**QUAMEN — Watson**

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**The Watson Network: Using Data Visualization to Analyze Social Networks**

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The Watson Network details the editing modernism in Canada research team’s recent work on the social networks of two important mid-century Canadian writers, Wilfred (1911–1998) and Sheila Watson (1909–1998). This research is one component of a larger project funded by the Social Sciences and Humanities Research Council of Canada to digitize the two writers’ archives—journals, manuscript drafts, notes, sketches, artwork, newspaper clippings, reviews, multimedia artwork, and correspondence that encompass two lifetimes and that are now distributed between two universities 1,500 km apart. Wilfred’s archive alone consists of more than 100,000 scanned items and, as a recent library special collections exhibition has shown (The Thinking Heart), these two writers collaborated and communicated with a surprising number of intellectual and artistic communities that included theatre, literature, academia, and visual arts groups across two continents. Our recent work has generally attempted to use a variety of data visualization techniques to help us comprehend the shifting dynamics and complexities of two lifetimes’ worth of collaboration, collegiality, and friendship (see, for example, The Watson-McLuhan Correspondence, available online).

This particular project, The Watson Network, uses force-directed graph visualizations and timeline chronologies to help us map the Watsons’ participation in social networks and to understand how those interactions helped to shape their respective intellectual and artistic development. Recent biographies and literary appreciations (Flahiff, 2005; Hjartarson and Neuman, 2014) have provided insightful overviews of important relationships and aesthetic growth. Our project here extends that work by attempting to ‘zoom in’ to reveal the specific details and events that ground those analyses. While social relationships and artistic development may be easily summarized (for example, Wilfred taught at the University of Alberta from 1954 to 1977; his career moved from poetry to drama and back to poetry), we are seeking to make visible those dynamics at a smaller, granular level: that of the *event* and its *participants*.

**Methodology**

Our work defines an *event* as a particular material trace that is locatable in space and time—a letter, a meeting, a publication, a manuscript draft, a theatrical production. Because we work so closely with the literary archive, our definition is less strict than other groups like CIDOC-CRM, for example, which suggest that ‘events’ are ‘changes of states in cultural, social or physical systems, regardless of scale, brought about by a series or group of coherent physical, cultural, technological or legal phenomena’ (Crofts et al., 2003, 3). By capturing metadata about that event and its participants in a database, we can then query for associations in specific time periods, in specific locations, or can measure the frequency of associations through time.

The social network component of our larger archival project entails two significant methodological choices. First, like many other contemporary DH projects, we are making *data* rather than XML *documents* the central core of this particular analysis. The problems and choices we are engaging—about capturing metadata, analyzing complex relationships between objects and people, tracking events of various kinds, and generally working with data at scales that some humanists might increasingly call ‘big’—shift our research questions away from those that could be answered by a singular, textual edition marked up with annotations. Instead, we are moving towards pattern, chronology, relationship, and other modes of engagement that are made possible by the aggregation of disparate, even unrelated, data. Second, data visualization is an important technique both for working with nontextual data and for providing a useful interface for scholars and researchers. The common ‘keyhole’ search interfaces that help us find ‘needles in haystacks’ (perhaps most recognizable as Google’s home page) fail to allow scholars to see larger patterns and chronological developments. The aggregation of different datasets exacerbates this problem. Our various attempts to provide faceted browsing interfaces help us to understand the dynamics of the data that we are extracting from the archive, but we have not thus far found one preferred interface.

In other words, then, our current shift towards ‘data rather than document’ makes possible new kinds of interactions with the archive itself. We are engaging a series of questions: Does thinking about the Watson archive as *data* rather than a *document*, in other words, allow us to ask new kinds of questions about the shape and scope of a literary career? Does it allow us to interact with the archival materials in new ways? And are new patterns of intellectual influence made visible in the move towards greater quantities of more finely grained data?

**Results**

By collecting data on a variety of personal and professional events—metadata from correspondence; collaborations with actors, designers, and directors on plays; co-authorship on academic monographs—we have more accurately delineated *who* participated in these social networks, *when* they participated, and *how intensely* the participants interacted. Journals from a year spent in Paris in the mid-1950s, for example, have revealed an intricate network of international scholars and theatre practitioners. Individual letters have helped us to understand the chronology and drafting processes of Wilfred’s collaboration with Marshall McLuhan on *From Cliché to Archetype* (1970). Tracking Wilfred’s theatre collaborations leading up to productions of plays like *Cockrow and the Gulls* (1962) and the founding of a jazz and performance club called The Yardbird Suite have told us not only about the Watsons’ intellectual circles but also about important local historical moments that shaped local and Canadian midcentury art. The Watsons’ editorship of a literary magazine, *The White Pelican* (1970), brought together writers and academics from across the country. The prosopographical data alone from these social interactions provide a significant ‘who’s who’ of mid- to late-century Canadian artistic and intellectual history.

Social networks and their analysis, then, have provided us a rich resource to help understand more about the literary and artistic careers represented by the archive in front of us. They have also told us something about the dynamics of mid-century art and culture at local, national, and even international levels. The Watsons represent an important node in the development of Canadian modernism and postmodernism, and these social networks help us to understand not only where many of these ideas came from but also where they ultimately went.

**References**

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