To cite this article:

To link to this article:
http://dx.doi.org/10.17742/IMAGE.NBW.7-1.6

The copyright for each article belongs to the author and has been published in this journal under a Creative Commons Attribution NonCommercial NoDerivatives 3.0 license that allows others to share for non-commercial purposes the work with an acknowledgement of the work’s authorship and initial publication in this journal. The content of this article represents the author’s original work and any third-party content, either image or text, has been included under the Fair Dealing exception in the Canadian Copyright Act, or the author has provided the required publication permissions.
Résumé

Cet essai explore l’héritage concret et abstrait des ascenseurs à grain en bois au travers de la région des Prairies. Au fur et à mesure que ces ascenseurs devinrent obsolètes, un résultat des changements dans la technologie agricole, ils furent négligés, abandonnés et détruits. Bien que ces ascenseurs fussent autrefois des structures à but purement fonctionnel, leur stature monumentale par inadvertance a influencé les relations que les habitants des Prairies entretiennent avec ces derniers, encourageant une identité individuelle et communautaire. Le passé, le présent et le futur de ces ascenseurs ont été étudiés par le biais de recherches d'archives, de visites de sites et d'entretiens. La ville d'Indian Head, SK est une étude de cas. La micro-histoire d'Indian Head permet de comprendre la relation entre ces ascenseurs et les habitants de villes des Prairies. Le concept d’héritage vivant est utilisé pour examiner l’héritage culturel concret et abstrait qui est associé aux ascenseurs à grains dans un cadre temporel. L’héritage vivant est à la fois un acte et une théorie ; une manière de penser et de se comporter envers le passé, qui ouvre la porte à une discussion complexe sur l’espace, le temps et les gens en lien avec les ascenseurs à grain en bois dans la région des Prairies. Cet essai fournit des preuves sur l’importance de ces ascenseurs pour les habitants des Prairies et propose une solution architecturale pour une réutilisation adaptée.

Abstract

This essay examines the tangible and intangible cultural heritage of the wooden grain elevators across the prairies. As wooden elevators become obsolete as a result of changing agricultural technology, they are facing neglect, abandonment, and demolition. While these elevators were once purely functional structures, their unintentional monumentality has contributed to their relationship with prairie people, fostering individual and communal identity. The wooden elevators are explored in the context of the past, present, and future using archival research, site visits, and interviews. The town of Indian Head, SK is a case study. The micro-history of Indian Head permits an understanding of the relationship between elevators and other prairie towns. The concept of living heritage is employed to investigate the tangible and intangible cultural heritage associated with grain elevators using a temporal framework. Living heritage is both an action and theory—a way of thinking and acting towards the past—which sets the stage for a multifaceted discourse concerning place, time, and people relating to the wooden grain elevators across the prairie provinces. This essay substantiates the importance of the wooden grain elevators to prairie people and prescribes an architectural response for adaptive reuse.
Wooden crib grain elevators across Western Canada define the prairie landscape as a representation of both place and time. The cultural heritage—tangible and intangible—of the elevators exposes their importance within the evolving prairie culture. While wooden elevators were also constructed throughout the mid-western United States, the scale and volume of the elevator network in Canada contributed immensely to the development of rural prairie communities in Alberta, Saskatchewan, and Manitoba.

The grain trade industry produced numerous grain ports on both the Atlantic and Pacific coasts of Canada, fed by rail from elevators in the middle of the country (Clark 2). For many prairie communities, the wooden elevators evolved from mere functional structures into monuments that fostered individual and collective identities. The intangible cultural heritage—events, actions, emotions—associated with the elevators expose the memories and nostalgia that have contributed to transforming these structures into icons and place markers.

This essay first introduces the wooden grain elevators in a historical context focusing on the larger networks associated with the elevators at a macro scale. Building on this examination of history, I introduce the concept of living heritage: the intangible role that the elevators play to prompt a microanalysis of various perspectives of people between past and present. The final section provides an architectural response that reimagines grain elevators as places for people, ultimately revitalizing rural prairie communities.

The essay specifically focuses on the province of Saskatchewan, given that more grain elevators were built there than in Alberta or Manitoba. The town of Indian Head and its Saskatchewan Wheat Pool elevator serve as a case study to define specific tangible and intangible traits and is the site for the proposed adaptive reuse project that imagines the grain elevator as new spaces for the community. The essay also includes photographs and drawings that gesture in style and image to the intricate relationships between place, time, and people.
Historic Framework—the Rise of the Wooden Grain Elevator

“There is little in Canadian Architecture that has not been imported from elsewhere. The grain elevator, however, is one of the few building types that was developed in North America and proliferated in both Canada and the United States” (Flaman 2).

The simple monolithic form of the wooden elevator is derived strictly from its function. The elevator weighs, cleans, and stores grain until it is ready to be shipped by train or truck. The use of gravity to facilitate grain processing stipulated the sheer height and verticality of the elevators. The 2x6 and 2x8 wood timbers were stacked together with the ends overlapping to create the “cribbed” structure recognized for its strength and durability. Only slight variations of the wooden elevator design, mostly visible in the roof/cupola structure, have been made over the past 100 years. Many wooden elevators appear almost identical in form and massing, which has also contributed to the town planning of prairie communities: “A town’s Railway Avenue boasted an architectural landscape that included a row of elevators, railway stations, water towers… all were indicative of a way of life that revolved around prairie rail transportation. The first of these structures, the elevator; is the last to have survived” (Ross).

The first wooden grain elevators in Canada began to appear across the prairie provinces in the late 1880s following the construction of the Canadian Pacific Railway. The rail network had a significant impact on the construction of the grain elevators and the subsequent development of rural communities in Western Canada. Elevators were built along the railway at 8- to 10-mile intervals—the distance a farmer with a horse-pulled grain cart could travel from the family farm to an elevator and back in one day. The national grain trade operation depended on the wooden elevators as the initial point of grain handling and on the railway for national transportation. The prosperity of the agricultural economy in Western Canada was contingent on the ability to move grain by rail2. The Canadian Pacific Railway also influenced the design and implementation of the "standard" grain elevator—its crib construction, size and height, and installed mechanical equipment (Flaman 3).

The Polaroid photographs in Part 1 illustrate a degree of honesty through their blemished reality. They portray the “way of the past” and, in a sense, are tributes to the “glory days” of the elevators. Like the grain elevators, the Polaroid photos themselves are vestiges of outdated technology.
Part 1: Polaroid Photographs by Kyler Zeleny
The extensive agricultural heritage across the Canadian prairie was built from an economy grounded in wheat as a staple crop (Government of Saskatchewan). Around 1940, the agriculture-based economy of Saskatchewan began to be supplanted by mining and forestry (Phillips). This economic shift led to the replacement of the wooden elevators with concrete inland terminals. However, “[r]egarded positively or negatively, the elevator still represented the essence of an agricultural existence. Thus, when western writers and artists became interested in local concerns, the elevator started its ascension into the realm of the symbolic” (Dommasch 11). As Saskatchewan conservation architect Bernard Flaman states, “from an architectural viewpoint, it is the grain elevator that best symbolized this important point in the social, economic and cultural development of the region, and possesses wider significance through its influence and iconic form” (3).

A key social development in the early years of Western Canada’s grain industry was the founding of the Territorial Grain Growers Association in Indian Head, Saskatchewan in 1901. The Association developed out of farmers’ anger over the unfair marketing and unequal valuation of their grain (Gray 71). Its founding marked the beginning of farmer-owned and operated elevators with standardized grain value and the establishment of grain cooperatives in the prairie provinces.3 In no other country in the world have the grain growers done so much to solve their own problems as in our Canadian West” (Clark 22). The harsh prairie conditions produced cooperation, relentlessness, and pride in prairie pioneers who worked both with the land and with their neighbours. These cooperative traits continue to be a characteristic of everyday life in Saskatchewan today.

Concrete inland terminals and steel silos have gradually replaced the wooden elevators, given outdated mechanical functionality, reduction in rail transportation, and the changing agricultural economy (Banham 113). Additionally, the amplified capacities in the concrete terminals resulted in an increased service range for farmers in the area: ‘great grain ‘terminals’ made of concrete, without beauty, or mystery, signifying only industrialization of agriculture, began to appear by the side of major highways. The old ‘ten miles to the nearest elevator’ was becoming a thing of the past” (Butala xv).

The number of wooden elevators peaked in 1938, with over 6,000 elevators with a combined capacity of 190 million bushels across the three prairie provinces (Vervoort 182; Butala xiii).4 Wooden grain elevators continued to be constructed until 1980. However, fewer than 450 wooden elevators remain standing in Saskatchewan and no more than 100 are in active use.

At a large scale, the agricultural industry, national rail network, and cooperative grain trade businesses that collectively promote the development of wooden grain elevators have produced a tangible connection between prairie people and the land. This tangible cultural heritage is instrumental in shaping the intangible cultural heritage associated with the elevators. Within a more intimate context, the large trends presented here are developed through personal perspectives and related values in the following section on living heritage.
Living Heritage—Exploring the Intangible

“The elevator was more than just a tall building, important for the marketing of grain. There was an atmosphere, an intangible feeling attached to it, a feeling that is was a meaningful structure in which meaningful work was being done. Even when not selling grain, farmers tended to loiter at the elevator, sensing from its operation their role in the overall scheme of prairie life. It appealed on many levels and to almost all the senses: sight, sound, touch, and smell” (Dommasch 10).

Living heritage reveals tangible and intangible cultural heritage. While the term “living heritage” has been used by various entities with differing meanings and have interdisciplinary uses, this essay focuses on the concept as explored by Sandra Massey in Living Heritage and Quality of Life. The framework of living heritage exposes the transition of the grain elevator from its primarily functional role decades ago to its current iconic, monumental condition.

As a contemporary framework for exploring tangible and intangible cultural heritage, living heritage bridges the gap between the cultural traditions of the past, cultural identity of the present, and cultural aspirations of the future. Living heritage is unique in that it ultimately focuses on the creation instead of protection of heritage value over time. Living heritage is both a methodology for a vigilant evaluation of the past as well as a catalyst for imagining historic structures for the future.

The number of wooden elevators peaked in 1938, with over 6,000 elevators with a combined capacity of 190 million bushels across the three prairie provinces.
WOOD GRAIN ELEVATORS:
ARCHITECTURE ENGRAINED ON THE CANADIAN PRAIRIES

Figure 2: Hybrid Drawings by Alixandra Piwowar
Massey’s work on living heritage identifies five key themes: change, memory, narrative, identity, and value. Exploring each theme furthers our understanding of the importance of grain elevators. Value in heritage is a complex question, primarily because value is gained through personal or collective perspectives. As such, heritage values have overlapping and contradictory values for any given site. Table 1.0 below maps instrumental values and personal and collective sentiments from various perspectives pertaining to the wooden crib grain elevators. In heritage, instrumental values are the platform on which the significance of an act or object (tangible or intangible) is built and sustained. If something does not have instrumental value, it is not heritage. The instrumental values of grain elevators generate purpose and significance for the individual, the community, the province, and Canada. The individual and collective sentiments that stem from instrumental value contribute to an understanding that the importance of the grain elevators is fundamentally rooted in one’s perspectives and relationships with the elevators on an emotional level. These six perspectives were derived from interviews, archival data, and published material. Further, the identification of the instrumental values and personal and collective sentiments were identified as topics of common recognition. The table compares and contrasts people, values, and sentiments as they relate to grain elevators in general terms; it is by no means intended to be exhaustive.

The hybrid drawings in Part 2 use hand sketches overlaid on black and white landscape photographs begin to interpret the transformative relationship between the elevators and the prairie landscape. They present a condition of “delicateness” alluding to the way the elevators could blow away in the wind at any moment.
<table>
<thead>
<tr>
<th>Perspective</th>
<th>Instrumental Values</th>
<th>Personal &amp; Collective Sentiments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past</td>
<td>Present</td>
<td>Past</td>
</tr>
<tr>
<td>Farmer7</td>
<td>Economic Purpose</td>
<td>Sense of Financial Security</td>
</tr>
<tr>
<td></td>
<td>Gathering Place</td>
<td>Sense of Community</td>
</tr>
<tr>
<td></td>
<td>Place Marker</td>
<td>Sense of Identity and Belonging</td>
</tr>
<tr>
<td></td>
<td>Monumentality</td>
<td>Sense of Identity and Belonging</td>
</tr>
<tr>
<td>Elevator Operator8</td>
<td>Economic Purpose</td>
<td>Sense of Financial Security</td>
</tr>
<tr>
<td></td>
<td>Place of Employment</td>
<td>Sense of Community</td>
</tr>
<tr>
<td></td>
<td>Hazardous Environment</td>
<td>Sense of Family and Identity</td>
</tr>
<tr>
<td></td>
<td>Industrialization</td>
<td>Sense of Fear</td>
</tr>
<tr>
<td></td>
<td>Gathering Place</td>
<td>Sense of Accomplishment/Progress</td>
</tr>
<tr>
<td></td>
<td>Place Marker</td>
<td>Sense of Community</td>
</tr>
<tr>
<td>Townsperson9</td>
<td>Economic Purpose</td>
<td>Sense of Prosperity</td>
</tr>
<tr>
<td></td>
<td>Monumentality</td>
<td>Sense of Identity and Belonging</td>
</tr>
<tr>
<td></td>
<td>Commonplace</td>
<td>Sense of Identity and Belonging</td>
</tr>
<tr>
<td></td>
<td>Gathering Place</td>
<td>Sense of Community</td>
</tr>
<tr>
<td></td>
<td>Economic Purpose</td>
<td>Sense of Hope for Financial Security</td>
</tr>
<tr>
<td>Aboriginal Peoples10 11</td>
<td>Symbol of Colonialism</td>
<td>Sense of Oppression and Inequity</td>
</tr>
<tr>
<td>Passerby/Tourist12</td>
<td>Monumentality</td>
<td>Sense of Oppression and Inequity</td>
</tr>
<tr>
<td></td>
<td>Iconic Form</td>
<td>Sense of Oppression and Inequity</td>
</tr>
<tr>
<td></td>
<td>Place Marker</td>
<td>Sense of Oppression and Inequity</td>
</tr>
<tr>
<td></td>
<td>Hazardous Environment</td>
<td>Sense of Oppression and Inequity</td>
</tr>
<tr>
<td>Friends/Family of Individuals who Died in an Elevator13</td>
<td>Grave Site</td>
<td>Sense of Grief</td>
</tr>
<tr>
<td></td>
<td>Grave Site</td>
<td>Sense of Grief</td>
</tr>
</tbody>
</table>
Exposing varying perspectives and experiences illustrates the change of intangible cultural heritage of the elevators over time, a theme in Massey’s concept of living heritage. Change affects heritage through its threat of loss (Massey 6); however, living heritage recognizes change as inevitable and emphasizes how the past is used in a contemporary context (Massey 6). Change permits the realization of passing time and creates an awareness of temporality in tangible and intangible aspects of life. While the change in technology and economy leads to the disappearance of the grain elevator, its cultural value compels a response that enables the elevators to transform with time and persevere—to change and adapt.

In the context of living heritage, the act of remembering “construct[s] identity for ourselves and our communities” while “re-remembering construct[s] new narratives that underscore mutual obligations” (Massey 6). Memory is activated when elevators are observed in the landscape, photographs, paintings, and models, allowing history to become part of the present. Each observer will incur memories based on their individual relationship with the elevators. For example, an elevator operator may remember details of mechanical equipment or near-death experiences, while a villager may remember the sound and flurry of activity resonating from the elevator. A farmer may remember positive and negative grain-trading experiences, a First Nations Farmer may remember having to wait at the back of the line until the other farmers have had their grain processed, while a tourist may remember the replicated shape and prominent vertical position of the elevator within the prairie landscape. Memories of wooden elevators are imperative in defining their value.

Living heritage uses narratives shared between people to animate the present with the past, largely through remembering. The diversity in perspective generates countless narratives. For many Canadians, the iconic form of the wooden grain elevator represents Canadian agricultural heritage even without personal experiences; the wooden structures have been elevated to the realm of public awareness.15

Sharing stories leads to increased awareness of one’s identity and belonging. Living heritage encourages value in the past that cultivates identity. While the wooden elevators were originally private structures owned by grain companies, their architecture in the public realm embraces the collective identity of each prairie town, presenting the tangible and intangible cultural heritage. Grain elevators are also indicative of the towns’ degree of economic prosperity. Prairie people identify with the grain elevators: they “built them, ran them, relied on them, lived in them, and died in them” (McLachlan 6). They are examples of cultural infrastructure that anchor local identities.
Grain to People—Re-imagining Grain Elevators

“Elevators mark ‘our place’ in the vastness of the prairie landscape. Many of these elevators have already been demolished. We need an opportunity to mourn the passing of the way of life, they once represented… So, too, must we redefine our ‘sense of place’ and our self-definition in response to our changing environment” (Cole).

While architecture is the physical manifestation of ideas, built form also presents a story—remembered or imagined—to its users through spatial experience. In this way, the architecture of the grain elevator tells many stories. The character-defining elements trigger these stories. Living heritage requires community involvement and community-generated ideas to negotiate the past in the present and future (Massey 7), as took place in Indian Head, Saskatchewan. New programs for the adaptive reuse of the grain elevator were generated for the historic Saskatchewan Wheat Pool grain elevator in Indian Head. Ultimately, this project proves that any standard grain elevator, with the support and involvement of the community, has the potential to be re-imagined as a space for people.

The computer-generated renderings in Part 3 pointedly introduce imagined spaces. Perhaps rather aggressively, this final series of images juxtaposes the two previous sets in both style and idea. The architecture is rooted in the historic tangible fabric of the elevator, while the portrayal of the human interaction subconsciously introduces a continuum of the elevator’s narrative (the intangible).
Figure 3: “Imagined Spaces” Renderings by Alixandra Piwowar
Within the expansive setting of the open prairies, the location of the grain elevator adjacent to the railway and on the edge of town is an additional character-defining element. Elevators are rarely farther than seven meters away from a rail line, most often on a siding to permit through traffic on the main line while rail cars are being loaded with grain. The wooden elevators typically sit between the railway and Railway Avenue (a common street name in rural prairie towns). As the tallest structure, the physical relationship with the town gives a sense of permanence. While only southern portions of the prairie provinces are flat, the image of the wooden crib grain elevator connecting land and sky is dominant in prairie art and media.

The primary character-defining element of the exterior fabric of the grain elevator is its simple geometric form and featureless façades. The modular shape of the elevator is derived from form adhering to function. The typical sloped-shoulder roof (a design based on the spatial organization of the grain cribs within) creates two different elevations; however, the shoulders of the elevator always face incoming and outgoing trains. The name of the town was also printed on the elevations so train drivers could identify their location. The name of the grain company was painted on the opposite two elevations for farmers to reference when trading grain.

For the purpose of this research, the citizens from the community of Indian Head were asked to re-imagine their elevator. A series of conversations with residents identified a variety of programs: hotel suites, a tourist information centre, community space(s), and a coffee shop. The proposal places two hotel suites in the shoulder of the elevator with a coffee shop occupying the cupola at the top. The adaptive reuse also proposes interstitial spaces within the grain cribs—spaces rarely experienced by people. Community gardens and a community kitchen are also designed on the site, creating a social and physical connection between the town and the site. Placing the tourist information centre adjacent to the community garden and community kitchen facilitates the opportunity for residents to interact with visitors. Through memories and narratives, residents inform the experience of the visitor, thereby reinforcing identity and belonging.

Re-imagining the grain elevator as a place for people ensures that the character-defining elements are sustained. The elevator’s dramatic wooden atmosphere creates an innovative spatial experience through the addition of floor plates and circulation in the grain bins. The re-imagined elevator will be an important public space for the townspeople, establishing a reminder of the past. The elevator’s living heritage will continue to connect prairie people to the land. Most importantly, the adapted architecture will generate social interaction and strengthen community.
Monumental Canadian Architecture

Referred to as the most Canadian of architectural forms, the grain elevator is an iconic monument on the prairies. Its prominent verticality stands in stark contrast to the vast horizontal landscape, inspiring references such as “prairie sentinels,” “prairie skyscrapers,” and “lighthouses of the prairies.” Famous modern architect Le Corbusier referred to the elevators as “the cathedrals of the plains,” while others simply call them “vators.”

With time, the shift from functionality to monumentality has contributed to the consciousness of the wooden elevator at a national and international level. The tangible and intangible heritage of the wooden crib grain elevator to Western Canada points to its cultural importance. On a large scale, grain elevators are a product of the cooperative agricultural economy and national rail network that shaped the province of Saskatchewan and Canada as a nation. On a small scale, living heritage illustrates the evolution of the elevators from functionality to monumentality through change, memory, narrative, identity, and value—all deeply rooted in prairie communities and their people.

Re-imagining grain elevators as places for people does far more than save the elevator from demolition; the re-imagined architecture generates old as well as new interpersonal relationships, economic opportunities, and a sense of community. Engaging communities in identifying their unique perspectives on the tangible and intangible cultural heritage of the grain elevators allows for the realization and development of pride, identity, and place-making in translating and articulating their stories from the past to the future. Re-imagining wooden grain elevators can ultimately revitalize prairie places.
Notes

1 "The grain elevator is one of the by-products of the expansion of the wheat market from a local to a world basis" (Clark 2).

2 Wheat congestion occurred when wooden elevators storage bins were full and grain cars were not available to ship grain (Indian Head, “Town History”).


4 Refer to “Towers of Silence”: The Rise and Fall of the Grain Elevator as a Canadian Symbol for further information on the count of wooden elevators at relative dates (Vervoort).

5 The concept of living heritage was originally introduced at UNESCO’s Convention for the Safeguarding of Intangible Cultural Heritage held in 2003 in Paris. Living heritage has also been active in Newfoundland and Labrador in research and teachings at Memorial University and in initiatives by the Heritage Foundation of Newfoundland and Labrador (Heritage Foundation of Newfoundland and Labrador).

6 For more on values-based heritage, see Randall Mason’s Assessing Values in Conservation Planning: Methodological Issues and Choices, published by the Getty Conservation Institute in 2002.

7 Formulated based on archival research using Indian Head and District History Book and grain elevator publications at the Saskatchewan Legislative Library.

8 Formulated based on interviews with Robert Sepke and Brad Kinchen.

9 Formulated based on interviews with Tara-Leigh Heslip, Linda Kort, Brad Kinchen, and Bruce Neill, as well as numerous publications.

10 Formulated based on personal correspondences with Dr. Shauneen Pete and Tara-Leigh Heslip of Indian Head.

11 "The elevator was the physical reminder that meritocracy was limited to only certain groups (with access to power) and that the structural barriers to fuller participation in the economy were very real for First Nations Peoples“ (Pete).

12 Formulated based on interviews with Kyle Franz and Bruce Neill.

13 Formulated based on interviews with Brad Kinchen and consulting Gone but Not Forgotten by Elizabeth McLachlan.

14 See also A Place to Remember: Using Heritage to Build Community by Robert Archibald for a discussion on the consciousness of the past through remembering and re-remembering.

15 Patricia Vervoort distinguishes the “Canadian grain elevator” as part of Canadian History because of its extensive use” (Vervoort 188).

16 The Standards and Guidelines for the Conservation of Historic Places in Canada provides a complete definition and explanation of character-defining elements.

Works Cited


