The Wenshan Review of Literature and Culture · Vol 18.2 · June 2025 · 1-21.
DOI: 10.30395/WSR.202506_18(2).0001

A Sundial and a Flower: Susan Glaspell's Philosophy of Science in *Tickless Time* and *The Verge*❖

Yi-chin Shih[*]

ABSTRACT

Conscious of her gender identity, Susan Glaspell (1876-1948), an American female playwright, novelist, poet, and journalist, often presents feminist ideas in her works and offers a feminist critique of society. This paper aims to understand Glaspell's philosophy of science through an analysis of two of her plays, *Tickless Time* (1918) and *The Verge* (1921). By focusing on the relationship between gender and science, this paper also seeks to propose a new interpretation of the two plays. The analysis first scrutinizes *Tickless Time* to expose its representation of gender bias in science and technology and then turns to *The Verge* to take a step further in suggesting the possibility of a new science. After a brief comparison between the two plays, the paper argues that due to Glaspell's feminist assessment and the failure of this new science, she indicates multiple perspectives as the way to examine science and explore the potential of both science and women.

KEYWORDS: Susan Glaspell, *Tickless Time*, *The Verge*, gender and science

❖ This paper is a partial fulfillment of the research project "Gender and Technology in Western Contemporary Drama" (NSTC-101-2629-H-032-001), which is subsidized by the National Science and Technology Council, Taiwan. The author expresses her gratitude for this financial support and would also like to thank the anonymous reviewers for their insightful suggestions and comments.

[*] Received: October 11, 2023; Accepted: October 15, 2024

Yi-chin Shih, Associate Professor, Department of English, National Changhua University of Education, Taiwan (yichin@cc.ncue.edu.tw).

日晷與花：蘇珊・葛列絲貝在《沒有滴答聲的鐘》與《邊緣》中的科學哲學❖

施懿芹*

摘　要

蘇珊・葛列絲貝（Susan Glaspell, 1876-1948）是一位美國女性劇作家、小說家、詩人與記者，她意識到自己的性別身份，常在作品中呈現女性主義思想並對社會進行女性主義批評。本篇論文目的在透過分析葛列絲貝的兩部戲劇作品《沒有滴答聲的鐘》（*Tickless Time*, 1918）與《邊緣》（*The Verge*, 1921）來了解她的科學哲學。藉由著重性別與科學的關係，本文試圖為兩劇提供新的詮釋方式。論文首先詳細檢視《沒有滴答聲的鐘》並揭示科學與技術中的性別偏見，隨後進一步轉向《邊緣》探討新科學的可能性。在對這兩部戲劇作品做比較之後，本文認為由於葛列絲貝的女性主義評估與新科學的失敗，她暗指需以多重視角的方式來檢視科學，如此能同時探索科學與女性的潛力。

關鍵詞：蘇珊・葛列絲貝、《沒有滴答聲的鐘》、《邊緣》、性別與科學

❖ 本篇論文是國科會專題研究計畫「西方當代戲劇中的性別與科技」（NSTC- 101-2629-H-032-001-）的部份研究成果。作者感謝國科會的補助，也感謝匿名審查者的寶貴建議與評語。
*本文 112 年 10 月 11 日收件；113 年 10 月 15 日審查通過。
施懿芹，國立彰化師範大學英語學系副教授 (yichin@cc.ncue.edu.tw)。

I. Introduction

As an American female playwright, novelist, poet, and journalist active at the beginning of the twentieth century, Susan Glaspell (1876-1948) shows awareness of her gender identity and often comments on social issues from a feminist viewpoint. She emphasizes the power of sisterhood in *Trifles* (1916) and the power of female creativity in *Alison's House* (1930), and she challenges the patriarchal structure of marriage in *Close the Book* (1917) and social conventions of femininity in *Woman's Honor* (1918). Without a doubt, Glaspell shows herself as a feminist of her time. The early twentieth century in the United States was full of feminist movements: American women finally gained the right to vote in 1920, and Margaret Sanger opened the first birth control clinic in New York in 1916. In addition, this period was one of great advances in human development; in particular, numerous technological inventions and scientific theories were devised, including the very popular telephone and the innovation of cinemas (Noe and Marlowe 1). Following Sigmund Freud's lectures in the United States in 1909, his theories of psychoanalysis and the unconscious were also widely popular (Noe and Marlowe 2). In such a historical context and with a long-standing interest in women and their affairs, Glaspell was inevitably drawn in her works to re-examine science from a feminist perspective.

From the late 1970s onwards, feminists began to approach science by putting women at its center, but they found that science is overwhelmingly male-focused because male scientists constitute a significant majority. They, therefore, began to question this male domination. For example, Gayle Rubin's "sex/gender system" helps explain why women remain on the outside of science (159). The sex/gender system means "the set of arrangements by which a society transforms biological sexuality into products of human activity, and in which these transformed sexual needs are satisfied" (159). In other words, on a biological basis, women are not intellectually inferior to men in the practice of science; instead, women are socially and culturally constructed as a group who should stay away from this field. Although there is no singular feminist theory, most feminists agree that the fallacy of biological essentialism contributes to the diverse inequities experienced by women (Pilcher and Whelehan 49). The exclusion of women from science based on biological identity turns science into a domain for men alone to express their masculine conception of intelligence.

Thus, science is gendered. It has focused on the needs and experiences of men, with the exclusion of women revealing its androcentric bias (Gardner 201). Therefore, the objectivity of science is questioned. In order to avoid bias and uncover sexist assumptions, the feminist approach encourages women to involve themselves in the philosophy and practice of science.

Glaspell's *Tickless Time* (1918) and *The Verge* (1921) both focus on science as a theme. While in *Tickless Time*, a male scientist (an astronomer) creates a sundial to search for truth, in *The Verge*, a female scientist (a biologist) creates new species of plants to look for knowledge, in particular a new species of flower named "Breath of Life." Therefore, the paper is titled after the sundial and the flower to emphasize the theme of science. Taking these two plays together as an intertextual critique of science, this paper seeks to understand Glaspell's philosophy of science through a close reading with a special focus on the relationship between gender and science. While *Tickless Time* clearly points out and criticizes the existing androcentric bias of science in a comic tone, *The Verge* explores the possibility of a new science, with a tragic ending. Although *Tickless Time* exposes the fallacy of androcentrism and confirms the importance of women's needs, *The Verge* does not suggest a need for a new science based only on women's value. These two plays convey an idea that the feminist critique of science is one of the possible scientific standpoints; however, any approach that grants ultimate authority or supremacy to a given group results in domination and oppression. The paper finds that rather than adhering to a single approach, Glaspell's philosophy of science acknowledges a diversity of standpoints and employs multiple perspectives to examine science and explore both its potential and that of women.

II. *Tickless Time*: A Male Astronomer and His Sundial

Premiered at the Provincetown Playhouse in 1918, *Tickless Time* was created by Susan Glaspell and her husband, George Cram Cook (1873-1924). This one-act comedy deals with the relationship between gender and science by centering around the invention of a sundial by the character Ian Joyce. Ian is designated in the cast list as "Who Has Made a Sundial" (Glaspell and Cook 80), so his identity as a scientist is emphasized at the very outset. He studies astronomy and invents a technical device, a sundial. Eloise, meanwhile, is designated as "Wedded to the Sundial" (80), which characterizes her as a

woman married to technology. The earliest meaning of science is "knowledge" (Williams 215), while technology is the "practical application" of science (249). More precisely, a sundial is a product of applying knowledge of astronomy, and inventing a sundial is thus a kind of technological act. Ian believes that using a sundial means having "a first-hand relation with truth" (Glaspell and Cook 81); so, in order to foster this relationship with truth, Ian and Eloise replace their clocks with his invention. The humor is derived from Eloise's realization of how inconvenient it is for day-to-day life when there is no clock and the sundial tells sun time correctly for only four days of the year. With a connotation of joy and cheer in their last name, the Joyces indeed bring laughter to the audience. While Ian hilariously buries and unburies both clocks and his sundial, Eloise entertains with her hesitation as to whether she should follow her husband in using the sundial or accept her need for clocks.

Science has been gendered as masculine and considered sexist, and so too has technology. Judy Wajcman observes, "Technology, like science, is seen as an instrument of male domination of women and nature" (194), and *Tickless Time* manifests this statement by showing Ian's intention of dominating both nature and Eloise through his technological creation. Indeed, Ian shows a domineering attitude in his practice of science. Proudly displaying his device to his wife, he claims, "Eloise, getting this [the sundial] right has been a symbol of man's whole search for truth—the discovery and correction of error—the mind compelled to conform step by step to astronomical fact—to truth" (Glaspell and Cook 81). For him, the sundial he has created stands for "truth and nature," while clocks indicate "falsity and artifice." He further asserts, "When you take your time from a clock you are mechanically getting information from a machine. You're nothing but a clock yourself" (81). Seeing clocks as "standard time," "not true time," and "symbolizing the whole standardization of our lives" (82), Ian is satisfied with his new invention as a better way of understanding nature and truth. Moreover, he even believes he can "fix up the sun" (87): his sundial can tell sun time correctly for only four days a year, so Ian designs a means of determining time, namely, to correct the sun. Although he is proud of his ability to correct nature with such a sophisticated scientific diagram, the diagram, ironically, is seen as a "snake" by others (87), a cunning trick intended to mislead.

The way Ian seeks to control nature is similar to the way he treats his wife, that is to say, in an arrogant, coercive, and sexist manner. Having won Eloise

over to living with nothing but truth, Ian buries all the clocks but retains the sundial he has created. In response to Eloise's fear of tickless time—the silence of the sundial—he regards her as a little girl and replies, "You will grow, Eloise. You are growing" (Glaspell and Cook 83). From Ian's perspective, women know neither science nor truth, so Eloise must follow his instructions. Even when Eloise cries out for a clock, saying, "I want a little clock to tick to me!" (88), Ian still maintains his lofty attitude as a male commander and continues to say, "You will grow, dearest" (88). His bias is exposed again when Eloise asks him what truth is. Ian replies, "The mind of man" (87). Since he considers Eloise a young, naive girl, his answer of "the mind of man" in fact means "the minds of males." Moreover, Wajcman points out that "[m]en affirm their masculinity through technical competence and posit women, by contrast, as technologically ignorant and incompetent" (201). In this way, Ian gains and maintains his sense of masculinity through his astronomical knowledge and application of science, whereas Eloise is feminine, or feminized, because of her lack of scientific knowledge and technological competence. Ian's scientific belief is founded on his personal preference rather than empirical evidence; therefore, his invention of the sundial illustrates a science that is male-centered, biased in favor of men, and lacking objectivity.

Eloise does not have sufficient scientific knowledge to earn Ian's respect, but she actively uses technological products, both the sundial and clocks, and judges the function of technologies based on her needs and everyday practice. In other words, "women can and do actively participate in defining the meaning and purpose of technologies" (Wajcman 200). Although the sundial represents truth due to the first-hand relationship with nature it signifies, Eloise finds it hard to follow this truth since the sun time and clock time are different by nineteen minutes and twenty seconds. She will be late for appointments or other arrangements by almost twenty minutes, according to the standard clock time. For Ian, the sundial is his invention and the expression of his masculinity, while a clock is "something agreed upon and arbitrarily imposed upon us" (Glaspell and Cook 82). However, for Eloise, every different clock she has possesses a different meaning. She is not willing to bury their cuckoo clock because it is a wedding gift from her best friends, another couple, Alice and Eddy. In order to remember her grandmother, Eloise similarly refuses to bury her grandmother's clock. Unable to "see" truth and "wear" truth as an ornament, she wants to keep her watch. Because trains do not run by the sun, she wants to have an alarm

clock to remind her of the time. Without a clock, she cannot be on time if she has an appointment with her dentist. If the sundial symbolizes truth and the clock users are all wrong, Eloise claims, "It's just that it's a little hard to be true in a false world" (83). Truth does not make her life easy but rather difficult.

In addition to Eloise, the play further emphasizes women's agency in actively defining technology, rather than their subjection to it, through another character, Annie. Also confused by Ian's great invention, Annie, the Joyces' maid, cannot see how the sundial will help her to time the cooking of dinner. Annie is designated as "Who Cooks by the Joyces' Clock" (Glaspell and Cook 80). Without a clock to cook by, Annie loses her identity. After she learns that her alarm clock has been buried in the garden by her employer, Ian, she wonders, "Buried? My clock buried? It's not dead!" (86). Subsequently, in order to find her new identity as the maid "who cooks by the Joyces' sundial," Annie has to learn how to cook by the new device. Pot in hand, she dashes in and out of the garden in which the sundial is located to check the sun time in order to time the dishes she is preparing. Cooking by sundial is more than her patience can deal with, providing a source of great humor to the audience. When she is ready to give up, the sound of the alarm clock suddenly rings out from its grave. This, the funniest moment in the play, pushes Eloise to dig the clocks up. Annie is wildly delighted to see her clock again and cries out, "[*Sees the alarm clock; with a cry of joy.*] My clock! My clock! [*Overcome with emotion.*] Oh! My clock! My clock! Can I take it in the house to finish dinner?" (89). The exaggeration of Annie's excitement after she gets her clock back is intentional: it mocks the uselessness of a scientific device introduced without any consideration of women's day-to-day needs.

The comic effect lies in the repetition of burying and unburying the clocks and the sundial, particularly given that the sundial represents truth. After Eloise digs up an alarm clock and gives it to Annie, Ian buries his sundial instead. Eloise suddenly becomes dejected after seeing the sundial buried. The stage directions suggest that witnessing the sundial's burial is like attending a funeral: "ELOISE *and* IAN *sit there on either side of the grave, swaying a little back and forth, as those who mourn*" (89). Ian's sundial is buried, and his masculinity is buried, too. Faithful to her femininity in obeying her husband, Eloise instantly changes her mind and decides to dig up the sundial and rebury the clock. The climax of the play comes when Annie, having had enough of the back-and-forth, finally announces her resignation. Ian and Eloise are both stunned. It is

Alice who reacts to Annie's decision by exclaiming, "Oh, this is madness. What does any of the rest of it matter if you have lost your cook? [*To* IAN.] Eloise can't do the work! Peel potatoes—scrub. What's the difference what's true if you have to clean out your own sink? . . . Eloise, stop fussing about the moon and stars! You're losing your cook!" (Glaspell and Cook 90). Ian and Eloise's main concern turns from living with truth to keeping their maid. Because of his lack of understanding of women's needs, Ian's wish to live with his invention becomes a joke.

With regard to women and technology, "the division of labor by sex can be particularly useful in providing an understanding of why men and women relate to technology in different ways" (Morgall 122). Traditionally, it is believed that men are breadwinners, so they work in the public sphere and have high technical skill; women, conversely, are housewives, restricted within the private sphere and engaged in housework. In this light, the sexual division of labor explains Ian's ignorance of women's needs in the private sphere and the immediate reason for women's exclusion from the public sphere.

In addition to the sexual division of labor, some feminists believe that the notion of standpoint explains men's and women's different views of science according to their different social positions (Pilcher and Whelehan 163). Men are a dominant group, so their perspective is "hegemonic" (164). Although women are an oppressed group, their perspective is in fact crucial for social change and liberation (164). Sandra Harding theorizes the standpoint of women based on Hegel's interpretation of the master/slave relationship, as he concludes that the standpoint of the slave provides a more complete view than the distorted perspective of the master (149). Associating the master/slave relationship and the men/women relationship gives Harding a foundation upon which to declare that women's standpoint (like the slave's) gives a more complete and less biased view (149). Furthermore, this special standpoint makes women "epistemically privileged" (Saul 240), which means that the non-evidential value of women's experiences and their daily practice offers them an advantage and the privilege of examining male-centered science and, further, of improving science. Alison Jaggar also believes that the position of women in society "gives them a special epistemological standpoint which makes possible a view of the world that is more reliable and less distorted than that available either to capitalist or to working-class men" (370). Therefore, because women's inferior

social status offers them a less distorted perspective, Eloise, Annie, and Alice are able to notice problems when the sundial is used in practice.

By emphasizing the importance of women's domestic labor and their practical use of technological products, *Tickless Time* presents a feminist critique of science. At the end of the play, facing Annie's resignation, Eloise stands "like a monument" without reaction (Glaspell and Cook 90). Alice, meanwhile, orders Eddy to chase after Annie while she digs up clocks. At this point, Ian suddenly realizes the importance of their cook, so, irritated by the inefficiency of the digging up of the clocks, he disinters an alarm clock by himself and gives it to Annie. Feeling his sense of masculinity again wounded as a result, he retrieves a suitcase and indicates his intention to leave. It is easy for the audience to guess that Eloise will bury the clocks and dig up the sundial again to show her love for Ian; after all, the comic effect of the play lies in this repetition. Nevertheless, at this point, Mrs. Stubbs, a neighbor of the Joyces, comes to ask for the time. She then breaks the cycle by saying, "Well, I say: let them that want sun time have sun time and them that want tick time have tick time" (91). The play subsequently ends with Annie announcing that dinner is ready. Compared with Ian's intention of searching for truth, women's concerns may appear relatively trivial, such as Eloise's worry about being late for appointments or Annie's trouble with timing her cooking. *Tickless Time* nonetheless makes fun of androcentric bias in science, especially its inherent intention of dominating nature and women, while at the same time highlighting women's daily experiences and needs. Women's value in science may be emotional, but it provides them with a vantage point from which to review the field.

Tickless Time presents a feminist critique of science by challenging its androcentric bias and asserting the importance of women's needs and experiences. If Ian were a woman, however, would science be different? Can women's less distorted viewpoint allow them to establish a new mode of science without gender bias? By telling the story of a female scientist and her ambition of creating a whole new species of plants through a new science different from male-centered science, *The Verge* is seen in this paper to form an intertextual link with *Tickless Time* that furthers and complicates the gender issue in science and allows us to comprehend Glaspell's philosophy of science.

III. *The Verge*: A Female Biologist and Her Plants

Unlike *Tickless Time*, which was written by Glaspell and Cook together, *The Verge*, written individually by Glaspell, may more directly illustrate her personal critique of science. Premiered at the Provincetown Playhouse in 1921, *The Verge* is Glaspell's "most misunderstood play" (Noe 130). When critics analyze the play, the relationship between science and gender is seldom discussed. As one of few female scientists on stage, however, Claire Archer and her ambition for science cannot be overlooked. According to stage directions, Act One takes place in a greenhouse, which is also Claire's laboratory, and a strange vine catches the audience's attention (Glaspell 230). Similar to the noticeable sundial positioned "*to the left of the center of the stage*" in *Tickless Time* (Glaspell and Cook 80), this strange plant is placed in the spotlight, where "[*n*]*othing is seen except this plant and its shadow*" (Glaspell 230). *The Verge* highlights the issue of science immediately after the curtain rises, and the development of the plot subsequently centers on Claire's botanical experiment with a new species of plant, Breath of Life. Claire's experiment is not just an attempt to create a new species; rather, she is testing new concepts and methods to transcend the limitations of existing science. In short, she aims to establish a new science. A close reading of the play finds that Claire's new science is based on the experience of women, a mutation theory, and a feminine language. Finally, with the blossoming of Breath of Life, Claire's new science succeeds.

Due to her fear of being restricted within stereotypes of femininity, Claire expects her new species of plant to be free from any form and pattern. Praised and called "the flower of New England" (Glaspell 235), Claire does not like the title because she believes that New England men are the ones who make the laws and mold the American mind (235). She retorts, "We need not be held in forms moulded for us. There is outness—and otherness" (235). Accordingly, when she imagines her new species of plant, she hopes that the specimens "go mad—that life may not be prisoned" (240) and that they are "alien," "outside," and examples of "otherness" (246). Claire is expected to be "a refined woman" (235), but she is not. Flirting with Dick and engaging in an affair with Tom, she is not faithful to her second husband, Harry. She even claims, "All I ask is to die in the gutter with everyone spitting on me" (259). She does not want her plants to be beautiful, sound, or better than existing ones but rather to be "new" and go "over the edge" (246). When Adelaide, Claire's sister, tries to persuade

her to stop her experiment and return to her family, Claire replies, "[W]hy need I too be imprisoned in what I came from?" (249). It is clear that Claire feels burdened by social conventions of femininity, and her feminine experience motivates her to perform her experiment. Obsessed with breeding an entirely new form of plant, Claire is expecting the concomitant possibility of a new form of woman.

Unfortunately, as a female biologist, Claire finds her identity scorned by Harry and Adelaide. Harry believes that taking care of plants and flowers is "an awfully nice thing for a woman to do" (Glaspell 236), but experimenting on them is masculine and a job for men. He remarks to Dick, "I suppose a woman who lives a good deal in her mind never does have much—well, what you might call passion" (237). Harry thinks that a refined woman should not have passion, and certainly not passion for science, because passion is not womanly. Science being conducted by women is "unsettling" (236), he claims: "What is the good of it, anyway? Suppose we can produce new things" (236). Also troubled by Claire's experiment in creating new species, Adelaide emphasizes the importance of unity, order, and harmony in society, stating, "What I think is, Claire has worked too long with plants. . . . What we need is unity" (258). What Adelaide means is that people should be satisfied with their position in society, for example as a good mother, and that anything new or different destroys the unity of society; thus, she tells Claire, "You are really a particularly intelligent, competent person, and it's time for you to call a halt to this nonsense [scientific experiments] and be the woman you were meant to be!" (248). Neither Harry nor Adelaide can accept Claire's identity as a scientist as adequate reason for her taking a job that does not belong to a woman. Claire disrupts unity. She is an unusual woman. She threatens the unity that the convention of sexual division of labor builds up.

It is important to note that Claire breeds hybrid plants by cross-fertilizing specimens to produce radically new species, an experiment that diverges considerably from traditional Darwinian theory. Claire even challenges this theory; Kristina Hinz-Bode, explaining the significance of Claire's research, notes that "what underlines her scientific experiments is not an idea of evolution patterned along the lines of Darwinian thought, but a concept of species development based on the mutation theory . . ." (172). Because "Darwin attributes evolutionary development in human beings almost exclusively to male activity" (Okruhlik 135), evolution theory is gendered masculine and is

usually criticized as having an androcentric bias. Darwin's observations rely mainly on male activity, but his theory turns out to be a manifestation of biological determinism (Kohlstedt and Jorgensen 267), which affirms the superiority of men and the inferiority of women because of their physiological and physical differences. Darwin's theory is then supported by other scientists asserting "male mental superiority" (270), and this sexist theory becomes fundamental when discussing "women's nature" (267). Thus, the nature of women is believed to be mentally and physically inferior, and this belief is allegedly proven by science.

Therefore, what Claire does is not simply to create a new species; rather, she symbolically tries to create a new mode of science, distinguished from male-centered science. Abandoning Darwin's ideas of natural selection and survival of the fittest, Claire does not expect her plants to be "better" at surviving as long as they are "new," asserting: "They may be new. I don't give a damn whether they're better" (Glaspell 245). Elizabeth, Claire's daughter, believes that the purpose of Claire's experiment must be to make plants better at adjusting to their environment; otherwise, it is nonsense to do such research and even goes against God. "Unless you do it to make them better—to do it just to do it—that doesn't seem right to me" (247), Elizabeth declares. Contrary to Darwin's evolutionary belief in natural selection, Claire intends to create something new artificially and arbitrarily. Adelaide is worried about Claire's radical approach, as she indicates when she says, "There's something—not quite sound about making one thing into another thing" (258). Harry signals the same concern by saying, "But there's something about this—changing things into other things—putting things together and making queer new things—" (236). Because of Claire's radical method and intention to breed strange plants, her experiment in producing life is seen as "mysterious" (234) by Dick, "wrong" (246) by Elizabeth, and "not quite sound" (258) by Adelaide. Counter to traditional beliefs that science brings improvement and progress, Claire's plants are an experiment in the possibility of a new science.

Claire's laboratory symbolically represents a womb that produces the life of new plants and a new science. Both Elizabeth and the plants are Claire's experiments, metaphorically and practically, but Claire does not want to raise them to be better; instead, she hates Elizabeth for being a cultivated woman and detests her plants for growing according to an old pattern. Elizabeth is the daughter of Claire and her first husband. When Dick compares Elizabeth with

Claire's plant experiment, Claire's research assistant Anthony rejects the comparison by saying, "Her daughter is finished" (Glaspell 242). An experiment is a scientific procedure to test a hypothesis without being sure in advance of the result. If Elizabeth is an experiment, she is indeed finished because the result of the experiment has been confirmed: she is a "well built, poised, cultivated" and "mature" seventeen-year-old woman (243). Her father is a portrait painter, an artist who seeks to represent a person's appearance realistically in a painting. With no space for free creation or innovation while painting, a traditional portrait painter aims to display the "likeness" of the person. Claire's preference is for newness and difference rather than likeness. This is why when Adelaide asks her why she does not like Elizabeth, she replies, "She's just like one of her father's portraits" (248).

It is obvious that Claire does not like Elizabeth, but she clearly loves David, her son with Harry, an aviator. Claire marries Harry because she thinks he is "the man of flight" (Glaspell 240). While she is pregnant with David, she takes several airplane trips with Harry and flies high in the sky. David thus symbolizes flying and freedom to Claire; more importantly, he also represents difference. Unlike most children, David is sick. He dies when he is just four years old. Claire likes David's "abnormality" in this respect, which leads her to say, "I love him. Why should I want him to live?" (252). If Elizabeth, David, and the plants are all Claire's experiments, she, flying in the face of traditional masculine science, which aims at improvement, expects them to be extremely new and different rather than beautiful or better. Claire directly expresses her "abnormal" preference in her science.

Claire's experience of being restricted within traditional femininity motivates her to conduct tests in search of a science without regulation and without consideration of Darwin's evolutionary theory. In addition, language provides another space for experiments in her new philosophy of science. Male-centered scientific discourse depends on logical relationships, so female relationships of fluidity are easily excluded. Hence, for feminists such as Lucy Irigaray and Hélène Cixous, "scientific theories themselves are read as 'texts' or 'narratives' in order to tease out their covert biases and ideologies" (Gardner 202); therefore, the fundamental problem of gender bias in science lies in "the 'male' language of science itself" (202). "Feminine" language becomes a way to reject the domination of patriarchal language, so Claire's fragmented sentences and illogical repetitions symbolize liberation from scientific

discourse. Marcia Noe argues that Claire's language represents *l'écriture féminine*, which is "fluid, nonlinear prose, characterized by broken syntax, repetition, multiple voices, long, cumulative sentences, embedded clauses, parenthetical assertions and other disruptions of traditional prose style" (133). In other words, feminine language articulates the ineffable in the existing, masculine language, thus lacking conventional grammar, patterns, and coherence, and instead focusing on uncovering hidden meanings within language. Claire's intention to break out of male logical discourse is strongly apparent, as she declares, "Stop doing that!—words going into patterns;/ They do it sometimes when I let come what's there./ Thoughts take pattern—then the pattern is the thing./ But let me tell you how it is with me . . ./ All that I do or say—it is to what it comes from,—/ A drop lifted from the sea" (Glaspell 255). Annoyed by fixed meanings and patterns in language, Claire responds in an opposing manner: her language is fluid, polyphonic, and nonlinear with a broken syntax. In short, her language is feminine. Unable to understand her, Harry believes Claire has "the most preposterous way of using words" (251).

When the plant named Breath of Life succeeds, Claire finally succeeds in creating otherness. Harry says he has never seen such a flower before and calls it a "novelty" (Glaspell 263). Dick admires the "new" form of it (263). Tom is speechless on seeing the flower. They cannot describe the flower in detail because it is beyond what language can describe. Anthony finds it is both "stronger" and "more fragile" than others (262). In this, the flower is unusual: it is beyond binary thinking. Breath of Life breaks patterns, which symbolizes Claire's liberation from the cage of her gender role. It is both stronger and weaker than other flowers, which disproves Darwin's evolution theory. It is beyond words because it cannot be described in patriarchal language. Overall, Breath of Life exactly manifests the viability of Claire's new science.

Claire's horticultural accomplishment represents a new model of science, but the success of Breath of Life paradoxically symbolizes the failure of the model. Claire is dejected at the success of Breath of Life. When a new species is created, it has in the process fallen into another pattern even though the purpose of its creation was to get rid of a pattern. Claire laments, "Breath of the uncaptured?/ You are a novelty./ Out?/ You have been brought in./ A thousand years from now, when you are but a form too long repeated,/ Perhaps the madness that gave you birth will burst again,/ And from the prison that is you will leap pent queernesses/ To make a form that hasn't been—/ To make a

person new./ And this we call creation" (Glaspell 263). Claire recognizes that all her efforts have been in vain and that her very experiment was destined for failure from the beginning. Barbara Ozieblo claims that Claire's achievement is "ambivalent" because "any organism is condemned to repetition and stagnation unless it continually overcomes itself" (116). Noe explains that Claire realizes "she is trapped by forms, for, no matter how hard she tries to break outside the old forms, all she gets is another form, one that will seem revolutionary for a time but will ultimately become as confining as the one from which it came" (139). Claire is caught in this dilemma herself. The success of Breath of Life symbolizes that Claire is trapped in another prison or even, tragically, indicates that Claire has never liberated herself at all.

The last straw for Claire is the moment when she detects Tom's hypocrisy: he is just like the other men who want to keep her as their possession. Unlike Harry, who cares more about eating eggs with salt than Claire's experiment, and unlike Dick, who simply enjoys a short romance with Claire, Tom seems to be Claire's soulmate. He listens to her with full attention and understands that Breath of Life is Claire's own breath of life. After the simultaneous success and failure of her new species, Tom changes his plans from leaving for India to staying with Claire. Gradually revealing his sense of possession of Claire, he tells her, "I love you, and I will keep you—from fartherness—from harm. You are mine, and you will stay with me" (Glaspell 265). He continues, "I can keep you. I will keep you—safe" (265). Powerfully afraid of being caged and struggling with the word "safe," Claire suddenly loses her temper and chokes him with her hands. While she is killing Tom, she says, "Oh, gift! Oh, gift!" (266): death is the gift that she gives him. Based on her eagerness for breaking patterns and regulations, one may understand that for Claire, destruction starts a new life. She kills Tom first, and then she kills Breath of Life and all of her plants by destroying the ventilation of the greenhouse with a revolver. Death is also a gift that Claire gives her plants, allowing them to be reborn. However, it is only God who has the power to revive Tom and the plants. Claire finally begins to fantasize her nearness to God. *The Verge* thus ends when Claire loses her mind, becomes hysterical, and firmly declares, "Nearer . . . my *God*" (266).

IV. *Tickless Time* and *The Verge*: Gender and Science Reconsidered

While *Tickless Time* and *The Verge* share the same theme, they differ greatly in terms of style: one is a comedy, whereas the other is a tragedy. Claire's experiment ultimately fails, but her courage to break convention and tradition shines brightly throughout the play. Driven by a desire to escape the confines of patriarchal society and courageous enough to stand out in the male-dominated science, Claire challenges not only herself but also the norms of her era. She tries hard to break free of paradigmatic rules, but ironically winds up entrapped by her own experiment. Claire's final hysteria seems like a form of redemption, rescuing her from the world she perceives as a cage and liberating her into a spiritual realm. In contrast to the tragic tone of *The Verge*, *Tickless Time* is humorous and even farcical, particularly in its repeated burying and unburying of the sundial and clocks. It is clear that the play offers a feminist critique by criticizing and ridiculing Ian's male-centered scientific belief. Different from *The Verge* written by Glaspell individually, *Tickless Time* is co-authored by Glaspell and Cook. Although it may be difficult to determine which playwright has more influence on the play, the critique of male-centered science in *Tickless Time* aligns consistently with Glaspell's longstanding focus on women's issues. Judith E. Barlow observes that Glaspell and other female playwrights of her time sensed "a covert strain of antifeminism" among male playwrights, so "[h]umor was safer" (290). Therefore, a satirical comedy is a safer avenue for Glaspell to offer a feminist critique without irritating her co-author, and for Cook to avoid direct engagement with feminism.

Tickless Time confirms the importance of women's value for science, but if women's value becomes the ultimate principle of a science, that is to say, creating a "woman's science," *The Verge* indicates the potentially tragic result through the dilemma that Breath of Life represents. Thus, the failure of such a woman's science deserves further discussion. First, reading *The Verge* and *Tickless Time* together, one may easily tell that despite the generalizing idea of women's inferiority inherent in the sex/gender system, the experiences of women in the two plays are very different. Claire, coming from upper-class society, is intelligent and does not need to perform domestic labor. Conversely, Annie, coming from a working-class background, must make a living by cooking and doing housekeeping. Claire obviously despises the responsibility of being a wife and mother, but Eloise remains a dutiful wife. Because of their

diverse social and cultural backgrounds, the differences between those women make it difficult to generalize as to the same value and accordingly hard to propose a new science founded on that value. Furthermore, the essence of women's values is questionable. While Wajcman explains the relationship between women and technology, she finds a fundamental problem in the idea of "a technology based on women's values" (194). There is no such idea, she finds, because a belief in women's values is a false belief in "the unchanging nature of women" (194). The so-called women's values, or what Wajcman calls the "inner essence of womanhood" or "femininity," are socially and culturally constructed (194). They are always under reconstruction and deconstruction. Thus, she claims, "The pursuit of a technology based on women's inherent values is therefore misguided" (194). There is no science based on women's values for the same reason.

While the relationship between gender and science has become a popular topic since the late 1970s, some feminists, instead of asserting a new science, prefer to detect or rectify errors in the development and practice of science. Catherine Gardner reiterates that the aim of a feminist philosophy of science "is not to create some kind of new science, but rather one that avoids the failures of the traditional model of science while working for social change" (202). Helen E. Longino, in her famous essay "Can There Be a Feminist Science?", similarly rejects a feminist science. Like Wajcman, Longino believes that such a science misleads people into believing that "women have certain traits" (252). The naming of a "feminist" science also annoys some women in science because "it is simply new clothing for the old idea that women can't do science" (252). Therefore, Longino provides the following insight: "I want to suggest that we focus on science as practice rather than content, as process rather than product; hence, not on feminist science, but on doing science as a feminist" (253). Rather than asserting a feminist science, every scientific researcher should be aware of feminist consciousness. Evelyn Fox Keller holds a similar opinion. From an examination of biology in general and some specific cases, she concludes that "we need not rely on our imagination for a vision of what a different science—a science less restrained by the impulse to dominate—might be like. Rather, we need only look to the thematic pluralism in the history of our own science as it has evolved" (Keller 245). While Longino underlines the practice and process of science, Keller looks more to pluralism to liberate the potential of science. Through *Tickless Time* and *The Verge*, Glaspell, at the

beginning of the twentieth century, seems to engage in call and response with the feminist study of science fifty years later.

Finally, one further issue must be discussed. These two plays both convey the idea that women occupy a better position than men to point out errors in science, especially androcentric bias, but if there is no so-called essence of women's values, do women still have a better viewpoint on science? Moreover, if women's status as "outsiders" or "the other" offers them a better perspective with which to analyze science, does this mean that women must remain at the margins to keep their privileged perspective? Patricia Hill Collins's standpoint theory, derived from her Black feminist thought, may shed some light on the matter. Harding's theory, based on Hegel's interpretation of the master/slave relationship, suggests that the more power the master has, the more distorted his perspective is. If so, a more oppressed group should have a more complete and undistorted perspective, and African American women's standpoint should be the least distorted since they are one of the most oppressed groups, suffering from interlocking oppressions of racism, sexism, classism, and other forms of discrimination. Nevertheless, Collins claims, "it is not the case" (270).

Eloise, Annie, and Claire may have a less distorted view of science, which is particularly influenced by patriarchy, but their culturally and socially inferior positions still constrain their perspectives. Collins believes that each group in society represents one standpoint and that each standpoint constitutes a part of knowledge. Multiple and diverse standpoints thus provide the way to build knowledge. As Collins explains,

> Each group speaks from its own standpoint and shares its own partial, situated knowledge. But because each group perceives its own truth as partial, its knowledge is unfinished. Each group becomes better able to consider other groups' standpoints without relinquishing the uniqueness of its own standpoint or suppressing other groups' partial perspectives." (270)

Collins's comment on standpoint theory suggests that while the marginal position of women in society may offer them a better perspective, their standpoint is partial and limited. They need to take into consideration the standpoints of other groups or subgroups, such as groups of women from different cultural and social backgrounds or different ethnic groups. In other

words, women do not need to remain on the margins but need to learn to accept different standpoints, which allow different interpretations and understanding.

In this light, one can claim that Ian's and Claire's experiments fail because they insist on their own standpoints without considering the perspectives of others. While Ian demands to use the sundial to directly relate to the truth of time, Claire is obsessed with abnormality and novelty to pave the way for a new science. As the former relies on a masculine scientific approach, the latter counts on a feminine one. Their viewpoints are both limited. Their standpoints on science represent only a part of the knowledge, so their scientific quests for truth are doomed to fail. Their failure manifests Glaspell's philosophy that science relies on a diversity of standpoints rather than a rigid, singular approach.

V. Conclusion

Overall, reading the two plays together as an intertextual critique of science and in light of the feminist philosophy of science, we might reasonably appropriate Longino's phrase of "doing science as a feminist" (253) to conclude that Glaspell is indeed "doing science, in theatre, as a feminist." Glaspell created these two plays at a time of major changes in scientific development. When feminists in the 1970s started to highlight the relationship between gender and science, Glaspell had already provided her feminist insight in her plays. While asserting the importance of women's perspectives, Glaspell denies an absolute value in science, even a woman's science. Her philosophy of science suggests the importance of multiple perspectives in examining science, by which the potential of both science and women may be explored.

Works Cited

Barlow, Judith E. "Susan's Sisters: The 'Other' Women Writers of the Provincetown Players." *Susan Glaspell: Essays on Her Theater and Fiction*, edited by Linda Ben-Zvi, U of Michigan P, 1998, pp. 259-300.

Ben-Zvi, Linda, editor. *Susan Glaspell: Essays on Her Theater and Fiction*. U of Michigan P, 1998.

Ben-Zvi, Linda, and J. Ellen Gainor, editors. *Susan Glaspell: The Complete Plays*. McFarland, 2010

Collins, Patricia Hill. *Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment*. Routledge, 2000.

Gardner, Catherine Villanueva. *Historical Dictionary of Feminist Philosophy*. Scarecrow, 2006.

Glaspell, Susan. *The Verge*. Ben-Zvi and Gainor, pp. 229-67.

Glaspell, Susan, and George Cram Cook. *Tickless Time*. Ben-Zvi and Gainor, pp. 80-91.

Harding, Sandra. *Is Science Multicultural? Postcolonialism, Feminisms, and Epistemologies*. Indiana UP, 1998.

Hinz-Bode, Kristina. *Susan Glaspell and the Anxiety of Expression: Language and Isolation in the Plays*. McFarland, 2006.

Jaggar, Alison M. *Feminist Politics and Human Nature*. Harvester, 1983.

Keller, Evelyn Fox. "Feminism and Science." *Sex and Scientific Inquiry*, edited by Sandra Harding and Jean F. O'Barr, U of Chicago P, 1987, pp. 233-46.

Kohlstedt, Sally Gregory, and Mark R. Jorgensen. "'The Irrepressible Woman Question': Women's Responses to Evolutionary Ideology." *Disseminating Darwinism: The Role of Place, Race, Religion, and Gender*, edited by Ronald L. Numbers and John Stenhouse, Cambridge UP, 2001, pp. 267-93.

Longino, Helen E. "Can There Be a Feminist Science?" *Women, Knowledge, and Reality*, edited by Ann Garry and Marilyn Pearsall, Routledge, 1996, pp. 251-63.

Morgall, Janine Marie. *Technology Assessment: A Feminist Perspective*. Temple UP, 1993.

Noe, Marcia. "*The Verge*: L'Écriture féminine at the Provincetown." Ben-Zvi, pp. 129-42.

Noe, Marcia, and Robert Lloyd Marlowe. "*Suppressed Desire* and *Tickless Time*: An Intertextual Critique of Modernity." *American Drama*, vol. 14, no. 1, 2005, pp. 1-14.

Okruhlik, Kathleen. "Feminist Accounts of Science." *A Companion to the Philosophy of Science*, edited by W. H. Newton-Smith, Blackwell, 2001, pp. 134-42.

Ozieblo, Barbara. "Suppression and Society in Susan Glaspell's Theater." Ben-Zvi, pp. 105-22.

Pilcher, Jane, and Imelda Whelehan. *Fifty Key Concepts in Gender Studies*. SAGE, 2004.

Rubin, Gayle. "The Traffic in Women: Notes on the 'Political Economy' of Sex." *Toward an Anthropology of Women*, edited by Rayna R. Reiter, Monthly Review Press, 1975, pp. 157-210.

Saul, Jennifer Mather. *Feminism: Issues & Arguments*. Oxford UP, 2003.

Wajcman, Judy. "Feminist Theories of Technology." *Handbook of Science and Technology Studies*, edited by Sheila Jasanoff et al., SAGE, 1995, pp. 189-204.

Williams, Raymond. *Keywords: A Vocabulary of Culture and Society*. HarperCollins, 1988.

CONTRIBUTOR

Yi-chin Shih is Associate Professor in the Department of English at National Changhua University of Education, Taiwan. Her research interests encompass modern drama, women's literature, and cultural studies. Her articles have been published in *Journal of Modern Literature*, *The CEA Critic*, *The Explicator*, *Review of English and American Literature,* and others. Her publications include essays on notable female playwrights, such as Susan Glaspell, Alice Childress, Lorraine Hansberry, Caryl Churchill, Wendy Wasserstein, and Timberlake Wertenbaker.