ariel: a review of international english literature

Vol. 49 No. 1 Pages 27-52

Copyright © 2018 Johns Hopkins University Press and the University of Calgary

Sharing Worlds through Words: Minor Cosmopolitics in Ruth Ozeki's A Tale for the Time Being Hsiu-chuan Lee

Abstract: Ruth Ozeki's A Tale for the Time Being (2013) responds to the radical global interconnectedness of today's world. I coin the term "minor cosmopolitics" and explain its indebtedness to as well as differentiation from "minority cosmopolitism" and "minor transnationalism" to explore the world-making potentials of minoritized individuals and the minor dimension of cosmopolitics in this novel. If we look at the relationship between the novel's two protagonists, Ruth and Nao, as that between a reader and a writer, we see how energy and matter on a small scale, in particular the energy and matter embedded in the words used in literary writing and reading, can actively engage with a scale as large as the world. Specifically, A Tale for the Time Being draws on quantum mechanics as a trope and sees words as quantum particles that illuminate the plasticity and multiplicity of space and time. Instead of aiming at a position of transcendence over the world, the novel tests out the possibilities of delivering, through words, worlds out of historical ignorance and amnesia, based on the quantum rules of randomness and undecidability.

Keywords: cosmopolitics, Asian American literature, quantum mechanics, time, Ruth Ozeki

Ruth Ozeki's novels engage with contemporary issues and events. Her first two novels are issue-driven: *My Year of Meats* (1998) responds to the use of hormones in the United States meat industry and *All Over Creation* (2003) delves into genetic modification in agriculture. Her third novel, *A Tale for the Time Being* (2013), though described by Ozeki as "philosophi-

cal" and enacting "a performance of certain aspects of Zen philosophy" (Stanford Humanities Center: The Wheeler Centre), does not withdraw from the dialectics between the actual and the fictional. In addition to the autobiographical elements (i.e., Ozeki wrote herself and her experiences as a novelist into one of the main characters, Ruth), Tale encompasses a number of real-life events, the most obvious being Japanese military aggressions during World War II, the global Internet bubble in the late 1990s, the 9/11 terrorist attacks in the US in 2001, and the earthquake/ tsunami that hit Japan in 2011. Indeed, the impact of the real world on Ozeki's writing became indelible when Ozeki decided to give up the draft she had worked on since December 2006 to start all over again after the devastating earthquake/tsunami hit Japan on March 11, 2011 (henceforth referred to as 3/11). Ozeki explained her decision in interviews: "There are certain catastrophes of such a magnitude. They draw lines in time" (Kenower). The "post-tsunami" reality made the manuscript she wrote in the "pre-tsunami" time "no longer relevant" (Kenower).² These statements compel us to read Tale as a post-3/11 text—a text called upon to respond with a new set of sensibilities to the time ushered in by an event as catastrophic as the 3/11 earthquake/tsunami.

Two questions arise: How did the 3/11 earthquake/tsunami and its repercussions change our conception of the world, and how did Tale respond to this change? While a complete answer to the first question is beyond this article's scope, the beginning of Ozeki's novel casts into relief the border-traversing impact of the earthquake/tsunami: a Hello Kitty lunchbox, which contains a diary written by the sixteen-year-old Nao in Japan, is washed ashore on an island in Desolation Sound, British Columbia and picked up by Ruth. Characters in the novel explain the Hello Kitty lunchbox as part of the tsunami debris swept from Japan into the Pacific Ocean. Although the novel does not confirm this theory,³ the Hello Kitty lunchbox and the events that follow its appearance invoke a sense of increasing global interconnectedness in today's world. Ozeki observed in an extended interview by Eleanor Ty: "[W]e are all radically interconnected" (162). And this radical sense of global interconnectedness increases when one takes into account not only the trans-Pacific trajectory of the tsunami debris but also the spread of radioactive substance

through the earth's ecosystem in the aftermath of the Fukushima Daiichi nuclear meltdown. While becoming cosmopolitan used to be a privilege of the elite few who could afford to live beyond local bonds and regional allegiances, the 3/11 catastrophe demonstrates that in the current world cosmopolitan linkage is no longer as much the result of class privilege or a personal choice as a shared human destiny. In part because of this realization that no one, not even a novelist living on a "remote" island off the Canadian west coast (Ozeki, "Confessions" 34), could avoid being pulled into the drifts of radical interconnectedness, Ozeki decided to write herself as a character into *Tale*. "It's an autobiographical story," Ozeki said as she launched into a rewriting of *Tale* in May 2011, "and so I just have to step forward and be in the book" (Ty 164).

Clear is the impact of the world on Ozeki's writing, but the juxtaposition of the cosmopolitan and the autobiographical compels us to read *Tale* as not simply about the world but about an individual's active engagement with the world. First, though "autobiographical," *Tale* is not confined to Ozeki's self-reflection. Ozeki has claimed that *Tale* takes the form of an "I-novel," a Japanese autobiographical genre that blends individual life with fiction and collective experiences ("Confessions" 39).⁶ Ruth's writing in the novel evolves from a concentration on self (as in a memoir) to an exploration of self through others (as in an I-novel): when she stumbles upon Nao's diary, her life branches into Nao's stories and becomes subject to transformation.⁷ The mutually constructing forces of a self and others are rendered evident through the network of thoughts, emotions, and memories of Nao and Ruth.

Moreover, the novel's cosmopolitanism does not mean that it embraces the world as a given totality; nor does it stop at a passive recognition of global interconnectivity. While *Tale* was completed under the impact of the 3/11 catastrophe, just as important as these real-life realities to Ozeki's writing are the coalitions and comparisons that Ozeki actively creates, through her writing, for the world. As will be demonstrated in subsequent discussions, by directing attention to the literary virtualities and historical realignment that unfold from Ruth's reading of Nao's diary, *Tale* exercises what I call "minor cosmopolitics" as it in-

Hsiu-chuan Lee

serts itself, via Ruth's and Nao's reader-writer relationship, into a creative world-sharing and world-making process.

In what follows, I make a distinction between "cosmopolitanism" and "cosmopolitics" by associating the latter with a world-making—or "worlding"—effort. Specifically, I coin the term "minor cosmopolitics" and explain its indebtedness to, as well as differentiation from, concepts such as "minority cosmopolitism" (in Susan Koshy) and "minor transnationalism" (in Françoise Lionnet and Shu-mei Shih). My goal is to explore the world-making potentials of minoritized individuals. In the second part of this essay, I attend to the interplay of words and world. Through a close analysis of the reading-writing relationship between Ruth and Nao, I highlight the importance of energy and matter on a small scale, such as the energy and matter embedded in the words used in literary creation as they engage with a scale as large as the world. Ozeki draws on quantum mechanics as a trope to describe the readingwriting time-space and as such gives the cosmopolitics in Tale another minor dimension to test out the possibilities of conceptualizing the world in terms of the quantum rule of randomness and undecidability.

I.

A concept dating back to ancient Greece, the word "cosmopolitan" derives from the Greek *kosmopolitēs*, a composite of *kosmos* (world) and *politēs* (citizen), and is thus generally interpreted as "citizen of the world." Unconstrained by local bonds or regional allegiances, a cosmopolitan is conventionally committed to the interests of humanity as a whole, and cosmopolitanism is upheld as an inclusive ethic appealing to a humanist cosmos of homogeneity and universality. Ironically, when transregional movements and cross-cultural contacts increasingly become an everyday reality, the human world is not more unified. For one thing, contemporary home-leaving and translocal encounters, instead of fulfilling the vision of a giant borderless world shared by human beings, bring indissoluble differences and conflicts that disrupt globality into asymmetrical and discontinuous locales. For another, human beings are gradually subjected to global networks of political and financial interdependence; they are increasingly trapped by shared global threats including climate change,

environmental contamination, infectious diseases, and terrorist wars, among others. Human lives are becoming cosmopolitan in the sense that they are less confined by geographical barriers, and long-distance communication has become a feature of the everyday. Yet cosmopolitanism as a philosophical vision of human commonality and well-being passed down through Greek stoicism, Renaissance humanism, eighteenth-century enlightenment philosophy, and modern universalism has been challenged by real border-crossing experiences of global connectedness.

Not surprisingly, studies on cosmopolitanism attempt to make distinctions between cosmopolitanism as a philosophical ideal and the cosmopolitan experiences in real life. Bruce Robbins' introduction to Cosmopolitics: Thinking and Feeling beyond the Nation is entitled "Actually Existing Cosmopolitanism," and Ulrich Beck also draws attention to "a new cosmopolitan realism" in The Cosmopolitan Vision (14). Robbins points out that cosmopolitanism needs a new definition, as its participants are no longer limited to those enjoying "a luxuriously free-floating view from above" but also include those caught in "transnational experiences that are particular rather than universal and that are unprivileged—indeed, often coerced" (1). Robbins' suggestion to conceive of contemporary "cosmopolitanisms" as "plural and particular" experiences that are "socially and geographically situated" (2) is echoed by Beck in his insistence that cosmopolitanism "has ceased to be merely a controversial rational idea": it "has left the realm of philosophical castles in the air and has entered reality" to become "the defining feature" of our era (2). Indeed, the increasing inseparability of an individual's life from others that characterizes the era of globalization—in Beck's words, the experience that "[m]y life, my body, my 'individual existence' become part of another world, of foreign cultures, religions, histories and global interdependencies, without my realizing or expressly wishing it" (19)—results in a "latent cosmopolitanism, unconscious cosmopolitanism, passive cosmopolitanism," in effect a "cosmopolitanization" of the everyday (19; emphasis in original). Cosmopolitanism no longer promises a solution to human conflicts and divisions; rather, real-life cosmopolitan experiences bring about inexorable mixtures, confrontations, and conflicts with differences and distances.

Kwame Anthony Appiah succinctly summarizes Robbins' and Beck's reappraisals by declaring that in our world "cosmopolitanism is the name not of the solution but of the challenge" (xv). In order to cope with this challenge, cosmopolitics—conscious engagements with the uneven and changing power relations in the world—has risen in importance, replacing the philosophically abstract and static concept of cosmopolitanism. Robbins asserts that "[t]he time for cosmopolitics is now" (10). In his view cosmopolitics is politics conceived and executed across geoplitical boundaries such as that embodied through transnational feminist, ecological, and human rights movements. Yet cosmopolitics draws force not only from geographical extension but also from temporal flow. Conceiving the world as not simply a spatial object but also a temporal construction, Pheng Cheah probes the temporal horizon of cosmopolitics by linking it to the Heideggerian idea of "worlding." For Heidegger, worlding refers not to a "cartographical process" that brings discrepant geographical parts of earth into a totalizing map but rather to how the world is ceaselessly opened up and formulated through time (Cheah, What Is a World? 8). Unlike cosmopolitanism, cosmopolitics does not take the world for a spatial given; it subjects the world to an interminable process of flexible geopolitical constitution and temporal reformulation.

I read *Tale* not as projecting a cosmopolitan ideal of human commonality and commensurateness but as undertaking a cosmopolitics that occurs through the process of storytelling, reading, and writing. Once Ruth starts to read Nao's diary, *Tale* plunges into a literary restructuring of the world by drawing previously nonexistent alliances and comparisons between people, times, places, ideas, and memories. On a personal level, Nao's diary introduces into Ruth's world the lives of Marcel Proust (as the diary is hidden in a carved-out copy of Proust's *In Search of Lost Time*), Old Jiko (Nao's great-grandmother, an "anarchist," "feminist," and pioneer of the I-novel who has turned into a 104-year-old Buddhist nun [19]), and Dōgen (whose teachings, passed on from Jiko, permeate Nao's writings), as well as Nao's own life stories. On a grander scale of world memories and worldly visions, Ruth's reading and writing aligns the bullying Nao suffered as one of Japan's *kikokushijo* (repatriated chil-

dren) with the bullying Nao's granduncle Haruki #1 was subjected to as a *kamikaze* pilot during the Second World War. The bullying is further linked to the exploitations Nao's father, Haruki #2, experienced within the global capitalist system; the 9/11 terrorist attacks; and the ethnic persecutions imposed on Muslim Americans in the wake of 9/11. These cases of human violence, furthermore, are presented in the novel alongside Ruth's meditations on the movement and mutation, power composition, and struggles for existence of various life species in the Earth's biosphere.⁸

The concept of "minor cosmopolitics" more clearly describes the cosmopolitics enacted by Tale. First, the word "minor" signals Tale's deviation from the elitism frequently associated with cosmopolitanism. Minor cosmopolitics in this sense echoes Koshy's conception of "minority cosmopolitism," according to which ethnic minorities conventionally categorized as subnational and marginal in global exchanges are recognized as exerting strong "scale-jumping" forces on the formation of worlds (Koshy 594). In Tale, the characters drawn into creative exchanges across temporal and geographical barriers are not strictly "ethnic minorities," yet most of them are still "minor subjects" in that they are bereft individuals in global politics and economy. Ruth, for example, is a novelist who has moved from New York City to Cortes Island off the coast of Vancouver in part because she and her husband, Oliver, "were broke and in need of affordable health insurance" (Ozeki, Tale 57).9 Nao is a bullied teenager caught between her childhood memory of "being a middle-class technoyuppie's kid in Sunnyvale, California" (70) and her maladjustment to high school life in Tokyo as a "poor loser foreign kid" (44). Nao's father, Haruki #2, "used to be in love with America" (42) and, as a computer programmer, was drawn to the US by the Internet boom in the 1990s. But after the collapse of the dot-com bubble, he lost his savings and visas and left Silicon Valley to become an unemployed and suicide-prone hikikomori (recluse) in Japan. In this list of minoritized characters are also Nao's great-grandmother Jiko, a feminist writer-turned-104-yearold Buddhist nun inhabiting a small temple on a distant mountaintop of Sendai in Japan's Tōhoku region (where the 3/11 earthquake/tsunami occurred), and Nao's granduncle Haruki #1, a student of philosophy

and French literature at Tokyo University forced into suicidal bombing missions during the Japan-US Pacific war. Struggling in scattered times and places, these characters are subject, in one way or another, to global political, economic, cultural, and environmental forces. They are constitutive of the minor "cosmopolitans today" (6) as described by Sheldon Pollock, Homi Bhabha, Carol Breckenridge, and Dipesh Chakrabarty: "the victims of modernity, failed by capitalism's upward mobility, and bereft of those comforts and customs of national belonging" (6).

Secondly, minor cosmopolitics alludes to "minor transnationalism," a concept proposed by Lionnet and Shih. Initiated as a resistance to colonial ideology, which focuses on the struggles between the colonizers and the colonized and thus reduces most discussions about the "minor" to a confining dyad of minor/major or center/margin, "minor transnationalism" conceptualizes nonhierarchical networking possibilities between the marginalized and the underprivileged. As Lionnet and Shih explain, "[t]here is a clear lack of proliferation of relational discourses among different minority groups, a legacy from the colonial ideology of divide and conquer that has historically pitted different ethnic groups against each other" (2). Colonial ideology intentionally plays up antagonisms between ethnic groups and undermines possible alliances between them for fear that these groups might join forces against the colonizers. A continuous minoritization of these ethnic groups is possible only when each member of the group remains "mediated by the major in both its social and its psychic means of identification" (Lionnet and Shih 2). The horizontal joining forces of members of minorities from scattered sites that minor transnationalism suggests makes it possible for the minor to influence the major, or more generally for the small to have impact on the large. In Tale, minor cosmopolitics derives force from the connection between Nao and Ruth as two marginalized figures. The novel joins these two characters to other marginalized characters: it shares with "minor transnationalism" the agenda of "look[ing] sideways to lateral networks that are not readily apparent" between different margins (Lionnet and Shih 1).

However, while nation and nationalism remain present in minor transnationalism (since nation is incorporated as one key parameter in

the coinage of "minor transnationalism"), minor cosmopolitics leaves out an explicit reference to nation and is thus not tied to a critique of nation or nationalism. I argue that Tale enacts a minor cosmopolitics more than a minor transnationalism insofar as the novel is more concerned with the various axes of connections across the world and individuals in relation to each other than about national divisions or national identities. Ruth, for example, is a Japanese North American who used to live in the US, spent years in Japan, and now lives in Canada. Her marriage to Oliver, a man of German ancestry, is jokingly described as "an axial alliance"—"a small accidental consequence of a war fought before either of them was born" (Ozeki, Tale 32). Nao was born in Japan but lived in Sunnyvale, California for about a decade before moving back to Japan. She continues to consider herself an "American," but this does not prevent her from having a close relationship with Jiko or nourishing a strong interest in Jiko's Buddhist learning. Haruki #2 sought career opportunities in the US; his plan fell through not because he was Japanese but because of the collapse of the dot-com boom as well as his insistence, as Ruth's research reveals, on building "a conscience into the interface design" of military/game software to compel users to react with human empathy at moments of urgency (307). Among the main characters in Tale, Haruki #1 is the only one whose fate is directly tied to the suppressing force of nationalism. He was assigned by the Japanese government to be a kamikaze suicidal pilot during the Second World War. Yet Tale arranges for Haruki #1 to choose to die not for Japan but for his conscience: after recognizing Americans as "an enemy" that he "cannot hate" (324; emphasis in original), he plunges his plane not into an American battleship but into the Pacific Ocean. In his letters to his mother Jiko, he states that he would commit suicide, but as "a free man" rather than as an instrument of Japanese imperialism (257).

Ozeki's novel does not take nationalist ideology as its most fundamental target of criticism. It does not present cosmopolitan practices as antithetical to national belonging or conflate cosmopolitanism with transnationalism.¹⁰ While national categories remain present in *Tale*, the novel introduces characters that move, live, and think beyond the confinement of these categories and thus from time to time compels

readers to think on scales larger than that of the nation. At other times, *Tale* sheds light on the geographical discrepancies, historical divergences, and group divisions within one nation-state, thereby ushering in identificatory scales smaller than the nation. Nao, for example, describes Tokyo as composed of various places: the "wild and weirdly awesome" Akihabara that is teeming with "stores and stalls spilling over with circuit boards and DVDs and transformers and gaming software and fetish props and manga models and inflatable sex dolls" (290); the "slick and modern" Shinjuku and Shibuya "with skyscrapers made of concrete and glass" (129); the neighborhood her family inhabits that is "like a slum, old and crowded, with small, ugly apartment buildings made of waterstained cement all crammed together" on a "crooked street" (129); and the tiny temple on her way to school, which is located "right in the middle of Tokyo" but feels like "a bubble in ice," "a core sample from another time" (46).

If Japan is not presented as an integrated nation-state, similarly on Ruth's side the names of several locales evoke community histories and memories that link these places to disparate lines of world history. The place nicknamed "Jap Ranch," for example, used to be "one of the most beautiful places" on Cortes Island; it was an "old homestead" that "once belonged to a Japanese family, who were forced to sell when they were interned" during the Second World War (32). The place has since changed name and is now owned by elderly Germans, yet Ruth insists on calling it "Jap Ranch" because she does not want to let "New Age correctness erase the history of the island" (32). "Whaletown" is also a place name that conjures up a "specter of the past" (59). Although it was once a whaling station from which the place derived its name, all whales in this area were "slaughtered or had fled" between 1869 and 1870 because of the whale oil trade (58). As "whales were rarely seen in nearby waters anymore" (57), the name "Whaletown" functions as a historical vestige that summons lives beyond the human realm.¹¹ "Cortes Island" is another place name on which Ruth dwells. Officially named after "a famous Spanish conquistador, who overthrew the Aztec empire" (141), Cortes Island has another nickname—"a shadow name that was rarely spoken: the Island of the Dead" (142). The locals are divided

on the origin of this nickname: explanations range from invoking "the bloody intertribal wars," "the smallpox epidemic of 1862," and the island's origin as "a tribal burial ground" to conjuring "the aging population of retired white people" (142). These divergent interpretations of a place's nickname illustrate the discrepant nature of the local lore. They also testify to the shifting ways in which a local community has been imbricated with the world. Guy Beauregard suggests that Ozeki's novel represents spaces "marked by commercial and militarized violence and by the forced removal of Indigenous and other racialized subjects" (102) so as to "prise apart depictions of Canada as a presumed place of refuge" (107). In view of the global subtexts of these local memories and hidden histories (the Japan-US Pacific war, the nineteenth-century global whaling trade, European overseas exploration and colonization, the smallpox epidemic across the Americas, and so on), I argue instead that Tale represents places such as Jap Ranch, Whaletown, and Cortes Island not so much as parts of Canada but as parts of the world. Its tentative suspension of the rubric of "nation-state" paves the way for a literary restructuring of scattered locales.

II.

Thus far I have explained minor cosmopolitics by laying bare its connection to and difference from minority cosmopolitanism and minor transnationalism. My goal is to conceive the scale-traversing potential of *Tale*'s "minor" subjects from discrepant geohistorical sites in world formation. In this section, I turn to the instrumental function of words—microscopic elements with force—in Ozeki's world-making project. *Tale* places at its center a character-writer and writer-reader relationship that delivers others' worlds through words. This endows the term "minor" in minor cosmopolitics with a third layer of meaning: besides referring to the minority status of the characters and the horizontal linkage between marginalized people and their histories, "minor" in *Tale* also depicts the microscopic dynamics of words in literary reading and writing. Although cosmopolitanism is commonsensically associated with large-scale thinking, *Tale*'s reference to quantum mechanics to illuminate the plasticity and multiplicity of space and time in liter-

ary imagination pinpoints the interlocking structure of the big and the small.

Briefly, Tale's world-making project draws force largely from tilting the world out of its habitual symbolic structures. Ozeki's suspension of national categories to represent geohistorical memories is one example. Nao and Ruth's relationship shows even more clearly Ozeki's attempt to release characters from conventional identity categories. From its beginning their relationship is irreducible to that between nation-states, nor can an even more simplistic framework of Asia vs. America or East vs. West account for their differences. That both Nao and Ruth are Japanese Americans to an extent yet develop dissimilar boundary-traversing experiences and worldviews from their contrasting historical genealogies renders problematic any simplistic attempt to differentiate them in terms of nation, culture, or geographical location. Instead of resorting to any convenient categorization, Ozeki casts Ruth and Nao's relationship as one between two individuals, specifically between a character and an author, or a writer and a reader. Ozeki has asserted that Tale is "very much about the process of fiction writing itself": it dramatizes "what happens when an imaginary character reaches out" to an author (qtd. in Ty 162). Ozeki elaborated this point further in an interview: it is like the characters are already "out there," "floating around in the ether" and "look[ing] through the clouds" in search of authors to carry out the potential of their stories (qtd. in Kenower). Fiction-writing is accordingly initiated from the random encounter of a character and an author across time and space. It is a cosmopolitan encounter that, according to Tale, bears vivid similarities in both process and consequences to the chance encounter between two particles in the quantum universe.

For Ozeki, novel-writing must not be a solipsistic activity. It usually comes from another's "voice," which conveys "a tone," "an attitude," and "a kind of sensibility" (Stanford Humanities Center). In *Tale*, Nao's teenage voice calls Ruth into the position of both a reader and an author. Nao's diary opens by addressing a "you": "Hi! My name is Nao, and I am a time being. Do you know what a time being is? Well, if you give me a moment, I will tell you" (Ozeki, *Tale 3*). Significantly, Ruth is suffering from writer's block when she encounters Nao's diary. Unable

to complete another novel, Ruth has spent years working on a memoir, and the "bristling tower of pages that represented the last ten years of her life sat squarely on the desk in front of her" (63). Though impressed by Nao's sense of "certainty" and the "uninhibited flow" of her language (37), Ruth is wary of allowing the diary to interrupt her memoir project. She asks: "What was she doing wasting precious hours on someone else's story?" (31). On second thought, however, she admits that only when she stops dwelling on herself and starts paying attention to others could she become alive again as a writer: "She was a novelist. She was interested in the lives of others. What had gotten into her, to think she could write a memoir?" (64).

The realization that a novelist's responsibility is not to write about herself but to explore others' lives turns Ruth's writing from a self-centered project that goes nowhere into an open-ended exchange—first with Nao, and then with the worlds unspooling through her connection with Nao. Although Ruth is the author, she is not given absolute authority over Nao. *Tale* spells out a collaborative relationship between Nao and Ruth: Nao plays the active role as a diary writer who tries to write her reader into existence while Ruth both reads Nao's stories and writes about this reading process. While reading the stories, Ruth wonders from time to time about the issue of agency: "Was she [Ruth] the dream? Was Nao the one writing her into being? Agency is a tricky business" (392). Aware that her name in Japanese could be pronounced *rusu*, meaning "not at home" or "absent" (59), Ruth imagines herself to be "as absent as her name indicated, a homeless and ghostly composite of words that the girl had assembled" (392).

Following Ruth's line of thinking, if a novelist comes into existence only through her curiosity about and exposure to a character's life and story across geographical and temporal barriers, then literary writing is a cosmopolitan practice. In *Cosmopolitanism: Ethics in a World of Strangers*, Appiah similarly addresses an affinity between literary creation and cosmopolitanism by emphasizing writing, reading, and storytelling as important cosmopolitan practices. According to Appiah, people usually develop an interest in and care for other groups after reading about these groups. Storytelling and story-sharing are fundamental to human

community-building. Appiah contends that "[w]e wouldn't recognize a community as human if it had no stories, if its people had no narrative imagination" (29). He adds: "[E]valuating stories together is one of the central human ways of learning to align our responses to the world. And that alignment of responses is, in turn, one of the ways we maintain the social fabric, the texture of our relationships" (29).

This statement throws light on the connections that storytelling can create among different groups. But *Tale* does more than reiterate the important role narratives might play in weaving a social fabric and enabling the coexistence of differences; it casts into vivid drama the boundary-crossing and viscera-affecting "magic" of words, which not only introduces characters to others' worlds but ushers in a temporal/spatial becoming of the world. ¹² As we can see, Nao's diary gradually comes to life in Ruth's hands. "Running her fingertips across the soft cloth cover" of the diary, Ruth notices "the faint impression of the tarnished letters. They still retained the shape of À la recherche du temps perdu, but they had evolved—no, that word implied a gradual unfolding, and this was sudden, a mutation or a rift, pages ripped from their cover by some Tokyo crafter who'd retooled Proust into something altogether new" (Ozeki, *Tale 37*).

Reading the diary, Ruth sees "[i]n her mind's eye . . . the purple ink scripting sinuous lines into solid blocks of colored paragraphs" (37), as if Nao's dairy were not a lifeless object completed in the past but a living narrative still under formation at the moment of Ruth's reading. More importantly, in the process of reading Ruth is drawn into the texture of the diary. Her mind and body are transformed by the life unfolding from the words in front of her. For example, dwelling on Nao's line "I'm reaching forward through time to touch you . . . you're reaching back to touch me" (37; emphasis in original), Ruth feels the diary "warm in her hands" and knows that the feeling has "less to do with any spooky quality in the book and everything to do with the climate changes in her own body" (37).

Accessing another person's stories results not only in a shared world but also in the transformation of the reader and her cognition of the world. Nao urges Ruth to give up any assumptions while reading her story: "Assumptions and expectations will kill any relationship, so let's you and me not go there, okay?" (6). Ruth also acknowledges the power of fiction to tear down temporal lines and spatial barriers of existing realities: "When she was writing a novel, living deep inside a fictional world, the days got jumbled together, and entire weeks or months or even years would yield to the ebb and flow of the dream. . . . Fiction had its own time and logic. That was its power" (313–14). To fulfill fiction's potential to reconfigure the world with an alternative time and logic, Ruth attempts to read Nao's diary at a speed that coincides with Nao's speed of writing: "I was trying to pace myself. I felt I owed it to Nao. I wanted to read at the same rate she'd lived" (375). Instead of adapting Nao's writing to her own reading speed or trying to absorb Nao's life into any conceptual abstraction, Ruth intends to leave the diary "real and totally personal" (38). ¹³

Tale as such enacts an open-ended collaborative project between Ruth and Nao that slowly unfurls in the time of Ruth's reading and writing. Given the fact that Nao plans to commit suicide upon completing her diary, Ruth's slow-paced reading strategy also postpones the closure of (Nao's) life/story. To illustrate the importance of time in sustaining the openness of (Nao's) life and to explicate textuality's world-making potential by delaying narrative closure, the novel incorporates quantum mechanics as a trope, first in conversations between Ruth and Oliver and then more systematically in the novel's Appendix B:

- superposition: by which a particle can be in two or more places or states at once (i.e., Zen Master Dogen is both alive and dead?)
- entanglement: by which two particles can coordinate their properties across space and time and behave like a single system (i.e., a Zen master and his disciple; a character and her narrator; old Jiko and Nao and Oliver and me?)
- the measurement problem: by which the act of measuring or observation alters what is being observed (i.e., the collapse of a wave function; the telling of a dream?) (409)

At first sight, *Tale's* inclusion of quantum theory seems ironic because the development of quantum physics has been historically linked to the invention of nuclear weapons and energy. Since, as is widely known, Albert Einstein's letter (drafted by quantum physicists Leó Szilárd in consultation with Eugene Wigner and Edward Teller) to US President Franklin Roosevelt in 1939 led to the Manhattan Project, which was responsible for the production of the first atomic bombs, Tale's concern with the US-Japanese war, 3/11, and the Fukushima nuclear crisis seems to contradict its citation of quantum mechanics as one possible theoretical base for minor cosmopolitics. A closer investigation into the history of twentieth-century physics, however, reveals that the relationship between quantum theory and the development of nuclear weapons was more accidental than intentional. The revolution brought on by the discovery of the quantum at the turn of the twentieth century and the rise of quantum theory in popularity among physicists in the 1920s was primarily theoretical and philosophical. It challenged the classical mechanical worldview by asking questions such as the following: "Do physical properties come into existence only as a result of measurements? If so, is the observed world real and objective? Can the object and subject be distinguished or do they form an indissoluble whole? Can the lessons of quantum mechanics be extrapolated to society and culture?" (Kragh 171-72). The rise of Nazism sent many Jewish quantum physicists and their affiliates not only into international exile; it also led them to fear that Nazi Germany would be the first to construct atomic bombs if the US did not take immediate action. If not for that fear, neither Szilárd nor Einstein would have suggested the militarization of physics. In fact, after the "quantum exiles" (Fraser 188) discovered that the Nazis had not tried to build bombs, Szilárd "organized another missive" to advise Roosevelt "to stop the [nuclear] effort before it was too late" (Fraser 188), but this time the letter was left unread, and when the atomic explosions became a reality in 1945, "the initial jubilation of the Los Alamos scientists sublimated into guilt" (Fraser 192). 14

While Ozeki does not explain why she brought quantum theory into *Tale*, the stories of quantum exiles resonate with the stories of Haruki #1 and Haruki #2, not only because these figures are all minor cosmopolitans facing large suppressing forces from race, nation, or capitalism but also because they struggle between the military/capitalist exploitations of their knowledge/ability and their desperate attempts to adhere

to their conscience. I would like to note, though, that *Tale* draws on quantum mechanics not simply for creating literary allusions to the stories of quantum exiles. More significantly than that, by citing quantum mechanics and focusing on its revolutionary worldview, *Tale* restores to quantum theory its philosophical dimension. Invented with strong theoretical and philosophical concerns, quantum theory was militarized and industrialized largely due to the Second World War. Helge Kragh, for example, mourns the lost dialogue between physics and philosophy after the War:

One result of the postwar generational shift and the general turn toward instrumentalist and pragmatic modes of thought was that philosophy lost its place in physics. Many members of the earlier generation of physicists had a deep interest in philosophical questions and were sometimes inspired by philosophers in their innovative work, or they discussed competently the philosophical implications of the new physics. (441)

Tale attends to the philosophical implications of quantum theory and in return, quantum theory enriches the novel with insights about world formation at the atomic and subatomic level. Dennis Bohnenkamp suggests the appropriateness of referring to physics in a literary text concerned with world-making in his study of the influence of post-Einsteinian physics on literature: "[T]heories of physicists and literary fictions have much in common. Both posit hypothetical worlds" (20). In Tale, the world-positing potentials of both literature and post-Einsteinian physics are vividly played out.

Indeed, quantum physics introduces new modes through which to understand the world. Ruth points out in *Tale's* Appendix B that while classical physics is constrained by phenomenal reality and its causal laws, quantum physics directs attention to the movement of "atomic and subatomic particles" (409), which initiated the discovery of a set of new rules for the universe. The change of scale from what scientists can see with the naked eye in classical physics to "the smallest scales and atomic increments" in quantum physics (Ozeki, *Tale* 409) compels us to imagine the constitution of the world in a radically new way. The rule

of superposition, for example, sheds light on the possible coexistence of many worlds before the intrusion of an observation. The principle of entanglement accounts for our imagination of the world as a huge quantum network of connections and interactions across time and space. The measurement problem challenges the existence of an objective reality. In effect, the so-called "reality" in the macroscopic world is made possible only through acts of observation and interpretation. Both being measuring acts, observation and interpretation collapse the multiplying possibilities of a quantum universe into a fixed and single "reality."

To elaborate, whereas classical physics attends to the properties and movements of objects and systems available to objective measurement and representation, quantum theory casts into relief a time-space of endless calculation and indeterminacy. The former offers an ontological and realist description of the world, but the latter heralds microscopic worlds with irreducible differences, chances, and connections. Temporally, the former is concerned with a commonsensical causal relationship between the past, the present, and the future as spatialized compartments, whereas the latter points toward past and future imperfects—the continuing, the repetitive, and the not-yet-complete that constitute an unbounded scope of virtualities. 15 Tale cites the thought experiment of Schrödinger's cat to explain quantum mechanics as "a calculus," "a machine for predicting experimental results" (415): before the box containing the cat is open for observation, it is equally probable that the cat is dead or alive. The wave function in a quantum field allows each particle (such as the cat in Schrödinger's experiment) to occupy diffuse and changeable positions (like a wave). In this way quantum physics comprehends the world not as a formed totality but as worlds still being made.

Tale finds correspondence between this quantum field of multiplying potentialities and a Zen moment. Ruth hypothesizes in the novel's Appendix B that "[i]f Zen Master Dōgen had been a physicist, I think he might have liked quantum mechanics. He would have naturally grasped the all-inclusive nature of superposition and intuited the interconnectedness of entanglement" (409). In particular, Ruth stresses the reality-altering potential of the human mind that is implied by both

quantum physics and Zen Buddhism. She recognizes Dōgen not only as "a contemplative [person]" but also as "a man of action" who "would have been intrigued by the notion that attention might have the power to alter reality" in quantum mechanics (409). Significantly, *Tale* casts the process of Ruth's reading and writing into a site of both Zen and quantum wave production, a site in which webs of words proliferate to generate "entanglements" that are capable of flexing time and space into linguistic and epistemic plasticity. Essential to Ruth's reading and writing is her attempt to restore the world's wave probabilities, an attempt most clearly illustrated through her intervention into Nao's and Nao's father's suicides and her restoration of the memories associated with Nao and Nao's family members.

Given the importance of time in the restoration of quantum probabilities, Ruth meditates on the possibility, while reading Nao's diary, that writing might carry "the texture of time passing" (64). She longs for a piece of writing that "could re-enact in words the flow of a life lived" (64). In a similar vein, Nao desires to capture in writing each performing moment of "now." She writes: "[T]he problem of trying to write about the past really starts in the present: No matter how fast you write, you're always stuck in the then and you can never catch up to what's happening now" (97-98; emphasis in original). The kotodama (word-spirit 言靈) of "now," Nao adds, "felt like a slippery fish, a slick fat tuna" (98). In light of quantum theory, "now" is valuable because it represents a moment of wave function in which many superposed worlds are possible. "Then," on the contrary, marks the already solidified symbolic reality, a static moment of signifying fixity after the collapse of the quantum wave function. The fact that "Nao" is pronounced like "now" renders clear that embedded in the diary writing is an effort to save both "Nao" and "now." "Now" embodies not only the quantum/Zen moment of overflowing potentialities but also the time needed for the survival of a self. To lose "now" is to lose one's self—to give up one's agency to the world of representation. In Nao's words, it is to "drop out of time," to "[e]xit my existence" (7)—or, put bluntly, to commit suicide.

No word better captures this correlation between the existence of time and the existence of life than the Zen concept *uji*. *Uji* is composed of

two characters—*u-ji* (有-時)—which together mean both "time" and "being time" or "time being." The word thus makes "being" inseparable from time; it is embedded in and manifested through time. As Dōgen declares, "[t]he 'time being' means time, just as it is, is being, and being is all time" (48). It is a mistake to objectify time and render it a space-like container in which being exists. Rather, being evolves through time, and time is illustrated by the existence of beings. Dōgen asserts that one "must see all the various things of the whole world as so many times" (49). Plural in nature, "time" is no longer just "something that goes past" (Dōgen 51). Dōgen encourages everyone to generate "many times" as a way to save "beings."

Incorporating uji into its title, A Tale for the Time Being is concerned with the preservation of time and time-beings. Nao's planned suicide upon the completion of her diary could be interpreted both literally and symbolically. It could refer as much to the destruction of her physical body as to the surrender of herself to an inevitable disappearance of "now" when she ceases writing. Her self and time, closed in suicide, however, are opened up when Ruth takes possession of Nao's diary on the other side of the Pacific and starts a prolonged reading process, in which she brings Nao's self and narratives once again into the temporal productivity of "now." Read in this light, Ruth's reading and writing are from their beginning a rescue mission. 16 What appears as the surreal plot arrangement of Ruth's life branching into Nao's and ultimately saving Nao and her father from their suicide attempts can be understood as Ozeki testing out, through her fiction writing, the time-giving and life-saving power of Ruth's reading and writing. Moving beyond the realist world measurable by classical physics, Ozeki enacts via her fictional writing a ghostly quantum time-space of superposition and entanglements. When Ruth continues reading Nao's diary, trying to "pace" herself and "read at the same rate" that Nao lives (375), the end of the diary keeps "changing"—more precisely, "receding" (375). "Every time I open the diary," Ruth says, "there are more pages" (376). For one moment Ruth even confronts a blank page, as if Nao's fate remains undecided, awaiting Ruth's intervention as a reader and writer. Ruth's friend Muriel, a retired anthropologist, offers a theory that compares Ruth's role as a reader to that of an observer in quantum mechanics, a role that could alter Nao's lived reality: "Her story was about to end one way, and you intervened, which set up the conditions for a different outcome. A new 'now,' as it were, which Nao hasn't quite caught up with" (376). Or, to borrow the language from Zen Buddhism introduced in the novel's Appendix E, we may contend that Ruth's reading introduces into Nao's diary a "Zen moment when possibilities arise—a schism occurs, worlds branch, and multiplicity ensues" (415). Indeed, Ruth herself appreciates the effect of "not-knowing" the exact outcome of the story. In her letter to Nao at the end of *Tale*, she claims that "not-knowing keeps all the possibilities open. It keeps all the worlds alive" (402).

III.

The accidental encounter of two individuals' minds in *Tale* develops into a grand fiction that gives our conception of the world a literary structure. In effect, more time allows more worlding opportunities. In keeping "all the worlds alive," Ruth not only encompasses events and memories on her side of the world into her writing but also makes use of the prolonged time of reading and writing to launch a research project on the Internet that ends up, as I show in the first section of this essay, salvaging world histories embedded in Nao and her family members' life stories. Compared to an ocean gyre, the Internet in Tale is conceived as containing a "gyre memory," as Ruth asks: "Is the Internet a kind of temporal gyre, sucking up stories, like geodrift, into its orbit? What is its gyre memory?" (114). Like a garbage patch that slowly breaks down into "razor-sharp fragments and brightly colored shards" (114), the Internet contains "an undifferentiated mat of becalmed and fractured pixels" (115)—"all the stuff that we've forgotten" (114), unless someone like Ruth plunges into the gyre to salvage bits and pieces that would otherwise drop out of human history.

In a conversation with David Palumbo-Liu, Ozeki claimed that her three novels are all about "agnotology" or the study of culturally induced ignorance, and the question of "what drops out of history" is central to her fictional creation (Stanford Humanities Center). Her experience of taking care of her Alzheimer's-afflicted mother between

1998 and 2004 propelled her further into meditations on the connection between time, existence, and amnesia. Considering people like her mother as beings "literally dropping out of time" while losing memories of the world (Stanford Humanities Center), in Tale Ozeki draws into close affinity efforts to generate time, save lives, and restore memories. Essential to the novel's minor cosmopolitics is therefore not any individual's ascendancy to a well-ordered cosmos of transcendence but an attempt to imagine how fiction reading and writing can restore lives and memories while also positively communicating the openness of the world. Words as quantum particles operating on small scales play essential roles in enacting imaginary uncertainties, bringing in forgotten lives and histories, and prolonging every "now" to forestall epistemic closure. They carry out a world-making project of huge magnitude not only by reconstituting connections between lives and memories but also by unfolding the temporal dimensions of what is "not-yet-known" or "notyet-decided."¹⁷ Although *Tale*, as a novel, has to conclude at some point, just as the collapse of a wave function "must happen because the reality of the macroscopic world demands it" (Ozeki, Tale 415; emphasis in original), the novel captures Ozeki's vision as a writer through the words of Nao's granduncle, Haruki #1, before his suicide mission. A kamikaze pilot, Haruki #1 wrote in his letter to his mother: "[N]o matter what nonsense I write in it [the official letter], please know that those are not my last words. There are other words and other worlds" (258). Aiming at neither homogeneity nor totality, *Tale* puts forth a cosmopolitics that points to other worlds through other words.

Acknowledgments

Portions of this essay were presented at the 2014 ELLAK 60th Anniversary International Conference, Nov. 20–22, 2014 in Seoul, Korea, on the theme of "Traveling Contexts: Cosmopolitanisms Old & New, East & West." I thank the organizer of the conference for the invitation and the conference participants for their feedback. Special thanks go to So-Hee Lee, Eunsook Koo, Soo-Young Lee, Seiwoong Oh, Peggy Cho, and Ioana Luca for their comments, assistance, and encouragement, to Guy Beauregard for his advice on revised manuscripts, and

to Tien-Te Chang and Jeng-Ying Nien for their help in formatting the essay. I would also like to gratefully acknowledge the Ministry of Science and Technology (MOST) in Taiwan for funding the research and writing of this essay.

Notes

- 1 The influence of Zen Buddhism on *Tale* is evident. The title of the novel is indebted to Dōgen's fascicle on time, "For the Time Being" ("*Uji*"). Ozeki was ordained a Zen Buddhist priest in 2010.
- 2 See also Ty 164; The Wheeler Centre; and Stanford Humanities Center.
- 3 Ozeki might have intentionally left this theory unconfirmed to disrupt a cause and effect linearity that a realist comprehension of reality commonly appeals to. The world in *Tale*, as I demonstrate in this article, is instead marked by (the quantum rule of) accidents, coincidences, and uncertainties.
- 4 For a detailed analysis of the ecological and psychological impact of the tsunami debris and the radioactive contamination, see Matsunaga.
- 5 The word "remote" is reiterated in *Tale*, such as in the description of Cortes Island as "a remote island in the middle of Desolation Sound" (11) or when Ruth says that she was carried by Oliver's mind "currents" onto "the remote shores of [Oliver's] evergreen island" (57). Beauregard observes that the trope of remoteness also frequently appears in reviews of *Tale* and raises the question: "[R]emote in relation to where?" (98). Read under the rubric of cosmopolitics, the novel's intention to play on the concept of "remoteness" in a world of global interconnectivity becomes significant.
- 6 The I-novel or *shi-shōsetsu* emerged in the Meiji (1868–1912) and Taisho (1912–26) periods. Though influenced by Western autobiography, the I-novel develops its own unique assumptions about self and life: first, in the I-novel the author usually reveals his or her mind and life under the guise of fiction; second, instead of presenting the self as an autonomous entity, it presents the self as embedded in the collective. The writing about the self in an I-novel is thus always pointing toward connections to others. For more details about the I-novel, see Fowler and Suzuki.
- 7 Though she does not mention the I-novel, Davis also notes that "[w]riting the lives of others becomes a key operation for the characters" in *Tale*: Nao and Ruth "struggle to write the stories of others, perhaps as a strategy for understanding themselves" (96–97).
- 8 Besides her concerns about the tsunami debris and radioactive pollution, Ruth also dwells on the power relations between human beings and the forest and between introduced species and local flora and fauna on Cortes Island. In addition, Ruth's husband Oliver is "an environmental artist" who "translated the vast, wild, Pacific Rim ecosystem into poetry and pixels" (Ozeki, *Tale* 56).

Hsiu-chuan Lee

- 9 One might note, though, that Ruth does not necessarily consider New York City a metropolitan center; she jokes that she does not lose anything as she just traded "one island" (the island of Manhattan) "for another" (Cortes Island) (Ozeki, *Tale* 57).
- 10 *Tale* resonates with Cheah by suggesting a complicated dialectic between nationalism and cosmopolitanism. Probing into the historical genealogy of both cosmopolitanism and nationalism, Cheah argues that it is anachronistic to think of cosmopolitanism as a resistance to nationalism since the development of the former predated the birth of the latter. In fact, before developing into absolutist states with ideological and territorial rigidity, nations as imagined communities were cosmopolitan by nature. See Cheah, "Introduction Part II" 22–30.
- 11 Huang describes these "no-longer-representative" place names as "name[s]-as-remainder" that mark the erasure of local humans and animals (100).
- 12 The word "magic" occurs more than once in Nao's diary. Toward the end of the first section in her first diary entry, she addresses her imaginary reader: "[I]f you do decide to read on, then guess what? You're my kind of time being and together we'll make magic!" (Ozeki, *Tale* 4). At the end of the second section, she reiterates: "[L]ike I told you, together we're making magic, at least for the time being" (5).
- 13 The encounter and exchanges between Ruth and Nao as two irreducible subjects resonate with Irigaray's treatise on the irreducible duality of human relationships. Just as Irigaray seeks in "the irreducible duality of humanity" an essential dimension of human freedom (Irigaray xxi), Ruth "shares worlds" with Nao to pave the way for an unfolding of the infinite becoming of the world. For details, see *Sharing the World*.
- 14 Please see Fraser for a detailed historical narrative on quantum exiles.
- 15 This brief comparison of classical and quantum physics is indebted to Bohnenkamp, Krips, Plotnitsky, and Miller.
- 16 Ruth's rescue mission must not be understood within the imperialist framework of a Canadian rescuing a Japanese or a Westerner rescuing an Easterner. What is rescued in *Tale*, via a prolongation of Nao's life through Ruth's reading and writing is the time required for a continuous world-making project. Ruth herself is aware of the time-generating and life-giving force of writing. She claims in one passage: "I've always thought of writing as the opposite of suicide. . . . That writing was about immortality. Defeating death, or at least forestalling it" (Ozeki, *Tale* 314).
- 17 Dōgen in "*Uji*" uses the word *mitō* (未到)—the "not yet arrived," "not yet understood," or "failure to understand"—to describe this dimension. He states: "You reckon time only as something that does nothing but pass by. You do not understand it as something not yet arrived" (53).

Sharing Worlds through Words

Works Cited

- Appiah, Kwame Anthony. Cosmopolitanism: Ethics in a World of Strangers. Norton, 2006.
- Beauregard, Guy. "On Not Knowing: A Tale for the Time Being and the Politics of Imagining Lives after March 11." Canadian Literature, vol. 227, Winter 2015, pp. 96–112.
- Beck, Ulrich. The Cosmopolitan Vision. Translated by Ciaran Cronin, Polity, 2006.
- Bohnenkamp, Dennis. "Post-Einsteinian Physics and Literature: Toward a New Poetics." *Mosaic: A Journal for the Interdisciplinary Study of Literature*, vol. 22, no. 3, 1989, pp. 19–30.
- Cheah, Pheng. "Introduction Part II: The Cosmopolitical—Today." Cosmopolitics: Thinking and Feeling beyond the Nation, edited by Cheah and Bruce Robbins, U of Minnesota P, 1998, pp. 20–41.
- Davis, Rocío G. "Fictional Transits and Ruth Ozeki's *A Tale for the Time Being.*" *Biography*, vol. 38, no. 1, Winter 2015, pp. 87–103.
- Dögen, Kigen. "*Uji.*" *The Heart of Dögen's Shōbōgenzō*. Translated and annotated by Norman Waddelll and Masao Abe, State U of New York P, 2002, pp. 47–58.
- Fowler, Edward. The Rhetoric of Confession: Shishōsetsu in Early Twentieth-Century Japanese Fiction. U of California P, 1988.
- Fraser, Gordon. The Quantum Exodus: Jewish Fugitives, the Atomic Bomb, and the Holocaust. Oxford UP, 2012.
- Huang, Michelle N. "Ecologies of Entanglement in the Great Pacific Garbage Patch." *Journal of Asian American Studies*, vol. 20, no. 1, Feb. 2017, pp. 95–117. Irigaray, Luce. *Sharing the World*. Continuum, 2008.
- Kenower, Bill, video uploader. "Interview with Ruth Ozeki." *YouTube*, 14 Feb. 2014, https://www.youtube.com/watch?v=E8ZGRzgG0BU, accessed 5 June 2017.
- Koshy, Susan. "Minority Cosmopolitanism." *PMLA: Publications of the Modern Language Association of America*, vol. 126, no. 3, May 2011, pp. 592–609.
- Kragh, Helge. Quantum Generations: A History of Physics in the Twentieth Century. Princeton UP, 1999.
- Krips, Henry. "Catachresis, Quantum Mechanics, and the Letter of Lacan." Configurations: A Journal of Literature, Science, and Technology, vol. 7, no. 1, 1999, pp. 43–60.
- Lionnet, Françoise, and Shu-mei Shih. "Thinking through the Minor, Transnationally." *Minor Transnationalism*, edited by Lionnet and Shih, Duke UP, 2005, pp. 1–23.
- Matsunaga, Kyoko. "Before and after the Quake: Ruth L. Ozeki's Global Narrative in the Nuclear Age." *AALA Journal*, vol. 20, 2014, pp. 84–96.
- Miller, Sean. "The Work of Imagining Subatomic Particles in Early Quantum Mechanics." *Configurations: A Journal of Literature, Science, and Technology*, vol. 19, no. 3, 2011, pp. 357–83.

Hsiu-chuan Lee

- Ozeki, Ruth. All Over Creation. Penguin, 2003.
- —. "Confessions of a Zen Novelist." *Buddhadharma: The Practitioner's Quarterly, vol. 15, 2013, pp. 34*–39.
- ----. My Year of Meats. Penguin, 1998.
- —. A Tale for the Time Being. Penguin, 2013.
- Plotnitsky, Arkady. "Chaosmologies: Quantum Field Theory, Chaos and Thought in Deleuze and Guattari's What Is Philosophy?" Paragraph: A Journal of Modern Critical Theory, vol. 29, no. 2, 2006, pp. 40–56.
- Pollock, Sheldon., et al. "Cosmopolitanisms." Cosmopolitanism, edited by Carol A. Breckenridge, et al., Duke UP, 2002, pp. 1–14.
- Robbins, Bruce. "Introduction: Part I: Actually Existing Cosmopolitanism." Cosmopolitics: Thinking and Feeling beyond the Nation, edited by Pheng Cheah and Robbins. U of Minnesota P, 1998, pp. 1–19.
- Stanford Humanities Center, video uploader. "Novelist Ruth Ozeki Presents at the Stanford Humanities Center." *YouTube*, 29 Jan. 2014, https://www.youtube.com/watch?v=BnuWVJs9i3Y, accessed 5 June 2017.
- Suzuki, Tomi. Narrating the Self: Fictions of Japanese Modernity. Stanford UP, 1996.
- Ty, Eleanor. "'A Universe of Many Worlds': An Interview with Ruth Ozeki." *ME-LUS: Multi-Ethnic Literature of the United States*, vol. 38, no. 3, Fall 2013, pp. 160–71.
- The Wheeler Centre, video uploader. "Ruth Ozeki on Catastrophe, Thought Experiments and Writing as Performed Philosophy." *YouTube*, 13 Sept. 2013, https://www.youtube.com/watch?v=I0--yah7K7U, accessed 5 June 2017.