By Alison Garwood-Jones

Accessibility has gone from "nice to have" to top priority in design as it moves from concept to law

(for Everyone)

Design That Works

FIFTY YEARS AGO, graphic design meant two things: working in print and kicking out mind-blowing creative. Wait, make that three: insisting on your own vision. The brash antics of Madison Avenue's "Big Idea" branding campaigns, personified by George Lois and his "my way or the highway" client dynamic, have long since been replaced by a more cautious, self-conscious, albeit powerfully democratic push toward user-focused (UX) design, with its emphasis on utility, accessibility and user satisfaction. In Ontario, accessible (or inclusive) design is the law.

Accessible design has set itself a lofty mandate to leave no one behind, while serving the widest range of permanent and temporary accessibility issues imaginable—from visual, linguistic, auditory and motor to vestibular, cognitive and everything in between. Proponents like to joke that if you plan to live past the age of 45, then UX's clear fonts, generous point sizes and proper colour contrasts are for you! Heck, if your optometrist has sent you into the subway system, eyes flooded with pupil-dilating drops, inclusive design is your friend, too. "Basically, we're building the future for ourselves," says Adam Antoszek-Rallo RGD, the founder and creative director at Catalyst Workshop, Inc.

At a time when Internet access is being upheld by the general public and the United Nations as a basic human right, Ontario is surpassing Madison Avenue, Silicon Valley and all of Europe in defining and

Previous spread
The Canadian Journeys gallery at the Canadian Museum for Human Rights (CMHR) in Winnipeg is one of the country's best examples of accessible environmental design. A free app complements the user experience with an audio guide, sign language and interactive map.

01
For all exhibits at CMHR, universal access points are identified on walls and through tactile floor strips. A "Near Me" beacon on the app helps low-vision visitors find the access points. Visitors also carry digital devices with raised numbers and braille codes to access audio files.

01

02

03

02
All exhibit fonts at CMHR were chosen for clarity and legibility, and line lengths adjusted to reduce reader fatigue.

03
Tactile braille markers at CMHR. For all video with spoken words, visitors can also access sign language interpretations.

04

05
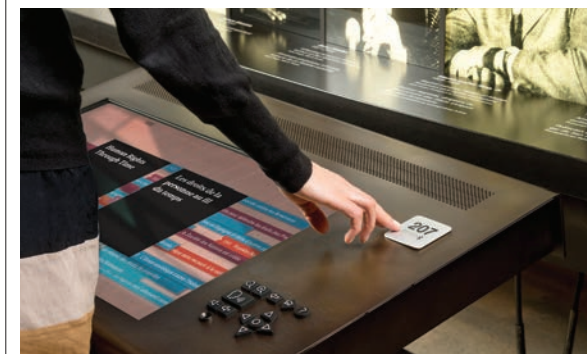
04
A digital kiosk with beacon marker and tactile navigation at CMHR.

05
The Canadian Journeys gallery at CMHR includes accessible seating and closed captioning.

developing how inclusive design should look, act and feel for print, web and the built environment. "I've done Google Trends searches on 'web accessibility,'" says David Berman RGD, "and I'm amazed how Toronto and Ottawa come up as top cities on the planet." Berman, who was the RGD's first elected president, is currently a GDC Fellow and a roving consultant on the logistics of implementing accessible design in all contexts. He's worked with the Canadian, Irish, Mexican and Omani governments, to name a few, and "Everyone is saying, 'How do we replicate Ontario's success?'"

Of course, not all designers are as gleeful as Berman by their province's leadership and knack for good governance. Who hasn't heard a colleague, drink in hand, moan at some industry event how accessibility is "the bane" of their existence? Meanwhile, having to explain to a client why a particular font or hue doesn't pass the test is a common scenario. As Stüssy Tschudin, the RGD's current president and principal of Forge Media + Design, sees it, "The province's accessibility standards may limit our pure graphic approach, but they force us to think about how our work is going to function in the real world, and that's an improvement on our design abilities." Antoszek-Rallo agrees: "It's an

opportunity and body of knowledge that's growing all the time." Work, he says, can get boring after a while. "You end up repeating yourself. But this challenges us to make our creative better and resonant with more people and more consumers."

The paradigm shift toward accessible design started with the passing of The Accessibility for Ontarians With Disabilities Act (AODA) in 2005. At the time, Queen's Park gave government offices, businesses (with a minimum of 50 employees), non-profits and public sector organizations until 2025 to become fully accessible. It bears mentioning that these standards are non-existent in the rest of Canada. Manitoba has an act but no regulations yet, Nova Scotia is working on legislation, and BC is "a long way off," says Berman. Still, there's hope: the federal spring budget saw the government commit to restoring millions of dollars to greater accessibility and to creating a Canadians With Disabilities Act.

All along, the RGD has played a key role in figuring out how to explain accessibility, govern it and make sure it goes well. In 2010, in conjunction with the Accessibility Directorate of Ontario, the RGD published an easy-to-read handbook covering accessible design for print, web and environmental graphics (see sidebar, p. 34). This was followed in 2015

01
Reich+Petch Design International's accessible overhaul of the Deloitte office in Montreal includes a numbering system for wayfinding, and bilingual, tactile and braille elements that work in tandem with the company's room assignment software.
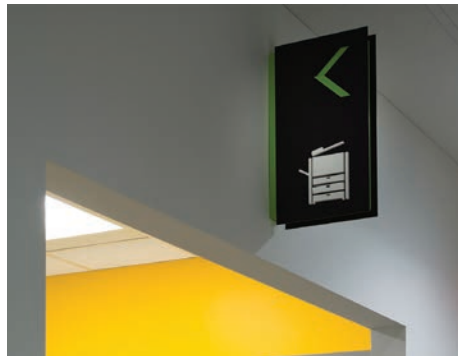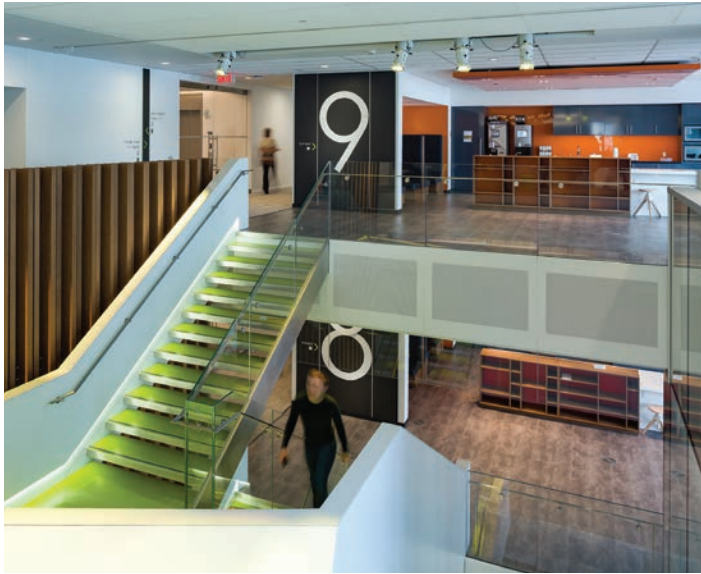
01

Where to Start: General guidelines for inclusive design

Thanks to Adam Antoszek-Rallo RGD for these tips.

Design for keyboard navigation
Many users must rely on keyboard commands to navigate a site. "It's difficult to navigate a site with a keyboard in a non-linear way," says Antoszek-Rallo, "so be careful about what information you put where. The linear flow of content in HTML has to make sense."

Place skip links first
Make the first links a user can access via keyboard commands a "Skip To Content" link. That way, the vision-impaired user doesn't have to toggle through a long lineup of options—About, Blog, Contact, or even display ads—to get to the article or information they want to read.

Adjust slideshow options
For users with vestibular (inner ear balance) disorders, a designer has two choices: don't allow slideshows to advance automatically—give that control to the user. Or, set the slideshow on a slow automatic advance, and include a clearly marked pause button.

Use No Coffee Extension to test typeface visibility
This Chrome extension (see sidebar, p. 34), which simulates common vision disorders, can help designers and web developers sensitize themselves to which typefaces and sizes work best when sight is compromised. It also broadens a designer's options well beyond traditional typeface recommendations such as Arial and Helvetica.

Check contrast
Watch the contrast between colour value and tone and don't use colour as your only indicator of meaning. Designers should use the Colour Contrast Analyzer desktop application for Mac and Windows, and the WCAG Contrast Checker browser extension for Mozilla Firefox.

Alt text
Set useful alternate text for non-text content, succinctly providing equivalent information for all images, videos and sound. As of this year, the alternate text option is also now available for Twitter and Facebook images.

by a second, web-only accessibility handbook that riffs on Web Content Accessibility (WCAG 2.0), the accepted international standard on web accessibility. "Accessibility is also a part of the certification process for all our members," says Tschudin.

In the four years since fully accessible websites were mandated (any website built in or after 2012 must comply with WCAG 2.0 standards—see sidebar, above), a growing number of designers have found ways to push the rigid guidelines further than "do-good" design, to design that's actually good. "You can't treat WCAG 2.0 like it's the Holy Grail," Antoszek-Rallo explains. "It's a man-made document written in 2006 before the first iPhone came out. We should be thinking beyond it." Berman agrees: "If you follow everything, you lose your typographic tone of voice." Both challenge designers to do better than Arial and

Helvetica, the two most recommended typefaces. Experiment, says Antoszek-Rallo. "Find a style that works for the sighted and users with limited sight." To get away with italics (a WCAG 2.0 no-no), he says, "You need to bold it and increase the amount of letter spacing." This is not about ignoring compliance. "I just think there's a difference between the rules and the spirit of the rules." When it comes to italics and typefaces, designers need to figure out where and when and how. "We should be thinking of the people who need it," says Antoszek-Rallo, "but use our tools, like the No Coffee Chrome Extension (see sidebar, above), to test what actually works."

As for print, "[accessibility] is on the minimal side," says Tschudin, and mostly about contrast, font choices, point sizes, hierarchy and non-glare printed surfaces, most of which were relevant before inclusive

01

01
Entro's cafeteria sign for Centennial College's Story Arts Centre. The lesson here: go big! Inclusive features include large fonts sized according to viewing distance, 70 per cent or greater colour contrast and an adjacent wall plate that lists the room name and number in tactile, easy-to-read fonts and their braille equivalents.

02
Entro's tactile washroom signs for Story Arts Centre include tactile lettering, recognized pictograms, a braille option, good colour contrast and a simple, sans serif font in a large point. The tactile and braille in both signs meet required surface depth and placement.

02

03

03
Andrew Kuzyk, founding partner at Entro Communications, explains his team's message hierarchy for MiWay, Mississauga's transit system: "We considered accessibility at bus stops through stop numbers [in this case, 0477]. The user dials 905-615-4287, and when prompted enters the stop number to get schedule information. The numbers are larger for someone who is visually impaired." For its part, MiWay continues to work out its digital presence. It got rid of its iPhone app in Aug 2015 because it wasn't set up to provide real-time information. Instead, MiWay is directing users to their free mobile site: m.miway.ca.

Accessible Design 101: Resources and tools for web and environmental design

Accessibility Developer Tools 9 (Chrome extension)
chrome.google.com

AChecker
achecker.ca
"This tool checks single HTML pages for conformance with accessibility standards to ensure the content can be accessed by everyone," says Adam Antoszek-Rallo RGD.

Association of Registered Graphic Designers (RGD) AccessAbility Handbook
rgd.ca

CNIB Clear Print Accessibility Guidelines
cnib.ca

CSS Validator
jigsaw.w3.org/css-validator

WCAG 2.0
W3.org

VAS
vas.3m.com
Andrew Kuzyk at Entro Communications points to software by 3M that conducts an assessment of a graphic or a sign in an environment.

For a full list of accessibility resources and links to each, visit appliedartsmag.com/ features.

design thinking. "The main parts we're interested in, and testing for, are web and environmental compliance." And the blending of the two. Donna Saccutelli's problem solving in information design, in collaboration with Seneca College's Paul Schecter and Jutta Treviranus at OCAD's entrepreneurial hub, Imagination Catalyst, show we are on the cusp of a redesigned landscape and retail environment where Universal Product Inclusive Codes (UPiC) printed on packaging are closing the loop between the physical world and the cloud. Provided their phone's native accessibility settings are turned on, they get a readout of the product name, brand, ingredients and nutrition facts. Saccutelli even hopes to embed brand jingles into the app so the blind can hear Tony the Tiger's "They're great!" when they pick up and scan the Frosted Flakes box. "We're creating a store that's turned on," she says.

As William Gibson famously said, the future is here—it's just not evenly distributed.

Alison Garwood-Jones is a freelance writer whose work has appeared in Toronto Life *and* The Globe and Mail *(alisongarwoodjones.com).*