

# Quantum Configurations in Nick Payne's Constellations Liliane Campos

### ▶ To cite this version:

Liliane Campos. Quantum Configurations in Nick Payne's Constellations. Symposium of the Société d'Études Anglaises Contemporaines "British Literature in the Present", SEAC, Feb 2013, Paris, France. hal-01293679

HAL Id: hal-01293679

https://hal.science/hal-01293679

Submitted on 25 Mar 2016

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



# Études britanniques contemporaines

45 (2013) The Age of Outrage

Liliane Campos

# Quantum Configurations in Nick Payne's *Constellations*

#### Warning

The contents of this site is subject to the French law on intellectual property and is the exclusive property of the publisher.

The works on this site can be accessed and reproduced on paper or digital media, provided that they are strictly used for personal, scientific or educational purposes excluding any commercial exploitation. Reproduction must necessarily mention the editor, the journal name, the author and the document reference.

Any other reproduction is strictly forbidden without permission of the publisher, except in cases provided by legislation in force in France.



Revues.org is a platform for journals in the humanities and social sciences run by the CLEO, Centre for open electronic publishing (CNRS, EHESS, UP, UAPV).

#### Electronic reference

Liliane Campos, « Quantum Configurations in Nick Payne's Constellations », Études britanniques contemporaines [Online], 45 | 2013, Online since 20 October 2013, connection on 23 March 2016. URL: http://ebc.revues.org/901

Publisher: Presses universitaires de la Méditerranée http://ebc.revues.org http://www.revues.org

Document available online on: http://ebc.revues.org/901 Document automatically generated on 23 March 2016. © PULM

#### **Liliane Campos**

## **Quantum Configurations in Nick Payne's Constellations**

- In her preface to the second edition of *Darwin's Plots*, Gillian Beer asks what 'new forms for storytelling' might be unleashed from scientific work, indicating that 'new grammars' may replace Propp's morphological approach to narrative. The sciences, Beer suggests, may lead writers away from organicist metaphors for form, into other analogies (Beer xxviii). This paper examines Nick Payne's *Constellations* (2012) as an example of such renewals in contemporary British drama.
- 2 Nick Payne is a newcomer in the growing number of British dramatists and theatre companies turning to science for imaginative material, from Tom Stoppard to Simon McBurney's Theatre de Complicite. With striking consistency, these artists turn to science as a source of metaphors and forms, using the language of particle physics, evolution or mathematics as ways of speaking about human experience. Constellations draws on the Many Worlds Interpretation of quantum physics, in which an infinite amount of divergent universes are superposed but do not communicate. In the play, we watch a series of variations on interactions between a bee-keeper and a quantum physicist, Roland and Marianne. At key moments of their relationship, different possibilities are played out, illustrating the idea that '[i]n the quantum multiverse, every choice, every decision you've ever and never made exists in an unimaginably vast ensemble of parallel universes' (Payne 25). This use of a mathematical structure to generate a theatrical situation is reminiscent of the OuLiPo's work on 'potential literature', and the combinatorial drama imagined by their theatrical offshoot, the OuTraPo, such as Esnard and Fournel's 'Theatre tree', or indeed of Alan Ayckbourn's Intimate Exchanges. Payne's profusion of alternative snippets of scenes also recalls Caryl Churchill's serial writing in texts such as *Heart's Desire*. While these texts all bring to mind the organic metaphor of a branching plot, Payne, however, has turned to physics for his central conceit. Because it refers to the natural world but not specifically to the living being, physics produces specific questions of scale and language: this study examines the dramatic 'grammar' it inspires, as a source of consoling perspective.

### **Non-linearity and Multiplicity**

- Perhaps the most evident appeal of multiverse theory is that it allows the playwright to replace causal structures by a multiplicity of outcomes. As Marianne remarks in a series of exchanges, in which either Roland or Marianne reveals that they have been unfaithful yet fail to produce clear reasons for their behaviour, '[t]here's no linear explanation' (Payne 35). *Constellations* explores the various possible outcomes of eight different situations: a first encounter, a first date, a revelation of unfaithfulness, a chance meeting at a ballroom dancing class after a period of separation, a marriage proposal, Marianne's discovery that she has a brain tumour, and the conversation preceding her departure for a euthanasia clinic. This structure invalidates linear views of causation, thereby going against the Aristotelian principle of concatenation, in which effect should clearly follow cause.
- Constellations may be viewed as a series of variations on key themes, in the musical sense of the word. It literalizes Umberto Eco's definition of the literary text as 'a machine for producing possible worlds' (Eco 246), and displays a heightened awareness of its own narrative potentials, particularly those of romance, which are already triggered in our minds by the characters' names. Each variation results from different choices, yet the very possibility of choice is alternatively asserted and refuted by Marianne as she explains the Many Worlds Interpretation: 'the decisions we do and don't make', she declares, 'will determine which of these futures we actually end up experiencing' (26), yet in the next variation on this scene she states that '[i]n none of our equations do we see any sign whatsoever of any evidence of free will' (26). Payne leaves the spectator to choose between the two, and indeed turns choice itself into the focus and central ethical question of the play. As we shift forward and backward in

time, it becomes clear that one key scene, from which we see longer and longer fragments and which, in contrast to the others, does not vary, is the play's focal point. Each time the play shifts from one main theme to the next, the separation is marked by the return of this scene in italics. We gradually understand that this central conversation concerns the deterioration of Marianne's brain due to her tumour, and her decision to visit a euthanasia clinic. Stability is produced among the proliferating universes, around the fixed point that awaits Marianne: the stasis of death.

Variations thus allow Payne to outline the invariant in the equation, the one outcome that cannot be changed. But they also emphasize the possibility of choice for Marianne, and invite us to consider whether the scientific perspective of the play provides a meaningful frame for the central theme of degradation and death. Payne himself asks this question by quoting John Gray in one of his epigraphs: 'Science continues to be a channel for magic—the belief that for the human will, empowered by knowledge, nothing is impossible . . . Death is a provocation to this way of living, because it marks a boundary beyond which the will cannot go' (Payne 9). Death, then, is presented as the one area of experience that the 'magic' of science does not reach, yet the form of *Constellations* draws a consoling perspective from quantum physics.

### The Solace of Form

Marianne is a physicist who spends most of her time inputting data from cosmic radiation into a computer, working on traces of the big bang and producing computer models. Before leaving for the clinic, although language is increasingly failing her, she insists that science brings her solace:

Roland—. . . I don't understand how it helps. It's not gonna make this sort of thing any easier, is it? Is it?

Marianne—I think it will. I do. Because There is a falsehood at the heart of

And knowing that in another u in another u

Knowing that another me and another u could be on holiday. Or at home. Or in our seventies. Or parents. Or with my mum. Or at work. Or healthy. Brings me solace because

And I'm sorry that we're here, but I promise you that in another u. (Payne 80)

7 This theoretical consolation is strongly contradicted by Roland, and indeed by Marianne's own confrontation with her loss of mental faculties and collapsing speech. In the central exchange about euthanasia, her syntax grinds to a halt on words relating to the body ('face', 'skin', 'tired' . . .). Yet to a certain extent the play's structure works against her failing syntax, by providing a different 'grammar' that takes over from it. Conflicting visions of time appear in the final fragments before Marianne's departure for the clinic, opposing the 'asymmetrical . . . arrow' of time experienced by humanity to the consoling symmetry between past and present on the level of atomic physic, where '[t]ime is irrelevant . . . We have all the time we've always had' (Payne 81–82). Both these conceptions of time are enacted by the dramatic structure: on the one hand the plot follows the arrow of time, presenting most scenes chronologically, with the exception of the ballroom dancing scene which returns at the end of the play, leaving us uncertain as to whether it is an alternative to death or an event that occurs before it. On the other hand, as the love story moves forward, the unchanging discussion about euthanasia moves backwards, as Payne adds an anterior section of the conversation every time we return to it. On the level of syntax this chiasmic movement is mirrored in some of Marianne's broken sentences: 'Before they had face/ face before they', or 'it became skin/ skin, it became' (Payne 28). The play thus moves simultaneously forwards and backwards in time, enacting both the momentum of change and death and a non-linear temporality, which produces different configurations of past and present moments. Although he does not refer to Walter Benjamin's 'constellations', Payne's dramatic structure may remind the reader of this vision of history in which a dialectical, constantly reconfigured relation between past and present moments confers renewed intelligibility upon them. The play shifts between a fixed point in time and its possible pasts and futures, and while the conversation about euthanasia seems paralysed in an unchanging 'now', this repeated 'now' is constantly developing and finding new meanings as we relate it to the many interactions between Roland and Marianne that may have preceded

or followed it. Each moment in time may be understood differently depending on the past and future moments to which we choose to relate it. Although Payne explores the modality of the possible rather than the historical, his use of the constellation metaphor is similar to Benjamin's in that it seeks to break down a linear, syntagmatic approach to human time and to activate the viewer's gaze as a source of meaningful configurations.

- If we examine multiverse theory as a source of syntax, the particular 'solace' it provides becomes apparent in the form of this new dramatic grammar, which compensates the breakdown of syntagm by paradigmatic variation, and thus mirrors Marianne's disintegrating speech. The passage quoted above illustrates her failing grip on hypotactical structure ('because . . . ') and even words, yet her sentences continue to progress metaphorically, as the 'universe' is reduced to the letter 'u', suggesting the possibilities of other 'yous' and the equation between a lover and a universe. While the interruption of syntax on the level of sentences reflects the impending interruption of Marianne's life, paradigmatic continuities are emphasized both lexically and structurally, through halting words and proliferating scenes.
- Rather than a branching plot, Payne presents us with a plotting of infinite possibility. As its title suggests, *Constellations* creates a space for the spectator's active gaze, inviting us to group his fragments together and to find new meanings in the constellations they produce and the transformations they effect upon each other. Science has become more than a source of perspective: it is, as Gillian Beer suggested, a stimulus for tentative new grammars.

#### **Bibliography**

8

AYCKBOURN, Alan, Intimate Exchanges, London: Samuel French, 1985.

BEER, Gillian, *Darwin's Plots, Evolutionary Narrative in Darwin, George Eliot and Nineteenth-Century Fiction*, Cambridge: CUP, 2000.

BENJAMIN, Walter, *The Arcades Project*, trans. H. Eiland & K. McLaughlin, London: Belknap Press, 1999

CHURCHILL, Caryl, Heart's Desire, in Blue Heart, London: Nick Hern Books, 1997.

ECO, Umberto, 'Lector in Fabula', *The Role of the Reader: Explorations in the Semiotics of Texts*, London: Hutchinson, 1981, 200–266.

ENARD, Jean-Pierre & Paul FOURNEL, 'The Theatre Tree, a Combinatory Play', ed. Warren Motte, *Oulipo: a Primer of Potential Literature*, Dalkey Archive Press, 1998.

PAYNE, Nick, Constellations, London: Faber & Faber, 2012.

#### References

#### Electronic reference

Liliane Campos, « Quantum Configurations in Nick Payne's *Constellations* », *Études britanniques contemporaines* [Online], 45 | 2013, Online since 20 October 2013, connection on 23 March 2016. URL: http://ebc.revues.org/901

#### Author

#### Liliane Campos

Université Paris III

Liliane Campos is a lecturer in English and Theatre studies at the Sorbonne Nouvelle. Her research interests focus on the uses of scientific discourse in contemporary drama and fiction. She co-organizes a research seminar on science and literature, and is the author of *The Dialogue of Art and Science in Tom Stoppard's* Arcadia (Presses universitaires de France, 2011) and *Sciences en scène dans le théâtre britannique contemporain* (Presses universitaires de Rennes, 2012). She has also edited a special issue of *Alternatives théâtrales*, 'Côté Sciences' (2009), exploring the work of director Jean-François Peyret and the role of science in contemporary European theatre.

#### Copyright

© PULM

#### Abstracts

#### Configurations quantiques dans Constellations de Nick Payne

Le théâtre britannique trouve depuis quelques années une nouvelle source d'inspiration dans les sciences exactes. La biologie et la physique se révèlent des sujets riches en métaphores, qui stimulent également de nouvelles formes dramatiques: *Constellations* de Nick Payne (2012) dérive ainsi sa forme des hypothèses de la physique quantique. La théorie des mondes multiples, selon laquelle notre monde est superposé à un nombre infini d'univers divergents qui ne communiquent pas, fonde ici une structure dramatique non-linéaire, qui parcourt une série d'échanges entre deux amants comme autant de possibilités divergentes dans des mondes parallèles. En privilégiant la superposition paradigmatique à la progression d'une intrigue, cette syntaxe apporte une nouvelle perspective aux thèmes de la mort et de l'euthanasie explorés par la pièce. *Constellations* met en acte les différentes conceptions du temps proposées par les sciences, et interroge leurs conséquences pour le spectateur.

In recent years, science has become a popular topic in British drama. Biology and physics are a source of new themes and metaphors, but also stimulate formal experimentation: this paper analyses Nick Payne's *Constellations* (2012) as an attempt to derive new dramatic form from the hypotheses of quantum physics. *Constellations* draws on the Many Worlds Interpretation, in which an infinite amount of divergent universes are superposed but do not communicate: rather than a linear plot, the plays presents us with a series of variations on encounters between two lovers, corresponding to coexisting possibilities in the divergent universes. With an emphasis on paradigmatic superposition, the resulting dramatic syntax allows Payne to examine the themes of mortality and euthanasia from a fresh perspective, as the play enacts alternative conceptions of time and questions their consequences for the viewer.

#### Index terms

*Mots-clés*: Benjamin, constellations, forme dramatique, mondes multiples, mort, non-linéarité, science, temps

*Keywords*: Benjamin, constellations, death, dramatic form, multiverse theory, nonlinearity, science, time