

Speculative Science Fiction

Clarissa Ai Ling Lee

What if we were to take the life-stories and intellectual productions of the real-life women scientists and have these different parts interact to create a new line of narrative; what could then emerge? It is not so much a ‘queer’ chimera made up of humanistic stories with highly abstract ideas that I am after, but rather, how queer feminist forms of agency can be approached through a combination of macro and micro politics. Many science fiction stories, even hard science fiction, tend to separate the producer from the production, possibly so that the writer need not be confronted with having to negotiate unexpected unconscious events that could arise from such a combination. To negotiate the science in a manner that will be attractive to a wide readership is also difficult.

One might notice certain similarities in the tales of the female scientists discussed in the overview, and maybe the more detailed biographies to some characters in hard science fiction stories. However, what tends to drop out of the discussion is the ability of the characters to enact queer interactive entanglements between rigorous science and the problem of the human, particularly the gendered human, to bring about a different imaginary that is neither humanistic nor scientific. Such an outcome can then create a situation that is productive for non-normative political and social interventions intermingling different global cultures, timelines, and histories—from which one can then prototype a different kind of logic on life and knowledge, one beyond the postcolonial and neocolonial. It is for all the aforementioned reasons that I have created my queer feminist science fiction story project.

The narratives of real-life protagonists in the previous sections, intertwined with their science, open up possibilities for re-reading and envisioning new ways of thinking about mathematical physics in relation to a reality that is non-quotidian. Even as this re-reading is performed through the framework of feminist science studies and feminist science fiction, another dilemma is awakened: how plausibly could a ‘real’

Accompanying Materials

Methodology & Intellectual Context

(<https://adanewmedia.org/2013/11/issue3-lee/>)

Biography of Noether

(<https://adanewmedia.org/2013/11/issue3-lee-accomp1/>)

Biography of Goepfert Mayer

(<https://adanewmedia.org/2013/11/issue3-lee-accomp2/>)

On Speculative Science Fiction

(<https://adanewmedia.org/2013/11/issue3-lee-accomp3/>)

Epilog

(<https://adanewmedia.org/2013/11/issue3-lee-accomp4/>)

hard science fiction prototype be created by altering the mode of realism; through the presenting of a world containing more traffic between the transatlantic continents and Asia than would have been actual, particularly the part of Asia constituted as underdeveloped and not cutting-edge? After all, we want predictions of the future to be realizable rather than far-fetched.

That said, I hasten to add that there are no real-life parallels between the two women intellectuals I have just discussed and the characters of my fictional project, given that the fictional characters inhabit very different categories of worlds, different time frames, and are preoccupied with different sets of problems. The intellectual cultures from which the real-life characters come are altogether different from the ones from which I derive the fictional characters. However, parallels emerge from the position of femininity in the labor of abstract knowledge and the desire to push through difficult and cutting-edge ideas that are not always well received. The characters in the fiction are part of the same intellectual genealogy as Noether and Goeppert Mayer in terms of the epistemological interests they shared and the differences that they made to the epistemology. More importantly, in fiction, I am able to project a thought experiment involving the queering of both science and the human participants in a manner difficult to obtain with the real life characters. Through the characters, I try to imagine the interleaving of histories from the different epochs of the quantum theories produced, and project various causalities of that production through our imperfect understanding of how far quantum theory can stretch. This is most specifically explored from part two onwards of the serial.^[1] The rest of the project is currently in the works. Its progress parallels the advancement I make within my own theoretical and scholarly interventions.

Another culturally different invocation is the re-appropriation of the localized myths and legends of Malaysia that has yet to take place at a radical techno-cultural level. In first producing a version of this fiction in Malay, I attempted to challenge the language to take risks, and, therefore, to imagine and animate an alterity, even if such an alterity could only, for now, have life in pure fiction. Such an alterity can only take place if subversion is allowed at the linguistic, and later, at the political stage.

Conceivably, the prerogative for the solution may lie in re-historicization as an act of agential reclamation of what is possible under the ideal, rather than after *realpolitik* corruption. This does not mean that one ignores the intellectual, political, and social inequities of postcolonial worlds. Rather, a stage is set for the hard thinking that has to be done concerning how one can deal with an intellectual history that was not, or is unseen, and therefore, reconstruct a history with an arrow of time pointing into the past before catapulting the newly historicized knowledge forward. The desire to

explore and exploit what is possible, and also to imagine a circumstance that has no comparable examples, gave birth to the project I am discussing here.

A quotation from Deleuze and Guattari's chapter, *1730: Becoming-Intense, Becoming-Animal, Becoming Imperceptible*, taken from Brian Massumi's translation of *A Thousand Plateaus*, best sums up the motivation behind the fiction-as-theory multimodal novel of ideas conceived in late 2010. The project arose from a desire to sublimate and complexify real-life events and narratives explicated through encounters that are not dissimilar to the ones just discussed in the preceding paragraph, with the injection of the author's own utopian futuristic pathways:

The plane of consistency of Nature is like an immense Abstract Machine, abstract yet real and individual; its pieces are the various assemblages and individuals, each of which groups together an infinity of particles entering into an infinity of more or less interconnected relations. There is therefore a unity to the plane of nature, which supplies equally to the inanimate and animate, and the artificial and the natural. This plane has nothing to do with a form of a figure, nor with a design or function. Its unity has nothing to do with a ground buried deep within things, nor with the end or a project in the mind of God. Instead, it is a plane in which everything is laid out... (280).

The fictionalizing of theory is presented through characters that are the outcome of the convergences of manifold epistemic differentials, organic-inorganic materiality, fantastical real, and dream-memories. The characters are also semiotic representations of the properties of quantum interpretations that are then 'anthropomorphized' so that the abstract properties now have organic qualities that are believable but not exactly mundane.

The project began life in a different form in 2010, when I decided that I wanted to write queer hard science fiction. I toy with the idea of developing a narrative that will allow me to experiment with, and negotiate, theories I wanted to examine in greater depth, such as whether it is feasible for feminism and queer physics to 'copulate' and produce an intellectual and creative progeny not like either of them. At the same time, I maintain a semblance of factual theoretical rigor, through acts of differentiation and conformance, between quantum physics and the macro-universe of human relations. The fictional aspect of the work acts as a set of extended thought experiments in experimental feminist philosophy of science by allowing the politics of the 'real-world' to be driven by developments in physics and its rhizomatic history.

The original Malay language version of the piece, referred to as "Kucing Schrödinger" (Schrödinger's Cat), is published in jalantelawi.com, a Malay language webzine established with the aim of promoting intellectual and political discourse. It was

written with a lay audience in mind and expected that they would have to deal with culturally unfamiliar neologisms and references that could be unsettling to them. The language, as repurposed for use in the country since its independence in 1957, has been set within a straitjacket of epistemic virtue that disallows the pollution of ‘deviance’ or ‘subversion,’ unlike the deployment of a similar language group in Indonesia. Hence, the Malay version of the serial novel project focuses on unstrapping the language from its shackles while straddling the unstable relationality of interdisciplinary *mélange* through the enaction of a defamiliarized quantum world against the phenomenology of cultural lineages in the Malay Archipelago.

The core of the serial centers on a female particle physicist and her non-cohabitating female partner, a historian of physics, both based at a consortium of universities in Kuala Lumpur, Malaysia. Set in a largely undisclosed timeline (with some important exceptions), the story opens with a prelude that doubles as flash fiction. The flash fiction is a conceptual monad that unfolds throughout. The story begins with Linda waking up from a dream and then rushing to get ready for a meeting. She receives a message from her partner, Nora, on a digital voice messenger with a central service connecting between her home and any place where she could access a computer-like device. The message is the spark that sets the tone for the rest of the story: Nora had discovered a barely visible emblem on an original (German) copy of Erwin Schrödinger’s “The Present Situation in Quantum Mechanics” that points to a mysterious project or organization in which the fictional Schrödinger participated. From then on, Linda and Nora find themselves confronted with an unsettling assemblage of physics, history, fantasy, horror, and the cybernetic. The story is imagined along two shifting horizontal and vertical lines, with sets of independent and dependent variables that could converge, or not, at varying points, thus opening the narrative to all forms of reading in the interpretative spirit of quantum mechanics.

The serial underwent a transformation, though only of the cosmetic nature, when I decided to embark on the project in English with a very different purpose and audience in mind. Moreover, the language switch brought about a set of cultural shifts and the need to rethink what is familiar and unfamiliar to different sets of readers. While maintaining the essence of the story and the superficial characteristics of the two protagonists and supporting casts, this story-in-progress no longer wrestles with too many encumbrances that is in the original language it was written. However, it is still trying to fit together different scales of physicality that neither coincide nor interleave straightforwardly into each other in terms of their respective schema and determinacy (i.e. the macro entities behaving according to quantum-level rules that are inexplicable by the laws of the macroscopic state). The results contain some unexpected outcomes

that are actually the effects of actions that are not yet made manifest in the unraveling of the plot.^[2]

The project also results from my dissatisfaction with the way non-male characters are portrayed in hard science fiction, or the lack of agency attributed to the non-male characters. While many feminist science fiction writers such as Ursula K. Le Guin, Joanna Russ, Marge Piercy, and Octavia Butler, to name but a few, have done incredible work articulating the problem of otherness and utopic limitations, their works have been mostly focused on developing a theme of social justice and awareness through the device of defamiliarization that science fiction is able to provide.^[3] This is because the critique of the status quo in gender politics becomes ever more powerful when the reader is displaced, imaginarily, on unfamiliar ground. Other than the question of ethics in science, much of the science featured in existing stories is used for place-setting and to leverage certain actions in the plot, but these are definitely not given equal consideration, or written in as the main engine, of most feminist science fiction. I hope to demonstrate, through my work, that science fiction enables social justice issues involving human and non-human organisms to be addressed and rendered more powerfully when juxtaposed against the background of epistemic advancement or destruction enabled by an imaginary technoscience that is still located very much in scientific reality. This is also a form of fictive performance of the same epistemic justice discussed by Barad, though I intend to extend the ontological measure. In doing so, I have to be cognizant of how power is rebalanced, and of whether the choices I make would lead to the reification of the same power structures under a different name. Even the best science fiction writer rarely escapes re-vindicating what is out there. I tentatively argue that the non-contiguous narrative devices and the platforms from which the narratives are then developed can help to interrogate my choice of plot, character development, and theoretical predisposition.

As the work itself is still in progress, the story evolves organically as its material is sourced from the author's dissertation research and philosophical interests. This project inspires the author to venture beyond the constraints set by modern science and its requisite laws, so as to venture into the exploration of scientific knowledge unbred by a western model while challenging the current assumptions that only western modern science, as we know it, is capable of producing the technology that is conducive to our lives. It is my intention to problematize the notion of the 'good life' that modern technology is tasked with producing. The discourse of technoculture in the advancement of the 'good life' through scientific development and the destruction of pathological conditions, whether at the level of the physico-biologico or psychological, requires a more thorough examination of the cause of such pathologies. All of these, in

the end, speak to the context-value of how technoscience, in its multifacetedness, is perceived and negotiated.

Please navigate to:

Methodology and intellectual context (<https://adanewmedia.org/issue3-lee>) | **Biography of Noether** (<https://adanewmedia.org/2013/11/issue3-lee-2/>) | **Biography of Goeppert Meyer** (<https://adanewmedia.org/issue3-lee-3>) | **Epilog** (<https://adanewmedia.org/2013/11/issue3-lee-5>)

Footnotes (returns to text)

1. See story at Lee, Clarissa Ai Ling. “**Schrödinger’s Notebook: Shifting Real.** (<http://www.sciencedirect.com/science/article/pii/S0040162513002394#articles?np=y>)” *Technological Forecasting and Social Change*
2. The **published episode of this story in progress** (<http://people.duke.edu/~cal33/SLSA2012ELITPERF/>) has been published as part of the conference proceedings of the Ambient Intelligence and Smart Environments, Volume 10: Workshop Proceedings of the 7th International Conference on Intelligent Environments by IOS Press. Please check out the readme.txt before you begin viewing the video and the PowerPoint. The PowerPoint and the video are best viewed in tandem on two different screens.
3. The works that I am thinking about in this case are Ursula K. Le Guin’s *The Dispossessed* and *The Left Hand of Darkness*, Joanna Russ’s *The Female Man*, Marge Piercy’s *Woman on the Edge of Time*, and Octavia Butler’s *Dawn*, though these works represent only a tiny sampling of their corpus. But even then, the authors have to deal with the constraints of the language from which their novels are written and also with the fact that the science that does make an appearance in their work is circumscribed by its political-epistemological provenance. This is most evident in the discourse of biological sciences concerning sexuality. However, the physical sciences contain subtle inklings of it, such as in our perception of space and time. The struggles in trying to articulate something outside the socialization of our experience is evident in the struggles articulated by the characters themselves, regardless of gender. Science is inserted into the stories as narrative prop, and often as a dystopic critique of the abuse of power and authority in scientific practice (though not necessarily of the science

produced, though sometimes, that too) where the feminine appears disempowered and ambiguated. However, they all demonstrate science fiction as a powerful tool for creating provocative thought experiments regarding our assumptions about life, philosophy, and the facticity of science.

Clarissa Ai Ling Lee (<https://adanewmedia.org/author/clarissalee>)

Clarissa Ai Ling Lee is ABD in the Program in Literature at Duke. She works at the intersection of comparative media studies and science studies. Her dissertation is currently titled *Speculative Physics* where she attempts to demonstrate that epistemic versatility and inspiration can be found in the transdisciplinary practices of physics and literature. She blogs at modularcriticism.blogspot.com and scandalousthoughts.wordpress.com. She tweets as [@normasalim](https://twitter.com/normasalim).



Copyright © 2012-2022. All work on this website is distributed under a Creative Commons license. The default license for the content on *Ada* is a **Creative Commons Attribution-NonCommercial-NoDerivs 4.0 Unported License**. Individual article copyright terms may differ. Please refer to each article for its license.

Ada: A Journal of Gender, New Media, and Technology
ISSN 2325-0496