

Dreary useless centuries of happiness: Cordwainer Smith's "Under Old Earth" as an ethical critique of our current Emotion Al goals

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Abstract

This paper explores the ways in which Cordwainer Smith's short story "Under Old Earth" problematizes emotions, who/what has them, and who/what is granted moral status. Most importantly, however, "Under Old Earth" questions the primacy of happiness in human society, especially where happiness is understood as the absence of other (negative) emotions. As such, "Under Old Earth" challenges the notion, widely held in contemporary ethics, that our moral obligation to one another is mediated through the goal of the attainment of happiness. Through this challenge, Smith's short story speaks directly to the current understanding of emotion in the field of AI, and complicates what the goal of affective computing should be.

Keywords Emotions · Cordwainer Smith · Robots · Affective computing

Zhuangzi said, "The minnows swim about so freely, following the openings wherever they take them. Such is the happiness of fish.".

Huizi said, "You are not a fish, so whence do you know the happiness of fish?".

Zhuangzi said, "You are not I, so whence do you know I don't know the happiness of fish?".

—The Zhuangzi 莊子.

Introduction

In 1995, Rosalind Picard published "Affective Computing," effectively launching a field now often also called "Emotion AI." Her argument is two-fold: emotions are an essential part of human cognition and therefore they ought to be part of artificial

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¹ Which she defined as "computing that relates to, arises from, or deliberately influences emotions" (249).

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intelligence; and emotion ought to play a more important role in computer–human interactions by having computers recognize and respond to emotions, as well as elicit emotions. Contrary to popular belief and what a character like Star-trek's Data might suggest, "[w]hen human emotions are impaired, the individual does not become highly rational; instead, he or she is severely handicapped by an inability to behave rationally, to make and act upon rational decisions" (Picard, 1995, p. 251). Furthermore, although, theoretically speaking, artificial intelligence need not mimic human intelligence, not having affective computers invalidates or erodes one's sense of emotional worth and therefore ends up harming productivity. Said differently, given that artificial intelligence is conceived of as a tool for human beings, and given that emotion is an integral part of human beings, artificial intelligence ought to, at a bare minimum, be able to navigate emotions in order to function with intelligence and sensitivity toward humans (Picard, 1995, p. 247).

Emotion AI is now a rapidly growing field covering alleged emotion-recognition algorithms used by employers, anger-preventing cars, as well as social media specifically designed to elicit highly engaging emotions.² In other words, we are designing AI systems that monitor, soothe our "negative" emotions and/or enhance the emotions that can be capitalised on. Picard could not have predicted the use of tools like Sentiment Analysis by companies such as Cambridge Analytica.³ She was interested in making computers more human-user-friendly:

Additionally, unlike present-day computers, it should have the skills to recognize its user's affective expressions, and to respond intelligently, especially if the user indicates frustration, fear, or dislike of something the computer can change. (Picard, 1995, p. 247)⁴

Currently, a number of tech companies advertise products that recognize a target's affective expressions through the use of facial recognition software. Technology which is based on Paul Ekman's work on so-called universal emotional facial expressions in the case of video technology, or on Natural Language Processing (NLP) models in the case of chatbots, for example Bianchi et al. (2021, cf. Barrett et al. (2019). However, Emotion AI systems cannot yet interact, in the way envisioned by Picard, with their users in response to their recognition of their affective

⁴ She goes on to specify: "Behind the technical facade is the fact that the computer simply does not care what its user thinks or feels; it does not speed up when he is bored, slow down when he is confused, or try to do things differently when he is frustrated with its current modus operandi. It is ironic that people feel like dummies in front of computers, when in fact, the computer is the dummy. Today's computers are far from being human centered systems; they cannot even see if they have upset their most valuable customer" (p. 248).



² For example, the company HireVue uses affective video technology to assess the emotional make-up of potential employees. Picard herself co-founded soft-ware company Affectiva, with now CEO Rana el Kalioubi, which uses Emotion AI for the purposes of more effective advertisement, and to monitor emotional states in vehicles in order to avoid drowsiness, distraction, and anger.

³ Sentiment Analysis refers to a set of technologies designed to identify the emotional state, attitude, or responses of their targets. It is currently used by advertising companies, political entities, and social media corporations, and academic institutions.

expressions. Although Picard did not anticipate theoretical roadblocks, there are philosophical ones raised in Cordwainer Smith's "Under Old Earth." 5

"Under Old Earth," first published in Galaxy 1966, was written by Cordwainer Smith, also known as Paul M. A. Linebarger, a political science professor and psychological warfare expert (Elms, 2000). It immerses the reader in medias res directly into the Instrumentality Universe (set in 15,000 CE), hinting that much lies untold beyond the dark edges of the tale. The lords of the Instrumentality are debating whether humans are happy or not. The Instrumentality of Mankind is a ruling force controlled by lords (who can be women or men), and, above them, chiefs. Although they are decadent, they have humanity's best interests at heart. Lord Sto Odin is the only one unconvinced that humans are happy despite being told that the Instrumentality's technology says humans are happy. He therefore embarks on a mission to cure the "weary happiness of mankind" which involves traveling Under Old Earth to the Gebiet, and later to the Bezirk with two robots carrying him. The Gebiet is a place where laws have been lifted, whereas the Bezirk is a place within the Gebiet that has been closed to people for 57 centuries, where laws have never existed and where all things are allowed. As he travels his suspicion that people are not happy on the surface is confirmed when he meets Santuna and the object of her love, the gambler-suicide Sun-boy, who having found a piece of congohelium is endangering everyone. Congohelium is a metal made of matter and antimatter laminated apart by a dual magnetic grid. It is usually used to keep the stars in place, but in "Under Old Earth" it is misused to create a frightening five-beat music that engenders delirium. It appears to be linked to the sensuous Douglas-Ouyang planets. Lord Sto Odin's cure for the weary happiness of mankind is found in the gifted figure of Santuna, who becomes a reimagined Pandora by bringing disease, risk and misery back to increase the happiness of man.

Cordwainer Smith is well known for exploring what it means to be human, and demonstrating that humanity does not depend on being literally human (although even that, as I show, is dealt with using some degree of irony). Smith's reverence for humanity and the unique way in which he presents it is explored at some length by Karen L. Hellekson. Lisa Raphals sees Cordwainer Smith belonging to the self-conscious genre of "speculative fiction" thanks to his broad interest in "human nature." Similarly, Carol McGuirk considers Smith a post-utopian writer whose "visionary science fiction" is "more interested in insights than ideas, more focused on people than on strategies for action or change" (p. 148). The theme of humanity appears through the stories of the Instrumentality in the contrast between true men (which is gender neutral) and the underpeople, who often showcase more humanity than true men. Most of Cordwainer Smith's science fiction fits into a consistent future history, where the Instrumentality of Mankind rules the world, where hominids and



⁵ Perhaps that is what Picard was alluding to when she said: "The challenge of affective computing is formidable, and not without risk, but it stands to move technology in a radically different direction: toward embracing part of the spark that makes us truly human" (Picard, 1995, p. 252).

⁶ All references to Cordwainer Smith's stories are from Smith and Mann (1993).

underpeople mix with true men, and where the universe has become so utopian that Lord Jestocost implements the Rediscovery of Man to keep humans human.

One striking feature of the world of "Under Old Earth" is that humans are not the only language-users. Thus, it is not language that makes human beings superior, or even what differentiates them; it is rather how they are seen to experience emotions. But even that is complicated by the presence of the Instrumentality, and their presumption that what human beings want is their particular flavour of happiness. The Instrumentality are able to capitalize on human labour given that their technology keeps the humans living on the surface of the earth happy. This basic setup, however, proves insufficient throughout the course of the story, and happiness as an emotional paradigm is cast as a deeply flawed moral system. This realization is mediated through comparison with other, non-human and pseudo-human species and their emotional portfolios. Ultimately, therefore, Smith's story poses a challenge to the picture presented by the field of Emotion AI, which has historically viewed emotion as a supplement to language-based AI models and which functions on the assumption of maximizing happiness and productivity, and minimizing negative emotions. Thus, "Under Old Earth," by problematizing what emotions are, therefore their legibility, and the primacy of happiness understood as the absence of other emotions, challenges the current understanding of emotion in the field of AI, and complicates what the goal of affective computing should be.

The first section introduces "Under Old Earth" and the problems of interest to Affective Computing by way of the timeless philosophical question of what is the good life. Throughout the story, the hero Lord Sto Odin explores the questions of what happiness is, having already problematized how the Instrumentality thinks they know human beings are happy. It therefore focuses on Affective Computing's first goal, to identify and modify human emotion, lessening "negative" emotions. The second section focuses on questions of alterity as they pertain to emotions. "Under Old Earth" focuses on two robots, unlike other of Smith's stories in which alterity is explored via the underpeople. The two robots' alleged lack of emotion is treated ironically throughout the story, furthering our sense that one cannot be sure of the emotions of the other. Whereas the status of the underpeople is based on their categorization as animals, the robots' status is based on their perceived lack of emotions and therefore interests. I conclude with some remarks about Cordwainer Smith's contribution to the contemporary critical landscape of emotion's role in human capital H-happiness. In "Under Old Earth" neither happiness nor our access to the emotions of the other can be taken for granted.

⁷ Something that is pointed out by the robot Livius, the robot, points out in the story.



This happiness or that happiness?

In "Under Old Earth" Lord Sto Odin finds a cure for the "weary happiness of mankind" (p. 561). The problem, however, begins as a philosophical one: What is happiness? Who gets to determine the answer? To what purpose? And why is even happiness a desirable goal? We are told:

There was the Instrumentality, with its unceasing labor to keep man man. And there were the citizens who walked in the boulevards before the Rediscovery of Man. The citizens were happy. They had to be happy. If they were found sad, they were calmed and drugged and changed until they were happy again (p. 554).

The Instrumentality have failed to understand humankind if they need to resort to *making* people happy. For Lady Ru, a long-dead lord of the Instrumentality, the question of how to make humans happy has already failed, for "[h]appiness can kill people as softly as shadows seen in dreams. We must be people first and happy later, lest we live and die in vain" (p. 555).

Lord Sto Odin is alarmed by what he sees is happening. Whether or not what it means to be human is to seek happiness, he sees the human population falling in most worlds, and human beings have stopped even caring for their children. The Instrumentality may have given human beings "happiness," and therefore fulfilled their moral duty towards them, but the result is:

Dreary useless centuries of happiness, in which all the unhappy were corrected or adjusted or killed. Unbearable desolate happiness without the sting of grief, the wine of rage, the hot fumes of fear. How many of us have ever tasted the acid, icy taste of old resentment? That's what people really lived for in the Ancient Days, when they pretended to be happy and were actually alive with grief, rage, fury, hate, malice, and hope! (p. 556)

We are faced with an age-old problem: Lady Ru understands happiness as not only unrelated to what makes a person a person but as something which stands in the way of that very project. Lord Sto Odin, on the other hand, does not reject the import of happiness but does seek a redefining of happiness, perhaps as something akin to *eudaimonia* or capital-H-happiness. Happiness is part of the project of being a person although not the absence of so-called "negative" emotion. The Instrumentality has been basing their conception of happiness on their own reasons and perceptions, not ordinary people reasons. Lord Sto Odin, on the other hand, attaches Happiness to meaning, purpose, and even close relations such as those with one's children. In other words, the ancient ways.

Lady Mmona, however, disagrees. The Instrumentality have tools and abilities that allow them to *know* that human beings are happy, therefore Lord Sto Odin's prognosis must be wrong:

Life can't be as bad as you say. We don't just think they are happy. We know they are happy. We look right into their brains with telepathy. We monitor their emotional patterns with robots and scanners. It's not as though we didn't have



samples. People are always turning unhappy. We're correcting them all the time. And now and then there are bad accidents, which even we cannot correct. When people are very unhappy, they scream and weep. Sometimes they even stop talking and just die, despite everything we can do for them. You can't say that isn't real! (p. 557)

Part of their disagreement might be purely semantic: Lord Sto Odin is talking about big Happiness, and Lady Mmona about happiness as opposed to sadness, fear, envy, etc. But behind Lord Sto Odin's questioning of the Instrumentality's notion of happiness lies an even deeper question about how we can have access and ascertain the happiness of others. In that sense, "Under Old Earth" offers us a lens to problematize current efforts in Affective Computing. "Under Old Earth" offers us a vision of what happens when science and technology not only presume to know what is best for us, what brings us happiness, but has also succeeded in reducing daily frustrations, road-rage, and grief and thus has made everyone "happy." In fact, Lord Sto Odin goes as far as to show that the creatures with which the Instrumentality does not meddle with in terms of their happiness do not attempt suicide, whereas if humans are given the chance they do.

The problem, articulated more specifically, is two-fold then: (1) the Instrumentality is wrong in believing their technology, robots, and even telepathy, gives them access to other people's happiness; (2) the Instrumentality by focusing on lower case "happiness" has prevented humanity from achieving Happiness.

That the Instrumentality have failed at 'keeping man man' and their mission of keeping people happy is also evident in the socio-geography of Old Earth: the surface, the Gebiet, and the Bezirk. The Instrumentality rules the surface, whereas the Gebiet is a "preserve where no rules apply and no punishments are inflicted. Ordinary people can do what they want down there, not what they think they should want" (p. 561). Lord Sto Odin seems to be the only one who understands that to know what makes people happy you have to see what they would choose to do if they were given the agency to do it. Why do some human beings choose to live inside the earth in the dangerous Gebiet instead of on the happy surface? Lord Sto Odin makes it his mission to find a cure for the weary happiness of humankind based on *their own* reasons.

Feminist critics and scholars have long been arguing for the epistemic and transformative value of so-called "negative" emotions. Yes, they are painful and we do much to prevent them, ignore them and sublimate them, but they are essential to navigating the world and understanding what we value. That is also the problem raised by Lord Sto Odin and, however briefly, Lady Ru. Of course, it would be unfair to say the Instrumentality's vision is Picard's. Picard's Affective Computing manifesto, as she called it, argued for the importance of emotion in human lives. It is still, however, worth asking what frustrations we want technology to eliminate, and what goes along with them. We also want to question who gets to decide since not everyone has the same experiences and needs. In "Under Old Earth," Santuna confirms both Lord Sto Odin's suspicions and Lady Ru's wisdom, "I knew I couldn't kill myself, and I didn't want to live, so I looked happy every time I thought a monitor might be scanning me and I found my way to the Gebiet. It wasn't death, and it wasn't life, but



it was an escape from endless fun" (p. 595). Santuna finds her purpose after falling in love with Sun-boy, the gambler suicide, which eventually leads to her key participation in the Redescovery of Man, which I discuss in the last section.

Whose happiness matters anyway? Emotions as status granting

What happiness is, who gets to decide it, and whether happiness is the only desirable end, are not the only concerns of "Under Old Earth." The limits of Lord Sto Odin's wisdom are challenged based on his understanding of who or what would be included in his circle of ethical concern. More importantly, "Under Old Earth" highlights the tension between Lord Sto Odin's attitude toward the legibility of the happiness of true men, and that of robots. The characters in "Under Old Earth" run the gamut from intelligent robots to laminated mouse brains to cats to underpeople, hominids, and the so-called true men. The ethical hierarchy between them is largely determined by their perceived emotional make-up/or lack of. In "Under Old Earth," we encounter two robots: Livius and Flavius. The two robots look like Roman legionaries without a trace of living tissue in them. They were the most compact and difficult to create, since their brains had to be located in their chests. Their brains consist of several million sheets of incredibly fine laminations, imprinted with the whole life experience of an important, useful and long-dead person. Their bodies, all-metal, are very strong. The underpeople, also called homunculi, are animals genetically engineered to look like humans but who maintain the qualities of the host animal.⁸ True men are unaltered humans (as opposed to hominids, which appear in other stories, who are true men who have been altered physically to live in different environments).

Smith uses the differences between the robots, the underpeople, true men, and even the potentially conscious Douglas-Ouyang planets to explore the nature of humanity (Hellekson, 58). But more specifically, he uses them to challenge the Instrumentality's narrow circle of ethical concern. The Instrumentality shows that they grant ethical status to true men by caring about their happiness. Lord Sto Odin as we have seen challenges the Instrumentality's views about human happiness however, throughout Lord Sto Odin's journey into the Gebiet, his assumptions about who holds ethical status is repeatedly challenged on the basis of who has emotions. He himself limits his ethical concerns to true men. When he points out how it is the Instrumentality's meddling that is making people unhappy (in his sense of the word) he uses the difference between the underpeople and true men, "But do we spend any time keeping the talking animals, the underpeople, as happy as men? And do underpeople commit suicide?" (p. 558) To which Lady Mmona answers that they do not commit suicide for *their* reasons because they are too busy working to care about

⁸ The underpeople are considered to be one of Smith's most intriguing inventions: as Hellekson points out, C'mell and D'joan, who are derived from animals, are two of Smith's most important characters. Gary Wolf and Carol Williams also point out that Smith's most memorable heroines are not human at all, but rather cats and dogs (Hellekson, 2001, p. 57).



whether or not they are happy—they do commit Instrumentality induced suicide if they are not able to work anymore. Lord Sto Odin and the Instrumentality do not care about the underpeople because they are not human—they are repeatedly called animals, even if they often look human.

Although Flavius and Livius also look like humans and they have the minds of former living humans, Lord Sto Odin also never forgets that they are robots. He accordingly uses them as mere machines, instead of treating them as intelligent beings. He does it despite the fact both robots contain the whole life experience of a human being. Flavius is imprinted with the brain pattern of the head of the Instrumentality's espionage division, Fourteen-B, and ex-director of the human race's historical research. Livius is imprinted with the brain pattern of a psychiatrist who was once a general who chose to die before his time because "battle itself was a struggle for the defeat of himself" (p. 294).

Whether or not Flavius and Livius have emotions, and whether or not that should grant them status is progressively problematized as they travel inward to the Gebiet. Flavius and Livius are first described as having toneless, mechanical voices, and they require the command "Summa nulla est" to have their minds on alert. They are dead and yet alive, they possess strength and accuracy beyond anything true men and underpeople could achieve, as well as total recall. And yet they have opinions, interests, and even disagree with each other. Livius does not think Lord Sto Odin should go somewhere like the Gebiet, but also expresses that he would like to be a part of Sto Odin's last noble endeavor. Flavius, on the other hand, thinks that while the Gebiet is dangerous it is also interesting and thus worth visiting. Flavius from the moment he speaks complicates his own status, "I'm dead, as you perfectly well know, but even I, inside this machine brain, feel the tug of adventure, the pull of danger, the magnetism of the unknown" (p. 564). Lord Sto Odin in a moment of vulnerability does recognize their ambiguous status when he asks, "You have the minds of men, and are not men?" (p. 569). 11 Meanwhile, we are reminded by the narrator that pity had not been programmed into their systems and thus cannot answer Sto Odin's philosophical troubles. 12 However, he insists:

What is life? A bit of play, a bit of learning, some words well-chosen, some love, a trace of pain, more work, memories, and then dirt rushing up to meet

¹² At another point, the narrator also explains the behaviour of the robots by saying, "Robots did not feel fear, but they were intellectually attuned to the avoidance of danger; Flavius found his mind racing with wild choices as he tried to get the bag open" (p. 573).



⁹ Except for their eyes: "the eyes were not eyes at all; robot eyes were like white marble swimming in little bowls of glittering ink, producing a grimly milky stare" (p. 582).

¹⁰ The Instrumentality's espionage division which is so secret very few lords know its location or function.

¹¹ A similar exchange is found in "The Dead Lady of Clown Town," first published in *Galaxy* in August 1964. The story consists of an extended flashback to the beginnings of the political organization of the Underpeople where a quasi-artificial intelligence entity containing the dead lady Panc Ashash says: "I'm a machine, but I used to be a person. [...] they made this copy, and I died, and they shot my body into space with all the usual honors, but here I was. It felt pretty odd inside this contraption, me looking at things and talking to people and giving good advice... So what do you say? Am I me or aren't I?" (p. 447).

sunlight. That's all we've made of it—we, who have conquered the stars! Where are my friends? Where is my me that I once was so sure of, when the people who knew *me* were time-swept like storm-driven rags toward darkness and oblivion? You tell me. You ought to know! You are machines and you were given the minds of men. You ought to know what we amount to, from the outside in (p. 571).

To which Livius answers that they were built by men, and therefore they only have what men put into them. He says, "we have no grief, no fear, no fury. We know the names of these feelings but not the feelings themselves" (p. 571).¹³

The emotional status of the robots is dealt with constant irony. Each time either Sto Odin, the narrator, or even the robots themselves assert the robots' otherness through their lack of emotions, there is evidence to the contrary. The question of the nature of their alterity becomes all the more obvious the closer they get to the most dangerous part of Old Earth, the Bezirk: the place where Lord Sto Odin will find a solution for the weary happiness of humankind, but fails to recognize the status of his robot companions. For example, when they are about three kilometers away from the Bezirk, Lord Sto Odin exclaims what they should do if he dies, and despite the robots alleged lack of fear he reassures them that they have nothing to worry about given that they are machines. One might wonder whether anyone would feel the need to reassure an entity which one thinks needs no reassuring. Sto Odin's show of care prompts Livius to also question his own status:

I know I am a machine, and I know that I have known feelings only when I was once a living man. I sometimes wonder if you people might go too far. Too far, with us robots. Too far, perhaps, with the underpeople too. Things were once simple, when everything that talked was a human being and everything which did not talk was not. You may be coming to an ending of the ways. (p. 581)

Lord Sto Odin immediately reminds Livius that had he said that on the surface "his head might have been burned off by its automatic magnesium flare. You know that there you are monitored against having illegal thoughts" (p. 581). Lord Sto Odin, in his vulnerable moments, has hinted at the potential political agenda behind the robots' status. The robots' status is shown less to be the result of some ontological reality, where robots are distinct from humans, than a political decision for humans to be masters.

Lord Sto Odin proves this by changing his tactic from a rhetoric of otherness to violence. When they reach the Bezirk, where there have never been laws, Livius asks whether they too are free. Lord Sto Odin answers in the affirmative provided that they still answer to him else he will kill them. It is here that Flavius tries to understand what is happening within himself: "may we sing the underpeople song? It might keep some of that terrible music out of our brains. The music has all

¹³ The narrator also says, "Here was something which their sharp swords could not pierce. Their oncehuman personalities, engraved on their micro-miniaturized brains, could not make sense of the all-toohuman situation of an old, old man dreaming wild dreams in a remote tunnel" (p. 580).



feelings and we have none. Nevertheless, it disturbs us. I do not know why" (p. 585). His choice of song cannot be accidental. The underpeople will eventually achieve equal status to true men. The song goes: "I eat my rage. I swallow my grief. There's no relief from pain or age. Our time comes" (p. 586).

Lord Sto Odin shows some signs of recognition of what the robots experience, even if ultimately he must ignore them. As the music from the congohelium gets louder and louder, he realizes that finding out what Sun-boy has been up to might mean that all three of them will have to die to settle the matter. He asks the robots whether they would mind having to die either by his own hand or something else.

"Mind? You mean, have emotions about it? I don't know," said Flavius. "I used to think that I had real, full experience when you used the phrase *summa nulla est* and brought us up to full capacity, but that music which we have been hearing has the effect of a thousand passwords all said at once. I am beginning to care about my life and I think that I am becoming what your reference explained by the word 'afraid'."

"I too feel it," said Livius. "This is not a power which we knew to exist on Earth before. When I was a strategist someone told me about the really indescribable dangers connected with the Douglas-Ouyang planets, and it seems to me now that a danger of that kind is already with us, here inside the tunnel. Something which Earth never made. Something which man never developed. Something which no robot could out-compute. Something wild and very strong brought into being by the use of the congohelium. Look around us" (p. 588).

The robots never get to choose whether they live or die. Livius is commanded to go with Santuna to the surface and Flavius dies as part of Lord Sto Odin's plan.

Although the underpeople (and some robots) eventually achieve humanity in Smith's Instrumentality universe, Flavius and Livius never do in "Under Old Earth." Several of Smith's short stories and his only novel, *Nostrilia*, discuss the struggle of the underpeople to earn freedom and rights. The martyr D'joan, whose story Smith tells in "Dear Lady," gives underpeople—and some robots—the gift of humanity. ¹⁴ What that suggests, is that the robot's perceived lack of humanity, meaning their lack of emotions, is not due to their ontological status. As Livius and Flavius get closer to the Bezirk they sometimes wonder whether their heightened feelings are the result of the delirious music produced by the Douglas-Ouyang planes, the congohelium, and Sun-boy, or whether it is the phenomenon as it where of "Heaven is high and the Emperor is far away" (天高皇帝远). In other words, they no longer feel the Instrumentality's grip. The fact that other robots are granted the gift of humanity in "Dear Lady" suggests that although the Douglas-Ouyand planets may have heightened their feelings, what allows for their emotional status to be questioned is distance from the Instrumentality and *their* reasons.

¹⁴ Lisa Raphals comments, "In Smith's stories, this realized humanity calls for more than intelligence; it also requires love, free will, and vitality, qualities that true animals do not attain but Underpeople do" (Raphals, 2005, p. 155).



The emotional status of the robots relates to the questions raised by Emotion AI in at least two ways. I have focused on how in "Under Old Earth" the legibility of emotions is questioned in terms of true men and robots. But there remains a broader theoretical question: at what point should Emotion AI systems, if they can truly interact with human beings emotionally be granted the same rights as human beings? If our decision is under no circumstances, we will have to reexamine the bases of human being's responsibility to one another. In other words, "Under Old Earth" prompts us to ask: If we cannot have immediate, objective access to our own emotions, how can we be so sure robots do not have them?

Concluding remarks: reopening Pandora's box and the rediscovery of man

Although "Under Old Earth" does not satisfactorily answer the relationship between emotions and moral status, it does argue for the importance of emotional agency and it warns us against conceiving of a technological future free of frustrations, fears, confrontations, anger, grief, and death. Smith's cure to the weariness of happiness in his utopian future is Santuna, the beautiful woman who fell in love with the wrong man. Upon reflecting on the events she experienced below the surface, the deaths of her lover and Lord Sto Odin, she decides to bring back disease, risk, and misery to increase the happiness of humankind. In doing so she becomes one of the principal architects of the Rediscovery of Man, a measure implemented by the Instrumentality to keep humans human, she becomes known as Lady AliceMore.

Santuna resembles the Hesiodic Pandora, who was Zeus' punishment to human-kind due to Prometheus giving human beings the capacity for technology by giving us fire. Santuna's voice rides "through the heavy air with the accents of clarity and death" (p. 589). Her appearance is statuesque, painted in gold—as if the Olympic blacksmith Hephaestus himself had made her: "The total effect was alien to all the previous experiences of mankind: it was lascivious grief to the thousandth power, dry wantonness perpetually unfulfilled, femaleness in the service of remote purposes, humanity enraptured by strange planets" (p. 595). Lord Sto Odin immediately recognizes her value when he says, "I think she has powers which will make the Instrumentality promote her or destroy her someday in the future" (p. 566). She is described as living for a mission of love in the midst of nothing and nowhere but remaining a "girl, a person, a human being capable, as she was now, of an immediate relationship to another human being." This is perhaps what sets her apart from not only Pandora but the Instrumentality, she remains human. Human in the sense that Cordwainer Smith explores in his Instrumentality universe, that is she has emotions.

In Hesiod's myth, humankind must toil and live a life of suffering as punishment for obtaining technology. In "Under Old Earth," true men have achieved a technological utopia with happiness that has become "bland as honey and sickening in the end." Pandora, for Hesiod, is the curse of man, she is beautiful but brought with her all that is evil. Smith questions Hesiod's myth and provides an alternative. Santuna brings with her "disease, risk and misery back to increase the happiness of man." In Smith's universe technology still becomes a thing to be questioned: it may have brought true men



longevity, and happiness, and the toil of work is now the problem of the underpeople and robots, but it also brought with it a lack of Happiness, and what makes man man (to use Smith's language).

Ultimately, "Under Old Earth," by problematizing what emotions are, therefore their legibility, and the primacy of happiness understood as the absence of other emotions, challenges the current understanding of emotion in the field of AI, and complicates what the goal of Affective Computing should be. "Under Old Earth" shows the dangers behind presuming to understand humanity, emotions, and prescribing what the good life is. Frustrations, disease, risk, and misery are what allow for Smith's concept of humanity and Happiness. Being human is also not a requirement for having humanity, therefore, "Under Old Earth" also warns us against the categories through which we explain our bodies and tools to ourselves and proves how SF continues to be uniquely positioned to help us understand contemporary reality.

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