

Parallel Structure of Topological Space in Shakespeare's *Cymbeline**

CHEN Xiao-feng

College of International Studies, Southwest University, Chongqing, China

Topology is a newly branch of mathematics, dealing with the non-qualitative properties of members within a solid topological space. In a broad sense, space is considered as an arena to exemplify the power relations, and power relationship becomes a dominant property within a topological space in a holistic way. Recently, topology has been allied with literary criticism, arising as a transdisciplinary approach. In Shakespeare's *Cymbeline*, three physical places—namely chamber, cave and battlefield—function as three individual topological places due to the commonality of power relationship within each place. At first, Innogen, the female protagonist who is enclosed in her chamber, becomes an object of supervision and scrutiny by triplex authorities, thus female body gains a metaphorical meaning within the topological boundary. Later, she changes costumes and enters the cave, embodying as the other in terms of power relations, where gender awareness becomes blurred. Finally, Innogen moves to the battlefield, gets access to the court, a public topological space symbolizing male authority, and launches an equal dialogue with men, thus constructing a brave female image. From chamber to the battlefield, Innogen's self-saving trip set up a parallel structure of topological space and a token for the subversiveness of hierarchy social order dominated by royalty, paternity and the absolute authority of husband in early Renaissance.

Keywords: parallel structure, topological space, Shakespeare, Cymbeline

I. Introduction

Topology, a young branch of mathematics developing in 19th century, becomes one type of space poetics. The term "topology" was named as "topologies" by the mathematician Johann Benedict Listing in 1847 (Shields, 2017, p. 135). It basically means the geometric figures maintain essentially unchanged with constant deformation (such as folding, extension, reduction, distortion, etc.). A well-known topological deformation is a doughnut may change to a cup in its form while keeping its interior constant unchanged, which is terms as "topological property" (Sue, 2009, p. ix). Topology is developed under the influence of gestalt holistic pattern, attaching great importance to the continuity and invariability within a solid topological space.

Luo Yamen, a Chinese scholar, first allied topology with literary criticism, explaining and exploring the mechanism, content, process and value of art generation. He investigated the meaning of topology (topo-) from

^{*} Acknowledgements: this paper is funded by Project: Chongqing Social Science Fund Project "The Ethical Topology of Shakespeare's Histories" (2020WYZX07).

CHEN Xiao-feng, lecturer, Ph.D. student of college of International Studies, Southwest University, China, majoring in English literature and western literary criticism.

the perspective of etymology, verifies its Greek origin and confirms that topology is a science about place (Luo, 2020, p. 6), which corresponds to Lefebvre' "topic", a region in space (Lefebvre, 1991, p. 21). Topological space being applied to literature is endowed with meanings of space, containing both physical space and mental one. Topological approach in literature takes the unchanged topological property as the dominant factor exerting influence on characters living within a bounded space. "Boundary" (Lewin, 1936, p. 118) is one of the primary concerns for topological approach, which delimits a fixed place where characters present something in common. The topological property would weaken as a member moves towards the spatial boundary. Once the member breaks the boundary line, the common property of former space would diminish while property of the latter topological space would gradually aggrandize.

The concept of boundary empowers a fixed topology where topology property is intensified. Topology emphasizes commonality and unitarity, nevertheless, it does not deny motion. Norberg-Schulz holds the idea that topology studies "spatial organization" (Norberg-Schulz, 2010, p. 212), in his viewpoint, each topological space constitutes of several subsets, within which members keep and center on the topological property even though moving constantly under the influence of a vector. In the process of space production, Lefebvre takes "truth of space" as a process of "analysis followed by exposition", which can be interpreted as an encoding—decoding—recoding way. He said, "a true space can be constituted or constructed, whether a general space as the epistemologists and philosophers believe, or a particular one as proposed by specialists in some scientific discipline or other which has a concern with space" (Lefebvre, 1991, p. 9). In his speech, what space concerns about is "a center" or one exemplified by "a centralized power". That is to say, in addition to "simultaneity" and "juxtaposition" of space (Foucault, 1986, p. 22), space bears the characteristics of centrality. As a form of spatial poetics, it is true that topology is defined by "deformation or transformation" (Lefebvre, 1991, p. 2), the end of topology is the topological property or "topological invariant" (Steiner, 2001, p. 448), the interior constant that keep a topological space reasonable and meaningful, thus providing a methodological significance for the existentialism and epistemology (Swiber & Turner, 2009, p. 5).

II. Chamber—A Metaphor for the Female Body in a Private Topological Space

In Shakespeare's *Cymbeline*, a princess called Nidogen locked herself in the chamber after her husband had been exiled and her chastity was under suspicion. Later she ran out of the prison-like boudoir to actively solve her dilemma. She came to a cave and meet her biological brothers where love dominates and gender discrimination is dissolved due to her successful cross-dressing. At last, she arrived at the battlefield, a male territory, where she initiated an equal dialogue with her husband and her king father, finally won understanding and respect, an essential ingredient for a harmonious marriage. Chamber, cave and battlefield are meaningful from the perspective of topological space, where topological property is shaping and acting on the identity and characteristics of the literary characters.

"The First Folio" of 1623 classifies Shakespeare's plays to comedies, tragedies, and histories, with *Cymbeline* being categorized to tragedy (Kings, 2005, p. 10), the tragicality lies in the fact the virginity of the princess Innogen becomes a bet that Posthumus and Giacomo has made, so that Thomas Durfey added a subtitle "The Fatal Wager" when he adapted the play in 1682 (Brown & Johnson, 2000, p. 5). It is common that wagers do not involve physical fights but verbal quarrels, nevertheless, bet is one kind of wars. John Keegan takes war as

means to settle down men's natural tendency in quarrelling about insults, property, women, status and inheritance (Keegan, 2011, p. 31). In *Cymbeline*, the bet is caused by two men's argument on women's chastity, the men's bet almost killed a prince with a nobler social status yet a more vulnerable position in gender. What is hidden beneath the quarrel is something about male identity and self-boasting, yet national complex is a less prominent factor. Giacomo has a straightforward personality by his promises to suit actions to his words, "I am the master of my speeches, and would undergo what's spoken, I swear" (*Cymbeline*, I, iv, 111-112). Posthumus' character is more complicated and more cryptic. With an omniscient third-person view, the play begins by praising Posthumus' morality, but King believes that such superficial praise is of no practical significance and that his love for Imogen is unreliable (King, 2005, p. 8). On the surface, the bracelet which Posthumus sent to Innogen is a metaphor for love, it actually locked Innogen's body and sealed her mind. Switching from an emblem of love to the most convincing evidence of adultery, the bracelet almost killed Innogen's life.

With the heartbreaking princess keeping herself isolated in her boudoir, the messenger reported to the king Cymbeline, "Her chambers are all locked, and there's no answer / That will be given to tph' laud's of noise we make" (*Cymbeline*, III, v, 43-44). The Queen also noticed her weird performance and said, "when last I went to visit her / She prayed me to excuse her keeping close, / Whereto constrained by her infirmity, / She should that duty leave unpaid to you / Which daily she was bound to proffer" (*Cymbeline*, III, v, 45-49). The reason why Innogen purposefully locks herself up in the chamber lies in the fact that the chamber is not an enclosed and confined place but it provides a shelter for the princess whose reputation is in danger. The shelter explanation corresponds to the reason why Virginia Woolf claims for a room of a women's own. Gaston Bachelard, who pioneers in applying space theory in literary criticism, examined in detail the significance of room for an individual in his masterpiece *The Poetics of Space*, he said, "our house is our corner of the word... it is our first universe, a real cosmos in every sense of the word" (Bachelard, 1994, p. 4). In fact, the house not only provides the inhabitants protection, courage and fantasy but also helps them to realize the value of humanity. Therefore, the house is a shelter both for physical attribute and mental imagination.

The house of Innogen is an imperial palace, which not only functions for dwelling and protection but also symbolizes regnal hierarchy, where she experiences repression from sovereignty and patriarchy, so that she has to retreat to her chamber and locks herself in. The chamber in the imperial palace is not a house highly appraised by Bachelard any more, but it become a place echoing with Michel Foucault's "heterotopia" or Edward Soja' "the third space"¹. From the viewpoint of topology, things in the chamber shares the similar topological property, including furniture, decorations, bed and Innogen's materialized body, among which the later one is the most prominent one in the room and becomes the topological invariant, that is to say, all the physical staff in the bedroom are endowed with female characteristics and being colored with eroticism. Soja redeems that the social space is initiated with human body (Soja, 2005, p. 144). When the body, bed and locked boudoir are juxtaposed within a psychological space, Innogen's husband Posthumus establishes the metaphorical connection between room and sex through "retentissement" (Bachelard, 1994, p. 2).

¹ The term "heterotopia" is put forward by Foucault, "Third Space" is put forward by Lefebvre and his student Edward Soja, they are rebellious to the logos centralism, having the dual characteristics of realism and imagination. By following the space concept, boundary in topology is a place where the topological property is decentralizing. In other words, the topological property of the original topological space is weakening while the new attributes are gaining until the regenerative topological space is formed.

1098 PARALLEL STRUCTURE OF TOPOLOGICAL SPACE IN SHAKESPEARE'S CYMBELINE

Back to Italy, Giacomo vividly describes layout of furniture, which only can prove that he once entered Innogen's chamber but cannot affirm his slander on Innogen's fame. The bystander Filario noticed, "Sir, be patient. / This is not strong enough to be believed / Of one persuaded well of" (Cymbeline II, iv, 131-133). Then why does Posthumus doubt his wife's fidelity? From the spatial perspective, a bedroom, especially the female boudoir, is regarded as a private place isolated from social life, bearing the characteristics of "desocialization" (Bachelard, 1994, p. 8). Except for a man with extra-intimate relation, other men are not permitted to enter. Giacomo realizes the inaccessibility of Innogen's chamber, he deploys a trick for his entrance. Influenced by Giacomo's vivid description, Posthumus conducted a gestalt project by connecting bedroom entrance with body entrance, in another words, chamber is mapping to the female body, thus the chastity of Innogen is under suspicion Posthumus' psychological space. Chamber—body—sexual relationship in becomes "homeomorphism" (Lewin, 1936, p. 11) if chamber is interpreted as a topological space. In other words, it is precisely because Giacomo enters the room of Imogen that Posthumus assumes that the former one also enters the body of Innogen. A woman's chamber and a female body establish a metaphorical connection in male's brain. It takes place when there was sextual relationship in exactly the same room, thus the chamber—body metaphor is built. That is the reason why Innogen called Posthumus "my dearest husband" (Cymbeline, I, i, 86) instead of finance, and their sexual relation in the same chamber can be presumed to some extent. Posthumus projects the memory of the room to the imaginary virtual space, which explains the reason why he is convinced that Imogen cheated on him.

III. Cave—The Other Space Locating at the Boundary

The two sources of Western civilization—ancient Greece civilization and Hebrew civilization—are both associated with exodus. Ancient Greece was constituted of city-states dispersing on Greek peninsula, surrounded by the sea on three sides. They were lacking of natural resources. In order to change their living conditions, the Greeks took voyage on the sea. The Hebrews are nomadic people who have experienced several great migrations in their history. In general, the historical footprint of European human civilization formed a survival mode of "departure—settlement—re-departure—re-settlement" (Huang, 2015, p. 61). The mode of departure echoes with classical works in the history of literature, such as the expeditionary journey in Homer's epic *Iliad* and *Odyssey*, the long march of chivalry in Spenser's *Faerie Queen*, and the salvation journey in Dante's *Divine Comedy*. Shakespeare inherited exodus tradition in his writings, including the overseas war in historical plays and female characters flee by changing costumes.

Usually, women leave because they are falsely accused, bullied and treated unfairly. Imogen decides to change his costume and run away from the double dilemma—reputation damage and marital crisis. In this context, Innogen's escape has been endowed with the meaning of struggling against male authority, as Lisa Jardine puts it, running away is a way to fight for women's basic surviving rights in a world where it is claimed that women are just female instead of a human being (Jardine, 1983, p. 1). That is to say, the gender difference is too much highlighted in the male-dominated society. Before leaving, Innogen continuously retreats to a place where she feels safe until she is aware of her identity as "the other" in the royal topological space dominated by paternity and sovereignty. The king Cymbeline is centralized in geometrical space and in power, and his former queen and daughter are marginalized in the palace. According to Kantorowicz, the body of a king is entitled with

dual properties, one is given with the physical attribute, the other is the physical body incarnating power meanings (Kantorowicz, 1959, p. ix). The second reason why Innogen decides to run out lies in her lacking of mother and thus maternal protection². In A Room of One's Own, Woolf lays stress on the importance of a separate room for female writers to think and to create, and a room of one's own becomes meaningfulness for a woman to be herself and to realize her potential. Interestingly, Zora Neale Hurston, author of Their Eves Were Watching God and a contemporary writer of Woolf's, expressed the wish for women stepping out of their private rooms and starting an equal dialogue with men in public space. In Hurston's view, an equal dialogue to eliminate gender differences only exists in Foucault's "heterotopia" and Sojia's "Third Space", which have the carnival characteristics of Bakhtin's, that is to say, the genuine equality can hardly be realized. The third reason for Imogen's departure was to find a topological space differing either the palace or the boudoir. bell hooks said, "the marginality imposed by oppressive force is very different from the marginality as a venue for resistance, as a foothold for radical openness and possibility. The place of resistance is evolving in a culture of adversarial isolation, a critical response to our domination. We have come to this space through suffering, pain and struggle. We know that struggle should make yearning a pleasure. We are changing ourselves individually and collectively. We are opening up space for total creativity. This space affirms and supports our subjectivity and gives us a new place to express our feelings about the world" (Hooks, 1990, p. 153). It happens to Innogen that the cave provides her a place for both protecting and fighting, being quite different from the chamber.

The cave is a space casting off the royal authority. It was the home where Innogen's two biological brothers, Guiderius and Arviragus and their adoptive father Belarius, lived. They bid Innogen warmhearted welcome. Even though they meet for the very first time, they are deeply affected with each other. Arviragus said, "I'll love him as my brother. / [To Innogen] And such a welcome as I'd give to him / After long absence, such is yours" (Cymbeline, III, vi, 69-71). Innogen replied: "If brothers! [Aside] Would it had been so that they / Had been my father's sons" (Cymbeline, III, vi, 73-74). In this heterogeneous space, Innogen's gender identity is weakened and replaced by her brothers' endless love. There is no trickery, no discipline or punishment. In the cave far away from the strife for power and throne, family love not only recovers Innogen's physical well-being, but also gains her abundant courage to find a way out of her current dilemma. There she has gained a lot of strength to step into the male-dominated space to appeal for women. It seems as if the cave turns to a utopia which is free from the bondage of royalty and patriarchy via Shakespeare's magic pen. Simultaneously, the cave has the characteristics of the boundary transiting from house to public territory. In hooks' view, boundaries can break logos centrism and exemplify the uniqueness of its geographic feature-pluralism and heterogeneity. She believes that boundary aims to resist the oppression force set up by the dominant race, gender and class (hooks, 1990, p. 145). In Cymbeline, the cave gives birth to two rebellious and striving princes, Guiderius and Arviragus, whom Shakespeare portrays differently with Cloton, the one growing up at court.

² Bachelard holds the idea that the absence of mother is one of the manifestations of the instability of family relations. Divorce, remarriage abruptly deprives a woman's reproductive ability. The image of mother can be traced back to biblical literature, the fall of Eve becomes the literary source of women being deprived of maternity (See Bachelard, 1994) In Shakespeare's another famous play *King Lear*, the old king angrily cursed female fecundity in the wilderness after being abandoned by his daughter: "And thou, all-shaking thunder, / Smite flat the thick rotundity of the world, / Crack nature's mould, all germens spill at once / That make ingrateful man!" (*King Lear*, III, ii, 6-9) Reproductive ability is closely related to the image of the mother, and the lack of reproductive ability symbolizes the lack of maternal love, the core element of family love. In Cymbeline, one of the reasons why Innogen was marginalized at the royal house is the absence of her biological mother.

1100 PARALLEL STRUCTURE OF TOPOLOGICAL SPACE IN SHAKESPEARE'S CYMBELINE

After Shakespeare, escape becomes an enduring topic in classical literature. Authors may try to solve a series of survival dilemmas by spatial displacement, including Woolf's *Voyage* and *To the Lighthouse*. However, it seems as if the female protagonists cannot really resolve the psychological conflicts and reverse the current social power mechanism. By travelling, they are switching from one enclosed space to the other, such as a ship, a hotel, etc. According to a Chinese scholar Chen Li, female travelers can't authentically escape, because no matter where they go, they would be trapped and could not get rid of the social expectation given by her identity (Chen, 2020, p. 159). In order to dissolve the gender difference, Shakespeare creatively arranges the heroines to dress male clothes in order to cover the gender issue, thus "breaking down the traditional binary opposition of private and public, internal and external" (ibid., p. 159). According to Feng Jun's statistics, more than 20 of Shakespeare's total works involve topics of cross-dressing and running away, among which "women dressing up as men" is the most frequently adopted strategy (Feng, 2020, p. 38). Before Imogen leaves for Rome, Pisanio prepares tights, hats, stockings, and other items in advance and asks her to "forget to be a woman" (*Cymbeline*, III, iv, 153). The costume change becomes a ritual, symbolizing Innogen's exile from her own room into man's space.

In order to approach men's space, Innogen has to conceal "that rarest treasure of your cheek" (*Cymbeline*, III, iv, 159) and forget the "laboursome and dainty trims, wherein / You made great Juno angry" (*Cymbeline*, III, iv, 163-164). What is more, her fair and white skin has to endure "the greedy touch / Of common-kissing Titan" (*Cymbeline*, III, iv, 161-162) thus turning black. Chen Li takes clothes as an important part of appearance. Dresses, headbands, necklaces and other decorating items strengthen female image yet become "symbols of bondage" (Chen, 2020, p. 182), which localizes the meanings of female body within biological limitation. Foucault explained the body—power relationship. In his viewpoint, power is a kind of technological mechanism that tries to govern body all round. If the body break the rule, it would be disciplined or punished (Foucault, 1995, p. 35). Neverthless, cave provides a provisional shelter where Innogen can hide her gender idendentity and run away from the mechanism of female body being materialized. She would contine his running trajectory to win the right of discourse as a woman.

IV. Battlefield—A Public Topological Space that Represents Male Authority

It is not difficult to notice Innogen's motion trajectory, that is from enclosed chamber to the semi-open cave and finally the open battlefield. These three places happen to unfold the gender issue. A chamber is a typical female place, the cave is the place trying to eliminate gender difference, and the battlefield is filled with male hormones. From the perspective of topology, each space is dominated by its topological property. In the topological imperial palace, Innogen is marginalized, so her living space shrinks to the boudoir where she continues to be the target of male gaze, in other words, her social attributes are replaced by gender attributes. Later, Innogen takes the initiative to go out of the closed boudoir, breaking the metaphorical association of boudoir and body, and entering the cave with boundary features. In terms of geographical location, the cave is located at the border of Britain, the edge of kingship and hierarchy, where gender difference is dissolving and the monarchy-patriarchy system is eliminating. If leaving is a kind of dynamic spatial resistance, Innogen's struggle on the battlefield is activated by static gaze. After all, the battlefield is a male-dominated space or a stage for resolving conflict and exemplifying personal courage, so it is a "continuation of political activities" (Keegan, 2011, p. 31). Interestingly, as the only woman in the topological space of the battlefield, Innogen is no longer being stared but standing by and initiating questions to men, guiding Posthumus, Giacomo, and King Cymbeline on a journey of self-repentance, which eventually becomes a moral ingredient for all-round reconciliation at the last scene.

Within the topological space of battlefield, reconciliation is the most salient topological property, including martial reconciliation between Rome and Britain, mutual understanding between the emperor and the subject, elimination of sexual conflicts, and parent-child reunion. Brown and Johnson expressed their disapproval when the victorious British decides to continue to submit to Rome in the final act by taking the side of Bernard Shaw's nationalism, so they rewrote the final act in 1936 (Brown & Johnson, 2000, p. 11). Actually, their stance is a narrow nationalistic one, while ignoring Shakespeare's view on harmony. It is investigated that Jesus was born when Cymbeline was taking the throne, so the political and military decision could be connected with the religious warship. The fact that conqueror Britain has to render continuous tribute proves British king's determination to submit to God (Moffet, 1962, p. 207). The king's obscure confession echoes with Posthumus' blunt claim, "Gods, if you / Should have ta'en vengeance on my faults, I never / Had lived to put on this" (Cymbeline, V, i, 7-9). In the last scene, Jupiter magically descends in thunder and light and conforms Britain thriving if order is restored and peace is regained. He conveys the oracle, "Our pleasure his full fortune doth confine" (Cymbeline, V, v, 204). After going through the chaos, restoring order and regaining peace seem extra urgent for "this scattered kingdom" (King Lear, III, i, 23). Based on the harmonious ideology prevailing in the Renaissance, Zhang He traces back to the Greek tradition and its influence on Renaissance, she makes a conclusion that Shakespeare's late romance conveys a harmonious thought, such as The Tempest, which corresponds with the micro cosmology theory (Zhang, 2008, p. 76). The micro cosmology is a metaphor for human body and both two system run in an organic way to realize harmony. The reason why Shakespeare deliberately avoids conflicts in his romances might be attributed to the his belief in Christian salvation, the Renaissance harmony and his own life span philosophy. Nevertheless, the decision to continue to pay tribute realizes comprehensive reconciliation of multiple special dimensions, including man and God, sovereign and family, power and love, male and female, emperor and subject, etc.

In terms of gender relationship, harmony is the topological invariant in the topological space of battlefield where identity is dismissing and social hierarchy is reconstructing, so that roles in the play motion towards the central invariant—peace, understanding and harmony. The political and familial reconciliation on the surface implies a harmonious relationship between the sexes. In the new relationship generated in the last scene, men do not take women as a wager any more, but devote considerate love and care to them, on the other hand, women maintain submission as a virtue. This kind of marital relationship may expose Shakespeare's ideal marriage.

Innogen: Why did you throw your wedded lady from you? / Think that you are upon a lock, and now/ throw me again.

Posthumus: Hang there like fruit, my soul, / Till the tree die. (Cymbeline, V, vi, 260-4)

Gillian Rose, in her *Feminism and Geography: The Limits of Geographical Knowledge*, sheds new light on the binary relationship between sexes and proposes a possibility of gender coexistence at the end of her book, "I want to explore the possibility of a space that no longer excludes the same and the other. I examine a spatiality

that recognizes the difference between one and the other" (Rose, 1993, p. 137). The difference between the two sexes can be identified, recognized and permitted, but the purpose lies at achieving harmonious coexistence. If harmony is taken as the topology property, it would function on each member living in the topological space of battlefield. Kurt Lewin defines the concept of equivalence in topological geometry, "Any one of these regions can be transformed into any other by a process of continuous transformation, without changing the connection within the region, even if it is extended or buckled, without splitting it" (Lewin, 1936, p. 93). In the battlefield space, the topological invariant—reconciliation—maps war with marriage. If the topological invariant does not function on the members, the members would motion toward the special boundary and move or generate another topological space. In the last scene, Posthumus puts on a piece of ragged clothes, which marks the renunciation of his male nobility and his estrangement from his wife. Although the wife-trial event causes the deformation of the conjugal relationship in the topological space, it does not lead to the split. On the contrary, Othello crosses the boundary of trust, goes to the double tragedy of marriage and life, and enters the tragic topological space. The young prince Hal realizes the boundaries of the Boars-Head Tavern, while Falstaff does not. The latter one ignores the topological properties, randomly collides with the boundary lines of divergent topological spaces. Finally, he is expelled by every topological space and moves deathward.

V. Conclusion

Topology is a young discipline deriving from geometry. It does no longer focus on the size, shape and other quantitative characters as Euclidean geometry does, but it studies the homology properties of topological Spaces. Under the influence of vector, the topological subset moves and establishes the binary relationship between center and edge. With topology being applied to literature, topological property has been taken primary consideration due to the thematic similarities within a certain space. In *Cymbeline*, due attention is given to the three topological spaces in this paper. They horizontally function as three spots for the protagonist's self-saving trip, to some extent, the paralleled structure subverts the hierarchy tradition prevailing in Renaissance.

At the imperial palace where the supremacy of royal, paternal and marital power is worshiped, Innogen, the one who "integrates the advantages of women" (Bate, 1992, p. 297) is stigmatized and marginalized in the royal household, she gradually retreats into her chamber and becomes the "other" under male's gaze, scrutiny and trick. After the Innogen's chastity is under suspicion and her marriage is in danger, the "energetic and masculine women" (Moffet, 1962, p. 210) takes the strategy of dressing up and running away to the boundary zone, a cave, which maintains the physical attribute of "primacy" (Shields, 2017, p. 108). The cave is endowed with resisting significance when gender, politics and power are involved. There, Innogen's gender identity is weakened and the power relationship is overturned. In the last scene, Imogen did not participate in the fight like a man, nor did she argue eloquently like Portia. Instead, she skillfully guided Giacomo and others to retell the authentic story, to solve the conflict and restore her reputation. Reconciliation becomes the topological invariant of battlefield, and gender harmony in the topological space expanded to other fields such as politics, religion and ethnology.

In short, topology provides a perspective for spatial analysis in literary critics, presenting *Cymbeline* in a dynamic picture flowing in three-dimensions or multi-dimensions. Innogen moves in different topological spaces, which is not only influenced by social, political and cultural factors, but also reflects her active exploration in the predicament of existence as a person, and expresses Shakespeare's humanistic spirit. In the play, Shakespeare

neither debases female infidelity nor praises female independence, instead, he argues that woman is an important part of the organic holism of binary gender.

References

Bachelard, G. (1994). The poetics of space (M. Jolas, Trans.). Boston: Beacon Press.

Bate, J. (1992). The Romantics on Shakespeare. Harmondsworth: Penguin.

Brown, R. D., & Johnson, D. (2020). Shakespeare 1609: Cymbeline and the Sonnets. London & New York: Macmillan Press.

Chen, L. (2020). Space. Beijing: Foreign Language Teaching and Research Press.

Feng, J. (2020). Approaching Shakespeare from the cognitive perspective. Sichuan Dram, (05), 35-41.

Foucault, M. (1986). Of other spaces (J. Miskowiec, Trans.). Diacritics, (16), 22-27.

Foucault, M. (1995). Discipline and punish: The birth of the prison (A. Sheridan, Trans.). New York: Vintage Books.

Hooks, B. (1990). Yearning: race, gender, and cultural politics. Boston: South End Press.

Huang, J. (2015). A comparative study of the theme of 'Female Running-away from Home' in Chinese and Western dramas. Journal of Nantong University, (03), 61-65.

Jardine, L. (1983). Still harping on daughters: Women and drama in the age of Shakespeare. New York: Harvester Press.

Kantorowicz, E. H. (1959). The King's two bodies: A study in mediaeval political theology. Princeton & Oxford: Princeton University Press.

Keegan, J. (2011). A history of warfare. New York: Random House.

King, R. (2005). Cymbeline: Constructions of Britain. Burlington, VT: Ashgate.

Lefebvre, H. (1991). The production of space (D. Nicholson-Smith, Trans.). Oxford/Cambridge: Blackwell.

Lewin, K. (1936). *Principles of topological psychology* (F. Heider & G. M. Heider, Trans.). New York & London: McGraw-Hill Book Company.

Luo, Y. M. (2020). The topological poetics of time in Shakespeare's sonners. *Journal of Guangdong University of Foreign Studies*, (2), 5-27.

Moffet, R. (1962). Cymbeline and the nativity. Shakespeare Quarterly, (2), 207-218.

Norberg-Schulz, C. (1980). Genius loci: Towards a phenomenology of architecture. New York: Rizzoli.

Rose, G. (1993). Feminism and geography: The limits of geographical knowledge. Cambridge: Polity Press.

Saiber, A., & Turner, H. S. (2009). Mathematics and the imagination: A brief introduction. Configurations, (1), 1-18.

Shakespeare, W. (2016). The new Oxford Shakespeare: The complete works. Oxford: Oxford University Press.

Sue, E. G. (2009). Beginning topology. Rhode Island: American Mathematical Society.

Zhang, H. (2008). The tempest and Shakespeare's harmonious concept. The Journal of English Studies, (3), 76-78.