PART 4 Reconceptualizations of Poetry in the Post-Mao Era

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CHAPTER 11

Network Analysis as a Modernist Intervention: The Case of Chinese Poetry Readings

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Recently, a substantial number of literary scholars have turned their attention to the use of network analysis and new computational methodologies in order to understand literature from new perspectives and, potentially, for new purposes.¹ These efforts are being undertaken on a global scale, analyzing literary scenes and discourses that lie outside the Euro-American space that has, for too long, limited the research supported by literature and comparative literature departments. The products of these inquiries sometimes make these two undertakings—the analysis of large data sets and the globalizing of literary reading—seem to be intimately interrelated, a set of zoomed-out, theoretical analytical structures that can be applied across cultural and linguistic boundaries.² According to Franco Moretti's metaphor, when one reads from the distance of aggregate data, one "sees" a wider geographic and cultural field. This essay takes the opposite position, arguing that no method of large-data analysis can be a culturally neutral and transparent hermeneutic.3 Network analysis in particular actively performs modernization and globalization on its objects, deforming nonmodern and local materials into parts of a modernist narrative. However, large-scale data analysis in general does not require us to reproduce the modernist, globalizing ideologies of network theory: we can shape our data analysis using the ideological and cultural techniques of the materials we intend to study.⁴ In this essay, recent scholarship on

¹ The core of this community is at the Chicago Text Lab's Global Literary Networks project, directed by Hoyt Long and Richard Jean So, but it spans from Franco Moretti's literary study *Distant Reading* to Hilde de Weerdt, *Information, Territory, and Networks*, a monograph on imperial informatics in the Song dynasty, to several forthcoming monographs and dissertations.

^{2 &}quot;That's the point: world literature is not an object, it's a problem, and a problem that asks for a new critical method: and no one has ever found a method by just reading more texts." Distant reading is his hypothesized answer to that question. See Franco Moretti, Distant Reading, 46.

³ This is true as well for small-data hermeneutics, but their ideological content has been the subject of much debate.

⁴ This is meaningfully different from the way Moretti thinks about the novel: "when a culture starts moving towards the modern novel, it's always as a compromise between foreign form

networks in contemporary and premodern China will serve as a corpus from which to point out real and potential lacunae in network analytical criticism. Recent works of literary anthropology about Chinese poetry events will then point toward potential revisions and rethinkings of literary networks, and disaggregate data-driven scholarship from implicit cultural imperialism in a way that will allow it to flourish.

1 What Is a Network?

The word "network" first appeared in the English language in the Tyndale Bible in 1530, used to describe an altar grating, a "work (esp. manufactured work) in which threads, wires, etc. are crossed or interlaced in the fashion of a net" (OED Online, 2015, "network"); long before there was a sense of a social or biological network, networks were commodities. This sense of the word is what lent itself to our more recent extension of the term into a name for physical constructs that take the shape of a net, like railroads, telephone systems, and electrical circuits. So described, these constructs gain a ghostly second valence: not only are they the results of work that take the shape of a net, they are now netshaped systems of objects that themselves aid in the performance of work. This sense of the word requires the network to be viewed conceptually, from above: an electrical network of any size cannot be viewed in the way an altar screen can; it can only be imagined as if seen from the air. Most recently, the term has gained force as a verb, such that "to network" now means to do the work of bringing commodities or people into relationships to one another, to attach a computer to a network, or to organize abstractions into an interlinked system. Yoked together by the historical metaphorical logic of the term, these three valences, commodity, tool, and action, are simultaneously experienced when we use the word "network" today. No matter how abstract the materials at hand—invisible electrons, digital bits, or theoretical constructs—when we network them, we think of them metaphorically as physical commodities undergoing circulation, and when we say that they are networked, we refer implicitly to some human work that put them into that relationship.

and local materials" (*Distant Reading*, 52). I read this as an implicitly imperialist position in which the international influence shapes local raw material: we must also attend to *local form*, culturally situated hermeneutics and ways of knowing, and the way local form shapes foreign materials.

⁵ It is worth mentioning that this perspective is usually fictive: once one is high enough off the ground to see a substantial part of the power network, individual lines are too small to be distinguishable.

This triple valence is deeply culturally contingent. Chinese renders "network analysis" as wangluo fenxi 网络分析, with wangluo representing the English "network"; like many modern Chinese words, wangluo is assembled from two separate, older words that both mean "net," and its modern assemblage lacks many of the connotations of its component characters.⁶ It also lacks some of the connotations of the foreign term it renders: it has no connection to work or any verbal use, although it can be turned into a verb with the suffix -hua 化. Contemporary uses for wangluo largely describe transnational or conceptually imported phenomena; in the People's Republic of China today, it is most often used for computer networks, including the Internet. A network is therefore a fundamentally English and European (because of the term's origins in Biblical translation, similar words appear in other European languages) metaphor that is centrally materialist and commercial, which cares very much about the movements of people and things from one place to another, and which has also evolved to accept a top-down, imaginative imposition of order onto a variety of experiences.

Network analysis applies these methodologies to a variety of literary texts, literary actors, and literary institutions. It chooses elements that it defines as nodes, often represented visually by geometric shapes. Nodes participate most strongly in the oldest stratum of the network metaphor, that of the object; they are inert and evaluable items that provoke or manage the net-shaped interrelation. In the trade network, they are markets; in a digital network, they are computers or processors; in a social network, they are people. These nodes are connected by edges, which most often take the form of straight lines. Edges are visual representations of exchange between nodes, whether those of commerce, data, or interpersonal relationships. These lines are the metaphoric pathways along which work takes place, implicitly conceptualized as the motion of objects. Nodes are homogeneous and separate. Although their different sizes allow them to have varying weight, and color coding can divide them into categories, they must be simultaneously distinct from one another and meaningfully identical to one another; this resonates powerfully with modern concepts of individuals as equal under the law, independent and isolate. At the very least, nodes must be identical in the way they receive and transmit edges. Edges compress space and time: in terms of computer networks, for example, they replace the physical distances between machines with a shorter

⁶ For example, the Han dynasty *Shuowen* 說文 dictionary defines *wang* as crossed ropes for fishing and claims they were invented by the legendary emperor Fuxi 伏羲; the modern term *wangluo* completely lacks this valence.

metaphorical distance, and transform occasional, temporary, narrative flows of data into a stable and persistent structure.⁷

The use of digital computing to analyze networks reinforces the power of the network metaphor, because computers themselves are figured as networks, and are constructed and used in close allegiance to the logics of networks. Tara McPherson describes the ideologies of early software design as dominated by encapsulation (segments of a program should be independent of other programs), modularity, simplicity, and connection; she then demonstrates that these ideologies match the social politics of race in the twentieth century.8 Contrary ideologies of deep interdependence (there can be no white race without the black race), mutual indistinguishability (there is no bright line between white and black), and complex resistances were all difficult to express in the twentieth-century United States; likewise, they are difficult, though not impossible, to express in twentieth-century American digital code. McPherson's overarching contention is that "the difficulties we encounter in knitting together our discussions of race (or other modes of difference) with our technological productions within the digital humanities (or in our studies of code) are actually an *effect* of the very designs of our technological systems" ("Digital Humanities," 140).9 Systems of analysis have ideologies; systems of network analysis have Euro-American, white, twentieth-century modernist ideologies.

Analysis through networks necessarily reduces complexity, as do all metaphors and all hermeneutics. To interpret a piece of text is always to ignore some other text or some other perspective, and in this way the limitations of the network metaphor are not categorically different from other metaphors of reading. Whether one reads through metaphors of transportation, envelopment, closeness, or distance, all hermeneutic inventions elide particular political, temporal, and linguistic differences between the text and the reader in order to allow readers to place themselves in relationship to the text. Richard Jean So and Hoyt Long are responsibly cognizant of this: they say the purpose of their network analysis "is not to capture social relations in all their dynamism and complexity but to isolate and abstract specific dimensions of this complexity ... in order to identify broader structural patterns" ("Network Analysis and the Sociology of Modernity," 156). However, the method of the isolation and abstraction is itself a cultural product, perhaps the cultural product

⁷ This is a heavily transformed and quite partisan interpretation of the "Explanation of Method" in Richard Jean So and Hoyt Long, "Network Analysis and the Sociology of Modernity," 156.

⁸ Tara McPherson, "Why Are the Digital Humanities So White?," 145.

⁹ All italics in quotations are in the original text unless otherwise noted.

par excellence: in deciding what to leave out and what to conceptualize, network analysis performs transformative and generative cultural work.

2 Network Analysis as Modernist Globalization

Arif Dirlik writes:

[Modernization discourse] has a great deal to do with the political economy of a globalized capitalism, which for its own survival depends at once on a valorization of difference, and the convergence of difference into homogeneity through techniques of representation that carefully assign equivalence only to those practices that accord with the logic of ongoing capitalist expansion.¹⁰

This description of capitalist global modernity closely matches the methodologies of network analysis as described in the first section. The enforced separateness of nodes—the way in which geometric shapes in a network diagram cannot easily overlap or share identities—valorizes difference, and the requirement for nodes to be connected in identical fashion by edges is a straightforward "convergence of difference into homogeneity." The data that is excluded from the standard network diagram is exactly that which does not fit into metaphors of work, possession, commerce, and transfer. We often lose, for example, the ability to see a human node's level of consent to participation in a social or economic network: as Anna Tsing says, "A focus on circulation shows us the movement of people, things, ideas, or institutions but it does not show us how this movement depends on defining tracks and grounds or scales and units of agency."11 Visualize a network diagram of the flows of global trade: which nodes determine the rules of the network? Which region's workers are helplessly subjected to it? These are not the questions asked by the standard network diagram, and this exclusion is analogous to narratives of capitalist globalization that either assert or ignore the consent of the globalized. The political shape of the isolation of variables here inscribes a partisan position into data-driven literary analysis: when it is shaped by the

¹⁰ Arif Dirlik, "Modernity as History," 21.

Anna Tsing, "The Global Situation," 337. I do not hold that this is necessarily or always true, but it is true for all the network analysis mentioned in this chapter, for example the publication interactions that So and Long study: they cannot (and do not claim) to be able to distinguish between the poet who chooses to print in a specific set of journals and a poet who is forced to do so by exclusion from other outlets.

metaphor of network analysis, large-data assessment represents an increase in the size of the network that very closely accords "with the logic of ongoing capitalist expansion."

Network analysis also matches the ideologies of modernization and globalization at a basic conceptual level. Eric Hayot argues that "the modern world-view, the feeling of modernity, is perhaps most simply the feeling that the rules governing history, physics, economy, communication, culture, space, and time, are the same everywhere and for all time: a general geometrization of the various measures of the universe."12 We can see, in this description of modernity, the history of the word network as it sweeps up into the sky, looking down on the electrical system as a set of timeless, simultaneous geometric abstractions; the description also echoes the dream of the cross-applicability of network structure to a wide variety of diverse global experiences.¹³ One might respond that any hermeneutic is necessarily geometrizing—that we always understand complex phenomena by simplifying them into some kind of diagram, some set of points and lines—and that network analysis is no different from other systems of analysis. This is, however, not entirely true. Network analysis works in binaries (nodes either are or are not connected by edges), positions (a node has a defined relative location on the page), and values (edges have more or less weight, and nodes are larger or smaller): these are also the specific building blocks of geometries. Other qualities—like probability and time, neither of which are easy to represent geometrically—are usually suppressed or elided in network diagrams. In acts of network analysis, assertions about what does and does not count as meaningful interaction are made prior to the visualization of the network: like geometric systems, the experience of the network is meaningfully generated by its axioms.

It is worthwhile at this point to underline the fact that processes of interpretation are productive rather than passive: network analysis is not simply modern, it modernizes. In Emirbayer and Goodwin's assessment of network analysis in sociology, they point out that cultural structures and cultural idioms interrelate with, constrain, and enable social interaction. They also, however, claim that these structures and idioms are "analytically autonomous with respect to network patterns of social relationships" (Mustafa Emirbayer and Jeff Goodwin, "Network Analysis," 1438; author's emphasis). Cultural

¹² Eric Hayot, On Literary Worlds, 115.

Note that this is not a criticism, in Hayot's version or my own, of interpretations of large data sets: as he says, "literary scholarship ought to be able to function at multiple analytic scales" (On Literary Worlds, 19).

Mustafa Emirbayer and Jeff Goodwin, "Network Analysis, Culture, and the Problem of Agency," 1441.

idioms pattern social relations in a way that cannot be understood by the direct study of those relations; we can identify a social interaction like shunning without gaining any information about the symbolic order that motivates it. When claiming to focus on the shapes of social interaction without reference to specific and local cultural idiom, network analysis in fact introduces its own cultural axioms as a totalizing, objective hermeneutic overlay. It interpellates people with their own set of cultural idioms into the metaphor that is the network, and in so doing invents them as modern nodes.

Some proportion of recent digital analysis overlooks the verbal nature of its axioms, the way in which methods of data analysis are always proposals. Matthew Jockers, in his *Macroanalysis*, establishes a set of Irish-identifying "marker words" in the titles of Irish-American books, and counts the proportion of books that use the marker words in their title. Finding a drop in the proportion in 1890, he writes, "what happens in or around 1880 to cause the precipitous decrease? Here we must move from our newly found facts to interpretation." This neat division between "facts" and "interpretation" contradicts the fact that the very creation of the archive is itself interpretive. Jockers has asserted that titles were used to uniquely express something about a book's Irishness, as opposed to book covers, distribution channels, or publishing imprints; he has also created a subjective list of which words count as markers, a list that includes words that are not exclusively Irish, like "priest." Both these decisions, along with many others, determine which data will be measured and which data will not; they are themselves interpretive of social practice. Network analysts must make similar decisions about what to measure and what to ignore: the network analysis is the result of those axiomatic choices.16

It is the active, verbal nature of network analysis that produces its best use. We know that modernization and globalization have taken place in many large and small ways over the long twentieth century, and we know that the globally totalized truth-system that Hayot identifies as modern has spread, along with capitalism and certain concepts from the European tradition, to many

¹⁵ Matthew Jockers, Macroanalysis: Digital Methods and Literary History, 51.

This is sometimes palpable in pieces of literary network analysis: the argument that Mandel et al. make is that "information visualization leads us also to hypothesize that high romanticism or the publishing history of Romantic-era writers of the Lake School may in fact be a 'network effect.' The network effect has been defined by economists as increasing the value of something through wide adoption of it." This tautology is driven by the fact that networks are seen as better if they are more widely spread, and the community is being assessed as a network. See Laura Mandel et al., "How to Read a Literary Visualisation," n.p.

points in space and time. In modernist spaces and at modernist moments, network theory comes into its own as a metaphoric hermeneutic that matches and respects the cultural idiom of its subjects. When an author really does care largely about circulation, expansion, and commodities, or when an author considers him- or herself as a member of a web of production and consumption, network analysis can read, understand, and predict that author's literary habitus. So and Long's project to map the web of literary publication in select American, Japanese, and Chinese modernist literary scenes is therefore a particularly well-chosen application for network analysis.¹⁷ They define two kinds of nodes, magazines and artists, and an edge is drawn whenever a poet publishes in a magazine. Literary publication of the period was dominated by technologies and ideas of exchange and commodity consumption: a poem was sent to an editor, an editor accepted it, and a magazine was sold to a reader in a transfer that was physical and commercial, and whose physical commerciality was ideologically important to artists and editors alike. The publications that So and Long study were additionally using the substantially globalized, transnational form of the little magazine, and artists adopted that form in part to make a positive case for something that today looks very much like globalization.¹⁸ Weighting the edges according to the number of publications a given poet published in a given magazine made even more sense, as the volume of publications could in fact stand in for an economic and possibly ideological connection: this was a world in which one purchased and reproduced artwork from perceived allies, very different from historical moments like the Mao period, when some publications were reproduced for the purposes of criticism. Additionally, the implicitly mercantile emphasis on number of publications would have been reasonable for modern Chinese poets, many of whom shared a drive to educate and transform popular culture on the largest scale possible, and who were attempting to transition from employment as scholar-officials to independent freelancers writing for pay.

When the cultural idiom of the hermeneutic is able to parse or reflect the cultural idioms of the cultures under study, we see readings that generate

¹⁷ What follows is not the rationale that is given in Richard Jean So and Hoyt Long, *Network Analysis*, 157–158: they justify the appropriateness of the study of publication data to artistic societies of the period. I intend to demonstrate why they are justified in applying network analysis to that data, rather than another hermeneutic.

See Michel Hockx, *Questions of Style*, 27–29, where he describes the earliest Chinese literary journals as quite similar in design to counterparts from the West: centered in cosmopolitan Shanghai and full of translations, they had names like *Yinghuan suoji* 瀛寰 琐记 (Scattered notes from around the universe) and *Siming suoji* 四溟琐记 (Scattered notes from the four corners of the earth).

insights, such as the importance of the position of cultural "broker"—another commercial metaphor—that So and Long identify with poets like Amy Lowell and Liu Bannong. 19 We see harmonies and synergies not just between the results of network analysis and the social events under consideration, but between social self-definitions and the axiomatic hermeneutics of the analytical system. Hoyt Long quotes a Japanese modernist poet: "if you analyze the poems of those active in today's [poetry community], somewhere you'll get a whiff of the age's global intellectual currents. The [community] as a whole is in fact a dizzying interlacing of all these myriad currents." 20 The modernizing and globalizing effect of network analysis allows data about modernist activities to be abstracted and emblematized in a way that represents the whole set. However, when the cultural idiom of the hermeneutic contradicts or stands in for the cultural idiom of the cultures under study, we see slippages, lacunae, and aporia; it is these that constitute the challenges for the future of network analysis.

3 Shapes outside the Metaphor

I came to the study of network analysis by asking a Chinese poet to tell me which contemporary poets he thought were worth reading and meeting. He took out a sheet of white paper, wrote "1960s," and started listing poets; then he drew a boundary line beneath the list, and wrote "1970s" and made a second list of poets. About halfway through this process, he mumbled, "well, of course, of course" and put his favorite poet at the top of the list, apart from all the others and outside of the list of decades.²¹ This was what some might

I question, though, their description of Countee Cullen as a rare "broker" between the Harlem Renaissance and other poetry scenes. They write "[Cullen and Lowell] bridged gaps in the field by strategically submitting their work to, and having it selected for publication in, clusters of journals that were otherwise sparsely connected" (Richard Jean So and Hoyt Long, *Network Analysis*, 163), insinuating that other Harlem Renaissance poets intentionally declined to do so, when it is equally if not more likely that they were prevented from doing so by racist literary structures and white supremacist aesthetics. Network analysis, in this case, may have trouble visualizing nodes that receive or transmit edges differently from one another. See Tara McPherson, "Digital Humanities," 2012.

Hoyt Long, "Fog and Steel," 285. I have translated "poetry community" and "community" for the Japanese *shidan*.

I elide the poet's name, and do not reproduce his sheet here, to spare him the kind of attention that adheres to value judgments: he generated the list as a favor to me, rather than as a formal statement of affiliation, and I am interested in its form rather than its content.

call this poet's "network" or community—but he did not organize it in the terms of his commerce or exchange with other poets. He organized it instead according to the birth years of poets, a list that was both hierarchical (because older poets deserve the respect that comes with seniority) and aesthetic (because poets educated before and after the Cultural Revolution have vastly different artistic praxis). This list was dominated by things that were shared, rather than things that were exchanged, and it demonstrated the poet's idea of elite poetry as a level of capability to which one rises, rather than a thing that can be given or received. Questions that network analysis could answer, such as who published the most, or in the most varied outlets, or who had visited or exchanged letters with who—would miss the way these people saw themselves, for example, the noneconomic and qualitative difference in exchanges that take place between people who reside in different places in hierarchies.²² If a network analyst did choose to study some kind of measurable transfer between these poets, they would likely pick up several genres of noise, such as geographic location (poets who live near one another read together and plan mutual visits) or personal and non-art-based relationships (poets who are dating each other write more letters to each other).

This is not to say that generational listing is a superior hermeneutic to network analysis; like any other interpretive methodology, it is a reductive metaphor for a complex system. And yet it is an *apt* metaphor for the complex system, as it participates in ideologies that are endemic to the group being studied. The list that the poet drew resembles nothing so much as a certain kind of premodern Chinese *zupu* 族谱 or *jiapu* 家谱, a family register: divided by generations, with each member of each generation listed alongside one another. Some genealogies, both European and Chinese, use the visual idiom of interpersonal connection—a parent shares something physical, represented by a line, with children and siblings—but some *zupu* list family members of each generation as possessors of a single shared quality of identity, and it is likely this habit of conceptualization that motivated the poet to describe his scene in this way rather than any other. We will remember, too, that these concepts are not just reflective of, but *constitutive of* social relations; the ability of

Indeed, estimations of literary quality, fame, and status in network analysis are often implicitly expressed by managing sample size, excluding writers that are insufficiently well published or insufficiently well connected; this can cause the remarginalization of marginalized groups, as described in Susan Brown's "Networking Feminist Literary History: Recovering Eliza Meteyard's Web"; see Veronica Alfano and Andrew Stauffer, Virtual Victorians, 65. Additionally, the idea that some people are meaningfully included and some meaningfully excluded is difficult to express in the form of a network, as we will see.

this poet to see someone who he has never met or interacted with as nonetheless part of his community will likely affect his treatment of that person, just as the arrival of a stranger who appears in a family's *zupu* lineage might be treated with a curiosity and openness that would be denied to other strangers.²³ To interpret these interactions through the lens of network analysis is to miss the community that exists, and to fail to predict or interpret their activity.

A more concrete example of nonmodern or anti-modern structures being read through the modernizing lens of network theory appears in Moretti's Distant Reading, when he takes up the first half of the seventh chapter of The Story of the Stone, also known as the Dream of Red Mansions. He creates a series of diagrams that record which characters speak to which other characters; characters are nodes, and face-to-face interactions are edges.²⁴ He then describes the chapter as one in which "nothing major happens.... No interaction is crucial in itself. But taken together, they perform an essential reconnaissance function: they make sure that the nodes in this region are still communicating: because, with hundreds of characters, the disaggregation of the network is always a possibility" (Franco Moretti, *Distant Reading*, 236–237). One can already see here the value judgments implicit in the network idiom and those of globalized modernization. The network is good; its disaggregation is bad; communication is good; lack of information is bad.²⁵ Boundaries are to be overcome and the free flow of people and things is the unreached ideal. Even in situations where "nothing major happens"—no truly important commerce or travel takes place—there is still some metaphoric value to the quotidian exchange of small information because it is "consciously producing connections" and generating *quanxi* 關係 (Franco Moretti, *Distant Reading*, 237).

And yet, for a reader of the chapter, this is not the point of this part of the story at all. Almost all of the interactions that the network diagram records in the first half of the chapter are undertaken by a single character, Zhou Rui's wife, as she attempts to distribute paper flowers to the residents of Lady Wang's compound. Lady Wang gives her very specific instructions: three of her

The production of the *zupu* is itself a self-consciously social act: as Johanna Meskill describes, premodern genealogies had many functions, from education in the deeds of great ancestors, to aid in selecting marriage partners, to providing a source of data to help governments select officials (see "The Chinese Genealogy as Research Source," 143–147).

See Cao Xueqin, The Story of the Stone, 167–175.

Although So and Long trouble their idea of brokerage with a discussion of community closure, they eventually hold that closure is a temporary phase on the way to a community's "success" through the profusion of connections ("Network Analysis," 169). As discussed earlier, however, this may very well be exactly how the artists of the period themselves conceptualized success.

granddaughters will receive flowers first, and then the remaining flowers are to be delivered to two of the novel's main characters, Daiyu and Baoyu. This is not a commercial interaction, but a hierarchical one; it sends a message to Daiyu, a grandchild who Lady Wang invited to live with her after the death of Daiyu's mother. The flowers make clear that for the moment, at least, she comes after Lady Wang's other granddaughters. Daiyu hears the message loud and clear: "I thought as much," she says, "I get the leavings when everyone else has had their pick" (Cao Xueqin, *The Story of the Stone*, 174). Lady Wang's floral message about the shape of the hierarchy underneath her creates inequality among nodes; far from preventing the "disaggregation" of the network, it moves one of its members from the center to the periphery, where her ties are weaker.

Intentional disaggregation—the breaking of ties as a plot device, the creation of interpersonal barriers and differences—is a substantial theme of The Story of the Stone. In chapter 5, the boy Baoyu falls asleep and dreams of an encounter with a fairy in the Land of Illusion; the fairy sings him a series of songs that foretell a love affair fated to fail, and hints that he is fated to marry not Daiyu but Baochai, another resident of Lady Wang's compound. This in fact takes place, such that the motion of the plot can be visualized as the long, complex end of the relationship between Baoyu and Daiyu, and Daiyu's death from lovesickness: the comment on life in the walled pleasure gardens of Lady Wang ends up focusing as much on the walls as it does the relationships within.²⁷ We can see the need for walls and barriers all over *The Story of the* Stone, even in the first half of chapter 7 that Moretti mentions: one of the reasons Zhou Rui's wife talks to so many characters is because Lady Wang, her real objective, is so important that she is constantly busy or otherwise engaged. Zhou Rui's wife does not primarily care about the maids and servants with whom she interacts; they are symptoms of the difficulty of getting an audience with Lady Wang, and that difficulty constitutes Lady Wang's importance.

²⁶ The gift also sends a subtler message, one that is often repeated by Lady Wang; Baoyu, a young boy, is included with the girls as a recipient of the flowers, a denizen of the compound, and much else.

This has a relationship to some of Andrew Plaks's conclusions about the novel: "the aesthetics of plenitude not only do not rule out figures of mortal incompleteness, but in fact necessitate their inclusion, so that the very desire to attain a state of self-contained completeness in individual experience is in itself symptomatic of incomplete vision" (see *Archetype and *Allegory in the Dream of the *Red Chamber*, 221). The included incompleteness—something that is in the network diagram but not connected to it—is a barrier or obstacle to the fetishization of commerce and flow that Moretti's network ideology possesses.

The answer to my argument that Moretti's network analysis ends in a misinterpretation of *The Story of the Stone* might be that the use of network analysis, because it works on a different scale and according to a distant methodology, simply produces a kind of knowledge different from that of traditional close reading. Because, however, this particular use of network analysis operates at the scale of the individual chapter, the individual story, and even the individual character, we can use more traditional interpretive tools to test whether its observations are primarily a result of its own axiomatic assumptions. Moretti finishes his conversation about *The Story of the Stone* by saying that Baoyu is not a free protagonist "because he has a duty towards the structure: towards the relation-based society he is part of" (Cao Xueqin, Story of the Stone, 240). These two halves of the clause, though, are not identical. Baoyu's duty is made up of Baoyu's belief in his duty; although he believes he has a duty toward society, his belief could never be in "the structure" as Moretti invents it, a web of relations that looks far more like a map of airplane flight paths than it does the conceptualizations of structure that would be possible in a large Chinese family of his era. When Moretti concludes that the Eastern novel is "opposite" to the Western novel, maintaining that Eastern characters serve "the structure" while Western characters are served by it, he is simply pointing out that the structure he has imposed on the novel is foreign to the ideologies of its characters, and acts as an oppression and a limitation. Network analysis often fails to serve people that are not modern, instead forcing them into the service of shapes that it can validate and interpret. In order to see premodern, postmodern, and anti-modernist relationships clearly, we will have to accept the cultural and temporal rootedness of data-driven hermeneutics. Only then can we engage with and adapt methods of analysis that aptly describe communities under study.

4 An Example: Recent Chinese Poetry Scenes

English-language studies of recent Chinese poetry, in the past five years, have engaged with poetic communities through a shared methodology: they give a narrative description of the scholar's entry into a poetic scene, talk about the activities and performances the scholar witnesses, and then draw abstract concepts from the experience. Heather Inwood visited and participated in the Lushan Famous Poets Summit; Maghiel van Crevel attended a reading and multimedia performance at the All Sages Bookstore in Beijing; John Crespi gives stories and contexts for many different readings, including one funded by

a real estate company and one in People's Square in Kashgar, Xinjiang. ²⁸ These accounts are all different, and they all illuminate different parts of poetic practice in contemporary China, but they have substantial elements in common. ²⁹ First, they *include the scholar* either implicitly as an audience member, but more often explicitly as an active participant in the recorded event. ³⁰ Second, they share their subjects' *focus on events*, usually called *huodong* 活动, or "activities," in contemporary China. ³¹ This is quite different from a focus on texts, as we will see later. And finally, these accounts of poetic practice all describe a *broad variety of roles* when they record events, touching on the people who organize them, fund them, read at them, and listen to them. People hold multiple roles, for example, when a poet also serves as master of ceremonies and switches roles without warning, as in the case of the audience member who objected to the style of a poem read aloud and charged the stage, saying "let *me* read it" (Heather Inwood, *Verse Going Viral*, 129)!³²

These are social groups, but they are illegible when seen through the lens of network theory. They are groups that do not always engage in exchange practices that can be described through metaphors of commercial or other physical exchange; poetry groups producing events more often collaborate in order to attain a common goal. Rather than submitting themselves to the transcendental view-from-above that is the perspective of the network analyst, poetry scenes withhold information from those who are not present—sometimes you

See Heather Inwood, Verse Going Viral, 129–140; Maghiel van Crevel, Chinese Poetry in Times of Mind, Mayhem, and Money, 462–471; and John Crespi, Voices in Revolution, 168–188.

Here I intentionally exclude my own work on contemporary prose poetry: although I also found myself embedded in a poetry community, and wrote a first-person account of my experience there, it was a state-sponsored, non-event-focused community whose structures were homologous to those of the Chinese Communist Party, and I therefore modeled my sense of the structure of the group on the quite developed methods that governmental and paragovernmental communities use to organize themselves (see *Recite and Refuse: Contemporary Chinese Prose Poetry*).

³⁰ Heather Inwood, *Verse Going Viral*, 40, states: "it is almost impossible to be an observer of such events without also becoming a contributor and acquiring participatory competence in the process." John Crespi, *Voices in Revolution*, 172–173, adds: "After attending dozens of recitation events over the course of eight or nine months, I found myself able to reflect upon my acquired competence as a participant in poetry recitals."

For an introduction to and historicization of the term *huodong* 活动, see John Crespi, *Voices in Revolution*, 173–180, although the whole book can be read as a kind of introduction to the poetry of live scenes in China.

³² See also Van Crevel's quite tantalizing discussion of the ways in which contemporary avant-garde poetry is like karaoke, where all performers are also audience members, and experimental poems are a type of "production for producers" ("Not Quite Karaoke," 654).

cannot understand what the event is like unless you're there 33—and force those who are present to participate. Like globalization, network analysis assumes that it is invited everywhere; but in contemporary Chinese poetry circles, totalizing perspectives are not necessarily on the guest list. The nature of events, or huodong, that we see in contemporary poetry scholarship also presents problems to the network analyst. Rather than being a static, transferable product, poetry events are diachronic productions: the makers of poetry events do not retain predictable, independent identities from encounter to encounter. This problem is compounded by the inhabitation of multiple social roles by individuals participating in poetry scenes. A person who helps with the lighting for one event may be the featured poet at another; a poet who reads may seem like an artist to some audience members even while others interpret him or her as someone whose value comes from their donation of funds or other resources.³⁴ So in addition to being overlapping (i.e., cooperative), nodes in a system that described this activity would also have to be multiple, as changes in the aspect and role of individual participants change their place in the community.

To describe these interactions through network analysis would be to visualize the community as dominated by values that may be contradictory to those they actually hold. The network diagram would falsely express a drive toward the expansion of modernist and capitalist values, the intensification and spread of a mesh of exchanges of poetry, wealth, and allegiance—it would see *quanxi*, or relationships, as Moretti does, something to be produced and accumulated (Distant Reading, 237). Both avant-garde events and the commercial events that imitate them can be, by contrast, carefully curated, focused, and limited: Yan Jun 颜峻 (b. 1973), as Van Crevel relates, once published a book where one side was bound by glue and the other stitched shut by thread, leaving no way for the reader to read the book without slicing it open, something he did with gusto at the start of live performances (*Chinese Poetry*, 462). This kind of resistance to audience, resistance to increased connection, makes perfect sense in the context of Bourdieu's argument that for avant-gardes, the literary field is the inverse of the economic field. The more popularizable and salable one's work, the less vital it is to the avant-garde, and the less necessary

John Crespi, *Voices in Revolution*, 173: "my research work, and even my identity in the 'field,' had come to be dominated less by an attempted analysis of poetry recitation itself than by personal participation in a flourishing social practice of the cultural event."

See, for example, the general manager of the real estate firm Genre Don introduced in John Crespi, *Voices in Revolution*, 183. Her company's promotional materials describe her as a serious poet, but I feel very strongly that many attendees of the event, including poetcritics Tang Xiaodu 唐晓渡 (b. 1954) and Xi Chuan 西川 (b. 1963) would categorize her separately from most publishing poets today.

the avant-garde community becomes to the work. This ideological position is being appropriated by market forces in today's China, as when the real estate company Genre Don used contemporary poetry events to attract its stated demographic of "bourgeoisie with taste and cultural aspirations" (John Crespi, *Voices in Revolution*, 183). Crespi describes the tradition of poetry readings, historically affiliated with mass events held by the Communist Party, as an only marginal participant in the commercial revolution that has transformed Chinese life in the late twentieth century (*Voices in Revolution*, 181–182); this gives them a position from which to contest, resist, and collaborate with commercial forces, a position whose uniqueness is invisible if one filters out all interactions between participants that cannot be conceptualized as exchanges of goods or information.

How, then, can we appropriately interpret these social systems? And what type of interpretation might allow for data about these social interactions to avail itself of the scale of contemporary data analysis? Reading Donna Haraway, Susan Brown asserts that we might try to "build inflection, orientation, flexibility, and difference into the emergent structures of the semantic web."35 For a community that comes together to put on performances, we could look to repositories of performance data. One of the biggest—and most useful—of these is the Internet Movie Database (imdb.com), which lists performers, directors, producers, editors, and crew in a set of hyperlinked lists.³⁶ One can find a film or TV show, choose a participant from its list, and then see a list of all the productions on which participant has worked. This makes the database valuable to answer highly specific questions—Has Jackie Chan ever shot a film in continental Europe?—and it organizes data on a scale large enough to allow for many types of analysis. Most importantly, perhaps, structuring data about huodong in the style of the IMDB avoids many of the pitfalls of classic network analysis. First, it allows us to include scholars and other analysts in their relationship to the scenes they study, reflecting contemporary poetry scholars' argument that to study a live scene is to participate in one. The recent scholarly narratives discussed previously, which are otherwise admirable in their sweep, lack the space to produce exhaustive lists of every poetry reading

In this she is responding to the possibility of resisting "modularity" in favor of Haraway's "situated knowledge," opposing one of the core structures of twentieth-century computer code as described in the second section of this chapter. See Susan Brown, "Networking Feminist Literary History," 73.

One Chinese reimagination of the site is dianying.com. Although its data is limited, it is often better than IMDB for Chinese films. For the reasonably minor Shanghai actor Chen Long 陈龙, for example, dianying.com has fourteen listed film and TV credits. IMDB has only four (but the Baidu baike has well over fifty).

a scholar has seen or participated in: access to that data would allow readers to judge the lacunae of each scholar's participatory archive. Second, the IMDB allows an individual to be listed as an actor in one production and a producer in another: a person can additionally hold multiple roles in the same film. This makes for substantially richer data, especially considering that events in the IMDB are diachronic; one can watch Clint Eastwood's transition from extra to actor to lead actor to producer/director. Were this structure to be applied to contemporary Chinese poetry scenes, we could ask and answer new kinds of questions: does serving as a financial backer for one event make it more or less likely that one will be invited to read at events without donating to them? Does audience size at an event correlate with the number of books the reading poets have published or with the amount of investment in the event? Are small events like banquets and outings organized similarly to large events like readings and conferences? Does a well-attended event in an area increase or decrease the chance that another one will be organized in the same place with the same poets?

It is possible to claim that accumulating event data in the form of the Internet Movie Database is simply a process of putting a new skin onto network analysis, with pages as nodes and hyperlinks as edges.³⁷ This is misguided in several ways. One, the "skin" of a data analysis is deeply influential: as So and Long put it, methods of data measurement and accumulation have a "tendency to reify social structure as a static substrate existing independently of the cultural content and processes flowing through it" ("Network Analysis and the Sociology of Modernity," 153). The shape of the social structure that undergoes reification and concretization takes the shape of the data analysis: what we produce is, in many ways, what our tools allow us to produce. The product then makes up part of our own self-image, and our images of others, eliding its basic arbitrariness and strangeness. Put concretely, an actor attempting to excel needs to excel at some metric, and actions intended to improve one's network diagram may not resemble actions intended to improve one's IMDB entry. That neither of these metrics are demonstrably identical to excellence at acting makes them no less influential; one identifies with one's own metrics. Secondly, though, there is a crucial ideological difference between a

A strict anti-imperialist critic might additionally point out that a non-Chinese structure is still being used here to interpret a Chinese reality; this kind of argumentation is less compelling after a hundred years of domestic film culture has produced events and roles in Chinese society quite similar to those that the IMDB attempts to record. Additionally, there should be space for analytical frameworks that are apt even though they are not endemic to a region, so long as an analyst can successfully identify homologous social structures or unique insights as a result of the new analytic.

network diagram and the IMDB that matters a great deal in understanding contemporary avant-garde Chinese poetry: the database format allows for the presence of events that are not part of a wider network. The independent film directed by an amateur with no professional actors receives the same type of entry as does a blockbuster whose participants are tightly interrelated to other films; this makes eminent sense in a poetic world in which circles often define themselves without reference to interactions between circles.

To test the utility of this *huodong*-centered model, we might very well ask whether, and how, it helps us read a text. László Krasznahorkai's recently translated book *Destruction and Sorrow beneath the Heavens: Reportage* makes for an interesting test case. Notwithstanding the book's title, it is a partially fictionalized account of interactions between a Hungarian author and those he takes as representatives of Chinese culture, including poetry critic Tang Xiaodu, poets Xi Chuan and Yang Lian 杨炼 (b. 1955), a range of artists in other media from traditional Chinese opera such as kunqu 昆曲 to fashion design, and people initiated into the histories of cultural sites.³⁸ Krasznahorkai's alter ego Stein moves from interview to interview, visit to visit, dinner party to dinner party, and huodong to huodong in vain search of any surviving classical culture. He asks the executive of the Shanghai Museum: "What is your opinion of the teachings of Confucius? Is there any hope that anything from the original spirit of these teachings can return to the Chinese society and culture of today?" (László Krasznahorkai, Destruction and Sorrow, 166). The answers are often evasive and mostly dispiriting—in the original Hungarian, Stein is named after the Inferno's Dante (Klein, "Taken as Strictly True," n.p.)—and he suffers through a long series of socially and physically awkward attempts to pursue an authenticity that make him seem simultaneously to be a kind of dogged journalist and a sort of transcultural Don Quixote.

The book's climax is in its penultimate chapter, "The Spirit of China," after Stein has come to an increasingly sharp understanding of the dinners, exchanges, and speeches he attends as versions of performance (László Krasznahorkai, *Destruction and Sorrow*, 47, 207, 250). He meets a stranger named Wu Xianweng, ³⁹ who creates an unintelligible and therefore untranslatable text that Stein's translator labors to reproduce. The translator's version

Lucas Klein discusses the seriousness and the complexity of the book's truth claims: he points out that while some details are clearly impossible, others conform not just to potential reality but to Klein's own experience with the named poets and critics listed, many of whom have in fact met Krasznahorkai' (see "Taken as Strictly True).

No characters are given for this name in the Hungarian or English version of the book; I believe that Xianweng renders *xianweng* 仙翁, or "immortal old man," a Daoist deity associated with the southern star Canopus.

begins: "Things next to one another / unspeakable / density" and it ends "Time / Poetry / recite / painting / We grow old / We die." Stein has a kind of epiphany: he abandons translation and whispers in Hungarian in Wu's ear that "he doesn't know how to explain how this is possible, but he has understood, and understands, every word" (László Krasznahorkai, *Destruction and Sorrow*, 264). Stein then goes on to say that he will always remember the pavilion in which they sit, the Longjing tea they drink, the specific garden surrounding them, and "the people sitting around this table" (264–265). A few short pages later, the book ends. If we read this enigmatic scene and its poetic, fragmentary text through its network, we are stymied: Stein has been introduced to Wu by Master Ji, who is a clown-like figure recommended by a Shanghai publisher as "a writer but not a particularly interesting one" who can take care of logistical issues for Stein (245). We have lost, rather than gained, ties: Stein has traveled outside the meaningful network of socially important poets and artists where he started.

Reading the huodong as a performance elucidates the text. Stein can understand what is happening because he is making it happen, he is participating; he is reading not the scattered words on the page but helping to craft a moment in which something imminent, dense, and shared occurs to all those present. He has learned not to penetrate performances to reveal authenticity, but to accept those performances as the living reproduction of classical culture that he has been looking for. Rather than reading Chinese culture from above, as a modernist looking for static geometries might, in this passage Stein accepts that the performances he engages in will always have qualities that are fictionalizing, essentializing, and Orientalizing: "Stein feels he has ended up in a great narrative" (László Krasznahorkai, Destruction, 258). His claim to understand without translation performs his dream of Chinese culture, and for the first time he uses the huodong not as a means to an analytical end, but as an expressive method in itself. We can visualize the drinking of tea with Wu Xianweng and his friends in a database alongside all the other events Stein has attended, and imagine what their lists of attendees would look like, and the roles each played: in part because it is a distant event with anonymous people, in part because he is no longer attempting to receive accurate and authentic information—at this and only this *huodong* Stein self-consciously acts as an artist. This change in roles provokes in Stein the simultaneous senses of the

⁴⁰ László Krasznahorkai, *Destruction and Sorry*, 264. For space reasons, I have elided the large patches of negative space between these words in the original, which only reinforce the piece's double identity as a set of explanatory notes and a poem.

emptiness and insubstantiality of classical Chinese culture in the modern day and its liberating possibility; it exists as and when people assemble to perform it, no more and no less.

A structure modeled on film databases is, of course, not the only way to understand contemporary Chinese poetry's event culture and their community interactions. Hermeneutics should always be multiple, overlapping, and mutually corroborating. But the procedure described here may be one way in which new, apt interpretive metaphors can be applied to social realities: begin with extant methods of analysis, compare their shapes and results to narrative or other accounts of lived experience in the community under study, and then adapt the structure to record and measure elements that matter to the group. In this process—which, as we have seen here, sometimes ends by concluding that network analysis is a perfectly appropriate interpretive lens through which to view specific social activities—is one that can assess modernizations and globalizations, rather than one that uncritically reproduces them.

5 Conclusion

While presenting the results of an elaborate word-count of James Joyce's *Ulysses*, Eric Bulson writes this: "quantitative readings of literature tend to get a bad rap today because people are skeptical about whether they can teach us anything that some good old-fashioned philological exegesis cannot. The truth is that quantitative data can actually help us ask new questions about the works we've read and will continue to reread." Like many scholars, I believe that quantitative methods are crucial to literary interpretation, and I agree with recently published research that demonstrates that they are not particularly new. Believe, however, that one of the things limiting the

I find myself often making notepad sketches of seating arrangements at dinners with artists: Who was paying for dinner? Who was the most famous artist there? Was there a scholar or journalist? Was there a Party representative? Where did they sit—how important are they to the group? This kind of habit of thought is one reason that event lists organized by role "feel right" to me; this happens, meaningfully, *before* data can be collected.

⁴² Eric Bulson, "*Ulysses* by Numbers," 26.

⁴³ See Andrew Goldstone and Ted Underwood, "The Quiet Transformations of Literary Studies," 359–384. One undervalued piece of digital data analysis in modern Chinese literature is Raymond S. W. Hsü's *The Style of Lu Hsün: Vocabulary and Usage*, which used punchcard computing to demonstrate quite convincingly that Lu Xun's writings freely mixed modern and classical Chinese, but used very little dialectical or regionally inflected language.

wider acceptance of quantitative methods is not a knee-jerk opposition to data itself, but resistance to the unexamined shaping of particular types of big data analysis by culture and ideology. This fear is not unfounded: Matthew Jockers explains that "the migration to digital humanities appears to be mostly about opportunity.... With apologies to the indigenous, I must acknowledge here that the streets of this 'new' world are paved with gold and the colonizers have arrived" (*Macroanalysis*, 11–12). Large-data literary analysis cannot and should not survive as a tool of the colonizer, the Euro-American assertion of globalization, or the modernist's unitary perspective. Our cognizance of the cultural situatedness and contingency of data analytics is at a visible crossroads: Hoyt Long quotes Latour saying that "the map *in no way* resembles the territory" ("Fog and Steel," 289); on the other contrary, Moretti says, "graphs, maps, and trees place the literary field literally in front of our eyes" (*Distant Reading*, 2).⁴⁴

Fortunately, the academy's recent quantitative turn has taken place at a moment of drastic cultural flow. To visualize this flow as proceeding outward from a center-methods of data analysis flowing out into the world from Chicago or Stanford—is to contribute to mismatched hermeneutics and acts of interpellation that make sense only if social subjects worldwide consent to internalize and reproduce the ideologies upon which data analysis has traditionally operated. The computer is a network of circuits, but it is not doomed to reproduce its internal structure in every interpretive process. Data-driven literary analysis can instead internalize the local difference that globalization has given us access to, transforming our analytical methods in ways that appropriately interpret cultural specificity, multiply options for future data analysts, and transform the "bad rap" associated with quantitative methods into a more textured assessment of individual quantitative methods as they are applied to individual cases. Using cultural studies to transform data hermeneutics is a step beyond mixing close reading with distant reading: it calls upon us to invent a distant reading whose distance is measured not from twentiethcentury Europe but from the places and times under study.

To resist and revise network analysis is more, though, than a practical or technical amelioration of interpretation. In Spivak's terms, it is also a small manner of opening spaces to overwrite the globe with the planet. She writes:

Note that the three methodologies here are agents that collect and display the field (an unsizeable extraction if there ever was one) for the delectation of an "us"—fitting neatly into the colonizing profit narrative that Jockers makes clear.

Globalization is achieved by the imposition of the same system of exchange everywhere. It is not too fanciful to say that, in the gridwork of electronic capital, we achieve something that resembles that abstract ball covered in latitudes and longitudes, cut by virtual lines.... The globe is on our computers. It is the logo of the World Bank. No one lives there.... The planet is in the species of alterity, belonging to another system; and yet we inhabit it, indeed are it.⁴⁵

Data accretion and quantitative thinking are not—do not have to be—tools of globalizing abstraction reducible to the "gridwork of electronic capital." Our challenge is to count and record in ways that "think the other" and, in doing so, clearly perceive the ways in which our social world succeeds in avoiding resolution into a single global system.

⁴⁵ Gayatri Chakravorty Spivak, An Aesthetic Education in the Era of Globalization, 338.