

HISTORICAL GIS RESEARCH IN CANADA

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Turning Space Inside Out: Spatial History and Race in Victorian Victoria

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In describing Rachel Whiteread's sculpture 'House,' cultural geographer Doreen Massey inadvertently captured what we propose to do with this research project: "it turns space inside out ... it exposes the private sphere to public view and thereby to questioning and understanding."¹

Whiteread made concrete casts of the inside of an archetypal London row house which was being prepared for demolition; when the buildings came down, the outside disappeared and what had once been empty space had become solid. Her sculpture (Fig. 1.1) was an interpretive act of an artist fixing a space in time.

Like Whiteread, we too want to "turn space inside out" and interpret the relationship of space to time as we build a spatial history of race between 1861 and 1911 in one of the key nodes of the British Empire at the peak of its power. Building a spatial history using the tools of the scholar "not only creates the possibility of history becoming more collaborative," observed Richard White, "it virtually necessitates it."² This project is an exemplar of this necessity. Since 2007, an interdisciplinary team of cultural historians, urban geographers, and GIS technicians, both faculty and students, have been creating and utilizing historical GIS to "expose the private sphere to public view" to get



Fig. 1.1. Rachel Whiteread's 1993 House. (Photo by Sue Omerod; courtesy of Gagosian Gallery, London. (c) 2011. Rachel Whiteread.)

a better understanding of how race and racial space operated in Victorian-era Victoria, British Columbia.³

What makes this unusual among historical GIS projects is that it also experiments with bringing this methodology into conversation with a type of scholarship that has lived in isolation and sometimes open hostility for decades: interpretive discourse analysis. Bringing these skills and methods together, we believe we can show that a spatialized “geohumanities”⁴ promises something substantively different from our previous ways of knowing space and time while it offers new insights about the

dominant interpretation of racism in British Columbia history.

This chapter illustrates some of that promise by presenting new conclusions about how race was created and experienced and documenting some of the “aha! moments” when never-before-seen patterns jumped off the computer screen and reframed our historical understanding. For example, in the early phase of this long-term project we have dispelled the myth of Chinatown as a Forbidden City and have documented the “vanishing” of Indigenous people from the city of Victoria between 1861 and 1911.

As a contribution to interdisciplinary collaboration, we also reflect on four interrelated challenges: 1) spatializing historical censuses and other data to exact street addresses over a forty-year period when for part of the era no street addresses existed; 2) working with multiple partial data sets including census, directories, tax assessments, photographs, and fire insurance plans; 3) adding “discourse analyses” to GIS mapping; and, finally, 4) transcending disciplinary boundaries.

CONCEPTS

For the cultural historian of race, the addition of spatial analysis offers a unique opportunity to empirically test conclusions inferred from the study of text. Such testing is rarely performed but is particularly useful when it comes to studying sensitive topics such as race, where a key problem is that people do not always say what they mean and what they say is not always what they do. What we currently believe about the history of racism in Canada is based on what

social elites said in the press, the courts, and government. Relatively little is known about the lived experience of race, either among the articulate minority or the largely silent majority. In this research project, we use census data and GIS to spatialize the lived experience of race and test it against the public discourse.

Thanks in large measure to the growing appreciation of the insights of Henri Lefebvre alongside Michel Foucault's metaphor of "archaeologies," the humanities have taken what some have called the "spatial turn" in the last decade or so.⁵ Lefebvre's key insight was that space is a social product, created and made to seem real by everyday social practices. "Space," he wrote, "is permeated with social relations; it is not only supported by social relations, but it is also producing and produced by social relations."⁶ Foucault, with his metaphor of archaeologies of knowledge, has provided a language to explore knowledge spatially, while his related work has influenced an earlier "cultural turn" in history, which focused specifically on the ways in which knowledge and power are seen as constituted through discourse. Race, in particular, is seen by scholars in this tradition as a system created by European writers who created a classification that placed themselves at the top and authorized themselves to seize the land, resources, and, in some cases, the bodies of others lower on their scale.⁷

There is already a rich post-colonial literature that focuses on the discursive practices of racism and colonialism.⁸ Another growing literature looks empirically at how race was spatially deployed in different urban contexts using census and geographic information systems and a variety of complex measures.⁹ Our project hopes to inaugurate a literature connecting

the two and testing the assumptions of the one against the other.

In British Columbia, the research on race and racism assumes that race "trumped class" as the 'primal line' that segmented populations and that the primary focus of immigrants was to create a 'White Man's province.'¹⁰ But historians have taken the pronouncements on race in the media and government documents as describing racial relations on the ground. They have not had the tools to seriously investigate how extensively 'popular attitudes' about race were shared. We do not yet know how people lived their racial pronouncements nor how or if elite racial ideas were shared by the wider population. This disjuncture between what we claim to know and how people lived is understandable in the context of the sources that have, until now, been available to study race. Only the elite have left writings for posterity, and even when they recorded voices of ordinary citizens, in trial transcripts for example, these are filtered and reformulated. In their attempt to expose and excavate the racism of the period, scholars have read the papers looking for evidence of racist language, and they found what they were looking for.

We have taken two steps that diverge from this model. First, we ask what race meant in Victorian Canada by exploring how it was lived and experienced spatially in the city of Victoria. Focusing on space allows us to get at one important aspect about how race was lived. Equipped with Canadian census data spatially referenced within a historical Geographic Information System (GIS), we have begun to survey the main streets and back alleys and open up the garrets and lavish parlours of Victorian Victoria in order to determine the extent to which personal lives and private spaces were



Fig. 1.2. Detail of “View of Victoria,” June 13, 1860, with the Songhees village in the foreground. (Painting by H. O. Tiedemann, lithograph by T. Picken; Library of Congress Geography and Map Division, Washington, G3514.V5A35 1860 .T5.)

organized by race in Victoria between 1861 and 1911. With GIS, we can determine physical space occupied and the relative proximity of different racial groups in a precise way. Second, this project takes advantage of the availability of recently digitized newspapers to search, not only for negative commentary on racialized groups, but for all commentary in order to give a fuller picture of the nature of racial discourse. By combining these two modes of analysis, we can answer new questions about the nature of those life-spaces as well as if, and how, changes in colonial society and discourse restructured those worlds.

Victoria (Fig. 1.2) is an ideal location to explore these ideas. Urbanist Jane Jacobs observed: “It was in outpost cities that the spatial order of imperial imaginings was rapidly ... realised,” and, as recent work by Penelope Edmonds and Renisa Mawani has shown, such settler-cities have distinctive patterns and morphologies.¹¹ Moreover, racism is not just an

historic phenomenon here or elsewhere. We live every day with the legacy of the period we are interested in.

Victoria, although unique in many respects, was like other imperial centres in that it was “a site of contradiction between a persistent localism and the context ... of a global empire.”¹² Despite public attempts to be “more English than the English,” with its gentlemen’s clubs, teas at the Empress Hotel, and a city newspaper proudly named “*The British Colonist*,” Victoria was in fact a place of inter-racial mingling, cohabitation, miscegenation, and hybridity – a meeting place of indigenous people and diverse immigrant groups.¹³ From our work to date we know that Caucasians not only lived and worked alongside Chinese, Black, Hawaiian, and Indigenous peoples, they slept with, married, and raised children and chickens with them. This raises the question: did Victorian British Columbians ‘live race’ the way elites talked about race?

New Insights I: Vanishing Indians

One of the key ways in which the spatialization of data has changed our thinking about the settler colonies lies in the ability to map where each individual person lived and to observe who they lived with. This provides a unique lens into how the city of Victoria worked as a site of settler colonialism. The seed of the city was the Hudson's Bay Company Fort Victoria, established near several Indigenous communities in 1843. Many of the nearby Indigenous people relocated to live beside the fort within a few years of its completion, and they vastly outnumbered the settler population well into the next decade. In addition to the local people, Indigenous people from all over the west coast, from Puget Sound to Alaska, began in the late 1840s to make seasonal visits to trade and work in Victoria. Several thousand of these visiting native people would camp seasonally in shanty towns on the edge of Victoria, a village which, until 1858, could count its settler population in the hundreds.¹⁴

When we compared the maps of the 1850s and 60s with our georeferenced census in the GIS showing where Aboriginal people lived in the period 1881–1911, we were shocked by what we saw. The Indigenous people living in what is now Victoria, who had numbered in the thousands in the 1840s to early 1860s, had vanished by 1901.

In 1861, there were three Indigenous “communities” in what is now Victoria: the Songhees Indian Reserve located across the harbour from the booming town, the shanty towns of migrant workers around Victoria, which ballooned in the summer and dwindled in the winter, and the Indigenous residents of the town itself. A visitor to Victoria recorded

that year that “Indians ... are seen everywhere throughout the town – in the morning carrying cut wood for sale; the women, baskets of oysters, clams etc.... In his account of Victoria in the 1860s, Edgar Fawcett emphatically stated: “Indians performed all the manual labor.”¹⁵ In April 1862, the *British Colonist* reported that “the Indians have free access to the town day and night. They line our streets, fill the pit in our theatre, are found at nearly every open door during the day and evening in the town; and are even employed as servants in our dwellings, and in the culinary departments of our restaurants and hotels.”¹⁶

Victoria in the 1840s to 1860s was very much an Indian town, but the nominal data in a municipal census taken in 1871, the year British Columbia joined Canada, suggests the situation had changed (see Table 1.1).¹⁷

The census was a limited one, just capturing the head of household by name, the number of adults by race in the household, the number of children by gender, and occasionally a street name to identify residence location. We can see that adult urban Victoria was 10 per cent Aboriginal, 5 per cent coloured, 7 per cent Chinese, and 78 per cent white. There were 45 per cent more Aboriginal women than Aboriginal men, largely reflecting the Indigenous wives or common-law wives of white settlers and a number of sex trade workers. Of the 1,083 households enumerated, sixty-six contained only Aboriginal people, and another thirty-six contained white males and Aboriginal females. There were thirty-six native women living in households with no men. Of these Indigenous urbanites, a third came from Fort Rupert on Northern Vancouver Island, a third from Haida Gwaii (Queen Charlotte Islands) and the remainder from eleven other First Nations

Table 1.1 Victoria Municipal Census 1871*(Does not include Indians living on the Songhees Reserve)*

	White Males	White Females	Chinese Males	Chinese Females	Coloured Males	Coloured Females	Native Males	Native Females	Children All races	Total
No.	1716	1188	219	29	119	77	144	210	1231	4933
Percent of Adults	46	32	6	1	3	2	4	6		

communities, including the Songhees community across the harbour. Where streets are listed with census entries, Johnson Street (Fig. 1.3) appears especially significant for Aboriginal residents: all native people living without whites, and a third of those co-habiting with whites, occupied this street.¹⁸ Across the harbour, the Indian superintendent reported in 1876 that there were 182 Indians living on the Songhees Reserve, including fifty-five adult males and sixty-two adult females.¹⁹ The shanty towns that had housed visiting migrant Indigenous people in the 1850s had been razed as a settler response to the 1862 smallpox epidemic and were never substantially rebuilt. Afterwards, visiting Indigenous people expanded the town's "Indian Quarter."

Ten years later, when Johannes Jacobsen first visited Victoria in 1881, he was surprised that "the streets of this town swarmed with Indians of all kinds."²⁰ When Franz Boas visited in 1884, he recalled: "The Indians are at present in the habit of living part of the year in Victoria, Vancouver, or New Westminster, working in various trades: in saw-mills and canneries, on wharves, as sailors, etc.... They have their own quarter in every city." He goes on: "Walking around the suburbs of Victoria, we come to

that part of the town exclusively inhabited by Indians." By the time Boas arrived, the native quarter had shifted north from Johnson Street, away from town centre to Herald Street (Fig. 1.4) and was significantly reduced in size.²¹ The federal census of 1881 shows 172 people whose origin is listed as "Indian" in the three wards that make up urban Victoria, of which 122, or 71 per cent lived in the "Johnson Street Ward," which included Herald Street, forty-one in the James Bay Ward, and two in the Yates Street Ward. The census showed sixteen mixed-race families with an Indigenous wife and non-Indigenous husband, twelve of those in the Johnston Street Ward. Another 180 Indians resided on the Songhees reserve.

While the 1891 federal census did not ask questions about race, origin, and ethnicity, we are lucky in Victoria to have an 1891 municipal census that does. The Municipal Check Census was initiated because Victorians believed they had been under-enumerated by the federal census. The municipal census counted over 23,000 people compared to the federal count of 16,841. The Municipal Census recorded 377 Indigenous people in Victoria – only 1.6 per cent of the population. The Indian Quarter was still centred on Herald Street, but the



Fig. 1.3. Victoria 1860 showing Johnson and Herald Streets. (Adapted from "Victoria District," 1860, B.C. Land Title and Survey Authority, 28T2.)

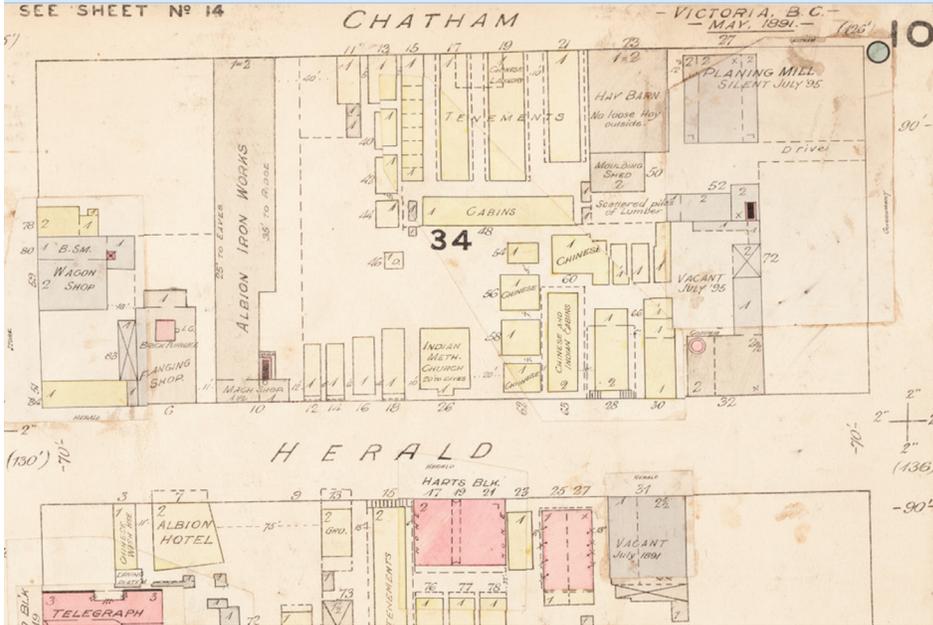


Fig. 1.4. Herald and Chatham Streets, 1891, from fire insurance plan "Victoria, B.C." (Charles Goad and Company [Montreal, 1891]. Courtesy of Royal B.C. Museum, BC Archives.)

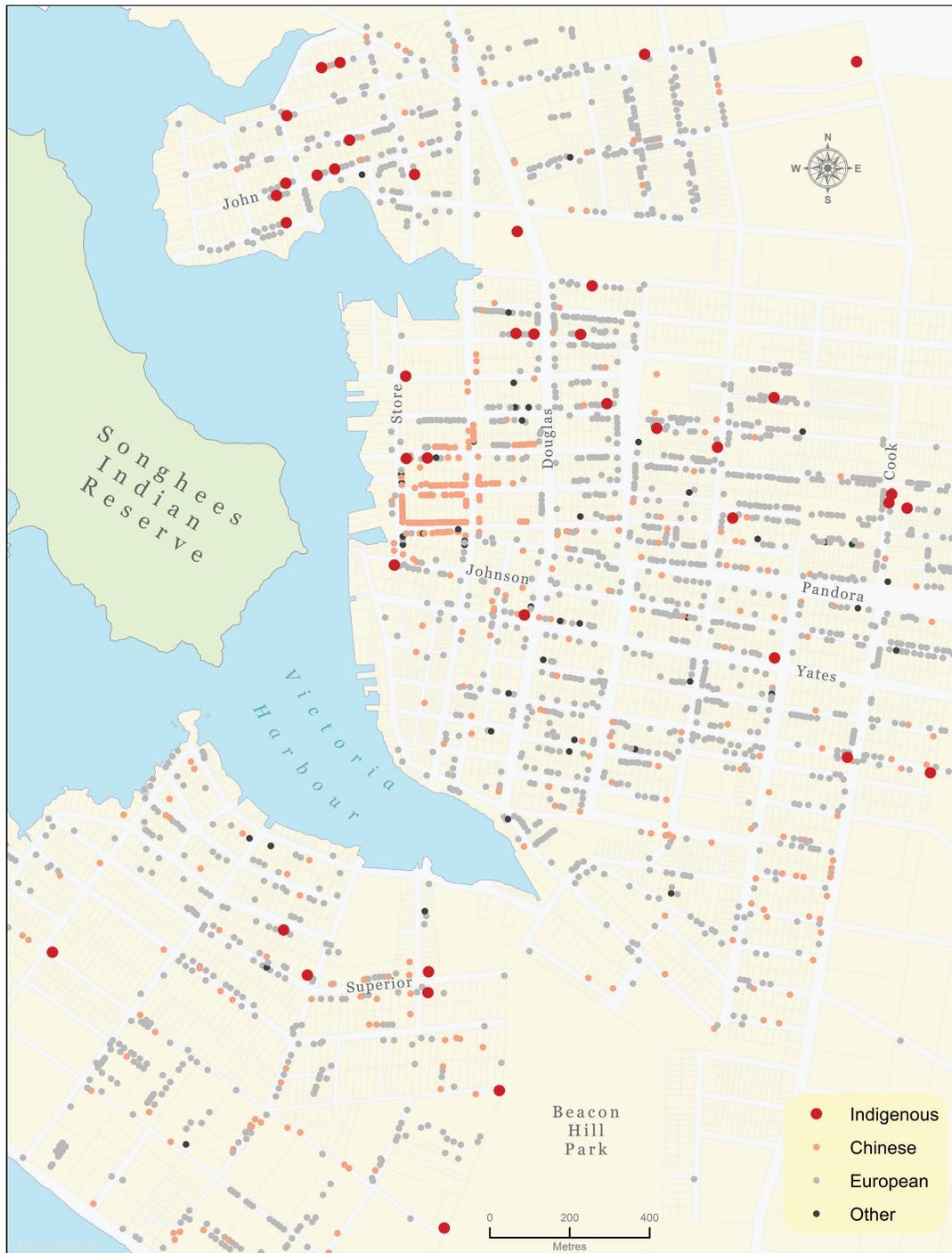


Fig. 1.5. Location of residences by race, Victoria, 1901. Source: Canada Census, 1901.
 Also available on viHistory.ca.



Fig. 1.6. Store Street encampment 1904 (Image PN 1433; courtesy of Royal B.C. Museum, B.C. Archives.)

municipal census also notes an Indian camp on Store Street (Fig.1.6).²²

When the next census was taken in 1901, questions about race and “colour” were asked. The number of those who identified their race as North American Indian in Victoria had dropped to only fifty-three people (and, of these, twenty-seven were living on sealing ships in the harbour). Actual residents included only nineteen “North American Indian” women and six men living in the city of Victoria outside of the Songhees reserve. Only seven were living in mixed-race families. Added to the North American Indians, another 153 were classified as of the “red colour,” apparently meaning they had at least one Indigenous ancestor. In

total, “red people” were a mere 1 per cent of the population of the city (Fig. 1.5). Johnson Street, which had been Victoria’s Indian Street in the 1860s, was by 1901 a white commercial district. Fires that broke out in the Indian and Chinese quarter in August 1904 and July 1907 finished the clearances.²³ In 1901, the Indian Agent recorded 101 Indians on the Songhees reserve. Taking the reserve population and all the North American Indians in the city, the Indigenous population of Victoria had declined 80 per cent in the half-century since the 1850s.

By 1911, even the Indian Reserve was gone – relocated outside the urban boundaries. Since the 1860s, efforts had been made to relocate the Indian Reserve on Victoria Harbour, and

Fig. 1.7. Number of Aboriginal Individuals and Mixed Race Families in Victoria, 1871-1911. Source: viHistory. ca from Victoria municipal censuses 1871 and 1891 and federal censuses, 1881, 1901, and 1911. (Department of Indian Affairs, Annual Reports, 1879, 1891, 1901, 1911.) 1871 does not include Indigenous children; mixed race families not available for 1891.

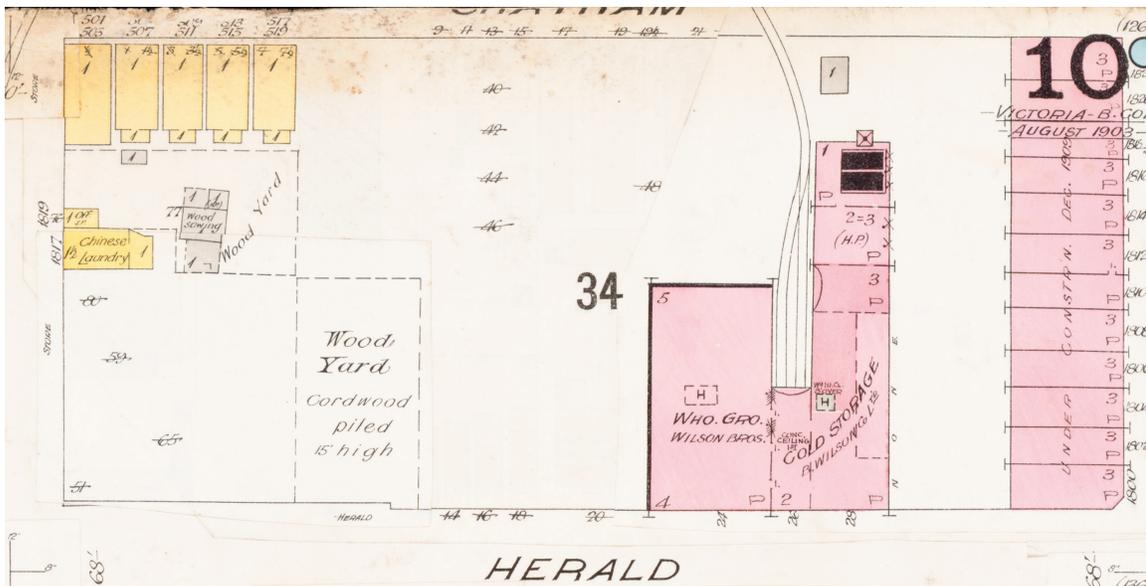
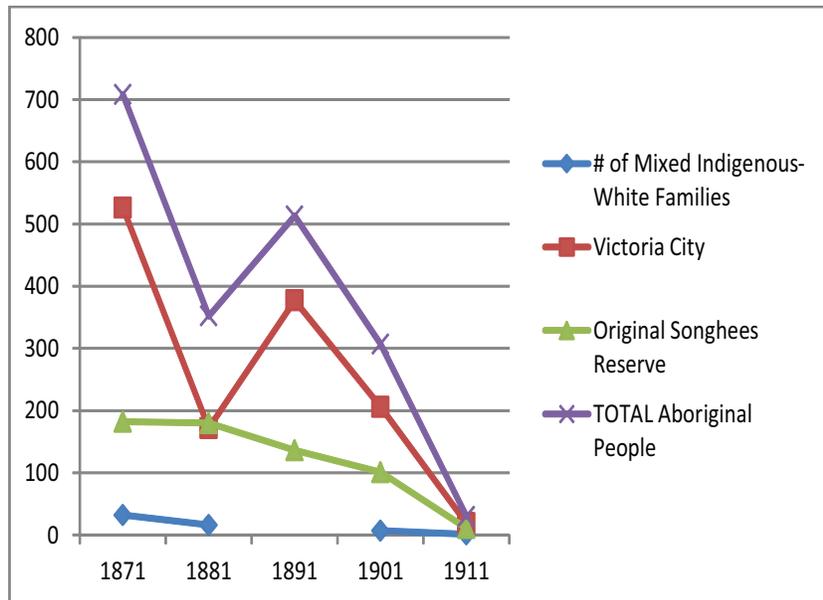


Fig. 1.8. Herald Street, 1907. (From Insurance Plan of Victoria, BC, 1903 [revised 1907]; Charles Goad and Company [Montreal and Toronto, 1907]. Courtesy of Royal B.C. Museum, B.C. Archives.)

finally in 1910 an agreement was reached with the Songhees and the federal and provincial governments.²⁴ By the time of the 1911 census, only three Indian families still lived on the site of the former reserve (Fig 1.7), and only one family of four whose racial ancestry was indicated as North American Indian lived in the city itself (Fig. 1.8). With three Indigenous sealers recorded on ships and one Native woman married to an Englishman, out of the total population of Victoria of 28,500 those with a racial ancestry as North American Indian only counted as nineteen in 1911 or less than one tenth of one per cent of the population.²⁵ The Indians had vanished.

*New Insights II: The un-Forbidden*²⁶

Victoria's Chinatown is perhaps the most striking symbol of racial space in the history of the city. Canada's oldest Chinatown was established in the colonial era and is traditionally seen as a racially segregated ghetto, an enclave that provided Chinese residents with a refuge from the hostility they routinely endured from the surrounding white community. It was regarded as a "Forbidden City," an inscrutable place closed to outsiders.²⁷ But through the use of our historical GIS we upset some long-standing assumptions about Chinese space in the city and the interactions between Chinese and non-Chinese residents. An historical GIS of Victoria's Chinatown, focusing on the year 1891²⁸ and derived from spatially referenced records, challenges and contradicts assumptions that have been derived mainly from narrative records. We are not disputing the prevalence of racial prejudice during the period, but our evidence suggests that the virulent rhetoric of

racism evident in traditional sources – such as Royal Commission reports on Chinese immigration and newspaper accounts of anti-Chinese labour agitators – may not have been actualized on the ground. From our GIS perspective, the alleged gulf between East and West in Victoria was not nearly as pronounced as historians have averred. Our research reveals a Chinatown that was a transactional community, predominantly but not exclusively Chinese.

In many ways, we are exploring new terrain, but in other respects we are following lines of inquiry that geographers and historians delineated in the 1970s, when they began making connections, in David Cannadine's memorable phrase, between "shapes on the ground" and "shapes in society."²⁹ Of course, we are also informed by a newer generation of historians and social scientists who have drawn upon social and cultural theory and theoretical concepts of spatiality in historical cities.³⁰ In practice, we are following the lead of Sherry Olson, whose pioneering work on nineteenth-century Montreal is a model of spatial history and building on the expertise that our team mates developed while constructing an historical GIS of London, Ontario.³¹

Our historical GIS of Victoria revealed trends and phenomena that we had not expected from the existing literature. By mapping the location of the Chinese and others, we were struck by the fact that Chinatown – far from a "Forbidden City" – was a porous multi-ethnic community. The time-spaces that are captured in the historical GIS of Victorian Victoria's Chinatown show a neighbourhood that was not all Chinese (Fig. 1.9). With a quarter of the population not Chinese, we have to start to question the idea of a forbidden city.

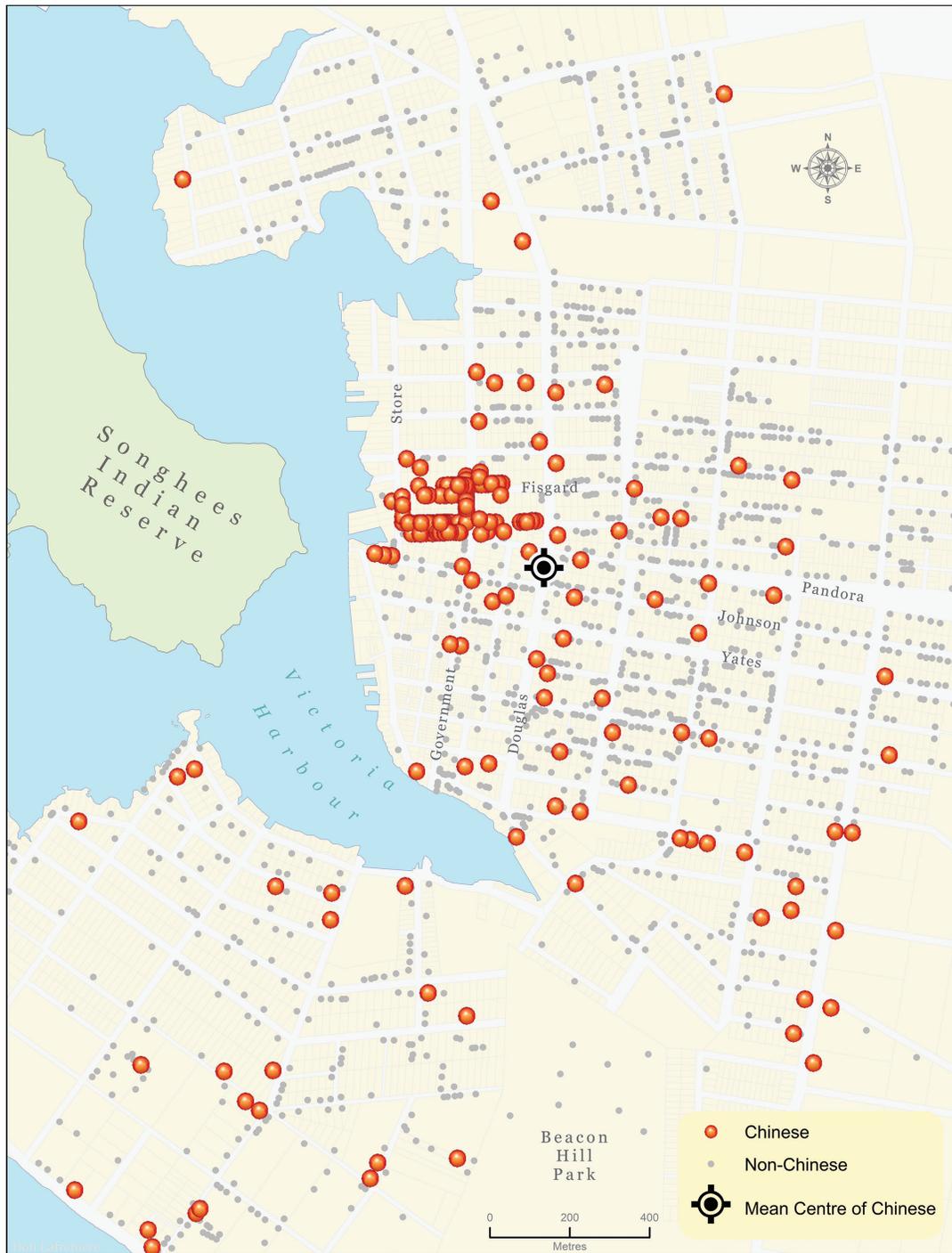


Fig. 1.9. Victoria population, 1891, showing residences of Chinese and non-Chinese. Source: Canada Census, 1891 with addresses provided by the City of Victoria 1891 Check Census in the BC Archives (Add Mss 1908) and Williams' Illustrated Official British Columbia Directory for the Cities of Victoria, Vancouver, Nanaimo and New Westminster, 1892 compiled by the firm of R. T. Williams of Victoria. The directory was compiled in the fall of 1891. Both the census and directory are available on line at www.vihistory.ca.



Fig. 1.10. Map of Chinatown ownership, 1891. Source: City of Victoria Archives, Tax Assessment Rolls. The assessment rolls are available online at www.viHistory.ca.

When we linked the tax records to the map, it revealed that 60 per cent of Chinatown lots and buildings were owned by white Victorians, who offered long-term leases to Chinese restaurant operators, launderers, boarding house keepers, merchants, and manufacturers (Fig. 1.10). Property owners in Chinatown included prominent figures, such as Joseph Carey, a land surveyor and former mayor, and Amor de Cosmos, a journalist and politician who opposed Chinese immigration twenty years earlier. Spatializing the census data allows us to see that several of the streets in the neighbourhood were heterogeneous, with white workers living beside Chinese shops, Indigenous women living with white men and between Chinese families. When we also map where the Chinese lived outside Chinatown, we see a city in which Chinese lived in every neighbourhood,

including the wealthiest, where they worked in the homes and gardens. Our findings suggest that Chinatown witnessed daily ebbs and flows of both Chinese and Euro-Canadian settlers as they exchanged goods, services, and cultural events with one another.

New Insights III: Adding talk to space

The surprises of the vanishing Indians and the un-forbidding Chinatown are significant in their own right, but they also open up new questions of how to explain what we can now see. And, like the result of any inquiry, they ought to be tested against other forms of evidence that might challenge or confirm them. One such check on the idea of the “un-forbidden city” is to see if the public discussion about

race verifies the patterns of spatial relationships. Michel Foucault asked historians to map “discursive practices in so far as they give rise to a corpus of knowledge” about race, among other things. Drawing on Foucault in part, but more substantively on the work of Teun Van Dijk and Margaret Whetherell and Jonathan Potter, we wanted to see if “mapping the language of racism” would support the conclusions of our maps of racial space.³²

When it comes to understanding public discourse about race, we have some excellent studies. Thinking primarily about the discourse around the Chinese in British Columbia, the work of Patricia Roy is foremost among them, but others like Renisa Mawani, Kay Anderson, David Lai, and Peter Ward have greatly added to our knowledge.³³ These scholars have done the hard work of reading newspapers, government documents, and, to a lesser degree, private manuscripts and have found them full of racist rhetoric. British Columbia, they found, was a racist society: white British Columbians looked down on Chinese; racism seemed to get worse over the last half of the nineteenth century, and, starting in the late 1870s, it manifested itself in discriminatory legislation against the Chinese.

The evidence from our GIS mapping suggested that the racial landscape in Victoria was more nuanced and racial boundaries more porous than standard historical accounts have indicated. To test these conclusions and look for an explanation, we turned to the discourse. The advent of fully digitized newspapers offered another methodology that was not previously possible. We reasoned that, if we systematically searched for all mentions of Chinese and examined the context, instead of just the negative references, we would get a fuller view

of racial discourse than earlier textual studies have given.

As a check on our conclusions drawn from the GIS, we sampled the major colonial/provincial paper, the *British Colonist*, in the decades 1861 to 1911, coinciding in the later period with census years. We read every word in every paper from a two-week period in the spring and a two-week period in the fall, a sample of 8 per cent in the chosen years. We identified every mention of Chinese or any synonym and did a close reading to identify the context of the reference: was it an editorial or an advertisement? Was the subject labour, crime, or disease? In addition, we coded the references as negative, neutral, or positive, a reflection on whether they were actively engaged in shifting the discourse to a more negative or positive portrayal of the Chinese. If neither, we assumed that the author did not choose at that time to push or reinforce elements of the discourse, leaving it instead to interact with the reader’s existing ideas of “Chineseness.”³⁴

At the most basic level, we wanted to see what terminology was used to describe the Chinese and to see if these were negatively loaded, neutral, or positive, and if they changed over time. We can demonstrate this numerically but the impact is clearer using the conversion algorithms of Wordle, a text-mapping application that displays the size of a word as a representation of its relative frequency of use.³⁵ We found, to our surprise, that the national term “China” or “Chinese” was used much more frequently than negatively charged synonyms like “Chinaman,” “coolie,” or others (Fig. 1.11). By comparison, negative terms almost never occurred.

At the next level, we wanted to determine the parts of the paper (news, editorials,



Fig. 1.11. Wordle figure showing terms for Chinese in the British Colonist; sample weeks, 1861–1910, with size proportional to frequency of occurrence.

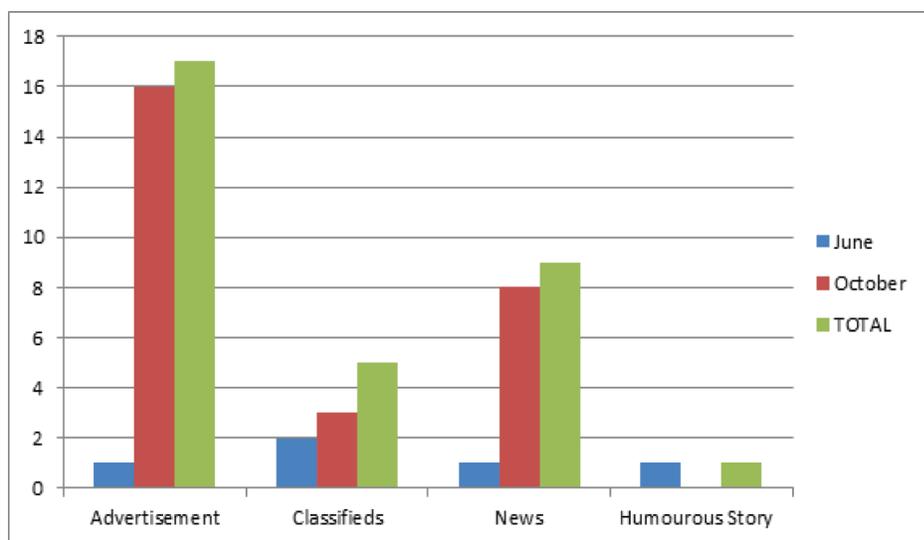


Fig. 1.12. Frequency of references to Chinese (all synonyms) in the British Colonist; sample weeks, 1891.

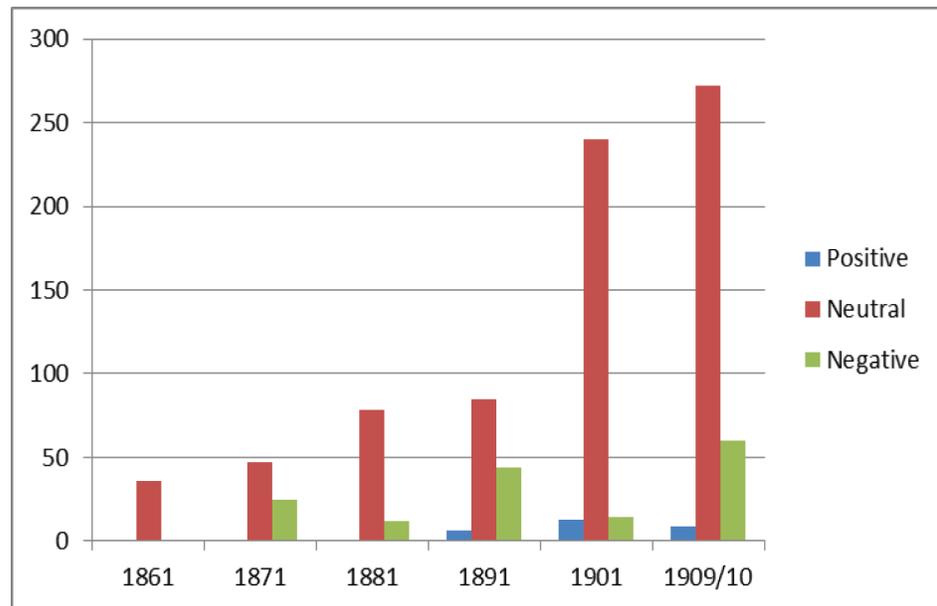
advertisements, or feature stories) in which references to the Chinese occurred. Again, we were surprised. The most frequent occurrence was in advertising: Chinese merchants advertising their wares or non-Chinese merchants advertising Chinese goods, like rice or crockery (Fig. 1.12).

Third, we wanted to see what proportion of the characterizations of the Chinese were negative, and if any were positive or neutral. Again the results surprised us. While negative characterizations were more common than positive, overall, loaded language was rarely

used. The discourse around the Chinese was overwhelmingly neutral: it did not try to move public opinion or reinforce either negative or positive views (Fig. 1.13).

Even at this surface level, the mapping of racial talk in the newspapers offers a confirmation of some of the conclusions suggested by our historical GIS research and a partial explanation for the openness of Chinatown. Where there was charged language, the preponderance of the negative supports the conclusions of earlier scholars that this was a society structured by race in which the white

Fig. 1.13. References to Chinese in the British Colonist; sample weeks, 1861–1910.



NEW BRICK CHINESE THEATRE,
 Cormorant street in rear of King Tye's Drug store,
 WO LOCK & CO., Proprietors.
THIS NEW CHINESE THEATRE WILL OPEN on Monday Evening next, Aug. 10th, with a splendid programme of attractions. A number of white performers have been engaged to act in connection with the Chinese and an interesting play will be presented, which can be easily understood by the English. The performance will commence at 7 p. m. in Chinese and at 8:30 will be given in English, when YOUNG DUTCHY and ALF. STEWART will give a display of the Manly Art of self-defence. At 9:30 the performance will be resumed in Chinese. The theatre is well-furnished and convenient and white people will be made comfortable.
 General Admission, 25c; Boxes \$2 extra. Doors open at 6:30. au9 1w

Fig. 1.14. Chinese theatre advertisement from the British Colonist, August 9, 1885, p. 2.

immigrants worked to maintain a hierarchy that put them at the top. However, the relative lack of any charged language and the apparent success of both Chinese and white merchants in selling Chinese goods to the colonial population suggests a vibrant transactional space where Chinese and other Victorians frequently met and exchanged goods and services in a regime more structured by the impersonal relations of capitalism than the embodied and personal relationships of race. The presence of both positive and negative references suggests competing ideas of Chineseness among the immigrant elite of the colony. Here we can only hint at the complexity of the analyses, but the key point is that the discourse describes a racial and commercial regime totally consistent with the un-forbidden city, in which Chinese and white lived, worked, and shopped alongside each other, just as they bought and sold from each other.³⁶ On occasion, they shared the same amusements (Fig.1.14).

CHALLENGES: BUILDING AN HISTORICAL GIS

There are numerous obstacles to trans-disciplinary scholarship, including learning and effectively using new methods, finding data that can be reliably analyzed through different disciplinary tools, and joining disparate data sets. Methodologically, we faced numerous challenges in building an historical GIS with data that was often not easily spatialized. We drew on a large pool of data that we began assembling several years ago for an online digital archive of Vancouver Island called *viHistory*. The *viHistory* website was developed as a joint initiative by the University of Victoria and Vancouver Island University and was launched in 2001.³⁷

Thanks to the work of the Canadian Families Project and the Canada Century Infrastructure Project and the ongoing development of the *viHistory* Project, we have the complete federal census for Victoria digitized for 1881, 1891, 1901, and 1911, as well as municipal censuses for 1871 and 1891. To these we have linked directory entries for the corresponding years and tax assessments in 1891 and 1901. We know a lot about everyone the census caught (and even about those whom it didn't³⁸), including their race, family composition, who their neighbours were, what their jobs and religion were, and even in 1901 and 1911, income and weeks of employment. Such a detailed, individual-level, and long-run data set in digital form allows a wide range of inquiries into the lives of Victorians.

The Dominion census was designed so that one person was identified as the head of the

household with other residents being assigned relative positions, such as such as wife of head, son of head, lodger, and so forth. Census households or families were numbered consecutively so that census family number 2 was next to census family 1, and physically located in space between 1 and 3. By connecting the head of a census household to a polygon, we were able to map everyone in that household. The census information in 1901 and 1911 included addresses, so linking people to their home spaces required a digitized map of cadastral lots for the period. We started with a modern GIS base map, generously provided by a local government authority, the Capital Regional District [CRD] of Victoria, and geo-referenced archival maps to it.³⁹ By digitally scanning and geo-referencing these cartographic records to a modern cadastre of the city, we were able to establish property boundary lines with precision.⁴⁰ Contemporary fire insurance plans, drawn to a scale of one inch to fifty feet, provided information about addresses, streets, buildings, land use, urban infrastructure, and utilities. Conveniently for us, nineteenth-century fire maps of Victoria also often indicate occupancy and, reflecting some of the discriminatory attitudes of the era, they pointedly indicated buildings that were occupied by Chinese and Aboriginal people.⁴¹ Street addresses in Victoria were completely renumbered in 1907 so a conversion table had to be created to link old to new addresses, and street name changes had to be researched so the data could be shown on a modern map.

Spatializing information for 1881 and 1891 was more challenging because in 1881 street numbers had not been assigned and in both 1881 and 1891 enumerators did not record the civic addresses of the households they documented. Fortunately, for 1891 we were able to determine

many civic addresses of people in the federal census by consulting the municipal check census. Although the check census collected much less information about each household, it did include addresses. We supplemented the check census with addresses from *Williams' Illustrated Official British Columbia Directory*, compiled in autumn 1891 and published for 1892.⁴²

We added property ownership records with the help of undergraduate student research assistants, who transcribed property tax records from large, leather-bound volumes in the City of Victoria Archives. These not only indicated the names of property owners and the assessed value of city lots, they also provided information about the location, dimensions, and legal descriptions of city properties. We linked that information to polygons on our historical, geo-referenced cadastre of Victoria.

To link the people enumerated in 1881 to their “time-space,” we first looked for matches between the census and the city directory compiled that year. The directory listed a street but no street number for heads of families and businesses.⁴³ We then looked for matches between the 1881 census and the 1891 census, for which we had already derived addresses. Where we found matches of people living on the same street as they had a decade before, we attached them to the same address. For the households between known addresses, we used the knowledge that the enumerators proceeded systematically to place them in order on the block. Fire insurance plans from after 1885 gave us the addresses for those lots. Between the maps, the census, the directories, and the assessment roles, we mapped over 80 per cent of Victorians to their lots with a high degree of confidence, giving us an entirely new view of racial space in Victoria.

CHALLENGES OF TRANSDISCIPLINARY RESEARCH

While spatializing the data presented challenges that we have largely surmounted, spatializing the historians on the team and historicizing the geographers is an ongoing process. We have found ourselves negotiating the challenges of transgressive scholarship, most particularly between humanists attentive to particular places and fetishizing context and geographers anxious to compare spaces with a variety of methods and analytical tools, including statistical measures of diversity that are abstracted from context. Peta Mitchell has called our attention to the challenges of finding a common language in that space “where the disciplinary strata of geography and history abut and blur,”⁴⁴ and it is true that we have each had to learn a new language to better communicate and new cultural practices.

Each member of our team has brought a skill and knowledge set to the project that has allowed for a scale and scope of conceptualization that exceeds the capacity of any given scholar. Still, the specialization meant that the geographers were much more skilled in using the tools of the GIS and the historians were quite hazy about what could and could not be accomplished. Likewise, the statistical measures of dispersion, density, and dissimilarity and the ability to use and critique them were much more in the repertoire of the geographers. The historians were located in Victoria and consequently were much more attuned to the particularities of place; they were also more immersed in different humanities literatures around race, space, and colonialism. A different and perhaps more

nanced use of the tools might emerge if all the skills were in the hands of a single scholar or if we all got better at using the tools and sharing the disciplinary culture of the other.

One of the cultural differences is the conventional practice of counting scholarship and sharing credit. In the social sciences model of geography, the main measure of output is refereed journal articles, and an article in an edited collection is accorded little weight. In the humanities, chapters in edited collections carry the same credit as journal publications, and books are the ultimate gold standard. In the social sciences model, everyone with a significant involvement in building a project gets authorial credit for any of the outcomes of that project, their relative contribution indicated by how close or far they are from being “first author” or presenter. In the humanistic rituals, only those actually involved in writing a publication or conference presentation gets authorial credit, with the rest of the team getting an acknowledgment within the publication/presentation itself. We have adopted history’s disciplinary practice of contributing to edited collections and geography’s convention of sharing credit in the hope that there is lots of credit to share!

We have also taken a page from another discipline, ethnography, to overcome the cross-cultural barriers imposed by disciplinary practices. We have done some participant observation of the exotic other: the historians both enrolling in week-long intensive GIS courses; the geographers coming to Victoria to get local historical tours and to investigate the traditions of hospitality among historians. We read each other’s work from the project and beyond, and each of us has moved inexorably from a spot central to our disciplines to a location closer to the geohumanities.

CONCLUSION

Where Peta Mitchell sees “the inescapable stratification of disciplinary ground,” we have found the little- or un-tilled spaces between the disciplines to be the most fertile places to put our attention, and the results seem to be rewarding the efforts. In his survey of the implications of GIS for history, David Bodenhamer offers a vision of “a unique post-modern scholarship, an alternate construction of the past that embraces multiplicity, simultaneity, complexity, and subjectivity.”⁴⁵ This may be a heavier load than the marriage of history and geography can carry but we do see grounds for optimism. We are still finalizing the GIS and the discourse data and are poised to be able to answer a variety of questions we could not before, but already the results have surprised us in important ways.

We hope that we have lived up to Douglas Richardson’s recent invitation to show “how integrative digital technologies such as GIS might substantively or qualitatively impact scholarly research.”⁴⁶ Our new research confirms the work of the pioneering scholars in this field, that Victoria and British Columbia were colonial spaces very much structured on a scaffolding of racist ideas constructed spatially and discursively in the late nineteenth century. Our contribution, we think, is to open up this black box of racism a little and ask how racism was expressed at different times and in one very crude but fundamental way, experienced in where people lived and who they lived with.

The pattern of racial space that emerges from the GIS time-lapse “snapshots” taken with each decennial census shows distinctive racial enclaves, shifting, growing, and

shrinking. We have found striking differences in the history of the Indigenous people and the Chinese immigrants. The regime of racialized space occupied by Indigenous people reversed over the Victorian era, from one where a few whites had a foothold in an Aboriginal space to a situation in which a few Indigenous people had only the slimmest toehold in white space. The hybrid, private space of mixed marriages and inter-racial children that expanded in the 1860s was also practically gone by 1911, a reminder of Lefebvre's injunction that social space is something we construct and which others construct about us. Space, as Doreen Massey says, "is always mobile, always changing, always open to revision, and potentially fragile. We are always creating, in other words, not just a space, a geography of our lives, but a *time*-space for our lives."⁴⁷ Functionally, the Chinese immigrants replaced Indigenous people in many labour markets just as Chinatown, spatially, displaced the Indian Quarter. Unlike the Aboriginal population which mixed households with European settlers extensively in the mid-century, there are very few instances of households with Chinese and non-Chinese living together – with the exception of the many Chinese servants living in white households. At the level of intimate space, racial space was highly segregated when it comes to the Chinese. At the level of public space, however, we see something quite different. We have revealed a Chinatown that is at the opposite end of the scale from what the Forbidden City would suggest.

The results of the discourse study confounded. We expected to find lots of negative racialized references and, while we found

some, when we looked for all the references to Chinese, and not just the negative ones, most of the discourse was not racialized one way or the other. Chinese merchants advertised their wares; white merchants advertised their exotic imports from China. News stories that mentioned Chinese tended to avoid racializing discourse. Editorial commentary, letters, and features, in the later years, tended to be where we saw racialized language more, but this was a minority of commentary, and, when the discourse was racialized, 15–20 per cent of it was positive. A full consideration of the discourse suggests that when Chinese entered the public sphere it was not as a demonized other but most often as a fellow resident, a neighbour, merchant, or labourer.

Testing the discourse analyses and GIS against each other shows a consistency between them. Both suggest a racially divided city but one whose divisions were more of a continuum, with more severe boundaries on the register of intermarriage and sexual intercourse, and much greater openness on the level of commercial intercourse, with a whole range of public and residential interactions in between. Joining the two approaches over a fifty-year time span opens a door into space-time, or, to use Mikhail Bakhtin's term, into a "chronotope," where "spatial and temporal indicators are fused into one carefully thought-out, concrete whole." In such an analysis, "time, as it were, thickens, takes on flesh, becomes artistically visible; likewise space becomes charged and responsive to the movement of time, plot and history." We can, like Rachel Whiteread's House, "turn space inside out."⁴⁸

NOTES

- 1 Doreen Massey, "Space-Time and the Politics of Location," *Architectural Digest* 68, nos. 3&4 (1998): 34. Whiteread's concrete cast of the inside of an entire Victorian terraced house was completed in autumn 1993, exhibited at the location of the original house – 193 Grove Road – in East London (all the houses in the street had earlier been knocked down by the council) and demolished on 11 January 1994. It won both the Turner Prize for best young British artist in 1993 and the K Foundation art award for worst British artist.
- 2 Richard White, "Foreword," in Anne Kelly Knowles, *Placing History: How Maps, Spatial Data and GIS are Changing Historical Scholarship* (ESRI, 2008), xi.
- 3 The project was funded for three years by a SSHRC Standard Research Grant. The team includes historians John Lutz and Megan Harvey at the University of Victoria, Patrick Dunae, emeritus of Vancouver Island University, and geographers Jason Gilliland and Don Lafreniere at the University of Western Ontario (UWO). Kevin Von Lierop at UWO acted as our GIS technician for the early part of the project and we have benefited from the research help and insights of the following students: Kate Martin, Tylor Richards, Julie Ruch, Karla Partel, Kim Madsen, Vanessa Dunae, Shannon Lucy, Carley Russell, Kathleen Trayner, Ryan Primrose, and Alan Kilpatrick.
- 4 We take the term from Michael Dear et al., *Geohumanities: Art, History, Text at the Edge of Place* (New York: Routledge, 2011).
- 5 Sarah Luria, "Geotexts," in *Geohumanities*, ed. Dear et al., 67; Michel Foucault, "Space, Knowledge and Power," *The Foucault Reader*, ed. Paul Rabinow (New York: Pantheon, 1984); Charles Withers, "Place and the 'Spatial Turn' in Geography and History," *Journal of the History of Ideas* 70, no. 4 (2009): 637–58.
- 6 Henri Lefebvre, "Space, Social Product and Use Value," in J.W. Freiberg, ed., *Critical Sociology: European International Perspectives* (New York: Irvington/Wiley, 1979): 286; see also *The Production of Space*, trans. Donald Nicholson-Smith (Oxford: Blackwell, 1991), 73.
- 7 Stuart Hall and Paul du Gay, eds., *Questions of Identity* (London: Sage, 1996); Agnes and Brian Smedley, *Race in North America: Origin and Evolution of a Worldview* (Boulder, CO: Westview, 2012); Margaret Wetherell and Jonathan Potter, *Mapping the Language of Racism: Discourse and the Legitimation of Exploitation* (New York: Columbia University Press, 1992).
- 8 The literature was launched by Edward Said, *Orientalism* (New York: Vintage, 1978). For an excellent survey, see Patrick Wolfe, "Land, Labour, and Difference: Elementary Structures of Race," *American Historical Review* 106, no. 3 (2001): 866–905.
- 9 For example: Amy Hillier, "Redlining in Philadelphia," in *Past Time, Past Place: GIS for History*, ed. Anne Knowles (Redlands, CA: ESRI Press, 2002), 79–92; Amy Hillier, "Spatial Analysis of Historical Redlining: A Methodological Exploration," *Journal of Housing Research* 14, no. 1 (2003): 137–67, and Jason Gilliland, Don Lafreniere, Sherry Olson, Pat Dunae, and John Lutz, "Residential Segregation and the Built Environment in Three Canadian Cities, 1881–1961," paper presented to the European Social Science History Conference, Ghent, Belgium, April 2010.
- 10 Cole Harris was among the first scholars to bring the insights of Lefebvre and Foucault to the shores of British Columbia in *Making Native Space, Colonialism, Resistance, and Reserves in British Columbia* (Vancouver: UBC Press, 2002) and "How Did Colonialism Dispossess? Comments from an Edge of Empire," *Annals of the Association of American Geographers* 94, no. 1 (2004): 165–182. Major works on the history of race in British Columbia include: W. Peter Ward, *White Canada Forever: Popular Attitudes and Public Policy towards Orientals in British Columbia* (Montreal and Kingston: McGill-Queen's University Press, 2002); Patricia E. Roy, *A White Man's Province: British Columbia Politicians and Chinese and Japanese Immigrants, 1858–1914* (Vancouver: UBC Press, 1990). Patricia E. Roy, *The Oriental Question: Consolidating a White Man's Province, 1914–41* (Vancouver: UBC Press, 2003); Patricia E. Roy, *The Triumph of Citizenship: The Japanese and Chinese in Canada, 1941–67* (Vancouver: UBC Press, 2007); Timothy

- J. Stanley, *Contesting White Supremacy: School Segregation, Anti-Racism, and the Making of Chinese Canadians* (Vancouver: UBC Press, 2011).
- 11 Jane Jacobs, *Edge of Empire: Postcolonialism and the City* (New York: Routledge, 1996), 3; Renisa Mawani, *Colonial Proximities: Crossracial Encounters and Juridical Truths in British Columbia, 1871–1921* (Vancouver: UBC Press, 2009); Penelope Edmonds, *Urbanizing Frontiers: Indigenous Peoples and Settlers in 19th Century Pacific Rim Cities* (Vancouver: UBC Press, 2010).
 - 12 Felix Driver and David Gilbert, eds., *Imperial Cities: Landscape, Display and Identity* (Manchester: Manchester University Press, 1999).
 - 13 Edmonds, *Urban Frontiers*, 227–29; Mawani, *Colonial Proximities*; Adele Perry, *On the Edge of Empire. Gender, Race, and the Making of British Columbia, 1849–1871* (Toronto: University of Toronto Press, 2001); Jean Barman, “Taming Aboriginal Sexuality: Gender, Power, and Race in British Columbia, 1850–1900,” *BC Studies* 115/116 (1997/98): 237–66.
 - 14 John Sutton Lutz, *Makuk: A New History of Aboriginal–White Relations* (Vancouver: UBC Press, 2007), 73–85.
 - 15 Sophia Cracroft, *Lady Franklin Visits the Pacific Northwest, February to April 1861 and April to July 1870*, ed. Dorothy Blakey Smith (Victoria: Provincial Archives of British Columbia Memoir XI, 1974), 79; Edgar Fawcett, *Some Reminiscences of Old Victoria* (Toronto: William Briggs, 1912), 84.
 - 16 *British Colonist*, April 28, 1862, 2.
 - 17 The municipal census data of 1871 was summarized and printed in the 1872 Dominion Sessional Papers. See Canada, *Sessional Papers*, 1872, Vol. 6, No. 10: “British Columbia. Report by the Hon. H. L. Langevin, C. B., Minister of Public Works.” The *Sessional Papers* did not include this level of detail transcribed from the manuscript census by Hugh Armstrong and digitized for the *viHistory* website.
 - 18 British Columbia Archives (BCA), GR 428, Vancouver Island. Police and Prisons Department, Esquimalt, 1862–1868, City of Victoria 1871 Municipal Census, online database on Patrick Dunae, ed., *ViHistory.ca* <<http://www.vihistory.ca>>. The data on community origin is not complete so the numbers represent the fractions of those reporting a community origin.
 - 19 I. W. Powell, in Canada, Sessional Papers, Department of Indian Affairs, Annual Report, 1877, 32–34.
 - 20 J. A. Jacobsen, *Alaskan Voyage, 1881–83: An Expedition to the Northwest Coast of America*, translated from the German text of Adrian Woldt by Erna Gunther (Chicago: University of Chicago Press, 1977); BCA, A/E/Or3/C15, Alexander Campbell, “Report on the Indians of British Columbia to the Superintendent General of Indian Affairs,” October 19, 1883.
 - 21 Franz Boas, *The Ethnography of Franz Boas: Letters and Diaries of Franz Boas Written on the Northwest Coast from 1886 to 1931*, Ronald P. Rohner, ed. (Chicago: University of Chicago Press, 1969), 28.
 - 22 See Patrick A. Dunae, “Making the 1891 Census in British Columbia,” *Histoire sociale–Social History* 31, no. 62 (1998): 234–36.
 - 23 *British Colonist*, August 10, 1904, 1, 5, 6; July 24, 1907, 1.
 - 24 Grant Keddie, *Songhees Pictorial: A History of the Songhees People as seen by Outsiders, 1790–1912* (Victoria, BC: Royal British Columbia Museum, 2003) and Renisa Mawani, “Legal Geographies of Aboriginal Segregation in British Columbia: The Making and Unmaking of the Songhees Reserve, 1850–1911,” in *Isolation, Places and Practices of Exclusion*, eds. Carolyn Strange and Alison Basher (London: Routledge, 2003), 173–90.
 - 25 Online at Patrick Dunae, ed., *ViHistory* <<http://www.vihistory.ca>>
 - 26 This section draws on Patrick A. Dunae, John S. Lutz, Donald J. Lafreniere, and Jason A. Gilliland, “Making the Inscrutable Scrutable: Race and Space in Victoria’s Chinatown, 1891,” *BC Studies* 169 (Spring 2011): 51–80.
 - 27 This interpretation is emphasized by geographer David Chuenyan Lai in *Chinatowns: Towns within Cities in Canada* (Vancouver: UBC Press, 1988) and *Forbidden City within Victoria: Myth, Symbol and Streetscape of Canada’s Earliest Chinatown* (Victoria: Orca Books, 1991). Historians have also represented Victoria’s Chinatowns as a defensive ghetto, sealed off from the surrounding host community. See Roy, *A White Man’s Province*,

- and Ward, *White Canada Forever*. The Chinese quarter in Vancouver has also been regarded as a rigidly segregated community. See Kay Anderson, *Vancouver's Chinatown: Racial Discourse in Canada, 1875–1980* (Montreal and Kingston: McGill-Queen's University Press, 1991).
- 28 Although our study focuses on 1891, we observe that the patterns hold true for 1881, 1901, and 1911 as well.
- 29 David Cannadine, "Residential Differentiation in Nineteenth Century Towns: From Shapes on the Ground to Shapes in Society," in *The Structure of Nineteenth Century Cities*, J. H. Johnson and C.G. Pooley, eds. (London: Croon Helm, 1982), 235–52.
- 30 Colin G. Pooley, "Space, Society and History," *Journal of Urban History* 31 (2005): 753–61; Edmonds, *Urban Frontier*; Philip Ethington, "Placing the Past: 'Groundwork' for a Spatial Theory of History," *Rethinking History* 11, no. 4 (2007): 465–94; Deryck Holdsworth, "Historical Geography: New Ways of Imaging and Seeing the Past," *Progress in Human Geography* 27, no. 4 (2003): 486–93.
- 31 We have benefited from foundational studies by Sherry Olson, including "Occupations and Residential Spaces in Nineteenth Century Montreal," *Historical Methods* 22 (Summer 1989): 81–99; "Ethnic Partition of the Workforce in 1840s Montreal," *Labour / Le Travail* 53 (Spring 2004): 1–66; Jason Gilliland and Sherry Olson, "Montréal, l'avenir du passé," *GEOinfo* (January–February): 5–7; Sherry Olson and Patricia Thornton, *Peopling the North American City: Montreal 1840–1900* (Montreal and Kingston: McGill-Queen's University Press, 2011). See also Jason Gilliland and Sherry Olson, "Residential Segregation in the Industrializing City: A Closer Look," *Urban Geography* 33 (January 2010): 29–58; Jason Gilliland and Sherry Olson, "Claims on Housing Space in Nineteenth-Century Montreal," *Urban History Review / Revue d'histoire urbaine* 26, no. 2 (1998): 3–16; and Jason Gilliland, "Modeling Residential Mobility in Montréal, 1860–1900," *Historical Methods* 31 (January 1998): 27–42. For early work on the London HGIS, see Jason Gilliland and Mathew Novak, "On Positioning the Past with the Present: The Use of Fire Insurance Plans and GIS for Urban Environmental History," *Environmental History* 10, no. 1 (2006): 136–39; Mathew Novak and Jason Gilliland, "'Buried beneath the waves': Using GIS to Examine the Social and Physical Impacts of a Historical Flood," *Digital Studies* 1, no. 2 (2010) <http://www.digitalstudies.org/ojs/index.php/digital_studies/issue/view/20>; Donald Lafreniere and Jason Gilliland, "Beyond the Narrative: Using H-GIS to Reveal Hidden Patterns and Processes of Daily Life in Nineteenth Century Cities," paper presented to the Association of American Geographers, Seattle, April 2011 and Don Lafreniere and Jason Gilliland, "A Socio-Spatial Analysis of the Nineteenth-Century Journey to Work in London, Ontario," paper presented to the Social Science History Association, Chicago, Illinois, November 2010.
- 32 Wetherell and Potter, *Mapping the Language of Racism*; Teun Adrianus van Dijk, *News as Discourse* (Hillsdale, NJ: L. Erlbaum, 1988).
- 33 Roy, *A Whiteman's Province*; Mawani, *Colonial Proximities*; Anderson, *Vancouver's Chinatown*; Lai, *Chinatowns*; and Ward, *White Canada Forever*.
- 34 Our methodology is fully described in a paper by Megan Harvey and John Lutz forthcoming in *Victorian Review*.
- 35 Jonathan Feinburg, "Wordle," in Julie Steele and Noah Illinsky, eds., *Beautiful Visualization* (Sebastopol, CA: O'Reilly Media, 2010).
- 36 We explore this in more detail in Dunae et al., "Making the Inscrutable Scrutable."
- 37 The *viHistory* website is located at <http://www.vihistory.ca>. It is edited by Patrick Dunae and maintained by the Humanities Computing and Media Centre at the University of Victoria. The attribute data used in our HGIS of Victoria are freely accessible to researchers on this open-source website.
- 38 We are able to capture the additional population caught by the municipal censuses and directories.
- 39 Geo-referencing is an intricate and exacting procedure, wherein a series of X/Y, longitude/latitude ground control points from high-precision, modern GIS maps are applied to digital images of historical maps. Using a technical process known as polynomial transformation, and informally

called rubber-sheeting, the historical maps are digitally stretched and skewed to correspond to their real-world spatial coordinates.

- 40 The exacting work of geo-referencing the cadastral layers, delineating polygons and linking attribute data to parcels was done by GIS technician Kevin Van Lierop and co-author Donald J. Lafreniere in the Human Environments Analysis Laboratory in the Department of Geography at the University of Western Ontario. We used ArcGIS, the popular GIS software from ESRI, in this project.
- 41 On the function and value of these spatially related records, see Diane L. Oswald, *Fire Insurance Maps: Their History and Application* (College Station, TX: Lacewing Press, 1997). See also Gilliland and Novak, "Positioning the Past with the Present."
- 42 R. T. Williams, ed., *Williams' illustrated official British Columbia directory, 1892; under the patronage of the Dominion and provincial governments, as well as the various municipalities throughout the province, containing general information and directories of all the cities and settlements in British Columbia, with a classified business directory* (Victoria, BC: Colonist Printers, 1892).
- 43 *The British Columbia Directory for the Year 1882–83*, published in Victoria by the firm of R. T. Williams in 1882 but compiled in the fall of 1881.
- 44 Peta Mitchell, "'The Stratified record on which we set our feet': The Spatial Turn and the Multilayering of History, Geography and Geology," in Dear et al., *Geohumanities*, 81.
- 45 David Bodenhamer, "History and GIS: Implications for the Discipline," in Knowles, *Placing History*, 230.
- 46 Douglas Richardson, "Spatial Histories: Geohistories," in Dear et al., *Geohumanities*, 210.
- 47 Massey, "Space-Time," 34.
- 48 Mikhail Bakhtin, "Forms of Time and of the Chronotope in the Novel; Notes towards a Historical Poetics," in *The Dialogic Imagination*, M. Olquist, ed. (Austin: University of Texas Press, 1981), 250.



John

Store

Douglas

Johnson

Cook

Pandora

Yates

Superior

Donghees
Indian
Reserve

Victoria
Harbour

