REUSING BUILDINGS

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INTRODUCTION

Consumer society has shortened the life cycle of just about every product – from refrigerators to automobiles – leading to a throw-away culture of consumption and mass amounts of waste. When a product starts to show inefficiencies in performance, we simply dispose of it for a newer and “better” model. This discourse of the “new as better” has extended into the housing market where numerous buildings are demolished annually across Canada to make room for new construction that promises greater energy efficiency, more square footage, and modernized features. This practice runs counter to the goals of urban sustainability, as many of the structures are demolished prematurely, shortening their life cycles. There are questions being raised about how long the new buildings will last (will it be more than 40 years?) and whether the original structures would have lasted longer following their rehabilitation. There is a growing body of research on the benefits of reusing historic buildings as part of an urban sustainability framework (see Bullen & Love, 2010). During this process, a building is adapted to another purpose while retaining its value. In what follows, I celebrate old houses in Regina, Saskatchewan for their contributions to sustainable city-building.

A RETURN TO TRADITIONAL PLANNING

In the 19th and early 20th centuries, neighbourhoods were constructed with the following principles in mind: walkability, access to alternative transportation, mixed land use and tenure type, and variation across structures. After WWII, increased homeownership, an emphasis on the nuclear family, and a desire for more space inside and outside the home led to the rise of the car-oriented suburban model. To satisfy demand for suburban living, developments were laid out to maximize residential use. Suburban living led to an exodus of residents from the downtown and diverted resources away from the core to support new infrastructure and transportation costs. Shopping malls soon followed the customer base and were constructed on the outskirts of the city to take advantage of lower land values, all to the detriment of core neighbourhoods, commercial activities, and services.

In the late 20th century, planners and policy makers responded to the sprawling suburbs with theories and practices supporting sustainable development. While there are a variety of names for these plans – complete neighbourhoods, new urbanism, compact development, smart growth – they generally share one commonality: a return to traditional neighbourhood design and planning. Older urban areas were premised on these ideas (often out of necessity), and offered, and continue to offer, their occupants a sense of place and quality of life through their connectivity and diversity of uses/users. I celebrate established neighbourhoods in Regina for their built-in sustainable features.
OLD BUILDINGS = GREEN BUILDINGS

Saskatchewan’s urban population is 67% and climbing. The majority of structures in the province’s urban centres are already built, meaning that the focus needs to shift towards how best to deal with aging infrastructure and buildings. Rehabilitation of existing building stock through adaptive reuse encourages alternative uses and/or users. Given the pressures of development across urban centres (typically where land value exceeds the value of the building currently on the land), assessments that measure the costs and benefits of rehabilitation versus new construction are critical.

Life cycle assessments take into account the energy and waste associated with the entire building process. In the case of existing buildings, it calculates the “embodied energy” from the production process alongside current operating performance. The term “embodied energy” is used to express the energy that is contained with an already existing building (as a product of the energy used to source, fabricate, and build the structure). If the building is demolished prematurely before it has run its life cycle, then all of the energy that is contained within its construction and alteration over time is wasted, and an additional amount of waste is created to deconstruct and construct another building in its place. As Kalman (2014: 89) simply states, “demolition is wasteful and waste is bad”. The demolition of historic buildings is routinely practiced and often framed as a response to declining operating performance. It is true that new construction can offer greater energy efficiency in comparison with older construction, but the current focus on building performance ignores other important measures of sustainability.

Buildings that are still structurally sound are being demolished, prematurely shortening their life cycle. When demolition is selected as a course of action, the decision should consider the loss of embodied energy, the waste/energy associated with building deconstruction, the energy associated with sourcing materials for the new structure and the building process. There are many instances where building demolition is the appropriate course of action; not all buildings should be rehabilitated, but all buildings should be assessed for their potential for reuse. When evaluating the viability of an existing building, consideration must be given to (public) safety, condition, and potential (for current or future use). Older houses need to be valued for the energy and materials that they already embody, and for their ability to undergo retrofitting to increase insulation, sealing, and efficiency in energy source.

PROTECTING BUILDINGS

There are a number of tools in the municipal toolkit that can protect individual buildings and broader areas of buildings from demolition. There are approximately 90 buildings under official heritage designation in Regina. These structures receive protection from demolition, and are eligible for financial incentives to ensure their appropriate maintenance. In addition, 230 properties are listed under the Heritage Holding Bylaw for their potential heritage value. If the owner of a listed property applies for demolition or major alteration, City Council has 60 days to assess whether to approve the request or designate without owner consent. During this period, the planning department works with the owner to educate them on the value of the structure, and the financial incentives that accompany designation.

Despite the delaying mechanism, the holding bylaw does not have the teeth to protect structures from demolition and/or owner neglect, and Regina has lost a number of listed properties over the past decade. In response, the City is reviewing the bylaw with the aim to get rid of it altogether, and replace it with an inventory list and proactive discussions with relevant owners. These discussions would focus on the benefits of a historic property and the incentives tied to full heritage designation (property tax incentives and circumvention of rules relating to parking stalls and conversions). Without the holding bylaw, permits for demolition or alteration can be stayed for an effective period of time. One of the biggest issues in protecting historic buildings is a lack of enforcement of the rules and regulations. In a letter to City Council in April 2016, Jackie Schmidt of Heritage Regina writes, “There is no policy or direction that indicates at what point a property is beyond repair or what repairs are essential, nor are there consequences for not repairing a structure on the Heritage Holding Bylaw list”. Creating a clear policy on the roles and responsibilities of owners and the roles and responsibilities of the City to enforce maintenance and infractions is critical at this juncture.

Beyond individual buildings, there is also the potential to protect historic buildings on a larger scale. In Design Regina, Regina’s Official Community Plan, several potential Municipal Heritage Conservation Districts are laid out in established core neighbourhoods (City of Regina, 2013). This broad level of designation would allow City Council to pass guidelines relating to scale and proportion of new construction and rehabilitation. These proposed districts require additional study to determine their potential, but offer promise for older core houses.

Another potential form of broad designation that is used in other Canadian municipalities is demolition control. Typically, if an applicant wishes to demolish a structure within an area of demolition control, not only must they submit detailed plans concerning current and proposed use, they are asked why the
current structure is not being considered for reuse. Applications in some municipalities require a planning fee (which can amount to several thousand dollars) to allow assessment. In Regina, if a property owner wishes to apply for demolition, there are no questions pertaining to the potential for reuse, and the costs associated with the application for demolition amount to a couple hundred dollars (City of Regina, 2018). Regina City Council has the power to create broad areas of demolition control, which would protect all existing buildings.

**FOR THE LOVE OF OLD BUILDINGS**

Older buildings contribute to sustainable city-building in social, cultural, economic and environmental ways (see Kalman, 2014 for an overview).

• **Social:** As buildings age, they deteriorate and typically filter-down in value. These spaces become affordable for lower income households who are often priced out of new construction. Established older urban areas with smaller houses typically contain higher densities and greater diversity in comparison with their suburban counterparts (Rypkema, 2002).

• **Cultural:** Older buildings contribute to our sense of place, and contain stories relating to their occupants, their construction and their uses (Tweed & Sutherland, 2007). These structures contain tangible and intangible heritage that contributes to liveability, attachment to place, and community/personal identity (Heritage Saskatchewan, 2012).

• **Economic:** On average, it costs less to rehabilitate older buildings than it does to build new (Kohler and Yang, 2007). In addition, rehabilitation can stabilize and increase property values when appropriate maintenance is applied (Shipley et al, 2011). Older buildings offer potential for innovation and creativity – from new start-ups to live/work arrangements – due to their economic value and aesthetic. Given that renovating and reusing buildings is more labour intensive than new construction, rehabilitation is associated with local job creation (and training) in the skilled trades.

• **Environmental:** The retention of older buildings conserves resources, reduces greenhouse gas emissions, and diverts waste from landfills (Itard & Klunder, 2007). While there are some important changes to the building standards in new commercial and residential buildings (pertaining to energy efficiencies), energy retrofits on older buildings can increase insulation and sealing. Suburban houses rarely display their true costs when infrastructure and connectivity is factored in.

Older smaller houses are utilized by a diversity of households.

Henderson Terrace is a Municipal Heritage Property in Regina that dates back to 1913. The eight attached dwellings carry stories about the people who built, worked on, lived in, and passed by these structures.
Renovation work on older housing provides an important source of local job creation.

This oversized infill home is incompatible with the character defining features of the surrounding buildings; its scale and proportion are out of place.

**INFILL DEVELOPMENT**

In Regina, “infill development” pressure in historic neighbourhoods often pits old and new houses against one another. Infill is defined as the development of under-utilized land in an already established area. As such, this form of development plays an important role in sustainable city-building: by filling a gap in a serviced, existing urban area, the costs of infrastructure and transportation connectivity are minimized (water, sewers, roads). In *Design Regina*, the City aims to direct 30% of future population growth into already existing areas as part of an intensification of lands (City of Regina, 2013: 19). Not all forms of infill development will add density. For example, demolishing a single-family residence and rebuilding a single-family residence may add square footage, but not always population. Increased density should be encouraged wherever possible.

Debates about infill housing typically relate to incompatibility of new construction with existing building stock, and its affects on the character-defining features of an established neighbourhood. Targeted planning policies outlining the scale and proportion of new buildings, their location, and relationship with surrounding structures will help to alleviate some pressure. The City of Regina completed a report on Infill
Housing Guidelines in 2017, and is currently developing a set of regulations from these guidelines. In addition, the City is undertaking an Underused Land Study, which will help direct infill to vacant and underused lots. Incentivizing the intensification of these lands will heighten the viability of this option for developers and builders.

CONCLUSION

Older buildings are an important component of contemporary city-building. Located in established areas of the city that reflect sound planning principles (mixed use, connectivity, walkability), they contribute to sustainable forms of growth and development. Rather than seeing older buildings as outmoded, they should be viewed as green buildings, affordable housing, economic levers, and social anchors.

The successful coexistence between old and new housing requires clear planning and policy provisions (broad designations as well as clarity and enforcement of listed historic buildings) that sets out land use regulations, financial incentives, and taxation. In addition to regulatory measures, consumers need to see (and value) existing buildings as an environmental responsibility. Older houses may not have the walk-in closets and exact room sizes and locations that made to order housing allows, but they contain value that responds to our current urban-environmental responsibilities.

CLASSROOM EXERCISES

Each of the exercises below can be modified across levels, and can be completed either on an individual basis or in small groups. They are designed to encourage different ways of seeing and valuing historic buildings as a component of place-based learning and to position students as important actors in urban environmental stewardship.

• Ask students to select an older building and write a fictional story about the people and/or practices that may have filled it at some point during its life cycle. Have a discussion about the intangible forms of heritage (stories, representations, spaces) associated with older buildings.

• Ask students to select an older underused building and consider its future potential. Do they think that the building could be modified for another purpose? This exercise allows students to evaluate the potential for reuse.

• Lead a mapping exercise of vacant and/or underused lots in a neighbourhood. You can either walk the area, or use Google Street View to find relevant lots. You can print out a land use map for the selected area from Design Regina (or the official community plan from another municipality if available). Encourage students to select a vacant/underused lot and brainstorm how it could be repurposed (as residential, commercial, park/community space).

• Ask students to select a municipal/provincial designated heritage building and learn about its history. Ask the students to consider how they might animate this history in an alternative format (play, drawing, story, poem) to reach a different audience.

• Working individually or in small groups, task students with designing a sustainable neighbourhood. What would they include and exclude? Consider providing them with a list of potential elements to include in their design: streets, houses, stores, school, trees, bus stops, parks, energy source, community gardens, recreation/opens spaces. Ask them to consider how different functions would co-exist and how they might minimize travel and waste. A range of mediums can be used to express the final neighbourhood plan (paper, clay, blocks).

REFERENCES


City of Regina (2018a) Apply for a Demolition Permit, https://www.regina.ca/residents/building-demolition/demolition-apply-demolition-permit/

City of Regina (2018b) Underutilized Land Study http://www.designregina.ca/currentprojects/underutilized-land-study/


