physical perfection that was highly prized by Anglo-American eugenicists. With his advanced intelligence, he has unlocked the secret of invisibility by thrusting himself into the fourth dimension of time. He is also gifted with parapsychological powers that allow him to communicate via "thought vibration." The narrative refers to him as a "demigod" and a "superman," and he indeed fits the literary type of the '*homo superior*' that would become a prominent trope in SF in the 1940s and 1950s.[37] However, the descriptions of Adam are simultaneously reminiscent of the gothic horror evoked by Frankenstein's 'monster' and his illicit literary progeny. Northwood observes how Adam resembles "a newly-made wax figure endowed with life" and is surrounded by an uncanny "aura of hate and horror."[38] Notably, the superman of early SF is generally no heroic messiah; in Thomas Andrae's words, he is not "the bastion of establishment law and order" or "the avatar of Americanism" that he would later become.[39] He is unemotional and unsympathetic, has little or no regard for traditional human morality, and is therefore quite willing to do what it takes to obliterate the parent species that he seeks to replace, thereby becoming "the evil genius of science fiction cliché."[40] Andrae also analyses how the narrative logic of such tales necessitated a common denouement, with the superman

either dying or being robbed of his power for the 'natural' order to be reinstated.[41]

In his reading of Frankenstein's Creature as a proto-superman, Attebery remarks that there is in Mary Shelley's text "the implication that the Creature could have been the progenitor of a new race, if only Victor Frankenstein had not destroyed the Creature's female counterpart. But the new Adam had no Eve, and so the race was aborted."[42] Mundson is a more benevolent creator than Frankenstein in that he does provide his Adam with an Eve, but this match turns out to be unsuccessful from a romantic as well as an evolutionary standpoint. Adam desires Athalia, while Eve focuses her attentions on Northwood. It is also revealed that the union of Adam and Eve would very likely be an evolutionary dead end, for the new race "would stop reproducing in another few generations without the injection of Black Age blood."[43] This too fits a general pattern in early SF by women writers, which seems to reiterate that masculinist-scientific experimentation with the mysteries of life and creation are doomed to culminate in sterility and/or death. This applies to "Creatures of the Light" in a more literal sense as well, for the mad scientist Mundson, in his attempt to unlock the workings of life and evolution, has merely engendered another mad scientist, who has isolated the Death Ray to destroy New Eden and conquer and rule his evolutionary ancestors. New Eden thus paradoxically betrays its eutopian function and becomes a dystopian enclave, threatening to spread its rot over the entire world and frustrating all hopes of progress.

The story culminates somewhat melodramatically in the inevitable unleashing of the Death Ray, which kills Adam and Eve and reduces New Eden, along with the new race of super-beings it houses, to a pile of ruins. Unsurprisingly, the only survivors are Northwood, Athalia, and a somewhat chastened Mundson, all of whom have been spared due to sheer luck (and the obvious demands of the plot). Adam's dystopian project of worldwide domination and destruction has been successfully thwarted (even as the tremendous

loss of young life that is the cost of Mundson's grandiose project is peremptorily glossed over), and an alternative, ostensibly balanced vision of perfectibility is presented through the union of Northwood and Athalia. While the text must be read as a critique of aggressive eugenic policies and practices, it remains conservative in significant ways. The conclusion implies that while scientific meddling in natural processes is inadvisable, marriages conducted on eugenic grounds with the goal of producing genetically superior offspring are a desirable goal and assist the natural evolutionary progression towards perfection. Ellis also fails to expand traditional gender roles in any substantial way. The only female character who exhibits something of a scientific temper is Eve, but there is no space for her in the world that the surviving characters return to at the end of the text. Her presentation, too, is as the stereotypical temptress or femme fatale, for as Attebery observes: "the master evolutionary narrative which generates the notion of a super male offers no extrapolative path towards superwoman."[44] The text thereby upholds contemporary socio-cultural preconceptions in defining scientific intellectualism as a masculine province, and the narrative's perfect woman, Athalia, is perfect precisely because she is willing to perform the traditionally feminine roles of wife and mother, as opposed to Eve's emphasis on dominance and sexual gratification. Once the latter is expunged from the narrative, the gender-normative hero and heroine can come together to pronounce perfection "the only hopeless state" and to commit themselves to a conventional marital and procreative future.[45]

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A more complex and sophisticated dystopia of perfection is portrayed by Leslie F. Stone, appropriately described by Attebery as "one of the genre's first female stars."[46] Stone's works have stood the test of time better than those of most of her contemporaries, and she is now particularly remembered for consistently engaging with gender

issues in her stories of feminist fabulation such as "Men with Wings," "Women with Wings," and "The Conquest of Gola," the last one having earned a lasting place in the history of feminist utopian literature. This article will focus on one of Stone's late stories, "The Great Ones," which charts another quest for evolutionary progress that catastrophically leads to "gross giantism and imbecility" for the majority of the human race, along with "a wild, insatiable urge to kill."[47] Much like the bifurcation of the human species into the Eloi and the Morlocks in Wells's *The Time Machine,* Stone imagines a distant future marked by an unceasing conflict between the great ones—monstrous humans who have grown over seventy feet tall—and the throwbacks—remnants of modern *homo sapiens* who serve as prey for the all-consuming giants. Stone's giants have key features in common with the evolved superman discussed earlier; they are not only larger and stronger than ordinary humans but also unfeeling and characterised by "soul-stirring evil."[48] However, Stone subverts the expectations of contemporary readers by not extrapolating the future of humanity towards the over-intellectual, large-headed creature with a weakened body imagined in so many other SF texts of the time. On the contrary, the giants are "Brobdingnagian idiots" with overdeveloped bodies and tiny heads:

> For there was something horrible in the sight of those small heads, so out of proportion to those tremendous bodies—heads less than a fiftieth of the height, scarcely more than one foot high from chin to crown!... The backs of their heads were all but flat, without any cranial development at all...[49]

Stone captures here the obsessive contemporary anxiety surrounding the possibility of degeneration—a devolution from a higher to a lower, more primitive order of existence, as opposed to the linear progression towards perfection that evolution was often misconstrued to be. Her dystopian future is particularly horrifying because it

undermines the anthropocentric notion of intellectual superiority that drove much of the Western discourse of progress.

Notably, fears of degeneration and regression to savagery were generally tied to apprehensions surrounding the rapid multiplication of groups deemed to be "unfit." Rickie Solinger explains how public images of "the unfit" in early twentieth-century America included "all nonwhite persons, mixed-race persons, many immigrants whose 'race' was indeterminate, as well as many poor and working-class whites who produced 'too many children.' The 'unfit' also included the blind, the deaf, the insane, the feebleminded, and criminals."[50] Degeneration thus became a convenient justification for the implementation of eugenic policies aimed at purging society of the unfit. Stone, however, subverts expectations again by presenting regression to primitivism as a consequence of rather than a justification for the eugenic project of perfection. This is revealed through a flashback sequence taking readers back to a pivotal juncture during the one-hundredth century, when the world, comprising twelve nations, is governed by the Congress of Science. Fergus V, the ruler of Mediterraneania, is a splendid physical specimen of the one-hundredth-century man, "with handsome, regular features, sturdy body, long limbs, thoughtful mien, intelligence—and great height."[51] His extraordinary features are a result of centuries of careful selective breeding, with all "undesirables" eliminated through sterilisation, and with the best features of all races bred together to produce an ostensibly perfect super-race. Extraordinary growth has been brought about through a "scientific regime" involving "synthetic concentrates of bone-and-body-building elements."[52] In some ways, this speculative future parallels Wells's *The Food of the Gods and How It Came to Earth* (1904), where the introduction of a dietary stimulant dubbed Herakleophorbia IV into the food chain yields a race of giant men committed to unfettered growth: "We fight not for ourselves but for growth, growth that goes on for ever. To-morrow, whether we live or die, growth will conquer through us. That is the law of the spirit for evermore."[53]

The world of the one-hundredth century is, to all appearances, a eutopian world. The Congress of Science has "created perfection out of chaos": cities are clean and resemble parklands; the wilderness is a cultivated garden; factories, mines, and machines are situated underground and remotely operated; and all elements of nature, including the weather, are perfectly controlled.[54] As in the previous story, there is pride in the masculine-scientific mastery over (feminised) nature that drives this narrative of progress and perfection. However, Stone plants key elements of unease that prompt the reader to challenge this seemingly eutopian ideal. The chief agent of this discomfiture is Prince Toms, Fergus V's twin brother—with one striking difference. If Fergus is the quintessential *homo superior,* Toms is one of "the midgets, throwbacks of their smaller-statured ancestors that made an unwelcome appearance from time to time."[55] Merely six feet tall, Toms is a scientist whose rigorous empirical studies have uncovered a terrifying truth: "with its very aim for perfection, the Congress has created only stereotyped stagnation—and worse."[56] Toms strikes the reader as an exemplar of balanced scientific rationality—a role that is also partially played by Northwood in "Creatures of the Light." However, Stone goes a step further in making Toms sympathetic to the alert reader; his is a voice from the margins due to his diminutive stature, which causes his own brother to label him a "freak." Donawerth has noted that even though female authors of pulp SF frequently used male narrators or male perspectives in keeping with the larger conventions of the genre, they tended to favour "male narrators who are not 'normal,' who do not share the values as defined by other males of their society." As a result, "women readers are not asked to identify with normative male values, and are offered, instead, narrators who stand outside of their societies."[57] Toms plays this crucial resisting role in a story where female characters are noticeably absent, and this very absence casts further doubt over whether the society being presented may be deemed eutopian in any meaningful sense.

The readers' reservations intensify when Prince Toms reveals to his brother that although the human body is constantly growing, the human brain is not growing in the same proportion, and this lack of balance is a significant threat to the survival of the species. Stone, like Wells, is drawing on the branch of evolutionary science that correlated intelligence with brain size, cranial capacity, and cortical convolutions; although she simultaneously distances herself from racist ideologies of craniometry by attributing the shrinking brains of the evolved humans to indiscriminate eugenic interference in human reproduction and growth. (In contrast, many craniometrists would actively advocate such interference in the interest of white racial purity.) Toms warns Fergus of the devastating consequences of the Congress of Science's project of perfection: "Man has lost his initiative! No new idea—excepting this one—has been born for twenty centuries."[58] The inevitability ahead is feeblemindedness—a popular term in American eugenics that designated "a wide range of mental deficiencies and . . . tendencies toward socially deviant behavior"—and eventual insanity.[59] Eugenic policies would thus lead to the very same attributes that contemporary American eugenicists were so keen on eliminating from the social fabric through legally sanctioned sterilisation. Such a trenchant critique of eugenics is rather uncommon in the context of early twentieth-century utopian literature and SF by women. We also learn that much like those deemed "feebleminded" in America, "throwbacks to normalcy" such as Toms are sterilised, effectively spelling the doom for humanity. In fact, Toms is executed on the orders of Fergus, his protesting voice silenced to uphold the status quo.

The narrative proceeds to trace the trajectory of human evolution over thousands of centuries, as Prince Toms's prognostications prove to be accurate. Human bodies continue to increase in size even as the skull remains stationary. Innovation dies; man forgets the use of tools and machines; homes fall into disrepair; communication systems break down; the eugenic board collapses; cities are abandoned; and

the vast majority of people are rendered feebleminded. The story thus underlines the untenability of masculinist-scientific fantasies of limitless growth. The throwbacks who are born immune to the disease of their race are the exceptions to the norm: they retain some semblance of the intelligence of *homo sapiens* but are pushed into agricultural settlements and ultimately to a precarious troglodytic existence as the cannibalistic giants begin to hunt these "dainty, tasty morsels."[60] This, here, is a primordial fear at the heart of degeneration theory: the fear that cannibalism can no longer be consigned to the realm of the savage, animalistic other, but is rather a repressed impulse at the heart of the civilised western subject. Stone also underlines how the violence of eugenics is a vicious cycle, with the throwbacks destroying all overlarge offspring and banishing parents who persistently produce such offspring: "They, the despised, were now seeking race purity. Without knowing their past, they were disfranchising the giant."[61] Moreover, as in "Creatures of the Light," the 'mad science' of eugenics inevitably ushers in sterility and death, and like many of her female peers writing in the tradition of *Frankenstein*, Stone attributes this to the denial of the feminine principle in such unnatural scientific endeavours. Many of the giants literally kill their mothers during parturition. The narrator also describes how fertility rates among the giants eventually begin to fall, not only due to their rampant killing of their own mates but also the propensity of the mothers to occasionally devour their own young in a morbid travesty of the procreative and nurturing impulses associated with femininity. As Alice Waters argues, Stone, in her "feminist critique of eugenics," represents "the almost complete betrayal of the maternal as the most monstrous of the behaviors of the future humans," violating "the female instincts of community and family."[62]

Stone's story is closer to the modern understanding of dystopia than Ellis's, because her dystopian world, rather than being the individual project of a mad scientist, is precipitated by a totalitarian

institution like the Congress of Science. Moreover, Sargent mentions that the "critical dystopia" is characterised by the presence of "at least one eutopian enclave" or "hope that the dystopia can be overcome and replaced with a eutopia."[63] Stone keeps this possibility open through her presentation of the settlement of Lunda, which falls short of being a eutopian enclave due to the relentless threat of the giants, but which keeps a kernel of hope alive by centring an alternative set of values: family, community, and cooperation. The tribe has a rudimentary existence in a second iron age, hunting and fishing with crude weapons and crouching in caves during the intermittent attacks of the great ones. However, as Waters notes, the throwbacks "do not necessarily function along traditional gender divisions."[64] While men hunt and women farm, the narrative also mentions older men supervising children, and weavers and skin workers of indeterminate gender caring for sleeping infants. The story ends with the 15-year-old son of Gorg, one of the tribesmen, proposing a method of ridding the world of the already dwindling race of giants. Gorg is exhilarated at this idea, and at the end he lies in his cave "dreaming of the greatest hunt of all"—"For it is by dreams such as these that man, so to speak, has pulled himself upward by his boot straps!"[65]

* * *

A final question to consider is whether, in critiquing the quest for perfection, stories such as "Creatures of the Light" and "The Great Ones" become more appropriate examples of anti-utopia rather than dystopia. Sargent uses the term anti-utopia to describe works that "attack either utopias in general or a specific utopia."[66] Anti-utopians posit themselves against the teleological theories of progress and perfectibility that are conventionally associated with utopian thought by arguing that absolute perfection is an unrealistic ideal and that all blueprints for the establishment of a perfect society are bound

to fail. Moreover, any utopia that is hypothetically realisable must inevitably be static, for the concept of perfection necessarily forecloses the possibility of transformation. Both these objections are, however, based on problematic presuppositions, as Sargent explains in the following passage:

> Perfect, perfection, and their variants are freely used by scholars in defining utopias. They should not be . . . there are in fact very few eutopias that present societies that the author believes to be perfect. Perfection is the exception not the norm . . . Without the use of the word perfect, part of the logic of the anti-utopian argument disappears.[67]

Thus, critiques of perfection are not necessarily equivalent to critiques of the utopian impulse, and both Ellis and Stone deftly negotiate the polarities of utopia and anti-utopia by interrogating overarching blueprints of perfection while retaining imaginative space for progress through gradual, balanced ideologies of positive change. For instance, even as Ellis cautions against the hubris of the male scientific enterprise, she does not entirely disavow the eutopian possibilities of science. The text suggests that fictional inventions such as the Leyden jar mother and the Life Ray have the potential to be beneficial on a larger scale, particularly for women. Likewise, Stone's narrative concludes with an explicitly eutopian dream of progress, constituting a "counter-narrative of resistance" to the dystopian future that the characters inhabit and creating the scope for utopian anticipation.[68] The stories by Ellis and Stone may therefore be fruitfully read as early thought experiments in the dystopian mode, encouraging renewed scholarly engagement with women writers in the pulp SF magazines in ways that do not reduce them to a prefatory comment or a footnote in the history of utopian literature.

NOTES

1 Sophie Wenzel Ellis, "Creatures of the Light," *Astounding Stories of Super-Science* 1, no. 2 (February 1930): 200, https://archive.org/details/Astounding_Stories_of_Super_Science_1930/asf1930-02/page/n53/mode/1up.
2 David M. Earle, *Re-Covering Modernism: Pulps, Paperbacks, and the Prejudice of Form* (Burlington: Ashgate, 2009), 6.
3 Eric Leif Davin, *Partners in Wonder: Women and the Birth of Science Fiction 1926–1965* (Lanham: Lexington Books, 2006), 5.
4 Davin, *Partners in Wonder,* 17.
5 Jane L. Donawerth, "Science Fiction by Women in the Early Pulps, 1926–1930," in *Utopian and Science Fiction by Women: Worlds of Difference,* ed. Jane L. Donawerth and Carol A. Kolmerten (Syracuse, NY: Syracuse University Press, 1994), 137.
6 Lyman Tower Sargent, "The Three Faces of Utopianism Revisited," *Utopian Studies* 5, no. 1 (1994): 9, http://www.jstor.org/stable/20719246.
7 Timothy Shanahan, "Evolutionary Progress?" *BioScience* 50, no. 5 (May 2000): 452, https://doi.org/10.1641/0006-3568(2000)050[0451:EP]2.0.CO;2.
8 Charles Darwin, *The Origin of Species* (Oxford: Oxford University Press, 1996), 272.
9 Darwin, *Origin of Species,* 395.
10 Charles Darwin, *The Descent of Man, and Selection in Relation to Sex* (Princeton: Princeton University Press, 1981), Volume I, 184.
11 Darwin, *Descent of Man,* Volume I, 177.
12 Michael Ruse, *Monad to Man: The Concept of Progress in Evolutionary Biology* (Cambridge, Mass.: Harvard University Press, 1996), 283.
13 Ruse, *Monad to Man*, 82.
14 Ellis, "Creatures of the Light," 199.
15 Ellis, 202.
16 Ellis, 206.
17 Darwin acknowledged that in the vast majority of species, while males typically compete with one another for sexual possession of the female, the latter, "though comparatively passive, generally exerts some choice and accepts one male in preference to others" to optimise reproductive success. See: Darwin, *Descent of Man*, Volume I, 273.
18 H. G. Wells, "The Man of the Year Million," *Pall Mall Gazette,* 6 November 1893, 3.
19 H. G. Wells, *The War of the Worlds,* in *H. G. Wells: The Great Science Fiction* (London: Penguin UK, 2016), 495.

20 G. Peyton Wertenbaker, "The Coming of the Ice," *Amazing Stories* 1, no. 3 (June 1926): 237, https://archive.org/details/AmazingStoriesVolume01Number03.
21 Clare Winger Harris, "The Evolutionary Monstrosity," *Amazing Stories Quarterly* 2, no. 1 (Winter 1929): 76, https://archive.org/details/Amazing_Stories_Quarterly_v02n01_1929-Winter/mode/2up.
22 Wells, *War of the Worlds,* 377.
23 Cesare Lombroso, *The Man of Genius* (London: Walter Scott, 1891), 6, 7, 14-5.
24 Lombroso, 7, 13.
25 Ellis, "Creatures of the Light," 211.
26 Ellis, 202.
27 Ellis, 208.
28 Jane Donawerth, *Frankenstein's Daughters: Women Writing Science Fiction* (Syracuse, NY: Syracuse University Press, 1997), xx.
29 Ellis, "Creatures of the Light," 207. Emphasis mine.
30 Ellis, 213.
31 Ellis, 202.
32 Ellis, 202.
33 Donawerth, *Frankenstein's Daughters*, xxvi.
34 Donawerth, "Science Fiction by Women in the Early Pulps," 140.
35 Ellis, "Creatures of the Light," 212.
36 Ellis, 213.
37 The term "homo superior" was coined by Olaf Stapledon in his novel *Odd John* (1935) to designate the next stage in human evolution.
38 Ellis, "Creatures of the Light," 198, 208.
39 Thomas Andrae, "From Menace to Messiah: The Prehistory of the Superman in Science Fiction Literature," *Discourse* 2, Mass Culture Issue (Summer 1980): 85, http://www.jstor.org/stable/41389055.
40 Andrae, "Menace to Messiah," 88.
41 Andrae, 88.
42 Brian Attebery, "Super Men," *Science Fiction Studies* 25, no. 1 (March 1998): 63, http://www.jstor.org/stable/4240674.
43 Ellis, "Creatures of the Light," 210.
44 Brian Attebery, *Decoding Gender in Science Fiction* (New York: Routledge, 2002), 82.
45 Ellis, "Creatures of the Light," 220.
46 Brian Attebery, "The Conquest of Gernsback: Leslie F. Stone and the Subversion of Science Fiction Tropes," in *Daughters of Earth: Feminist Science Fiction in the Twentieth Century*, ed. Justine Larbalestier (Middletown, CT: Wesleyan University Press, 2006), 50.

47 Leslie F. Stone, "The Great Ones," *Astounding Stories* 19, no. 5 (July 1937): 79, 77, https://archive.org/details/astoundingv019n05193707/page/n76/mode/1up
48 Stone, "The Great Ones," 77.
49 Stone, 76.
50 Rickie Solinger, *Pregnancy and Power: A Short History of Reproductive Politics in America* (New York: New York University Press, 2005), 90.
51 Stone, "The Great Ones," 78.
52 Stone, 78.
53 H. G. Wells, *The Food of the Gods and How It Came to Earth* (London: Gollancz, 2017), 209.
54 Stone, "The Great Ones," 77-8.
55 Stone, 78.
56 Stone, 79.
57 Donawerth, "Science Fiction by Women in the Early Pulps," 147-8.
58 Stone, "The Great Ones," 81.
59 Daniel J. Kevles, *In the Name of Eugenics: Genetics and the Uses of Human Heredity* (Berkeley: University of California Press, 1985), 78.
60 Stone, 87.
61 Stone, 85.
62 Alice E. Waters, "Hoping for the Best, Imagining the Worst: Dystopian Anxieties in Women's SF Pulp Stories of the 1930s," *Extrapolation* 50, no. 1 (2009): 68, https://doi.org/10.3828/extr.2009.50.1.6.
63 Lyman Tower Sargent, "In Defense of Utopia," *Diogenes* 53, no. 1 (February 2006): 16, https://doi.org/10.1177/0392192106062432.
64 Waters, "Hoping for the Best," 69.
65 Stone, "The Great Ones," 89.
66 Sargent, "The Three Faces of Utopianism Revisited," 8.
67 Sargent, 9-10.
68 Raffaella Baccolini and Tom Moylan, "Introduction: Dystopia and Histories," in *Dark Horizons: Science Fiction and the Dystopian Imagination,* ed. Raffaella Baccolini and Tom Moylan (New York: Routledge, 2003), 5.

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