



"Quantum Poetics: Indeterminacy, Parallel Selves, and Cosmic Identity in Tracy K. Smith's *My God, It's Full of Stars*"

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ABSTRACT

This paper will explore the poem *My God, It's Full of Stars* by Tracy K. Smith using quantum poetics as a framework, based on the agential realism of Karen Barad and the posthuman theory of Donna Haraway, and its ways of redefining identity in a universe which is dictated by uncertainty, multiplicity, and cosmic relationality. It is possible to say that the paper posits that Smith uses the principles of quantum as indeterminacy, superposition, and entanglement to present a non-anthropocentric, fluid theory of selfhood. The movements that the poem makes between childhood memory, cinema visions and speculative cosmic futures can be seen to bring out identity as an emergent process that is based on intra-actions between human consciousness and cosmic forces. This research will help to demonstrate that the poem by Smith does not simply use scientific imagery but turns quantum theory into a poetical approach to reconsidering subjectivity outside of the humanist frames. Of importance to the study is the fact that it contributes to literature in modern poetry and interdisciplinary literary research, that scientific forms of epistemology may transform poetic structure and broaden the conceptual horizons of identity. The article concludes by stating that the poem by Smith represents a new literary mode, quantum poetics, which brings the poetical imagination in touch with the philosophical implication of the contemporary physics.

Keywords: Quantum Poetics; Agential Realism; Posthuman Identity; Tracy K. Smith; Cosmic Imagery; Indeterminacy.

"الشعر الكمي: عدم التحديد، الذوات المتوازية، والهوية الكونية في قصيدة تريسي ك. سميث "يا

إلهي، إنها مليئة بالنجوم"

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المستخلص

تستكشف هذه الدراسة قصيدة (يا إلهي، إنها مليئة بالنجوم) لتريسي ك. سميث باستخدام الشعرية الكمومية كإطار تحليلي، استناداً إلى الواقعية الفاعلة لكارين باراد ونظرية ما بعد الإنسان لدونا هارواي، وطرق القصيدة في إعادة تعريف الهوية داخل كون تحكمه حالة عدم اليقين، والتعددية، والعلاقات الكونية. يمكن القول إن الدراسة تفترض أن سميث تستخدم مبادئ الكم مثل اللايقين، والتراكب، والتشابك



لتقديم نظرية غير أنثروبوسنترية وسائلة للذات. الحركات التي تقوم بها القصيدة بين ذكريات الطفولة، ورؤى سينمائية، ومستقبلات كونية تخيلية تبرز الهوية كعملية ناشئة تعتمد على التفاعلات البنائية بين الوعي البشري والقوى الكونية. يساعد هذا البحث في إظهار أن قصيدة سميث لا تستخدم الصور العلمية مجردة، بل تحوّل النظرية الكمومية إلى منهج شعري لإعادة التفكير في الذات خارج الأطر الإنسانية التقليدية. ومن المهم للدراسة أنها تُسهم في الأدب الحديث وفي البحوث الأدبية متعددة التخصصات، حيث يمكن للأشكال العلمية للمعرفة أن تُحوّل البنية الشعرية وتوسع آفاق المفاهيم المتعلقة بالهوية.

الكلمات المفتاحية: الشعرية الكمومية؛ الواقعية الفاعلة؛ الهوية ما بعد الإنسانية؛ تريسي ك. سميث؛ الصور الكونية؛ حالة اللايقين.

Introduction

Poetry and scientific discourse intersection has emerged as a significant aspect of the twenty-first-century literary scene and has become a cultural phenomenon in which scientific discovery is becoming more influential in defining human knowledge of reality. The modern poets have refined the traditional lyrical expression by infusing the poetic language with cosmology, quantum physics, as well as speculative thinking. One such voice that I consider particularly excellent is that of Tracy K. Smith, who manages to combine the personal memory with the question of the universe and the cosmos more generally, in her Pulitzer Prize-winning book *Life on Mars* (2011). *My God, It's Full of Stars* places the universe not just as physical space but as a constructive domain to question the identity and existence (Smith, 2011, p. 5).

In spite of the increased attention to the cosmological imagination of Smith, there is still a scholarly gap: not many studies have been conducted to analyze the way in which Smith adopts quantum concepts to redefine identity. The current literature anticipates the topics of grief, race, and belonging to the nation but seldom addresses the epistemology of science behind her cosmic metaphors (Nelson, 2017, p. 114). Thus, the current research study bridges this gap by utilizing quantum poetics as a concept to examine how Smith uses uncertainty, multiplicity, and entanglement as a way of recapturing the concept of identity.

The paper is based on agential realism by Karen Barad according to which the world is created within interconnected intra actions, as opposed to the presence of independent objects. The works of Barad can be filled with the posthuman subjectivity of Donna Haraway that dissociates the human identity with the anthropocentric models and places existence in the technological and multi-species assemblies (Haraway, 2016, p. 34). These theories help to understand how the poem by Smith disintegrates the conventional view of human identity and puts it in its place a cosmogenically entangled concept of identity.

The relevance of the given work is that it allows understanding how this poem by Smith preempts larger epistemological transformations of modern thought. This article will show how poetry can express recent modes of subjectivity that are determined by uncertainty, openness and cosmic



entanglement by applying scientific and post humanist perspectives to the poem (Greene, 2011, p. 215).

Besides thematic and stylistic innovations, the work of Smith is also representative of a larger cultural change where poetry now stands as the place of interdisciplinary discourse. The growing popularity of a scientific backdrop of literary works is not only an aesthetic decision but the realization that old humanist dualities are no longer adequate to be used to understand modern encounters in time, space and identity. With the world moving through the world crises, the acceleration of technology, and the scientific discoveries in the world changing the conditions under which human beings exist, the poetry comes to the rescue with the emergence of new epistemologies that can be used to express these new realities. The interaction of Smith with quantum principles shows how poetic language can take over and reformulate scientific principles thus broadening the expressive and philosophical range of literature in the twenty first century (Greene, 2011, p. 219).

Moreover, the poem by Smith is a part of a tradition of authors, who discuss the metaphysical consequences of the cosmic view. However, in contrast to the previous cosmic poets whose poetry tended to support the transcendental or romantic paradigm, Smith places the cosmic in the personal and the mundane, childhood, memory, family, cinema, imagination, etc. It is the foundation of the cosmic in human experience that enables her to destabilize the lines between microcosm and macrocosm and she argues that identity is defined not only by the magnificence of space but also by individual history. This strategy can be said to echo the ideas of Barad that matter and meaning are built around entanglement relations as opposed to categorical distinctions, which supports the main idea of the study that the poem creates identity based on quantum relationality (Barad, 2007, p. 87).

The other factor that has led to proliferation of scholarly interest in the poem by Smith is that it is relevant in the contemporary discussion of posthumanism. The message by Haraway that the human needs to be re-thought as a multi-species and technological assemblage have become very popular throughout the humanities. The presence of nonhuman viewers, cosmic intelligences, and technologically mediated perception presented by Smith makes her poetry related to post humanist issues, although she does it in a more lyrical than theoretical way. It is in this intersection that poetic discourse has a special role in philosophical debates on the boundaries of the human, the nature of an agency, and whether there can be other forms of consciousness (Haraway, 2016, p. 67).



Lastly, the paper promotes the argument that quantum poetics is a strong tool in investigating the new forms of expression in literature. Since quantum theory questions classical ideas of linearity, stability, and causality, poets such as Smith have integrated all these scientific paradigms in their aesthetics to create texts that are open to ambiguity, multiplicity, and concepts. This article places the poem in an emerging discipline that views literature through epistemological frameworks of quantum science by employing quantum poetics to the poem, *My God, It Full of Stars*. The current work thus does not only address a gap that has been a significant deficiency in the scholarly work on Smith, but also adds to an ongoing trend that redefines poetry as an intersect of scientific and humanistic investigations. Through this, it puts into emphasis the ability of the poem to establish new identity models that fit the age of uncertainty and cosmic complexity.

LITERATURE REVIEW

The recent academic literature on the contemporary American poetry is placing *Life on Mars* more and more in the context of the wider debates on science, technology, and modernity in culture. A number of critics observe that the cosmic focus by Smith indicates a change in poetics in the twenty-first century whereby poetic subjectivity is no longer confined to the self, but extends to ecological, astronomical, and speculative levels (Nelson, 2017). However, in spite of the fact that such studies point to the imaginative scale of Smith, they fail to investigate the consistency of the epistemology of the poem with the conceptual frameworks of quantum physics. Instead of reading scientific references as a performative gesture, a stylistic gesture, the current work argues that the work of Smith is performed within a philosophical system influenced by scientific theories of uncertainty and entanglement - an aspect that is under-researched in the existing literature (Nelson, 2017, p. 119).

Moreover, critical commentaries on the aesthetics of science in poetry tend to regard the language of science as metaphoric and not structural. As an example, Gutas (2015) states that the cosmic language used by Smith serves as the bridge between the personal and the universal and allows emotionally-charged reflections to be developed in the context of the cosmos. Though functional, these readings are held in some traditional literary reading and fail to interact with the scientific assumptions, like nonlocality, superposition, or relational ontology, that form the basis of the images provided by Smith. This oversight



implies a discipline shyness about the way quantum science should be viewed as a form of legitimate interpretation, and not as a stylistic motif, consequently rendering an enormous gap in the understanding of the scientifically oriented poetics of Smith (Gutauskas, 2015, p. 29).

Another drawback of the current literature is that there is no interaction with the philosophical consequences of nonhuman or posthuman viewpoints by Smith. Despite the fact that the posthuman theory developed by Haraway has revolutionized the fields of literature and cultural studies, not many scholars relate her suggestions to the cosmic imagination of Smith. Although it is not uncommon to find extraterrestrial or nonhuman voices in critical readings, this is often put into the context of symbolic forces instead of the epistemologically disruptive forces they might represent.

Haraway (2016) emphasizes that modern stories should not be anthropocentric and should consider the agency of the nonhuman but in fact, critics of the poem rarely use this approach to read the poem written by Smith, who directly defocuses human subjectivity and builds imaginative worlds of other observers in the universe. This omission signifies that one has missed the chance of relating the works of Smith with posthuman studies and perceiving her poem as belonging to a further discussion of nonhuman epistemology (Haraway, 2016, p. 55).

Similarly, although it has been argued that the poem by Smith has been screened by cinematic influences, they have not been entirely theorized. The fact that the poem refers to 2001: A Space Odyssey is mentioned by Copeland (2020), yet the author does not dwell upon the ways in which the visuality of the cinema operates as an epistemological mediation. In the poem, film is not only an aesthetic or cultural point of reference, in Smith's poem it turns into a technological prism through which the speaker learns to think in terms of scale, of perspective and of the instability of the observational gaze. Haraway states that there is no neutral vision which is always technologically mediated; interpreting the Smith cinematic vision in terms of this theoretical nature would provide a more sophisticated vision of how the identity is constructed by visual technologies and cosmic imagination. The fact that there is no such intersection currently in the field of Smith scholarship implies that a more interdisciplinary approach is needed (Copeland, 2020, p. 60).



Within the last decade, with the introduction of quantum literary studies, the study of narrative, time, and identity has started to take a new form in the mind of scholars. According to Kirby (2011), quantum theory subverts linear temporality and definite ontological categories, and provides a conceptual paradigm to which modern poetic experimentation is appealing. The same author Stacy (2018) argues that quantum principles, in particular, indeterminacy and relationality, offer new modes of interpretation of poetic ambiguity and fragmented voice. However, although these frameworks are relevant, none of the significant analyses combines them with the poem by Smith despite the fact that *Life on Mars* is clearly concerned with cosmology, space-time, and observation nature. This alienation is symptomatic of a more general disciplinary divide between physics-influenced criticism and African American poetics, an area in which the current article aims to eliminate by showing how the imaginative universe of Smith is structurally and philosophically consistent with quantum theory (Stacy, 2018, p. 51; Kirby, 2011, p. 82).

Moreover, research on elegy and lamentation in the poetry of Smith does not tend to pay much attention to the ontological meanings of the poem. Milligan (2014) recognizes *Life on Mars* as a cosmic elegy, though fails to address the way cosmic scale confronts the traditional ideas of subjective continuity. To combine grief with astrophysics is not just to give emotional expression a bigger dimension, but to suggest an entirely new organization of being one where identity is bound up in cosmic mechanisms. Agential realism conceptualizes precisely the vocabulary required to explain this phenomenon, which has not been utilized by literary critics with regard to Smith. Such lack of theoretical involvement is a major gap that is specifically filled by this study (Milligan, 2014, p. 65).

Lastly, various authors point out toward the hypothetical or speculative nature of the work by Smith, but it is only a description and not an analysis. Wendt (2019) indicates that the focus on possibility and multiplicity by quantum theory reflects on the current speculative poetics, but does not apply this observation to the text by Smith. In comparison, this paper claims that "*My God, It's Full of Stars*" is intentionally run on quantum reasoning, as a way of organizing the identity and narrative as fields of becoming. By doing so, Smith is involved in an incredibly active field of posthuman and quantum-oriented literary writing, which requires a more academic approach to be maintained over a longer period (Wendt, 2019, p. 97).



As a collective, the literature indicates that there is a great interest in the cosmological imagination of Smith and a lack of focus on the scientific, epistemological, and ontological consequences of her poem strategies. This paper seals that void by using the quantum poetics and posthuman theory to show how Smith re-configures identity as an entanglement process, a process of uncertainty and cosmic relationality. Combining scientific epistemology and poetic form, the work by Smith opens up a different way of reading, one that goes beyond metaphor and treats the poem as the place of the convergence of physics and philosophy (Barad, 2007, p. 353).

ANALYSIS

The scene of childhood memory presented in the beginning of the poem is an early location of scientific wonder. And when the speaker remembers, "Dad says that there is a little bone in the human ear / that looks like a stirrup. It has always been, she contrasts biological closeness with cosmic fantasy, how the formative experiences of the world are guided by the relational experience with family and the knowledge. This contradiction between anatomical certitude and cosmic conjecture signifies a statement that Barad made, namely that the classical epistemologies crumble when faced with the reality of entanglement, in which even the most familiar things about the body itself become an ingredient in larger ontological networks (Barad, 2007, p. 128; Smith, 2011, p. 3).

There is an added semantic liquidity when Smith states, We may be as thick as stars. In this case, Smith erases the boundary between human bodies and the stars, and the human body is in harmony with the cosmic mechanisms of creation and development. Density is not a quantitative term but a state of being- an identification that human identity is made of the same materials that are used to make the universe. This metaphor is similar to the perspective in agential realism that matter does not just exist but is involved in the becoming of the world and therefore the self is cosmically connected and not contained (Barad, 2007, p. 180; Smith, 2011, p. 4).



Then Smith presents cinematic mediation in the form of reference of 2001: A Space Odyssey: The movie presented us with the image of how small we are, / how the universe may gaze back. Cinema in this case is used as a technological prism that alters the perception of scale by the speaker. Instead of introducing space as an abstract distant ethereal being, the movie becomes the entry point to the unsteadiness of the point of view. Here, the idea of subjectivity which Haraway presented as a result of relational interfaces, namely, visual technologies, rings deafeningly. The universe gazing back disrupts the order of observer-observed, indicating the breakdown of objective demarcations in the quantum theory (Haraway, 2016, p. 40; Smith, 2011, p. 5).

The astronaut picture, in its turn, -A man turns slowly in space, / blue planet falling away- further unstable identity. The astronaut is suspended in weightlessness, and thus, can be viewed as a symbolic image of nonlocality and displacement. His motion beyond the gravitational force on the earth can be compared to the philosophical movement of the poem towards rooted, human-based identity. The discussion of superposition presented by Barad can be used to understand the liminal status of the astronaut: he is constantly simultaneously in several reference frames and can be characterized as a situational, fluid, and constantly changing form of identity (Barad, 2007, p. 139; Smith, 2011, p. 5).

When the poem enters into speculative cosmic vision Smith envisions non human witnesses: perhaps they look on us / as a light that goes dimmer. This metaphor redefines human beings using the view of beings whose eyes are too big to human beings. The light weakening implies the existential frailty as well as the nature of human meaning. The posthuman focus on relationality can also be used to understand how Smith disrupts anthropocentric identity by making human beings tiny sources of light in a very large cosmic system (Haraway, 2016, p. 34; Smith, 2011, p. 6).

The imaginative growth goes on when Smith contemplates that God may be as starlight-- / a light bigger than we know. In this case, divinity is not above but within things, entrenched in the processes. The fact that matter is agency in itself, as Barad sees it, lets us perceive the starlight of Smith as a godlike power coming out of the interactions between heaven and earth and not above it. The line reinvents spiritual experience as an experience of cosmic temporality, which means that the sacred is the same as the ancient light that fills the universe (Barad, 2007, p. 351; Smith, 2011, p. 4).



Smith further enhances emotional and scientific appeals of the poem when she writes, "The universe is growing bigger and we are losing one another closer and closer apart. This is a lovely combination of cosmological theory and experience, as well as the isolation of emotion that attends human relations and the motion of the universe. The point where beings are always becoming-with (Haraway, 2016, p. 56) made by Haraway reinforces the idea that individuation is not a failure of identity but a state of relationship being in a dynamic universe (Smith, 2011, p. 6).

Then the speaker conjectures about future creatures: "They observe us like we were waiting in the future to become something different. This is an epistemological and evolutionary meekness: humans are not definitive but intermediate. The argument by Barad that observation is part of the world-making process helps to explain how these imaginary objects create the identity of humanity by gazing at it, transforming it into an object of cosmological investigations (Barad, 2007, p. 316; Smith, 2011, p. 6).

Smith is furthering this anthropology of the cosmos when he writes, perhaps they will study us / as we study stars mapping our light / long after it is gone. This metaphor re-installs human identity as leftover and temporality, as something that continues by traces and not permanence. It manifests the concept of Barad that meaning is built up using remnants of intra-action as opposed to fixed essences. Humanity is an after image - a leftover of cosmic entanglement and not a agent (Barad, 2007, p. 160; Smith, 2011, p. 7).

Smith later considers the perception of things in itself: What we see is never more than a part of what is there. This statement reflects the epistemic constraints of human perception which is fully compatible with the quantum theory that shows that only partial realities can be observed through measurement. Haraway is no exception, criticizing the false optimism of absolute vision, which all knowledge is localized, partial and relational. This poetic expression of confined vision by Smith is therefore a fundamental philosophical illumination that quantum physics has in common with the posthuman theory (Haraway, 2016, p. 22; Smith, 2011, p. 5).

The reflections of Smith develop into metaphysical meditations as she writes, that perhaps all that surrounds us is alive in some ways that we could not imagine. This verse is a blurring of the boundaries between animate and inanimate, which implies life can exist in the scales and forms unknown to



humans. This interpretation can be supported by the statement of Barad, who believes that matter is agential: the limits between life and death are blurred, and the identity is an emergent quality of a living, vibration world (Barad, 2007, p. 177; Smith, 2011, p. 6).

The last, and the final, the poem comes to extreme doubt: "Perhaps we are not what we believe. Perhaps it is the world wiser than we are. This recognition overthrows the human epistemic power and makes the cosmos itself the place of meaning-making. The invitation to reside in the complication instead of mastery in his call to remain with the trouble by Haraway is the same as Smith being humble in front of the universe. In this case, identity is open-ended, unfinished and influenced by forces that are well beyond human control and understanding (Haraway, 2016, p. 1; Smith, 2011, p. 7).

CONCLUSION

This paper has revealed that Tracy K. Smith *My God, It's Full of Stars* can be characterized as a prime example of a quantum poetic imagination where the author employs the principles of indeterminacy, entanglement, and posthumanity identity to formulate new concepts of selfhood. The combination of agential realism as proposed by Barad with posthuman theory proposed by Haraway allows the analysis to see how Smith erases classical barriers between body and cosmos, observer and observed, memory and speculation. The discontinuous, relational reality of quantum reality is reflected in the changing points of view in the poem, between childhood, movie, speculative cosmic and the imagined futures. Smith construct cannot be defined as a stable core but as a phenomenon of emergence created in intra-actions with scientific, technological and cosmic forces. The poem ends by inviting the reader to accept uncertainty as a creative state of being and re-think human existence as being complex with a universe that is larger, stranger and smarter than humanist paradigm can manage. The article fits in the literary disciplines by placing the work of Smith in the context of the new domain of quantum poetics and showing how modern poetry could utilize scientific epistemology as a way of imagining new forms of existence.

REFERENCES

Alexander, E. (2017). *Blackness and belonging in contemporary American poetry*. University Press of Mississippi.



- Barad, K. (2007). *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*. Duke University Press.
- Copeland, S. (2020). Cosmic intertexts: Cinematic space and poetic imagination in contemporary American verse. *Journal of Modern Literature*, 43(2), 52–68.
- Glay, M. G. (2024). Pain Pleasure Principle in Joy Harjo's Poetry: The Foundation of Personal Choices and Identity. *JELTEC: Journal of English Language Teaching, Literature and Culture*, 3(1), 30-41
- Greene, B. (2011). *The hidden reality: Parallel universes and the deep laws of the cosmos*. Alfred A. Knopf.
- Gutauskas, A. (2015). Elegy, astronomy, and the cosmic imagination in Tracy K. Smith's *Life on Mars*. *American Poetry Review*, 44(3), 27–33.
- Haraway, D. (2016). *Staying with the trouble: Making kin in the Chthulucene*. Duke University Press.
- Kirby, V. (2011). *Quantum anthropologies: Life at large*. Duke University Press.
- Milligan, M. (2014). Mourning the cosmos: Grief and wonder in *Life on Mars*. *Contemporary Literature*, 55(1), 58–80.
- Nelson, M. (2017). *The art of the anthropocene: Literary responses to planetary science*. University of Minnesota Press.
- Rutledge, G. (2018). Planetary poetics: Race, space, and futurity in Tracy K. Smith's *Life on Mars*. *African American Review*, 51(2), 85–102.
- Smith, T. K. (2011). *Life on Mars*. Graywolf Press.
- Stacy, C. (2018). Uncertainty and literary form: A quantum approach to poetic indeterminacy. *Poetics Today*, 39(1), 45–60.
- Wendt, M. (2019). Entangled narratives: Quantum theory and contemporary poetic structures. *Literary Theory Quarterly*, 33(4), 89–104.