My talk today draws from a larger collaborative project I’ve been involved with at the University of Chicago called “Global Literary Networks.” The project explores the application of social-scientific methods and sociological theory, specifically network analysis, to the study of global literary modernism and avant-garde poetic movements. The culture of the avant-garde is particularly ripe for such analysis because of the networked social formations and collaborative publishing ventures through which it was typically manifest. To participate in this culture, whether in Japan, China, the United States (or in other parts of the world where modernism flourished) was to be part of a shared system and set of media practices defined by specific forms of group association—forms that were often expressed and made visible through independent literary journals and coterie magazines (Fig 1). Such publications served as a critical venue in which certain kinds of loose affiliation (e.g., personal ties, shared aesthetic or ideological tendencies, common geographies) temporarily materialized as informal “organizations” that then adopted a definitive stance not only toward other organizations, but also toward the general marketplace of poetic ideas. While we must keep in mind the many layers and types of affiliation that coalesced in these venues, and which were never strictly homologous with them, these journals are nonetheless a tangible reminder (and record) of the deeply collaborative and collective practices structuring creativity and literary innovation in this period. They also provide an empirical starting point for a more general sociology that addresses the dynamic interplay between social relations on the
one hand, and cultural forms on the other; between macro and meso-scale structures and patterns, and the micro-scale activities from which these patterns are woven.

So how then to shuttle between these scales of analysis, between the level of the cell (i.e., the fact of publication in a journal) and the level of the organism (i.e., the literary marketplace)? Assuming there’s a connective tissue that holds these two things together (and indeed our project is essentially about finding ways to test this assumption), then how do we turn that tissue into an object of analysis? Let me try to answer this by starting small. Very small. In 1934, about six months after the death of provincial poet and writer Miyazawa Kenji (1896-1933), a group of writers from his hometown, along with several established metropolitan poets, contributed to a memorial volume in honor of his passing (Fig. 2). I came across this volume while researching my first book and was struck by the dissonance between the eulogizing gesture and the fact that most of the individuals who contributed to it claimed not to know much about Miyazawa the man, nor much about his writing. Though a hugely canonical figure today, he was hardly known at the time of his death. So I began to wonder what, besides Miyazawa, had brought these people together? Had they collaborated in the past in ways that might explain their attachment to this figure? If so, how to go about telling the history of that collaboration? I could imagine sifting through individual biographies, tracking personal correspondence, or trying to identify stylistic and thematic tendencies in their poetry and criticism—all valuable and necessary ways to respond to this sort of problem. But each also limited in its own way. For while they would get us closer to understanding the internal organization of this collaborative formation, if indeed it is a meaningful formation at all, they could tell us little, to borrow from Raymond Williams, about the group’s “proposed and actual
relations to other organizations [or formations] in the same field and to society more generally” (68).

For that we need a wider lens. Distance, yes, but also context: a means to situate these external relations within the system that made them meaningful and coherent. One way to do this is to proceed on the assumption that journal publication constitutes an important record of actual relation, and then to try and analyze the sum total of these relations at scale. Fortunately, we have a lot of rich bibliographic data with which to do this. In fact, I’m working now with an index of modernist journals (mostly poetry) that catalogs the output of over 4,000 Japanese and foreign poets in 166 journals for the period 1920 to 1944 (Fig. 3). All together, there are more than 103,000 pieces of poetry, translation, and criticism represented here. To get a handle on this vast quantity of data, I use network analysis and visualization tools to produce graphs such as this one (Fig. 4), which shows the data for 1921 to 1922. This is just a fraction of the total dataset (less than 1 percent), so there’s not much to see here. Modernism was still in its infancy, particularly the avant-garde brand of modernism characteristic of the journals in the dataset. But the image is useful for explaining the interpretive principles that define the visualizations I’ll be showing you today: yellow nodes represent journals, sized according to the total number of publications that appeared, while all other nodes represent poets, sized according to their total output. Poets are linked to those journals in which their works appeared, with the thickness of the link (or edge) indicating the relative amount that was published. Distance between nodes is determined by a layout algorithm that treats the edges like springs or coils, pulling nodes together and pushing them apart based on the combined weight and number of edges between them. There is obviously a lot of
information being lost in this process, and one could question whether it is appropriate to
treat all poems as equal, or to not account for differences in the circulation size of each
journal. Important questions, to be sure, and perhaps a point to return to in the Q&A, but
let me first try to demonstrate a some of the things we gain at this scale.

Let’s move ahead to the years when several of the poets who contributed to
Miyazawa’s memorial volume started publishing (Fig. 5 - 7). This brings us to 1924-1925.
You’ll notice along the way that even as the amount of published material increases, the
journals remain sparsely connected. Poets are largely confined to their own camps with
little cross-pollination occurring at the level of journal space. In this time slice (Fig. 7),
for instance, we see in one corner a couple of journals publishing out of the colonial port
city of Dalian; in another are several journals based in the regional hub city of Nagoya.
Elsewhere we find journals dominated by members of the old guard and their followers. I
have colored red those poets who wrote for the memorial volume, and we can see that
during this period they were loosely clustered around several journals that were
themselves intertwined. What these journals represent, in essence, is the emergence of the
avant-garde, and the rise of a new generation of poets attracted to various popular “-isms”
(e.g., dadaism, futurism, anarchism, constructivism, expressionism). Ideological
differences would eventually harden into firmer divisions, but this early stage is
classified by flexibility and openness as the mostly young upstarts coalesced around
the twin goals of “destroying” and “denying” the old aesthetic order. In the next time
slice (Fig. 8) we see a further strengthening and integration of these avant-garde networks,
as well as some consolidation of the red poets around two key journals, Taiheyo shijin
and *Dora*. It is through these venues that the poets who later gathered around Miyazawa initially forged links of creative affiliation.

Naturally, viewed at this scale, and solely through the fact of co-publication, the network can tell us little about the character of the links that were forged. Which is to say its “network effects” on the individuals and texts represented here. For that we would need to go into the archive and perform the kinds of discourse and stylistic analysis with which we’re more familiar: reading their poems for evidence of a coherent aesthetic; examining commentary and criticism for signs of shared ideas about literary value and collaborative production; tracking personal interactions. Nothing about the network we see here (itself just one possible interpretation of the underlying data) predicts or predetermines what we will find when we move to this less reductive scale of analysis. What it can do, however, is frame and focus that analysis through a new lens, allowing us to put micro-patterns of affiliation, which may seem random and contingent close-up, into their larger relational context. Let me offer some concrete examples as to how one might do this. Consider, for instance, that by making visible the publishing activities of this particular group of poets, we’ve also made visible a larger network of actors who were active in these same circles. A community emerges here, the relative cohesiveness of which we could start to quantify using the mathematical properties of the network graph. Was this subset of poets more (or less) strongly connected than other communities that we see in this time window? Did they tend to hold together over time, and did they do this more (or less) well than other communities?

There are also ways that we could start to assess the community’s relation to the field at large. Two things you will have noticed in the shift from the previous time slice
(Fig. 7) to this one (Fig. 8) are the explosion in quantity of production and the appearance of a centralizing hub (詩神, Shishin) that integrates the formerly disparate camps. There are some important historical reasons for why this apparent vacuum is suddenly filled, which I’ll come back to, but one way to evaluate how “connected” the community truly is is to filter out some of the thinner edges and identify poets who broker between journals in the avant-garde community (internal brokers) or between this community and those who are outside it (external brokers). In this image (Fig. 9), from which I’ve removed edges with a weight less than 4 (i.e., links that represent less than 4 publications), we can identify at least 4 possible internal brokers (Ono Tozaburo, Ko Ei, Ogata Kamenosuke, and Fukutomi Seiji). Significantly, we find none who have strong connections to the field at large, a condition that will change in the years to follow. Other ways to isolate differences between this community and the larger field might involve classifying the poets and journals according to various types of metadata (age, education level, place of publication) to see whether these traits correlate in any meaningful way to the formations that emerge at the level of publication. For instance, do poets of a certain age and education level tend to be active in certain groups and not others? Or alternatively, we can track just the translated material within these networks to assess whether micro-publics are forming around specific groups of imported foreign works (Fig. 10). This approach becomes more interesting when the data is viewed in aggregate, yet already you can see how fruitful it could be to compare communities based not just on who wrote with whom, but also on the different ideas flowing into and “infecting”—to borrow from the language of diffusion theory—these communities.
I realize that I’m throwing out a lot of possibilities, but I do so to highlight some of the ways that network analysis can offer new critical purchase on how we approach questions of social differentiation and creative collaboration in the study of literary modernism. I want to conclude by returning to the questions I started with: can distant techniques help us identify the social glue holding together the poets who contributed to Miyazawa’s memorial volume? As should be clear by now, macroanalysis takes us pretty quickly beyond the individuals involved and forces us to consider a wider set of social forces structuring and animating their interactions with each other. From the 10,000 foot level, we see that their entry into the poetry field was part and parcel of a systemic shift that saw a restructuring of the field around a new generation of poets. A major catalyst in this shift was the disbanding of a group known as the Shiwakai, which ceased publication of their long-standing poetry journal, *Nihon shijin* (or Japanese Poet), in 1926. The Shiwakai consisted primarily of figures who had established themselves in the teens as innovators of lyrical free-verse, and the best known among them served as editors for this field-defining journal. *Nihon shijin* is not part of the dataset I’m using, which partly explains the vacuum we see up until 1925. Even if it were included, and this is something we could quite easily test, it’s questionable how central it would be in relation to the factions that do appear in our networks. For right around 1925 and 1926, the journal and its members came under attack from these factions for being outdated, out-of-touch, and hopelessly myopic in determining what counts as poetry. Indeed, in journals like *Taiheiyo shijin*, which I highlighted earlier as a central node linking the Miyazawa group, there’s a steady invective issued against the old order (i.e., the Shiwakai members), and numerous calls for a new breed of poet who rejects the kind of poetic practice that merely adheres
to the whims of established taste-makers. With *Nihon shijin* out of the picture, young poets who had previously felt excluded from the market now sensed an opening.

Indeed, one thing we observe as we advance the time windows is that some in our group were taking advantage of this opening and branching out in ways that more firmly embedded them within the market for poetic goods (Fig. 11-13). By 1929, it even looks as if several of the poets in red were brokering between local networks and the larger field. As you can see, one of the key conduits for this brokering was the journal *Shishin*, which quickly supplanted *Nihon shijin* as the central clearinghouse for poetry of all shades and stripes. How central *Shishin* was becomes apparent as soon as we remove it from the network (Fig. 14). Here we can see that outside of this journal, ties between the red poets remained rather tightly clustered (Fig. 14). It’s also interesting that when we step back and consider which poets were holding the field together by this time—here defined as the poets who were publishing in the most number of journals (Fig. 15)—it turns out that several of them are former members of the Shiwakai (colored in blue). Thus even without their former media platform, some were still finding a way to distribute their cultural authority. Understanding how this earlier generation adapted to the shifting proclivities of the field (Who closed ranks? Who tried to remain relevant? How did these strategies get expressed in publication activity?) can be another way of assessing just how much of an impact the new generation was having. Jumping ahead to 1933 (Fig. 16), a year before the memorial volume was published, it’s also interesting to find our red poets scattered across the map like rogue satellites without a planet around which to orbit. Whatever gains they had made since 1926 in terms of integration with the market seem to have been lost by this point.
Does this partially explain their willingness to come together to celebrate the life of a marginal poet, one who not only exemplified the marginal positions they once occupied, but who also served as comforting reminder of the creative potential that marginality could offer? Partially, yes, but I think it would be hard to imagine even asking such a question without the perspective network analysis offers. Of course, the point of working at this scale, to paraphrase Mark McGurl, is not to capture the whole truth of a given event or an instance of art, which anyway exceeds membership in some category. Rather, it is a way to make this excess visible by better locating it within the systemic relations and structures within which it is produced. Assessing the possible effects of these relations then becomes a matter of reading for them at the level of text and discourse, but also of examining comparative cases. For instance, within this dataset, do we find communities that are structurally equivalent to the one I’ve focused on here, in terms of both their relative exclusion from, and inclusion within, the field? If so, then it would be useful to compare how such shared social patterns manifest differently at the levels of poetic form and group identity. Stepping back even further, we can also begin to consider how macro-social structures might help to understand aesthetic innovation and diffusion across and between different national contexts. Do the different network topologies we observe in the U.S., Japan, and China, for instance, suggest literary modernisms of varying robustness or sparsity (Fig. 17)? These are the kinds of questions that “Global Literary Networks” hopes to get at as we expand our datasets and refine our analytical techniques. Let me just end by saying that the goal here is not to define a whole new way of doing literary history, but rather to use scale and quantification to enhance, augment, and reframe how we do that history.