Original Paper

Franco Moretti's Interdisciplinary Approach and its Influence on Foreign Literature Studies in China

Shuping Chen[1*]

[1] College of Foreign Languages, Huaqiao University, Quanzhou, P. R. China

[*] Shuping Chen, College of Foreign Languages, Huaqiao University, Quanzhou, P. R. China

Abstract

Western literary theorist Franco Moretti's researches are featured with interdisciplinarity. His approach began with the conceptual model of "world literature", followed by the methodology of "distant reading", and ended with the practice of "computational criticism". This paper aims to explore the dynamic interaction between Darwin's evolutionary theory and Wallerstein's world-systems analysis, as well as the interplay between close reading and distant reading, and the dialogue between traditional criticism and computational criticism. With the popularization of the Internet, the revolution of information technology and the wave of globalization, the categorization of disciplines with distinct barriers can no longer meet the complexity of modernization, and the call for interdisciplinary integration is constantly heard. Nevertheless, interdisciplinary research is in urgent need of theoretical framework and practical guidance for reference. This paper seeks to contribute to the interdisciplinary study of foreign literature in China within the purview of "new liberal arts".

Keywords

Franco Moretti, interdisciplinary, computational criticism, new liberal arts

1. Introduction

Franco Moretti is an Italian literary critic, comparatist, and pioneer in digital humanities. Jonathan Arac has referred to Moretti, Erich Auerbach and Edward Said as the representatives of "three generations over the last half-century" in comparative studies (Arac, 2002, p. 35). Moretti's research method and practice are characterized by their interdisciplinary nature. This paper aims to explore the dynamic interaction between Darwin's evolutionary theory and Wallerstein's world-systems analysis, as well as the interplay between close reading and distant reading, and the dialogue between traditional criticism and computational criticism. Additionally, it seeks to examine the influence and impact of Moretti on

foreign literature studies in China, specifically in relation to the emergence of the "new liberal arts" in higher education.

2. Interdisciplinary Concept: World Literature

Goethe, Carl Marx, and Friedrich Engels contributed to the genesis and development of the notion of world literature. Goethe's concept of *Weltliteratur* implies a Greek civilization centralized view, while Marx and Engels' understanding of world literature is closely linked to the capitalist commodity market. David Damrosch, as the editor-in-chief of *The Longman Anthology of World Literature*, centers his approach on classics, translation, and circulation. Morreti's concept of world literature reflects the distinct feature of interdisciplinarity. According to Moretti, there are two forms of world literature. Prior to the eighteenth century, world literature consisted of a "mosaic" of national and local literatures. However, after the eighteenth century, world literature became deeply influenced by the capitalist commodity economy and the international market, giving rise to the "one but unequal" system (Moretti, 2005, pp. 227-228). The study of world literature, as Moretti suggests, poses a challenge that necessitates a new critical approach (Moretti, 2000a, p. 55). Moretti considers Darwin's "evolutionary theory" and Immanuel Wallerstein's "world-systems analysis" as two ideal models for examining literary history, comparative literature, and world literature in particular (Moretti, 2005, p. 218).

Darwin's "evolutionary tree" provides the theoretical basis and visual tools for the study of literary form. The "evolutionary tree" first appeared as a doodle of "I think" (Figure 1) in Darwin's notes of 1837, and its final form (Figure 2) in *On the Origin of Species* (1859).
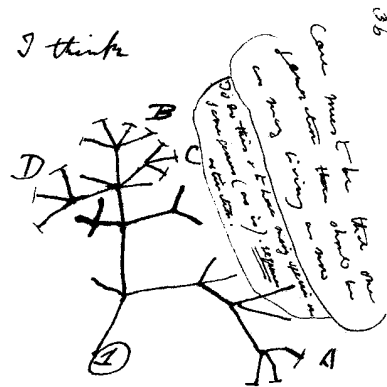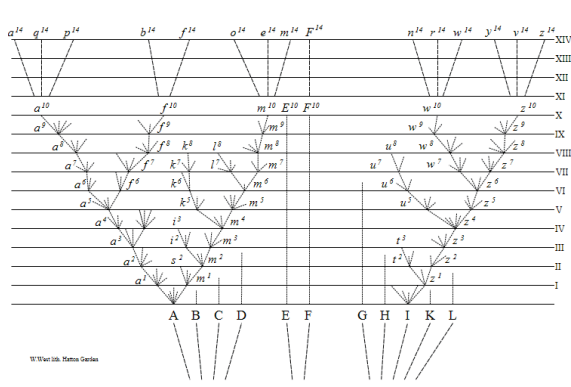

Figure 1. "I think" (1837)   **Figure 2. Evolutionary Tree (1859)**

The "evolutionary tree" served as a visual tool for Moretti's quantitative approach, leading him to subsequently consider graphs, maps, and trees as three abstract models for the research of literary history. Drawing upon the concept of homology in genetics, genetic biologist Alberto Piazza, by highlighting the similarities between "gene" and "genre", justifies the application of "evolutionary theory" to explain the evolution of literature. Piazza's analysis demonstrates that biological evolution

98

shares internal resemblances with language and linguistic evolution, thereby justifying the employment of concepts such as variation, natural selection, gene drift, and migration to elucidate the development of languages and literature (Piazza, 2005, pp. 103-104). For Moretti, the "evolutionary tree" has evolved from a visual aid for literary interpretation into a "cognitive metaphor" (Moretti, 2000b, p. 217). He argues that the jungle law of "survival of the fittest" in biological evolution underwent a transformation into a market-driven "slaughterhouse of literature" upon its integration into literary history, where literary classics assume a hegemonic position. Conversely, readers are cast in the role of "blind canon-makers" (Moretti, 2000b, p. 210). Roberto Schwarz criticizes the "evolutionary tree" as a form of literary interpretation for completely disregarding the dimension of social criticism, while Christopher Prendergast accuses Moretti's "evolutionary tree" of potentially introducing "social Darwinism" into the study of literary history (Kilian, 2016, p. 8). Schwarz and Prendergast express opposed concerns regarding Moretti's literary evolutionary theory. Notwithstanding, influenced by Tzvetan Todorov's Russian formalism and Georg Lukacs' philosophical approach to history, Moretti has dedicated his academic career to bridging the gap between form and history. Consequently, the "evolutionary tree" is not weak due to its disregard for history, but rather its main limitation lies in its inherent blind spot, wherein it tends to perceive cultural choices as solely dictated by the economic laws of the literary market (Kilian, 2016, p. 9). In other words, the historical perspective Moretti considers is only the history of the market economy, which is to a certain extent an overstatement.

Apart from "evolutionary theory", Moretti employs Wallerstein's "world-system analysis" to reinterpret the intricate landscape of world literature. Wallerstein posits two types of world systems: the world empire, centered on politics, and the world economic system, grounded in economy. Within the world-system, three distinctive structural locations exist: core, periphery and semi-periphery (Wallerstein, 2003, p. 98). Moretti, similarly, identifies three areas of imbalanced development within the realm of world literature. These include Western European literature as the center, Northern and Eastern European literature as the semi-periphery, and the literature of other countries and nations as the periphery. To test this hypothesis, Moretti undertakes an "ambitious" literary experiment. Drawing from an extensive collection of literature and conducting manual analysis of critical studies from four continents, he concludes that novels in Turkey, Arabia, Latin America, East Asia, and West Africa have been influenced by Western modern novel forms (Moretti, 2000a, pp. 56-60). However, this experiment has faced criticism from ethnographers and postcolonial scholars for three primary reasons. Firstly, Moretti's argument revolves around the novel, raising doubts about the universality of the novel form and its explanatory power for other forms of art. Secondly, Moretti argues for the autonomy of novel development in Western Europe, thereby amplifying the reliance of novel development in other regions and reinforcing a narrow sense of European superiority. Thirdly, Moretti emphasizes the influence of the center on the periphery, disregarding the literary dialogues that occur between other regions and essentially denying the cultural output and contributions of "marginalized" regions.

Wallerstein's conceptualization and classification of the "center-periphery" dichotomy primarily stem from the emergence of the nation-state and the global expansion of the capitalism. He argues that the economic, political, and sociocultural spheres are interconnected, instead of being independent realms (Wallerstein, 2003, p. 168). Hence, he suggests that economic and political logics can be applied to the study of literature and culture. However, it is important to note that the degree of economic development does not necessarily align perfectly with the trajectory of literary development. Fernand Braudel, a scholar associated with the French Annales School, emphasizes the relative autonomy of the artistic sphere. He observes that during the late 19th and early 20th centuries, France, despite being economically less advanced compared to other European nations, held a prominent position in Western painting and literature. Similarly, the dominance of Italy and Germany in the realm of music did not coincide with their economic dominance. Even in the present day, the economic supremacy of the United States has not translated into global leadership in literature and the arts (qtd. in Casanova, 2004, p.11). Braudel's argument highlights the divergence between economic, political, and artistic developments. One of the key reasons why Moretti's conception of world literature has faced criticism is its neglect of the distinct attributes of literary subjects and the potential disjunction in historical progress, which shows the possible "chaos" caused by the interdisciplinary practice.

3. Interdisciplinary Methodology: Distant Reading

Distant reading, serving as a fundamental methodology, constitutes a pivotal component within Moretti's interdisciplinary research paradigm. In his work, "The Slaughterhouse of Literature" (2000), Moretti observes that existing literary classics represent a mere 0.5% of the vast literary market, leaving the remaining 99.5% consigned to what Margaret Cohen terms as "the great unread" (Moretti, 2000b, pp. 225-227). Recognizing the need to challenge the myth of the "classics" and its monopolistic grip on literary history and the literary market, Moretti sets out to unearth the multitude of lesser-known works buried beneath the towering literary monuments. To accomplish this formidable task, he embraces an unconventional approach which is called "distant reading". "Distant reading" is initially referred to as "serial reading", the roots of which can be traced back to Braudel's quantitative investigations into the social history of the "*longue durée*" (Hackler & Kirsten, 2016, p. 6). The quantitative turn in French historical research provides methodological inspiration for Moretti in tackling the intricate challenges of literary history and world literature, ultimately giving rise to the concept of "distant reading".

"Distant reading" places primary emphasis on the intellectual detachment from the research subject, which is not defined by physical or spatial proximity, but rather as a "state of knowledge". As the scope of research broadens and ambitions grow, the distance from the text becomes more pronounced (Moretti, 2000a, p. 57). Furthermore, distant reading seeks to encompass literary works that have circulated in the international market over a prolonged period, challenging the excessive veneration of

classics that often leads to neglecting the operational mechanisms of the literary world system and overlooking the marketability and circulation of works. Ultimately, distant reading reflects the tension between the intricacies of reality and the abstraction of concepts, whereby the broader the research field, the more abstract the theories and concepts employed (Moretti, 2000a, p. 58). When combined with computational criticism, distant reading enables exploration of a wider literary expanse across space and time, affording distinct advantages over traditional close reading. In essence, Moretti's distant reading stands in stark contrast to the practice of close reading. Moretti characterizes distant reading as "a little pact with the devil", as he argues that "we know how to read texts, now let's learn how *not* to read them" (Moretti, 2000a, p. 57). However, given the strong tradition of close reading in the United States, the promotion of distant reading within American academia is bound to encounter questioning and criticism. Defenders of the canon, such as Harold Bloom, and individuals like Lindsay Walters, a former editor at Harvard University Press, have expressed oppositions to Moretti's distant reading.

Moretti believes that close reading tends to focus on a single text, aiming to closely observe and analyze its intricate details. While close reading centers on the individual text, Moretti proposes an alternative approach that adopts a broader perspective encompassing grammar, rhetoric, and corpus. This approach involves intertextuality, association, and sequential reading practices. Intensive reading, as associated with close reading, tends to prioritize a limited number of texts for thorough examination. Distant reading utilizes machine reading, keyword extraction technology, quantitative analysis, and visual representation to reconcile the intensive reading approach with the skimming nature of extensive reading. By employing multiple strategies, distant reading endeavors to strike a balance between in-depth examination and the ability to cover a wide range of texts.

The practice of close reading, as advocated by the New Criticism in Britain and the United States, primarily focuses on the appreciation and analysis of poetry within the realm of traditional literary criticism. It entails a microscopic interpretation of the text, often lacking a broader perspective and connections to the larger literary landscape. On the other hand, distant reading, closely associated with comparative literature and world literature studies, adopts a macroscopic approach in examining literary history and identifying patterns within genres. Close reading finds its roots in Western literary formalism, while distant reading can be seen as a methodological offshoot within the realm of digital humanities. The critics of digital humanities are no longer mere "anatomist", but rather "programmers" who engage with machines and algorithms to conduct their analyses.

4. Interdisciplinary Practice: Computational Criticism

Moretti's interdisciplinary approach can be characterized as a "two-step" strategy, encompassing both early quantitative literary criticism and later computational criticism that delves into the realm of algorithms. Moretti's initial attempt of quantitative criticism can be traced back to the publication of *Atlas of the European Novel* (1998), where he employed simple and even hand-drawn statistical tables

and charts. The subsequent work, *Graphs, Maps, and Trees* (2005), presents a compilation of the research findings of quantitative criticism. In 2010, Moretti, together with Matthew Jockers, established the Stanford Literature Lab, adopting a collaborative model that utilizes algorithms to analyze sentence patterns, rhetoric, plots, and themes within data-driven literary and non-literary materials. This development marked a significant shift from traditional literary criticism to computational criticism. Since the founding of the Literature Lab, Moretti has overseen and participated in 11 literary experiments: "Quantitative Formalism: an Experiment" (2011), "Network Theory, Plot Analysis" (2011), "Style at the Scale of the Sentence" (2013), "'Operationalizing': or, the function of measurement in modern literary theory" (2013), "Bankspeak. The language of World Bank Reports, 1946-2012" (2015), "On Paragraphs. Scale, Themes, and Narrative Form" (2015), "Canon/Archive. Large-scale Dynamics in the Literary Field" (2016), "Literature, Measured" (2016), "The Emotions of London" (2016), "Patterns and Interpretation" (2017), "Totentanz. Operationalizing Aby Warburg's Pathosformeln" (2017), and so on. All these showcase Moretti's dedication to advancing interdisciplinary research. Stanford Literature Lab, henceforth, launched the computational criticism model in the field of literary research, leading the international trend of "digital humanities".

Moretti maintains that one notable advantage of the "digital humanities" lies in its ability to expand the number of research objects, liberating researchers from the constraints of time and space. However, inherent within the "digital humanities" is a complex "coexistence of contradictions". While it embraces revolutionary new tools, it also exhibits "an enormous provincialism in its field of application" (Heise, 2017, p. 273). This is evident in the fact that the database of "digital humanities" largely relies on English language corpus. Moretti also highlights that the progress of "digital humanities" faces challenges related to copyright issues. Specifically, the construction of a substantial corpus in the United States must adhere to a copyright term of 75 years after the author's death. This explains why nineteenth-century English literature has played a prominent role in the realm of "digital humanities". Additionally, the corpus from the 18th century presents another challenge due to the printing practices of that era, where the elongated letter "s" often resembled the letter "f" during the printing process. This poses further difficulties for both modern readers and machines in terms of recognition and comprehension (275).

Another noteworthy advantage of "digital humanities" lies in its potential for algorithms used in processing archives to stimulate new ideas, novel combinations, and innovative synergies for traditional literary criticism. Moretti emphasizes that at the core of "digital humanities" lies the convergence of big data archives, data mining techniques and algorithms. Nietzsche, in the preface to the second edition of *Morgenröthe*, characterizes himself as an underground worker engaged in "mining". When this notion of "mining" is reintroduced in the context of "digital humanities" as "data mining", it retains its Nietzschean essence of "digging" and "exposing". However, the means of operation have expanded to encompass algorithms, large-scale computing, and remote analysis (Kilian,

2016, p. 7).

Notwithstanding the foregoing, the emergence of "digital humanities" raises potential concerns and challenges. Firstly, the practice of "data mining" extends beyond being a mere technical method for knowledge discovery; it permeates various dimensions of social life, encompassing activities such as e-commerce advertising, network intrusions by hackers, intelligence gathering and public opinion monitoring. Consequently, accurately positioning, objectively evaluating, and appropriately guiding the development of "digital humanities" becomes a complex and pressing issue. Secondly, the visual nature of "digital humanities" has the potential to induce cognitive blockages. Computational criticism often presents vast amounts of information and intricate visualizations, leading to a shift in focus from the original text to the visual representation. This shift neglects the in-depth analysis and interpretation of the underlying data. Gradually, "digital humanities" has transformed into a "visual feast", where charts and diagrams serve as mere "illustrations" for academic papers and monographs. Hence, literary interpretation becomes a superficial representation of ideas rather than genuine critical thinking.

In the face of these challenges, Moretti has recognized that both extensive databases and complex algorithms are merely auxiliary tools. As an enrichment and extension of traditional literary criticism, his research logic and methods adhere to the problem-centered approach. His investigations begin with the study of problems and culminate in the analysis and interpretation aimed at serving social criticism.

5. Inspirations for Foreign Literature Studies in China

Moretti's interdisciplinary researches encompass a systematic approach that begins with conceptualization of world literature, followed by nontraditional methodology of distant reading, and culminates in practice of computational criticism. This approach demonstrates the interplay between evolutionary theory and world-system analysis, the synergy between close reading and distant reading, and the dynamic between traditional criticism and computational criticism. Moretti's academic career is featured with interdisciplinarity, which can serve as the constructive inspiration for foreign literature studies in China, especially under the calling of "new liberal arts" in recent Chinese higher education.

The advocacy of interdisciplinarity in the realm of foreign literature stems from several fundamental factors. Firstly, interdisciplinarity emerges as an inevitable consequence of the inherent integrity of knowledge. The tension between maintaining knowledge integrity and the subdivision of disciplines has always existed. Literature, in its essence, embodies a holistic perspective. In ancient Greece and Rome, the realms of logic, ethics and physics were intricately interwoven within a comprehensive mythological framework. During the medieval period in Europe, the "Seven Arts" were heavily influenced by orthodox Catholic thought. Similarly, in China, a longstanding tradition emerged, advocating the integration of poetry, music and dance alongside literature, history, and philosophy (Feng, 2010, pp. 43-47). Throughout the histories of Chinese and Western disciplines, a noticeable shift can be observed, moving from the initial categorization of knowledge to the establishment of rigid

disciplinary boundaries. This trajectory has reached its culmination in the widespread specialization and compartmentalization of knowledge (Wallerstein, 2003, p. 213). Although the quest for internal consistency in the realm of humanities knowledge is an ongoing endeavor, it is crucial to recognize that once the autonomy of individual disciplines has been largely established, it becomes imperative to embrace interdisciplinary or transdisciplinary thinking to align with the inherent internal coherence of knowledge.

Secondly, interdisciplinarity arises as an intrinsic requirement within the realm of literature studies, especially foreign literature studies in China. The impetus for interdisciplinary interactions originates from the endeavors of humanities researchers to explore and pursue theoretical innovation. These scholars seek to enhance literary research by incorporating knowledge from other disciplines, aiming to achieve advancements in "interpretive techniques, knowledge thresholds, ideological resources and value principles" (Feng, 2017, p. 275). The phenomenon of "heteroglossia" in the field of foreign literature studies in China, primarily refers to the incorporation of Western theories such as aesthetics, linguistics, psychoanalysis, and anthropology into the realm of literary criticism. The introduction of Western literary theory represents a crucial initial step in interdisciplinary research. However, it is essential to acknowledge that the study of domestic and foreign literature has often remained stagnant at this preliminary stage. Concerns have been raised regarding the potential stifling and domination of Western literary theory over classical Chinese literary theories. To realize meaningful interdisciplinary studies in the field of foreign literature, it becomes imperative to transcend the limitations of national and disciplinary boundaries to attract diverse intellectual contributions. Subsequently, efforts should be directed towards establishing a collaborative educational "community" that connects knowledge and disciplines, ensuring a harmonious blend of "self-reliance" and interdisciplinary engagement.

Thirdly, interdisciplinarity plays a vital role in dispelling the myths about "canon" and "power". Prior to World War II, the demarcation of disciplinary boundaries and the pursuit of knowledge autonomy held paramount importance. However, the proliferation of the Internet, the revolution in information technology and the wave of globalization have rendered the traditional classification of disciplines, characterized by meticulous specialization and clear barriers, inadequate to address the complexities of modern society. Moreover, Foucault's seminal work, *Discipline and Punish: The Birth of the Prison*, reveals the underlying power dynamics inherent in disciplinary practices. According to Foucault, the disciplinarization of modern knowledge involves exercising control and surveillance over individuals through institutionalized mechanisms, ultimately giving rise to power relationships (Foucault, 1995, p. 296). Foucault's understanding of power encourages a reassessment of the underlying rationale behind disciplinarization in higher education, especially in relation to the realm of humanities.

As demonstrated above, interdisciplinary study and research is becoming more and more important in humanities, especially in foreign literature studies in China. Nonetheless, the establishment of "new liberal arts" necessitates a solid theoretical foundation and empirical experience. Moretti's

interdisciplinary research offers valuable insights for the study of foreign literature within the framework of the "new liberal arts". This essay outlines two key inspirations derived from Moretti's interdisciplinary approach.

On one hand, it is essential to address the reconciliation of the human-machine conflict within the realm of "digital humanities". In recent years, there has been a pervasive discourse surrounding the "humanistic crisis", but it is crucial to approach such narratives with dialectical thinking. When faced with computational criticism, maintaining a rational and critical perspective becomes necessary, avoiding both unwarranted praise and undue negativity. The excitement surrounding big data, artificial intelligence, and visually appealing charts should be tempered with a sober perspective. However, we must not shy away from exploring potential avenues for literary criticism with an open mind. Computational criticism offers an alternative possibility that warrants exploration, serving as a window and catalyst for interdisciplinary research in literature. It is important to recognize that computational criticism neither represents the ultimate refuge for literary research and criticism, nor implies the abandonment of humanistic spirit and aesthetic sensibilities in an era of information explosion. Human beings and machine are not inherently antagonistic, as there exists vast potential for collaboration and diverse modes of cooperation between them. Thoroughly reconsidering the relationship between the humanities and technology becomes crucial, delving into how the humanities can actively engage in the process of technological advancement and contribute to the future development of science and technology.

On the other hand, it is crucial to consider teamwork, technology sharing and the construction of interdisciplinary frameworks. The "old liberal arts" emphasized independent disciplinary studies, whereas the "new liberal arts" advocates for "interdisciplinary integration". To transcend disciplinary boundaries, literature also necessitates the incorporation of collaborative teams. It is undeniable that the advent of "digital humanities" presents significant challenges for researchers like Moretti in the humanities field. It demands elevated requirements for the software and hardware competencies of scholars and their teams, emphasizing the urgent need for collaborative teamwork and technology sharing. Moretti's research journey, from being a literary critic to a humanistic scientist, and from interdisciplinary theoretical exploration to the establishment of interdisciplinary literature laboratories, is regarded as an "intellectual movement" in humanities. Moretti's contributions extend beyond the creation of interdisciplinary concepts and methodologies; they also encompass the construction of interdisciplinary frameworks. In 2004, Moretti initiated a graduate course at Stanford University titled "Digital Data and Literary Theory", which initially had only one student enrolled. However, in 2014, Stanford University introduced a new policy allowing undergraduates to pursue a "joint major" combining computer science with English or music, a development that has been seen as influenced by Moretti's work. Moretti's successful trajectory provides a valuable reference for the progression from micro-level theoretical investigations to macro-level disciplinary construction.

Acknowledgment

References

Arac, J. (2002, July-August). Anglo-globalism? *New Left Review*, *16*, 35-45.

Casanova, P. (2004). *The world republic of letters* (M. B. DeBevoise, Trans.). Cambridge and London: Harvard University Press.

Foucault, M. (1995). *Discipline & punish: The birth of the prison*. New York: Vintage Books.

Hackler, R., & G. Kirsten. (2016). Distant reading, computational criticism, and social critique: an interview with Franco Moretti. *Le foucaldien*, *2*(1), 1-17.

Heise, U. K. (2017). Comparative literature and computational criticism: A conversation with Franco Moretti. In U. K. Heise (Eds.), *Futures of comparative literature* (pp. 273-284). London: Routledge.

Kilian, P. (2016). Of trees and genealogies: A foucauldian commentary on Franco Moretti. *Genealogy+Critique*, *2*(1), 1-10.

Liming, F. (2017). Interdisciplinarity—A post-disciplinary theoretical discourse. *Chinese Forum*, *5*(1), 274-281.

Liming, F. (2010). The knowledge basis of interdisciplinary interaction and literary research. *Literary Debate*, (13), 43-47.

Moretti, F. (2000a, January-February). Conjectures on world literature. *New Left Review*, (1), 54-68.

Moretti, F. (2000b). The slaughterhouse of literature. *Modern Language Quarterly*, *61*(1), 207-227.

Moretti, F. (2005). World-systems analysis, evolutionary theory, "weltliteratur". *Review*, *28*(3), 217-228.

Piazza, A. (2005). Evolution at close range. In F. Moretti (Ed.), *Graphs, maps, trees: Abstract models for a literary history* (pp. 95-113). New York: Verso.

Wallerstein, I. (2003). *The Essential Wallerstein* (G. Y. Huang, Trans.). Nanjing: Nanjing University Press.