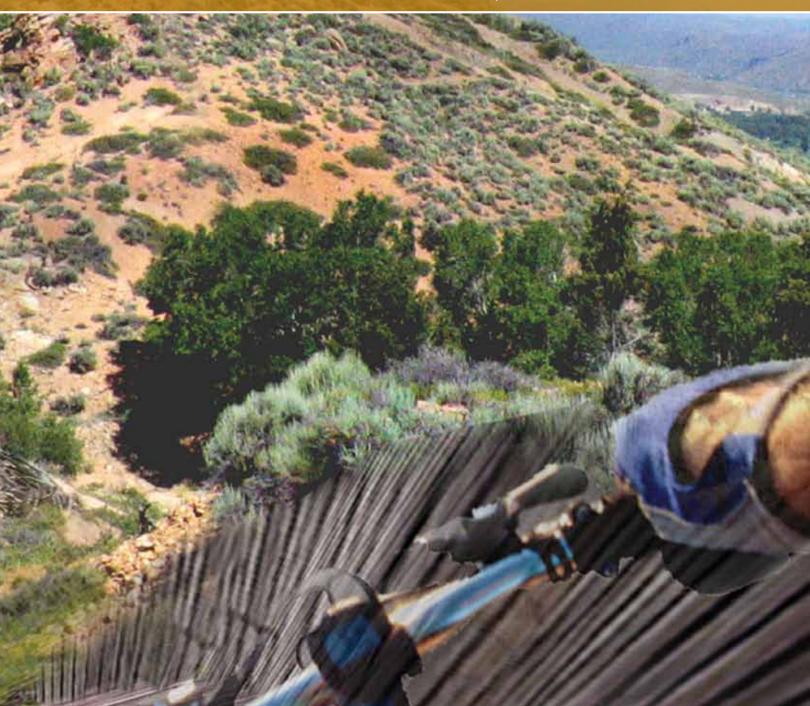
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Sitelines is published six times per year; February, April, June, August, October, and December by the British Columbia Society of Landscape Architects and is mailed to all BCSLA members, registered landscape architects, associates and affiliates. The editorial deadline is the 8th and advertising is the 16th day of the intervening months. Advertising rate information is available on request. Inquiries regarding editorial, advertising, or other issues should be addressed to the Sitelines Editor, c/o the BSCLA at the above address.

## Editor's Note Brett Hitchins

## During her term as Editor, Jane Green has shown tireless commitment to Sitelines.

This issue marks the start of a transition that will see Jane, sadly, focus her ambitions on other opportunities, and me begin to assume the position of Editor. Certainly, Jane's tenure has seen many positive changes. A new graphic layout, invented with the help of Graphic Designer Odette Hidalgo, evokes a sense of artistry consistently seen across Sitelines' covers. Beyond that, Jane has strengthened the publication's connection to the MLA program at UBC and, in the process, justly represented the role of academia in our profession.

As Sitelines' new Editor, I intend to build on these initiatives and introduce new ideas in an ongoing effort to raise the profile of the publication. As Jane mentioned in the previous issue, there are discussions about scaling back Sitelines' distribution frequency from bi-monthly to quarterly. To compensate, at no extra cost to the BCSLA, the publication will become full colour and a hired staff writer will contribute regular content.

With this pending transformation, there is an opportunity to add structure and create a more content focused magazine. As an advocate for sustainability and innovative design, I believe more articles on emerging trends will bring these ideas to attention. However, the merits of those ideas rely on the costs and constructability associated with them. To reflect this, a service section devoted to the technical and practical side of our

industry is under consideration. By diversifying content, I hope the result will be broader readership and improved service to the BCSLA.

Sitelines will best succeed by embracing the issues that are most significant to the membership and by presenting that content with the utmost level of professionalism. In stepping forward, it is important that the publication acknowledge multiple viewpoints on each issue explored and that all angles of the profession receive due coverage. With this in mind, Sitelines will continue to fulfill the needs of the BCSLA by celebrating the writings of our professionals and sparking debates among topics related to Landscape Architecture in British Columbia.

#### Outgoing Editor's Desk



I want to say how much I have enjoyed being your Sitelines Editor for the past two years. I always liked our magazine and

have enjoyed being part of its on-going evolution. I am confident that our new volunteer Editor, Brett Hitchins, will do a wonderful job and bring lots of new and exciting ideas to the magazine as it continues to change. Thank you all for this opportunity; it has been my pleasure to be of service.

I Jane Green, MLA BCSLA Associate

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The purpose of Sitelines is to provide an open forum for the exchange of ideas and information pertaining to the profession of Landscape Architecture. Individual opinions expressed are those of the writers and not necessarily of those of the BCSLA.

#### In this Issue:



Cover Image: Visualizing a new trail through an old gravel mine. Conceptua rendering provided by Shasta R. McCoy.

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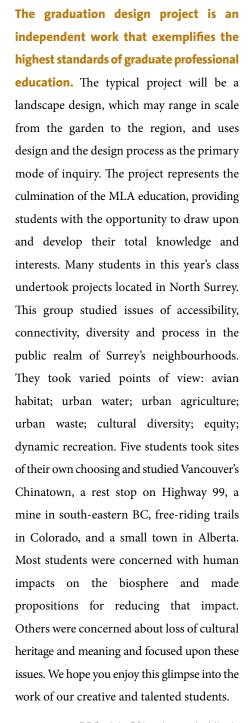
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### Landscape Architecture Program UBC School of Architecture + Landscape Architecture

## 2009

## Graduation Design

Submitted by Cynthia Girling, Chair Landscape Architecture Program







#### Projects Located In North Surrey:

### Food-Oriented Development, Surrey BC Carol-ann Seela Amaratunga

Faculty supervisors: Cynthia Girling, Ronald Kellett

Leading world climate experts believe the first major socio-economic impact of climate change will be on people's food supply, in large part due to our global food system. At the same time, the level of food production in conventional low density suburban areas, such as those in Surrey, BC is very low. In many Surrey neighbourhoods there is a great deal of underutilized land, including private lands, streetscapes, parks, left-over spaces, and greenways that hold great potential for food production. This project addresses how typical high maintenance, low productivity residential landscapes can be transformed to become food-producing landscapes. The food production potential of a Whalley neighbourhood is explored via two scenarios: Food-Oriented Development 2015, which explores what can be achieved easily and in the short-term, and Food-Oriented Development, 2050 exploring more radical change.

right: Food-Oriented Development frameworks, 2015 and 2050

## Road Rights of Way | Connective Conduits Katy Amon

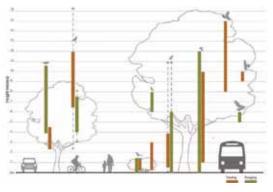
Faculty supervisors: Patrick Mooney, Ronald Kellett

Using birds as a biodiversity indicator, this project develops a methodology for integrating viable ecosystems and habitats into road rights of way to augment quality and connectivity across scales. The Hyland Creek Watershed in Surrey, BC is used as a case study to explore the integration of avian habitat, ecological function, and human programming as connective conduits. There has been significant theoretical work in the area of landscape ecology, a discipline that focuses on the structural and spatial patterns of a landscape or region. This project involves these principles but focuses on a finer grained detail of the diversity and quality of habitat types and plant associations within these spatial patterns. Although the project focuses on road rights of way, the methodology is designed to be applicable to a variety of marginalized spaces.

right top: Nine bird species were modeled as a representative range of birds and as indicators of general biodiversity.

right bottom: 148th street section. A culvert, prone to flooding, is replaced with a narrowed bridge allowing pedestrian access and an enriched, less fragmented riparian habitat.







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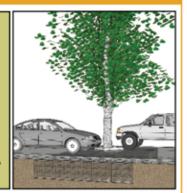
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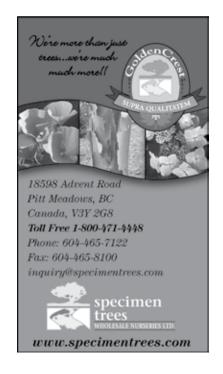
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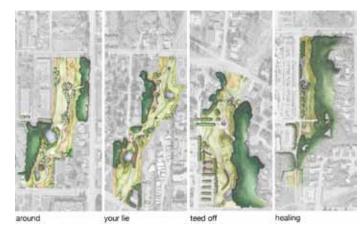
## Recreate the Remnant: alternative golf within the corridor

#### **Cheryl Bouwmeester**

Faculty supervisors: Patrick Mooney, Ronald Kellett

Numerous hydro rights-of-way cross Surrey. Some are already used as bike paths, but this land has far more potential for parks and open space networks. In addition to bike corridors, they can provide connections for communities and wildlife, while simultaneously providing opportunities for environmental enhancement and recreational activities. This project illustrates these possibilities within a 2km section of the hydro right-of-way in central Surrey, BC. The design responds to the surrounding community and environmental setting and emphasizes the interaction of people and nature. In addition to appropriate programming, the setting has lent itself to the development of an alternative form of golf, a sport that has become inaccessible to many people. This project knits golf into a multi-use public space.

above right: The conceptual masterplan reflects the entwining of human and natural systems and the multi-functional programming associated with each.







The sand trap is the defining feature of this hole and potentially another area of play for children.

This area welcomes users to sit along the large boardwalk and enjoy the constructed wetland and all the species that will inhabit it—the red-winged black bird, mallards, songbirds, great blue herons and many types of amphibians.

## Retrofitting for Walkability: beyond measures of density, proximity and connectivity

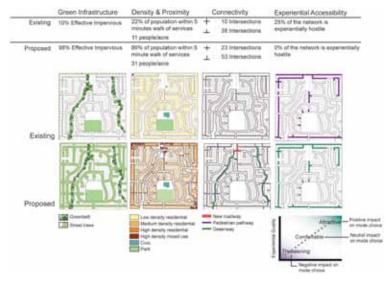
#### Kari Dow

Faculty supervisors: Patrick Condon, Ronald Kellett

This design project looked at densification within the context of an existing conventional suburban neighbourhood in Surrey, British Columbia. It explored ways in which the densification process could improve walkability within the community as a whole while accommodating future growth within the existing neighbourhood footprint. The concept of walkability was expanded to include experiential quality and a diagrammatic language was developed as a way to map experiential conditions in the landscape and to aid in the diagnosis and evaluation of existing and proposed experiential conditions in the pedestrian realm.

above right: Comparative maps of existing and proposed neighbourhood plan. Walkability was evaluated in terms of green infrastructure, proximity, connectivity and experiential quality.

right: Pedestrian Pathway. Coach houses fronting the pedestrian pathway add entrances and interest to the pathway. Lower fences, porches and plantings provide semi-permeable transitions between public and private space.





#### Green Streets – Street Design in Newton Town Center

#### Ning Han

Faculty supervisors: Patrick Condon, Ronald Kellett

This project explores how street design can provide environmental, movement and liveability functions and benefits in Newton Town Center redevelopment. The goal is to create sustainable, efficient, accessible, and livable streets in Surrey. To achieve this, suburban superblocks and disconnected streets are rebuilt as small urban blocks and an interconnected street system. A hybrid street system promotes multiple choice trips for people, encourages transit, bike use and walking. To minimize negative impact of runoff on aquatic habitat and provide recreation functions for residents, streets are also designed as a part of green network employing green infrastructure. The project assumes neo-traditional neighbourhood development with higher density and mixed land uses in Newton Town Center.

right: Newton Town Center Master Plan

#### Walk the Waterfront

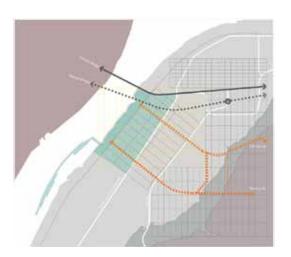
#### Sara Kasaei

Faculty supervisors: Cynthia Girling, Ronald Kellett

This study addresses the Fraser River waterfront site in Surrey, BC. It is concerned with the preservation of the site's marine character while at the same time motivating its social, cultural and economic vitality. This project explores an appropriate form of development at this site, and examines the ways in which redevelopment could improve the connections between this isolated area and the rest of the Surrey. One of the primary goals of this project is to develop a plan for the area that will be responsive to future changes. The value of the Fraser River as a recreational and scenic resource is recognized and enhanced. This design creates a connection between the site, the City of Surrey, and processes of the wider region. Elements of ecological and cultural history are used as a catalyst for future change.

right: Walk the Waterfront concept diagram. below: Fraser River Waterfront Park plan.







## FLOCK: migration + place communication Alia Johnson

Faculty supervisors: Patrick Mooney, Kelty McKinnon

What do passenger pigeons, plastic pink flamingos, and feather headdresses have to do with the City of Surrey? FLOCK explores the link between socio-cultural and ecological systems through the lens of avian migration. Policy, programming, and design interventions recognize the importance of cultural celebration in achieving ecosystem sustainability and place communication.





above: Rooftop Phenotypes. Inserting avian habitat into urban areas through rooftop habitat interventions.

left: Avian-cultural connection? Exploring avian-cultural disconnects across the Surrey landscape.

## Retrofitting Newton Town Centre

Maryam Haghighat Kashani

Faculty supervisors: Ron Kellet, Stephen Sheppard

"The world will not evolve past its current state of crisis by using the same thinking that created the situation." Albert Einstein, 1956

The goal of this project is to demonstrate what transportation, landscape and building design changes are needed to reach the BC climate stabilization goal of 80% carbon dioxide reduction by 2050, from 2006 levels. The design has an analytical, research, and process oriented approach. Three different scenarios are defined (year 2006 or current levels, 2025, and 2050) and compared in four categories of transportation, green network, land-use and energy source. The comparisons are done in the context scale as well as focus area scale, and with attention to the consequences it has on the city scale. In addition, it explores the parcel scale briefly. Within each of the four categories; three caveats are defined that have direct effect on the greenhouse gasses, and are variables of the design. The entire process is a proposal for a new system to approach design problems in order to be able to respond to the issue of climate change; the back and forth process between "propose, experiment and design".



top: Plan of Newton Town Centre in 2050. bottom: Sections of Newton Town Centre in 2050.





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## space for people: public space and community reclamation in newton town centre

#### **Elizabeth Laing**

Faculty supervisors: Christopher Macdonald, Ron Kellett

This project proposes design strategies for the reclamation of public space in Newton Town Centre in Surrey, BC. These strategies endeavour to encourage citizen participation, at multiple tiers, in the creation, occupation and perpetual manipulation of public space. This is an interdependent and dynamic process with the goal of shaping viable and inclusive public spaces that act as catalysts for community pride and empowerment. Design strategies include the structure of process, the structure of space and the structure of initial programming. The structure of process makes formal and informal provisions for the process of community involvement and change. The structure of space creates places and opportunities for expression, play and occupation that are socially and spatially overlapping, flexible and dynamic. The structure of initial programming initiates use, to populate the everyday, to develop ritual and meaning, engage youth and meet the neighbours.

right: Plan of space for people in the Newton Town Centre.



## Do Not Waste Your Ginger on Pigs Shalea Oretzky

Faculty supervisors: Susan Herrington, Ron Kellett

In North America we have become detached from our system of waste. As a result of this separation, our cultural values of what is considered waste have also been dramatically altered. As the population increases, the simultaneous rise in waste generation in urbanized areas will inevitably become an unmanageable problem as current wastescapes fill to their capacity. This project proposes a system of localized integrated sites that weave daylighting household waste processing with social interaction in order to create a new cultural interpretation of what is waste and what is resource. The Neighborhood Waste Park utilizes decommissioned gas stations as proposed sites for this alternative local waste management system. The goal of the Neighborhood Waste Parks is to divert a significant portion of refuse and recyclables to direct re-use, reducing waste generation. A design test site in Newton Town Centre illustrates the potential of one of these sites to create a neighbourhood gathering space and amenity, while also forming community identity through creative use of local waste.

right above: Composition of Household Waste: Of the 48% of a BC family's 4.5 tons of annual waste which goes to the landfill, 85% has the potential to be diverted through re-use, recycling, and composting programs.

right: Functional and Social Programming Meet at the Neighborhood Waste Park.



#### Projects Located In Other Locales:

## INSCAPE evolution of a working landscape Jenna Jessie Buchko

Faculty supervisors: Daniel Roehr (chair), Kelty McKinnon, Michael Hitch, Erick Villagomez

Industrial lands are the canvases, which reflect the demands of our consumer society. It is in these spaces where, for the purpose of collecting resources, we have created some of the most unique human constructed landscapes. Being the spaces that support societies resource demands, it is important to make these large-scale industrial landscapes accessible to the public. But, the current reclamation strategies (according to federal law) require the coal mining company to return the landscape to its "pre industrial characteristics", thus erasing the rare details created by the mining process. The goal of this project is to create a new remediation strategy that allows the public to become connected to the landscape created by the mining of coal in the southeastern Kootenays.



The project is structured by three systems: anthrotopes, referring to the human systems; biotopes, referring to the natural systems; enerscape, referring to the energy collected from the site. By merging these systems, "Inscape" is created.



Inscape Lake System. The epicenter of the site, it is here where the multitude of systems gather together to reveal the true character of Inscape.

The High Wall. The reclamation strategy retains the topography created by the coal mining process while allowing natural and human systems to become a part of the site.





## Continuity as a Design Vision for Vancouver's Chinatown

#### Yin Lun Chan

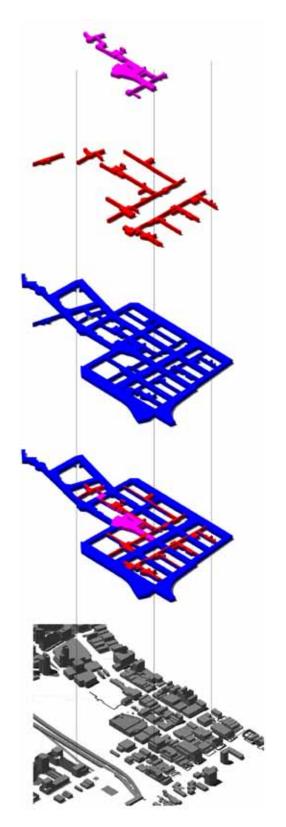
Faculty: Douglas Paterson, Kelty McKinnon

Over the course of the twentieth century, successive waves of international migrants have settled and inscribed cultural imprints on metropolitan landscapes. In many cases, historic ethnic neighbourhoods within Western metropolises have evolved from places that simply fulfil everyday functions and have turned into marketed tourist destinations. The current threat now lies in that these rooted and culturally unique places that have developed through lived, organic processes are being capitalized and represented through superficial touristic and real-estate place-marketing images. The current paper discusses the threats and opportunities that face the preservation and on-going evolution of Vancouver's Chinatown and proposes a design vision that is anchored upon continuity of space and time.



The Chinatown Memorial Plaza plan





The Chinatown Memorial Plaza section view

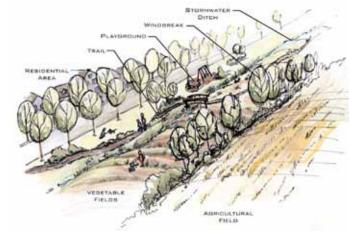


## Small Town, Small City: Designing with Community Character

#### Lori Johnson

Faculty supervisors: Stephen Sheppard (Chair), Cam Campbell, Will Marsh, Randy Heaps

Many small prairie towns, the agricultural backbone of Alberta, are not as small as they once were. The rapid growth of these richly diverse places has led to the infiltration of generic design solutions. Resident employed mapping and visualization exercises in the Town of Stony Plain, Alberta provide a foundation for design guidelines that celebrate its community character and small town values.



Agricultural Transition Areas: Create transitional community agricultural open spaces between residential areas and farmland to blur the agricultural edge.





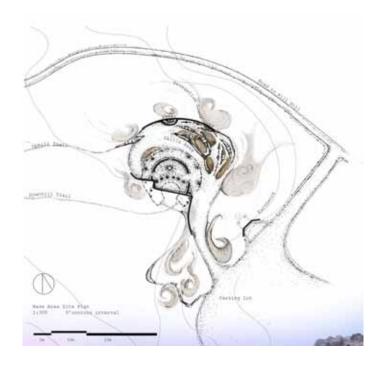
Left image shows the build-out of the current Area Structure Plan. Right image shows the build-out of a subdivision designed using the Eight Essentials for Designing with Stony Plain's Character.

## freefolly: caught in the momentum of trail evolution

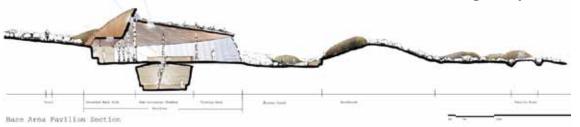
#### Shasta R. McCoy

Faculty supervisors: William Marsh (Chair), Stephen Sheppard, Duncan Cavens, Erick Villagomez

This project explores the practice of mountain bike trail design and attempts to develop innovative solutions for shaping these recreational landscapes. A design-based process is used to test the hypothesis: The vernacular "freeride" style of trail building may be refined and developed as a design strategy to preserve and engage ecological process while simultaneously facilitating an intense and meaningful landscape experience. This study found that in addition to mitigating rider impacts to sensitive environments like steep slopes and streams, the freeride vernacular operates similarly to the follies of the Renaissance and Picturesque gardens: leading visitors through a series of experiences in the landscape. By addressing common design challenges and articulating trails with constructed technical features, it is possible to significantly improve ecological function and user experience.



Base area site plan: the base area addresses big site influences like wind, views, solar orientation and rider speed to create a functional origin and terminus to the larger trail system.



Base area pavilion section

## The Chieftain Rest Stop Gemma McLintock

Faculty supervisors: Susan Herrington (Chair), Daniel Roehr

This project proposes a redesign of the existing Chieftain rest stop on the Sea to Sky portion of Route 99 in British Columbia. Building upon growing design knowledge concerning the highway experience, it explores experiential design methods and modes of aesthetic appreciation in conceptualizing a contemporary rest stop. The "inventive analysis" approach of landscape architect Bernard Lassus is adopted and supplemented with insights from Christophe Girot and Georges Descombes to form a methodological framework based on the concept of site immersion. In the resulting site design, the rest stop is conceived as an important punctuation along the Sea to Sky journey where people can interact with the landscape through a dialogue of intense sensory experiences. The final submission includes an overall concept plan for the rest stop and a number of site-scale studies.



Plan of the design proposal for the Chieftain rest stop.



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## BIRD SONG LISTENING STATION

## A New Artwork at Seattle Center

By Kari Huhtala MCIP Photos by Douglas Taylor

Doug Taylor, a well known BC artist, has recently completed a public art installation at the Seattle Center.

Taylor focuses largely on wind and water-powered kinetic works, implementing renewable energy, and exploring the relationship between society, technology, and the environment. His work is installed at sites such as Whistler's World Cup Plaza, Victoria's Selkirk Waterfront, Vancouver's False Creek (George Wainborne Park) and Kitsilano Pool.

A panel of artists, community members and Seattle Center staff selected Taylor to create an artwork at Seattle Center, and it is located near the Fisher Pavilion. The work is a kinetic and interactive sculpture that harnesses the renewable energy sources of wind and sunlight for power. As breezes fill the three 15-foot sails and rotate the wind turbine, a small generator supplies power to the sculpture's audio components. Participants standing beneath the listening station's sound dome will hear digital recordings of calling songs from a variety of western finches.

"In the 21st century, we lead extraordinarily busy lives in densely populated areas with high levels of traffic noise," says Taylor. "We tend to not hear the wind in the trees or the bird song coming from our feathered friends high up in the branches. Bird Song Listening Station helps remind us of sounds which are ever present in the natural world, but often unnoticed."

His kinetic sculptures are an interesting mix of space age materials (like delrin and teflon) combined with old-fashioned pragmatism. Taylor was inspired by designs applied to wind-operated water pumps farmers used for their thirsty cattle. He has his pieces tested in the University of British Columbia's wind tunnel, and admits that if he'd known more about engineering he probably wouldn't have been able to proceed. But, these engaging pieces do work. Taylor's wind machines are tested to withstand gusts as high as 88 kilometres per hour. At this velocity they are designed to turn sideways to the axis of the main piece so that they confound the wind they'd sought out. "The whole prop," Taylor describes, "turns sideways to the axis of the main piece and begins to slow down."

These human-figured whirligigs, Taylor says, "capturing and focusing on endlessly repeating actions, are mesmerizing, a meditative form for everyday people." It could be argued that for Doug Taylor, life and art combine to form a moveable feat.

For more information, please contact Doug Taylor at dtaylor@lightspeed.ca





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