

“THE NATIONAL GAIN IS NIL”: INFANT MORTALITY AS FAILED REPRODUCTION IN EARLY 20TH CENTURY ALBERTA¹

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Abstract. This article contributes to the sociology of vital statistics by examining the understandings of infant mortality which circulated in Alberta in the early 20th century. In those years, infant mortality came to be represented as an unnatural and unacceptable diminishment of Alberta’s population and an appropriate object of political concern. This paper deals with the ways in which infant mortality became saturated with symbolism, even before the full emergence of policies and programs for reducing it. Using a database of 73 digitized Alberta newspapers, I identify the dominant metaphors for infant mortality as economic inefficiency and military defeat. I also set this concern for lost infant life within the context of other population anxieties, including xenophobic fears about “unnatural increase” through immigration and fears about “population quality” which culminated in calls for eugenic sterilization. I argue that infant mortality is a unique form of population process in that it temporally fuses birth and death, creating, in the collective imagination, a spectral collection of those who might have lived, had they not been deprived of life unnaturally soon.

Keywords: Alberta, infant mortality, vital statistics, population, biopolitics, newspapers

Résumé. Cet article contribue à la sociologie des statistiques de l’état civil en examinant les connaissances de la mortalité infantile en Alberta au début du vingtième siècle. En ce temps-là, la mortalité infantile était représentée comme étant une réduction anormale et inacceptable de la population albertaine et un objet approprié d’inquiétudes politiques. Cet article aborde les moyens qui ont permis à la mortalité infantile de se saturer de symbolisme, même avant l’émergence des politiques et des programmes ayant pour but de la réduire. Grâce à une base de données de 73 journaux albertains numérisés, l’auteur identifie les métaphores dominantes de la mortalité infantile comme étant une inefficacité économique et une défaite militaire. L’auteur place également l’inquiétude à l’égard de

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la perte de la vie des enfants dans le contexte des autres anxiétés de la population, dont les craintes xénophobes de « l'augmentation anormale » de la population par l'immigration et les craintes à l'égard de la « qualité de la population » qui ont abouti à l'appel de la stérilisation eugénique. L'auteur fait valoir que la mortalité infantile est une forme unique de processus démographique en ce sens qu'il fusionne temporairement la naissance et la mort, créant, dans l'imagination collective, une collection spectrale de ceux qui auraient pu vivre, s'ils n'avaient pas été privés de la vie de manière anormalement précoce.

Mots clés: Alberta, mortalité infantile, statistiques de l'état civil, population, biopolitics, journaux

INTRODUCTION

This paper is intended as a contribution to the sociology of vital statistics, those numbers which represent changes in the size of a population. Vital statistics record two types of change in particular: gain and loss, or increase and decrease. However, not all gains carry the same political and symbolic valence, nor do all losses. When people talk about vital events, they are talking about more than simple population arithmetic. The first (and as far as I can find, only), use of the term “sociology of vital statistics,” in a 1911 edition of the *Journal of Home Economics*, makes this quite clear:

The sociology of vital statistics is wonderfully fascinating to the student. In scarcely any other way can he gain so vivid a conception of the actualities of modern social life.... [How] enlightening is the tragedy of the death-rate. The student is appalled when he first comprehends the wanton sacrifice of human life, the reckless waste of our vital resources, through ignorance, disease, and bad social condition.... Gradually he realizes that slaughter in war is not so deadly as institutional murder in times of peace; ... Then he turns to the triumphs of scientific prevention, and takes new courage. To his amazement he learns that there is actually being achieved a conquest of death.... A single flash of knowledge enables him vividly to see how much the life of man lies in his own hand. (Elliott 1911:38)

In this article, I suggest that one form of vital event in particular — infant mortality — has been understood as an especially troubling and troubled occurrence. Infant mortality represents the near-simultaneous arrival through birth and departure through death of human life. Here I examine a case in which this temporal juxtaposition became understood as perverse and unnatural, and was linked metaphorically to broader historical experiences of the body politics.

Many other scholars have explored the ways in which concerns with infant mortality have been used to justify launching or expanding state interventions ranging from mothercraft to eugenics. Most notably, the works of Anna Davin (1978), and Ann Stoler and Frederick Cooper (1995) have launched many inquiries into the governance of infant health and maternal behaviour, all in the name of the state. In a slightly different vein, the work of Lorna Weir (2006) has focused attention on perinatal mortality, or the constitution and extinction of a subject just before or immediately following birth, through close readings of legal struggles over the beginnings of life and death.

These scholars have focused primarily on the mobilization of knowledge about birth and death rates, with close attention to states, or fractions thereof, as actors. As Rose (1991:674) says, “counts of population, of birth, death and mobility have become intrinsic to the formulation of and justification for government programs.” Rose is speaking here of the processes which have come to be known as biopolitics, defined by Foucault² as

the specific strategies and contestations over problematization of collective human vitality, morbidity and mortality, over the forms of regimes of authority, and practices of intervention that are desirable, legitimate and efficacious. (1994:197)

He specified four areas as the terrain of biopolitics: issues concerning the birth rate; endemic (as distinct from epidemic) morbidity; old age; and the “problems of the race” under different ecological and geographical conditions. Foucault’s areas cover the human lifespan, from birth to death. All four are fertile ground for meaning-making. In this paper, I focus on the representational issues which arise when the two ends of the lifespan are brought into abrupt proximity, when births are temporally proximate to their own negation by death. While many scholars have concentrated on the political and legal uses to which infant deaths have been put, I am here interested in the saturation of infant mortality rates with meaning in the popular imagination by means of persistent tropes, even before the initiation of such programs. Thus, I am dealing with a

2. Although I bring in the concept of biopolitics, this paper is not intended as an exegesis on Foucaultian thought. I situate myself more in the tradition of Canadian social history as practised by researchers such as Angus McLaren, Sarah Carter, Joan Sangster, Veronica Strong-Boag, Mariana Valverde, or Meg Luxton, who draw on diverse concepts when these concepts help to illuminate empirical matters, but who are primarily concerned with delineating aspects of the social imaginary for a place and time, rather than using Canadian history as an entrée to theoretical excursions. More broadly, I locate this paper in the tradition of social history of reproduction exemplified by Anna Davin and Wally Secombe in the United Kingdom, Nancy Rose Hunt and Luise White in Africa, or Linda Gordon, Viviana Zelizer, and Rickie Solinger in the United States.

moment which is causally, if not always chronologically, prior to the emergence of states and other collectivities as actors on infant mortality.

I take Alberta, Canada, from the end of the First World War until the beginning of the second as a case of the meaning-making surrounding infant mortality rates. In this time and place, the birth rate and its management was a focus of discursive concern among the intelligentsia and the emerging middle class. This concern was articulated, however, not in terms of the absolute numbers of babies being born, but in terms of the rate of *successful* reproduction — births that led to ongoing life, as distinct from those which quickly ended in death, and therefore contributed nothing to the collective well-being. Alberta was thus imagined as a population with particular deficiencies, of which one of the most pressing was the rate at which those who had newly entered the population through birth proceeded to exit it, through death. This distinction between the excess of “failed” births and the deficit of “successful” ones led to preoccupation with Alberta’s infant mortality rate, as a marker of the economic, political, and moral health of the population, as well as its demographic well-being.

Infant mortality represents thwarted reproduction, when those who should have lived have instead died, whether through misfortune, negligence, or deliberate intervention. The fact that this death occurs so soon after beginning to live gives infant mortality a particular urgency as a social problem, because the death of infants is more easily understood as an ethical crisis than the death of older people, who have already experienced a full measure of life and whose deaths can be more easily understood as appropriate or natural.

As Weir (2006) demonstrates, in the mid 20th century, the perinatal boundaries of personhood are constructed out of contemporary anxieties about birth as a social problem, with particular types of perinatal deaths coming to be understood as especially problematic. Going back earlier, Bayat-Rizi (2008:122) describes the emergence of a distinction between timely deaths from natural causes, and “premature” or untimely deaths. Infant deaths are a prime example of such “unnatural” mortality, given the temporal compression of life in cases of infant mortality, when death comes before full social life is attained.³ While anthropologists and sociologists have historically talked of these conditions where life and death are proximate as “liminal” states (see Kaufman and Morgan’s 2005 review of the literature on the beginnings and endings of life), “liminal” does not seem as good a descriptor as “perverse.” Births that end in rapid

3. By contrast, Schepher-Hughes’ (1993) work in impoverished parts of Brazil shows that not all infant deaths are regarded as unnatural or untimely, and that high rates of infant death under some conditions may be normalized.

deaths are not “real” births, insofar as they do not augment the population but decrease it, through their unnaturally rapid appearance and disappearance. These perverse and unproductive births confound the categorization of biopolitical phenomena, in which death and life are distinct categories, separated by taxonomies which distinguish fertility and mortality.

I have chosen this particular time period not only because it was a particularly stressful one in Alberta’s history, but also because it is when birth rates and death rates came into existence in the province, when the first such statistics were compiled in 1919. Of these statistics, infant mortality rates are unique. They denote a population which both exists and does not exist, representing life which has come into being, and then quickly exited. However, this absent life continues to exist in representations of lost potential, of the assets which could have been fully present had they not been betrayed by the inability to keep them alive.

Infant mortality — birth haunted by death — was rhetorically stylized through analogies to two specific collective traumas: the aftermath of the Great War and the Great Depression, which in Alberta arrived even before the 1929 stock market crash. The stylization of “failed” births through metaphors of economic inefficiency and military defense is particular to Alberta’s own history, just as, for example, the stylization of collective efforts to change infant mortality in Wilhelmine Germany as *kulturkampf*, or cultural struggle (Frohman 2006:452) was tied to contemporary events.

In the archives, infant deaths are sometimes visible as events occurring at the level of the individual. For instance, in the case records kept by district nurses in the Glenbow Archives in Calgary, infant mortality is visible as specific babies, undergoing specific traumas and deaths. Similarly, in the remembrances of adults from the early 20th century, losses of children form part of the narrative of an individual life (Silverman 1998). In public discourse, however, the sentiment and the tragic affect which attended the loss of a particular child or mother was subsumed into a more collectivized loss, a waste of human potential instead of, or in addition to, a privatized tragedy. This depiction of infant mortality, without particularized sentiment or affect, functions to diagnose the population, as the failures and tragedies of the social body were read off the failures and tragedies of individuals.

ALBERTA

Alberta is the westernmost of Canada’s prairie provinces, separated from British Columbia and the Pacific Coast by the Rocky Mountains. For decades, Alberta has functioned in the Canadian political imaginary as

a frontier, a place of risk and danger but also a place where the rules of the hidebound east do not apply, and where societies can be rebuilt along newer and better lines. Alberta has experienced waves of “prairie populism” over the last century, which have been simultaneously conservative, libertarian, and reconstructionist. In the interwar years, Alberta held a successful women’s suffrage movement, which was deeply bound up with the idea of collective betterment and thus overlapped with the concerns about infant mortality and “baby-saving” as well as with the repressive eugenic sterilization movement, as discussed below.

From the beginning of the 18th century, whites and First Nations interacted in Alberta through the fur trade. As Canada grew, First Nations were induced or coerced into restricting themselves to set-aside parcels of land which became Aboriginal reserves, as their land became increasingly valuable to the Canadian government for purposes other than fur. From the late 19th century onwards, the government was concerned with filling up Alberta with white settlers. Canada needed the minerals and agricultural bounty from the west; the federal government was also concerned with staving off Americans from the US border states who might try to move north. Homesteading in Alberta was aggressively marketed to prospective immigrants from the United Kingdom and from central Canada, with Alberta proclaimed the “last best West,” where prosperity, success, and land ownership awaited the intrepid and optimistic settler. In 1905, Alberta became a province, carved out of the Northwest Territory along with its neighbour province Saskatchewan. The land rush peaked in 1908, and the population quintupled between 1901 and 1911, almost all white immigrants. Meanwhile, the First Nations population decreased from 20% of the population in 1901 to 3% a decade later (Payne et al. 2005:382). The rapid growth in white presence in Alberta, combined with the territory attaining full status as a province, produced much debate among the settler community over what shape this new polity might take.

SOURCES

Most of the material for this paper is drawn from the Bruce Peel Prairie Newspapers Collection at the University of Alberta. The Peel Collection consists of 73 Alberta newspapers, digitized and available freely on the internet (<http://peel.library.ualberta.ca/index.html>). The collection contains just under three million discrete articles. I searched this collection for articles and letters to editors, using the keywords “infant mortality,” “infant + mortality,” “mortality rate,” “mortality + rate,” “babies + death,” and “infants + death,” for the years between 1914–1940. This

produced 2001 hits, with considerable redundancy as articles were often published simultaneously in different journals. On all searches, the hits peaked in the late 1910s and 1920s, then began to decline in the 1930s. Findings from the Peel Collection were supplemented by as-yet-undigitized newspapers and other documents in Alberta's main archives (the Provincial Archives in Edmonton and the Glenbow Archives in Calgary) as well as smaller local archives in Grande Prairie, Lethbridge, and Medicine Hat.

Because I am interested primarily in the way people imagined infant mortality rather than in state efforts to govern it, I make limited use of documents describing the emergence of programs of governance, such as the archives of the provincial Ministry of Health. I rely primarily on reports from small-town papers, for several reasons. In the first part of the 20th century, most papers were owned and run by town residents, rather than by large conglomerates (Wetherell and Kmet 1995). Unlike the newspapers of the two major cities, Edmonton and Calgary, small-town papers concentrated on local and provincial news, and editorial boards made free use of the news sections and opinion pages to promote their own views. "Boilerplate" news, obtained from wires services or large services and printed verbatim, occupied a smaller and smaller proportion of the news section until by the 1920s, the use of "boilerplate" had completely ended (Wetherell and Kmet 1995:67). The editors preferred to fill their pages with local and provincial news, and, if local news was scant, opinion and commentary on local and provincial issues.

The papers, mainly weeklies, were also infused with the ethic Wetherell (2005) calls "boosterism," in which the function of a newspaper was not so much spreading news as promoting the development of the town it served. While "boosterism" could take the form of unreflecting celebration of small-town life and commerce, it also took the form of diagnosing and prescribing remedies for social problems which, when eradicated, would make Alberta a better place. In addition to articles on infant mortality, local newspaper writers also ran many pieces in which news shaded into opinion on topics such as the substitution of mixed ranching for farming, control of prostitution, flat-tax systems, dower laws, and Esperanto. The pieces on infant mortality thus form part of a broader discourse about assessing and correcting the flaws of the "last best West."

These sources are undoubtedly not representative of all sentiment in Alberta at the time. They come from presses owned by men (and a few women) of British descent who were, if not wealthy, at least well-off, and who had significant financial and moral capital invested in the idea of a modern, progressive Alberta. The attitudes about those who

fell outside this circle — the poor, the non-Anglo, the displaced First Nations — were for the most part predictably condescending and often demeaning. The courses of action recommended for such people — overcoming ignorance, following experts' advice, educating themselves, self-improvement — were also predictably paternalistic and individualized. However, these attitudes are the backdrop to this paper, not the focus of it.

DEATH AND INFANTS IN ALBERTA AFTER THE GREAT WAR

A tour of the social imaginary of infant mortality in Alberta might begin at the annual Baby Welfare Week held in Calgary, then the largest city in Alberta, in the early interwar period. The Baby Welfare Weeks consisted of exhibits, speakers, and films on the latest "scientific" advances in child development, and attendees received a detailed booklet containing program notes and other useful short articles given to attendees. The intended audience was mothers and mothers-to-be in Calgary and surrounding areas, and the week's activities were organized by the municipal health authorities and sponsored by commercial enterprises whose profits depended on convincing mothers that their infants' lives were at risk.

The programs for the week's events made it clear that infant mortality was an ever-present danger to families and to the greater polities in which families were embedded, and that infant survival was tied to the military and economic capacities of the state. In 1917, the week's theme was "Our Empire Builders," proclaimed on the cover of the program, echoing Davin's (1978) evocation of "imperial motherhood" in the United Kingdom. On the inside, readers were asked, "Do you know that intelligent motherhood conserves the Nation's best crop? A low infant mortality rate indicates high community intelligence? Health first is a form of safety first?" (Glenbow M8401-35). The 1923 program reminded women that "the race marches forward on the feet of little children" (Glenbow M8401-35).

While these exhortations from civic authorities evoked a progressive vision of a nation dependent on a constant increase in safe and healthy babies, the ads from local merchants conjured up the converse of infant survival. In these advertisements, the spectacle of infant mortality was repeatedly invoked, with some advertisers stating explicitly that their product was necessary to prevent infant life being snuffed out. One merchandiser in 1918 whose store sold "combs, baby trusses, rubber bibs, etc." informed readers that "your baby's life depends on these precautions" (Glenbow M8401-35). Other advertisers reminded readers that the early days were the most dangerous ones, and that without the

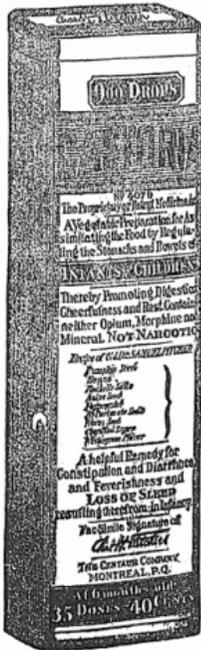
use of vitamins, sterilizers and other specialized items, mothers risked the loss of their infants.

Using Infant Mortality to Sell Castor Oil.

Making History.

INFANT MORTALITY in past ages has been something frightful, something almost beyond belief, and even today it occupies the time and the mind of leading physicians in all countries. The death rate among infants is being gradually reduced through new methods of hygiene, new preventatives and new remedies for infants. This reduction in the death rate has NOT been accomplished by adapting the precautions taken and remedies used by adults. Rather has it been to keep clear of the old methods, and choose after long research the precautions and remedies specifically applicable to infants.

This being so, is it necessary for us to caution mothers against trying to give her baby relief with a remedy that she would use for herself? Will she remember that Fletcher's Castoria is strictly a remedy for infants and children?



Exact Copy of Wrapper.

Children Cry For
Fletcher's
CASTORIA

Of Course You Love Your Baby.

You love it because of its very helplessness, because it can't tell you what is the matter when it feels bad. It can only cry and look to you for help. But the more you love baby, the more you want to help baby, the more you ought to realize what a wonderful remedy Fletcher's Castoria is. It has been used for babies' ailments for over thirty years.

An experienced doctor discovered Fletcher's Castoria especially for babies' use. It is a harmless substitute for Castor Oil, Paregoric, Drops and Soothing Syrups. Doctors who know what is safe and best for babies have only good to say of it.

Don't neglect your baby. Get a bottle of Fletcher's Castoria and give baby a few doses of it. See how the little one smiles at you as if trying to thank you for helping it. Soon you will learn to depend on Fletcher's Castoria, made just for Infants and Children, and of course you would not think of using anything for them that was not prepared especially for Infants and Children. So keep it in the house.

GENUINE CASTORIA ALWAYS

Bears the Signature of

Chas. H. Fletcher.

THE CENTAUR COMPANY, NEW YORK CITY.

Chinook Advance, July 14, 1921, p. 3.

The contrast between the optimistic possibilities of enhanced infant survival and the implicit pessimism of the advertisements typifies the

representation of infant mortality in the early 20th century, as the infant population of Alberta was framed as simultaneously precious to both parents and the province, and threatened.

Before the Great War, there was no infant mortality rate as such in Alberta, as no figures on infant births and deaths were collected. The 1914–1918 war and its loss of life carved the contours for public concern with infant mortality. Although the age-specific quantification of death had been possible in the English-speaking world since the 17th century “political arithmetic” of John Graunt (Bayat-Rizi 2008:127), the treatment of infant mortality as not just an individual tragedy but a problem of politics in Alberta began in the postwar period, somewhat later than elsewhere. Across Canada, statistics on infant births and deaths (along with other vital rates), were first compiled in 1919, as was the case in other British colonies and dominions, such as Australia, New Zealand, and South Africa, where population-level mortality phenomena, especially infant mortality, were quantified in the wake of the war (McPhail 1927:476).

The impact of the war on concern for infant mortality was also noted in countries where quantification had existed for years. Richard Titmuss (1941) summarized changes in Great Britain’s infant mortality patterns, attributing state awareness of and intervention in infant mortality to the shock experienced by the country in the wake of war. “There is perhaps something rather shocking,” Titmuss wrote, “in the idea that it took a war to focus public attention on a wastefully high infant death rate” (1941:12). Titmuss linked infant survival and military fitness, and argued that the former would not be properly attended to “unless the threat of mass devastation was upon us” (1941:13). In fact, secular declines in infant mortality had begun well before the Great War (and even before the Boer War, which had also occasioned such hand-wringing), but the link between war and infant mortality was established in the public imagination (Woods et al. 2010).

Anna Davin (1978) provides extensive analysis of the programs to save babies by improving mothers, in the name of the empire, which sprang up across the United Kingdom at the beginning of the 20th century. In Ontario and central Canada, Mariana Valverde (1991), Catherine Arnup (1994), and Cynthia Comacchio (1993) chronicled similar projects for the moral uplift of mothers, fuelled by the newfound “sciences” of mothercraft and domestic economy and embedded in the broader context of the Social Gospel movement around the same time.

On the far side of the prairies, however, events moved more slowly. In Alberta, it was not until the years following the First World War that “child-saving” — a broad term which included moral rehabilitation as

well as the physical preservation of children — gathered momentum as a social movement. In 1918, the provincial superintendent of neglected children reported that

With almost unprecedented rapidity, social organizations have been organizing child welfare departments, baby clinics, and other child-saving activities ... [and] arousing people to the realization of startling facts concerning unnecessary infant mortality. (Superintendent of Neglected Children Annual Report 1918:9)

A contemporary editorial in Alberta's *Claresholm Review-Advertiser* connected the war with heightened awareness of human stock as wealth and security for the nation:

With all its horrors, suffering and losses, the Great War conferred at least one benefit to mankind in that it opened the eyes of all the people, and particularly all the governments ... [to the fact that] the greatest of all national assets are people. (*Claresholm Review-Advertiser* 1926:2)

While the Claresholm editorialist called the 1920s a “wonderful age,” most Albertans would not have agreed. The postwar years in Alberta were marked by collective trauma. War casualties were high. Canada provided more than 600,000 servicemen to the European war effort, of whom 233,000 ended up as casualties. Alberta itself provided 45,136 enlistees, a stunning number from a province with fewer than half a million inhabitants. I was unable to find numbers for total Alberta casualties, but Alberta-based units registered very high rates of deaths and injuries. The Calgary 149th Battalion, for instance, consisted of 975 men, of whom 284 were killed and 401 injured (Cunliffe nd:74). The number of war widows and abandoned wives in Alberta was large enough to spur the creation of the province's first social welfare scheme, in the form of widows' pensions, and contributed significantly, albeit indirectly, to changes in provincial law allowing women to hold title to land instead of vesting it in a husband or male relative. Simultaneously, the Spanish flu epidemic of 1918 killed somewhere between 3,800 and 4,300 people in Alberta, out of approximately 32,000 infected. (Cavanaugh et al. 2006:420–421).

In addition to loss of life, the postwar years were a time of crisis in agriculture, the basis of Alberta's economy in the years before oil was discovered. Grain prices which had been artificially inflated by war-time demand fell precipitously. This blow was combined with localized drought, a precursor of the huge droughts of the 1930s (Marchildon et al. 2007). This drought led to the depopulation of some rural areas, especially in southern Alberta, so that from the perspective of farmers, popu-

lation growth actually appeared to reverse itself. In the so-called Special Areas of southeastern Alberta, the heart of the “dry belt,” population fell from 41,050 in 1921 to 29,785 by 1926 (Marchildon et al. 2007). Coal mining, another pivot of Alberta’s economy, also diminished because of reduced demand from the United States as alternative sources of energy were found. During this downward economic spiral, a new political party with strong populist roots, the United Farmers of Alberta (UFA), was elected to the provincial government in 1921. UFA supporters imagined Alberta as the site of both great failure and potential victory over social problems, including both the quality and quantity of its population.

MANAGING POPULATION IN ALBERTA

Under the UFA, the calls to improve the population, including but not limited to decreasing mortality among infants, eventually materialized into several social programs, driven by the powerful women’s auxiliary, the United Farm Women of Alberta. The most notorious of these was negative eugenics, the sterilization of people considered unfit to reproduce for genetic or social reasons. Under the 1927 *Sexual Sterilization Act*, inmates in psychiatric hospitals could be sterilized as a condition of their release. The *Act* was amended in 1937 and again in 1946 to broaden the category of persons who could be sterilized beyond only those institutionalized for psychiatric reasons to include different forms of “mental defect,” including promiscuity or substance abuse; and to dilute the requirement that the person consent to the procedure. The *Act* was repealed in 1972, by which time 2,800 Albertans had been sterilized, an unknown number of whom were sterilized without their knowledge (McLaren 1990, Wahlsten 1990, Nind 2000, Grekul et al. 2004). The *Sexual Sterilization Act* still stands as the greatest collective violation of human rights in Alberta’s history.

In addition to eugenic sterilization, the population politics of Alberta included nativism and xenophobia, in the context of concern about the “quality” of immigrants. Alberta’s population was growing rapidly, from 73,022 in 1901 to 373,943 in 1911 and 584,454 in 1921 (*Canadian Encyclopedia* 2010), arousing anxieties among the earliest settlers, especially in the economic crash after the war. The government was caught between the desire to “fill up the land” and increase the population, and a widespread perception among Albertans descended from the British Isles that immigrants from other places, especially Asia and eastern Europe, were degenerate, lazy, or unintelligent. In its most benign form, this xenophobia was expressed through imperatives to “Canadianize” new immigrants through schools and language policies; in its more malignant

form, it was manifested through support for measures such as the *Chinese Immigration Act* of 1923, which effectively terminated Chinese immigration into Canada, and through calls for restrictions on the settlement of immigrants from the Catholic and Orthodox countries of eastern Europe.

Although both sterilization and immigration xenophobia are related to anxieties about population quality (as well as quantity) in Alberta, they are qualitatively different from anxieties about infant mortality. As a population phenomenon, infant mortality is different from migration or sterilization because it involves the net loss of people who already exist: the diminishment of an already existing population rather than the shaping of a future one. Sterilization and xenophobia involve the prevention of new and presumably undesirable people from entering the population of Alberta, rather than the loss of already valued people from the polity. The children who were lost to infant mortality — the objects of contemplation in the anxious discussion about what must be done — were clearly imagined as precious and important, as economic and political assets to Alberta, not as potential dangers to the population, as was the case with the imaginary children whom the eugenically sterilized might have borne, or the “undesirable” immigrants who might have flooded into Alberta had they not been stopped.

This particular characteristic of infant mortality as a social problem — the concern with the loss of new citizens, rather than the prevention of future citizens — distinguishes it from Alberta’s other forays into population governance, in the form of eugenics and immigration control. The lost infants, potential new citizens now irretrievably gone, had been allowed to die when they should have lived. The framing of infant mortality as failure resonates throughout public discussion of health, reproduction, and population growth.

NATURAL AND UNNATURAL INCREASE

Concerns about infant mortality in Alberta were first and foremost concerns about population growth. Increasing population was considered an intrinsic good, but, crucially, not all forms of population growth were equally desirable. Population growth through a continued excess of births over deaths — “natural increase” — was preferred to, and contrasted with, population growth from already born people coming into Alberta’s population via immigration. For instance, a verbose editorialist for the *Lethbridge Herald* commenting on the release of vital statistics for 1919, the first year that such information existed, linked infant mortality not only to the growth and perpetuation of cities, provinces, and Canada as a nation, but also to the most desirable way of perpetuat-

ing those political units. Both the quantity and the quality of population growth were implicated in birth rates and infant deaths. Infant mortality represented a lost opportunity for Canada to “grow from within,” through biological replenishment, rather than “growing from without,” by taking in immigrants from other places:

If there is anything to be gleaned from the vital statistics of the year gone by, it may be found that too great a ratio of mortality of infants under five years to the death roll in the city. It serves to show that the campaign of child welfare in its particular relation to infants is one that is abundantly time-worthy and of great importance, if we are to rely on the increase of our population of native Canadians more than on immigration. Of the two, the former is of greater importance in that the principle of growing from within is preferable to growing from without. (*Lethbridge Herald* 1920)

The infants lost to unnaturally early mortality were counterpoised to adult immigrants. The lost children were part of Alberta, coming from “within,” as distinct from the alien immigrants from “without.” An editorialist for the *Irma Times* agreed, commending the new United Farmers of Alberta government for identifying infant mortality as a political problem linked to immigration. The “vacancies” created by infant deaths, he argued, would be filled up by immigrants, and by implication, foreigners would substitute for true Albertans:

The new minister of health ... is on the right track in endeavoring to improve the province’s life and death numbers. In an address in Calgary a few days ago he called attention to the too-high infant mortality rate ... urging upon the public the seriousness and needlessness of this annual loss. It would be better, he very rightly claimed, to conserve the life we have here now than to keep on filling up unnecessary vacancies by immigration. (*Irma Times* 1921:5)

Two years later, the same newspaper (and possibly the same editorialist) reiterated that

Of the many natural resources which the prairie provinces possess, the greatest is their people. The natural increase from births is Canada’s best source of population and the growth and maintenance of this increase is her first duty. (*Irma Times* 1923:7)

Because of this compelling political duty, continued the editorial, “there is considerable satisfaction to be gained from the fact that the infant mortality rate was less than that of the preceding year” (*Irma Times* 1923:7).

MORTALITY RATES AND NUMBERS

Among early 20th century European settlers in Alberta, “it is not an exaggeration to say that every family lost at least one infant at birth or shortly after birth” (Langford 2000:156). According to contemporary sources, infant mortality rates varied between 75–94 per thousand live births in the interwar years, fitting into the mid-range of Canadian provinces (McPhail 1927:478). However, contemporary knowledge about infant deaths usually set the number much higher, creating a portrait of Alberta as a dangerous place for babies. For instance, Richardson (1998:2), citing Helen MacMurphy’s 1928 study *Maternal Mortality In Canada*, claims that Alberta had the highest rates of infant and maternal mortality in Canada as of 1921 (which is not borne out by McPhail’s statistical data), and that maternal mortality (which usually entailed the death of the infant as well) was the second leading cause of death for women after tuberculosis.

In the interwar years, representations of the infant mortality rate tended to be highest in public settings where convincing rhetoric was required. For instance, in an address to the Alberta Women’s Institute annual meeting in 1916, Irene Parlby claimed that “the high death rate among infants in Alberta is something like 35 per cent ... it [is] high time the women of the province took steps to remedy this” (*Grain Growers Guide*, 18 March 1916:29). The *Bassano Mail* (1927:2) reported that Alberta’s infant mortality in 1926 was 77.2 per thousand, down from 89.5 in 1925. However in a 1928 address to the United Farm Women of Alberta, a Mrs. J.W. Field reported infant mortality as 85 per thousand (*The UFA*, 1 February 1928:28). Despite variance of the reported rate, it was inevitably described as too high, as dangerous and unnatural. The failures of the Alberta government to safeguard its resources were compared unfavourably to the successes of Alberta’s closest peers within the empire, especially New Zealand and Australia.

To bring down the infant mortality rate, speakers called for actions ranging from the vague and general, such as making baby-saving a political priority, to the very specific, such as enforcing the pasteurization of milk at licensed dairies. The root cause of infant mortality was usually defined as either poverty (in the socialistically inclined papers with strong UFA leanings) or as ignorance on the part of parents (in the more conservative papers). To remedy poverty, writers focused on changing the conditions under which farmland was acquired and disposed of, as well as changing the pricing structure for Alberta’s agricultural products, which were perceived to be bought by eastern Canadians for untenably low prices. For ignorance, the dissemination of knowledge about “scientific” baby care, particularly the encouragement of breastfeeding,

was the most frequently mentioned remedy. Other plans for reducing infant mortality at the municipal and provincial level included improving facilities for giving birth; preventing infectious disease through vaccination and improvements in housing; and mandatory pasteurization of milk, all of which eventually came to pass in the interwar years.

These concerns about infant mortality were profoundly gendered. Infants were only represented in conjunction with mothers, on whose shoulders lay the most direct responsibility for the keeping the new life from dying too soon. I did not find a single reference to fathers as either causes of or bulwarks against infant mortality. While infant mortality was represented as a concern for every Albertan because of its implications for the health of the population, the female half of the population — actual and potential mothers — were the conduit through which changes in infant mortality must flow. The responsibility laid on mothers was great. In addition to their broader duty to raise good citizens, they were also responsible for the very existence of the country, by keeping babies alive.

Neither the security nor the economy of the emergent population of Alberta was solid, as long as the mortality rate stayed high. When so many new lives were being “let die,” Alberta’s claim to be a true modern polity was jeopardized. As a speaker at the 1918 Lethbridge Child Welfare Week put it, “we are not in a position to be a democracy when we waste more than 30,000 children annually, and the ability of a nation shows up in making itself strong [*sic*] to withstand tyranny” (*Lethbridge Herald*, 3 May 1918:8). A feature in the *Empress Express* (1930), titled “Judge nation by child death rate” also made the case that “infanted [*sic*] mortality [is] an index of any civilization.” A few commentators described infant mortality in moral or affective terms, such as the writer for the *Carbon News* (1921), who referred to the “slaughter of the innocents,” but even this reference was framed by the qualification that “apart from the human aspect in the unwarranted loss of child life ... [the most important aspect] is the loss to the state itself” (*Carbon News* 1921). More typical was the line of argument in the *Clareholm Review-Advertiser* (1918:8) that “the waste of infant life affects not only the happiness of the home, but the well-being of the nation.” In this commentary, the well-being of the nation received much more attention, and many more superlatives, than the comparatively bland “happiness of the home.” Sentimentality surrounding the figure of the child is not evident here; instead the spectral image of the lives lost to infant mortality was construed as a component of a greater social machine.

The rhetoric about infant mortality was dominated by two metaphors: collective defense and economic growth. The babies who had gone missing through excess mortality were imagined primarily as sol-

diers missing from some future army, and secondarily as economic resources wasted and inefficiently dispersed. Humanitarian presentations of the tragedy of child death and depictions of individual suffering were few compared to analogies to military strength, national defense, investment, and efficiency and waste. Infant mortality was thus figured as both excess and lack — too much death and too little strength.

MILITARY METAPHORS

Of the two dominant tropes in discussion of infant mortality, metaphors of military strength, or lack thereof, were the most plentiful. One editorialist pointed to Great Britain, the “mother country” for the socially dominant ethnic groups in Alberta, as an example of what could happen when countries failed to protect their infants, by invoking troop strength during the First World War:

Great Britain now realizes that the neglect of her babies during the years 1872 to 1899 cost her the lives of 1,600,000 male infants alone who would have been of military age today if they had been spared — a priceless reservoir of manpower wasted (*Claresholm Review-Advertiser* 1918:8).

In her regular radio series, Maude Riley of the Calgary Child Welfare Association, a suffragist and well-known “modern” progressive activist, told listeners that

The question [of infant mortality] is one of dire necessity and will have to be dealt with by our provincial and federal governments ... 15,000 babies that might be saved die in Canada every year. Think of it, more babies died every year than there were men killed overseas [in the First World War]. We blame the greater slaughter of men during the Great War to [*sic*] the German autocracy. Then can we not justly blame the appalling casualty rate among babies to our own apathetic indifference? (*Albertan* June 1916, Provincial Archives of Alberta (PAA), file M6466-4)

In case listeners missed the point, Riley titled her lecture “The greatest patriotism is interest in [the] child” (*Albertan* June 1916). In a speech the next year to a city conference on child welfare, Riley linked the loss of new life to the perceived underpopulation of the west:

If every child who had died had lived, there would be a number great enough to duplicate the present population of our western cities. (*Calgary Herald* 1918, PAA M466-4)

The following year, the Alberta Women’s Institute adopted “Save the Babies” as their national slogan, and launched a series of campaigns intended to protect against the wastage of precious Albertan life, including

campaigns for mandatory pasteurization of milk, for more postpartum checkups for infants, and for better education of new and prospective mothers on how to keep their babies alive through proper hygiene, sanitation, and breastfeeding. In the AWI's annual bulletin, members read that

The Institute, owing to the high infant mortality rate, intends to launch an active campaign of conserving the baby life of Alberta. It is estimated that two out of every seven deaths in this province today are babies under one year. The Alberta soldier in the trench has seven chances to live to the Alberta baby's one. The hardest job in Alberta is being a baby. (*The Alberta Club Woman's Blue Book* 1917:31)

The *Redcliff Review* and *Chinook Advance* also compared infant mortality to the deaths of soldiers:

Canada sacrifices 30,000 little babes under one year of age every year! Somebody said about the close of the war that the trenches in Flanders and France were a safer place for Canadian life than the cradles of Canada! (*Redcliff Review* 12 June 1924:5)

Canada lost 10,000 of her fine young men in the Great War. She loses 20,000 of her little babes every year in peace and war alike.... Can you say as the preacher did of old over the little graves "the Lord has given and the Lord has taken away, blessed be the name of the Lord"? Assuredly not.... We shall have to say "cursed be the name of the city or community." (*Chinook Advance* 22 May 1924:6)

In Calgary, Maude Riley and her Child Welfare Association pushed local leaders towards an understanding of babies as precious, endangered, and of great importance to collective well-being. Riley, in an exasperated letter to a Calgary mayor whom she perceived as insufficiently supportive of setting up a new clinic for infants, wrote:

The aim of this clinic is not curative but prevention ... when you think that almost as many babies die in Canada every year as there were men killed and died overseas in the whole Canadian army over the whole four years of the Great War, it is no wonder that this question is [of] such paramount importance to the state. (21 August 1922, Glenbow M8401-28)

ECONOMIC METAPHORS

Infant mortality was also represented as wastage of the "best source of population growth," expressed through almost Fordist metaphors of inefficiency and nonproductivity:

One of the great and impelling duties of this generation is to provide adequate protection for the citizens of tomorrow, who are the babes of today.

We need an awakening to the importance of the child as the primary asset of the nation. The waste of infant life affects not only the happiness of the home, but the well-being and the future of the nation.... There is no loss so irretrievable as the wastage of these human resources. *There is no economy so fundamental and no investment comparable to that devoted to the conservation and all-round development of infant life.* We must save the lives ... [of] a healthy, intelligent and moral generation of young Canadians equipped for the tremendous nation-building tasks that awaits them. (*Red Deer Advocate* 1918:2, italics added)

The replenishment and expansion of the population through children was explicitly likened to other forms of accumulation. In its *Blue Book* for 1917, an anonymous author of the Alberta Women's Club wrote that

a low and decreasing rate of infant mortality marks the attainment of a high degree of civilization. The growth of population *like other forms of wealth* results not only from increases in gains but also from diminution of losses, the excess of births over deaths being enlarged by a rise in the birth rate but perhaps also more by a fall in the [infant] death rate.... About one-ninth of the deaths in this province during the last few years have been among infants less than a year old. In the joy that heralds the birth of a babe, there should also be great care lest the life thus begun be ended too soon. Unless the infant lives, the national gain is nil. (1917:53, italics added)

Another author likened the prevention of infant mortality to investment, whereby the national wealth depended on salvaging, rather than wasting, the "capital" represented by infants:

To save our infants for future citizens is a salvage policy of national importance.... Infants become assets to the country. Here is abundant need for a wise policy of conservation. (*Lethbridge Herald* 1920)

In several instances, infants were depicted as a form of natural resource, potential sources of wealth just like Alberta's mineral and agricultural stocks. The *Irma Times* (1923) included a piece on infant mortality in its series titled "Natural resources bulletin," noting with approval that it was decreasing, sandwiched between a series installment on mineral ores and an installment on the pulpwood industry. An article in the *Redcliff Review* went even further with the comparison, likening infants to raw, unprocessed resources as distinct from finished commodities:

The greatest of all the natural resources of Canada is her children.... The automobile, aeroplane and radio are only machines, whereas children are the future of the state. In order to preserve and develop in the highest degree the great resources represented by child life [new health measures must be taken].... Can Canada afford to lose 514 mothers and babies

every week? [Information about child health] is needed in order to bring home to the people the greatness of this national resource, and how it might be preserved. (*Redcliffe Review* 1924:3)

CONCLUSION

In this article, I have sought to make conceptual and historical contributions to the sociology of vital statistics, as it intersects with the study of mortality and reproduction. Using local newspaper accounts, a valuable if partial window into the collective imagination of Albertans, I argue that infant mortality is a unique form of population process in that it temporally fuses birth with death, creating, in the collective imagination, a spectral collection of those who might have (and should have) lived and added to the population, had they not been deprived of life unnaturally soon. Infant mortality also interpellates infants as innocents, deprived of the life which should have been theirs. In terms of vital statistics, infant mortality is the shadow side of the birth rate, representing failed reproduction. This failed reproduction is distinct from “normal” or “natural” mortality, in which the beginnings and endings of life are not juxtaposed so jarringly. Infant mortality is thus a goad to biopolitical management, an obvious target for those seeking to create a more rationalized, ordered population.

The preceding paragraph might be read as a general statement about infant mortality. However, the ways in which infant mortality is imagined and figured in popular discourse are contingent on historic experience and contexts. In some contexts, infant mortality might be considered unremarkable, a sad facet of human existence but not one which imposes a duty of outrage or mobilization on the communities in which it occurs (cf. Scheper-Hughes 1993). In Alberta, however, the collective traumas of the Great War, followed by drought, depopulation, and economic depression, provided the metaphors for talking about infant mortality and for defining why it mattered so much to the emergent population. Infant mortality was not seen as inevitable; it was understood as something which could have, and should have, been otherwise. However, the concern with infant mortality and the assertions that something needed to be done were not founded solely in ethical concerns for the well-being of infants.

These spectral infants lost to unnatural mortality were imagined as soldiers who might have made up a future army, and as economic assets which might have provided value and profit. Infant mortality itself was portrayed as losses in battle and as the inefficient wastage of resources, images which must have resonated with the newspaper-buying audience. In a province already grappling with anxieties over the quality and

quantity of the population, through eugenic sterilization and xenophobic immigration restrictions, concern for preserving the lives of infants was consistent with ongoing political projects, which were not necessarily based on concern for individual well-being or for the equal value of all human lives.

This article is a first cut into the problem of failed reproduction, as manifested in infant mortality, in 20th century Alberta. Future research will follow this imagination of infant mortality into practice, through the various policies and programs intended to make mothers more successful reproducers and babies more valuable assets to the population.

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