

APRIL 2013

# OCEANS

Dive deep into the vast expanse of the discipline of Information Design

**Connecting the Dots...**

**An Introduction to  
Transit Cartography**

**Paving the Road for  
Information Design:**

**An exclusive interview  
with Dr. Glenn Ruhl**

**Discover Information  
Design, Technical Writing,  
Wayfinding, Visual Design,  
Typography, and More!**

CAN \$18 / US \$18



# Letter from the Editor

**Dear Readers:**

## **Welcome to the launch issue of Oceans!**

Information design is a varied, extensive, and deep discipline. Its impact on society and culture is comparable to the ocean in that it appears to never end and there are so many new waves of information appearing all the time. From the design of the street signs that guide your travels to the information booklet that came with your iPhone, information design is everywhere. Without it, we would be as lost in this world as the tiniest fish in the sea.

I have studied information design for three years, which is enough time for me to learn that I will never fully be able to learn all its facets. I could study for the rest of my life and not have learned everything there is to know in this discipline; the wide variety of graphical, typographical, organizational, technical, stylistical, rhetorical, hypothetical, and dysfunctional applications of this area of study is little short of ridiculous. Later in the magazine, feel free to view an interview with one of my information design gurus, Dr. Glenn Ruhl. He can explain this whole discipline a lot better than I can, and with much better language.

In short, this magazine was brought to you by information design. Literally.

Happy Exploring!

~ Alyssa Berger

Cover Image Credit: Luigi Diamanti

<http://www.fedtechmagazine.com/article/2012/11/how-ride-information-tsunami-infographic>

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## Just Do Good (Design)

by Kelsey McColgan & Janine Tannahill

*Information designers have the ability to create change for the greater good.*

## Paving the Road for Information Design

by Lyndelle Gonzalez & Santiago Lazala-Silva

*The Information Design program at Mount Royal University is one of a kind in Western Canada. We had the opportunity to interview the Chair of the Information Design program, Dr. Glenn Ruhl.*

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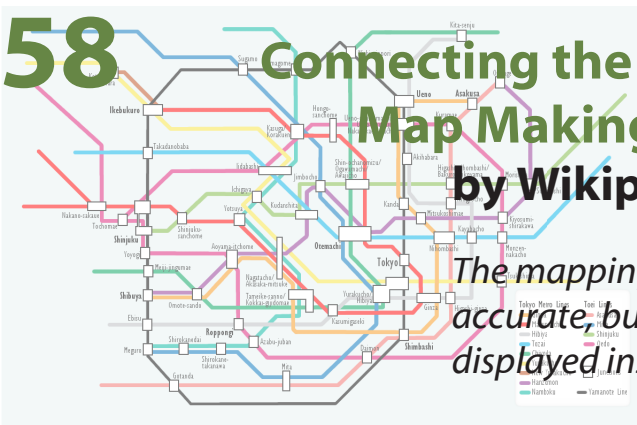
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## Connecting the Dots: A Short History of Transit

### Map Making

by Wikipedia

*The mapping of transit systems was at first generally geographically accurate, but abstract route-maps of individual lines (usually displayed inside the carriages) can be traced back as early as 1908*



## The Birth of Infographics: Technical Illustration — A Historical Perspective

by Kevin Hulse

*The earliest forms of illustration predate written records and even the spoken word.*



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## Methods for Organizing Information

### LOCATION

Organize by geographical location or place of origin



AaBbCc

### ALPHABET

Organize alphabetically



### TIME

Organize by duration, timeline, historical period, or task completion time



### CATEGORY

Organize by colour, style, type, size, departments, models, etc.

### HIERARCHY

Organize on a scale: small-large, old-new, cheap-expensive, black-white



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# Let's Get Technical

JANINE TANNAHILL

Usability specialist, information architect, technical writer, user experience designer, interaction designer, plain language expert, visual communicator — what do all these professions have in common? They research and collect various forms of information and distil it into one coherent and digestible form relevant to a particular audience. Whether this form is graphic, written, or interactive depends on the profession or practitioner; but they all focus on the needs and learning methods of the audience.

Information design has emerged from the aforementioned professions and encompasses many of the skills and techniques used by them, such as design and technical communication. As information designers, we may lean towards either design or technical communication; however, no matter which focus is chosen, one cannot exist without the other. Both work in tandem to create useful, pleasing and structured documents that benefit, teach and assist an audience. Effective information design cannot rely on design alone — technical communication, structure, and information architecture techniques are also very important.

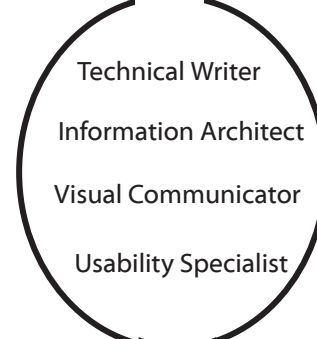
Technical communication, as defined by the Society for Technical Communication (STC), is a broad field including any form of communication that exhibits the following characteristics:

- Communicating about technical or specialised topics; for example, computer applications or medical procedures
- Communicating using various forms of technology such as web pages, help files, or social media sites
- Providing instructions about how to do something like using an electronic device, or describing a process

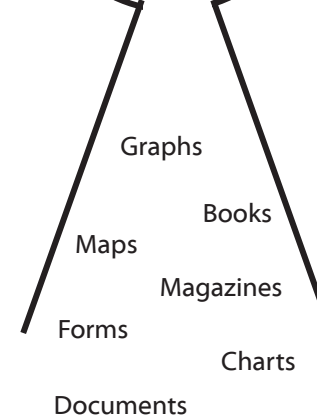
**This jumble of nonsensical data...**



## The Information Design Process



**...is analyzed by these information experts...**



**...and turned into these meaningful pieces of information**

The writing of technical communication generally follows five steps:

1. Determine purpose and audience
2. Collect information
3. Organize and outline information
4. Write the first draft
5. Revise and edit

Just like information design, technical communication is audience based and driven. It is important to understand your audience — not only to write at an appropriate level, but also to reflect their language style and jargon. Using words that are not understood by the audience only creates confusion and frustration. The use of glossaries or in-text definitions (even hyperlinks if writing for the web) can assist the reader's understanding; but minimizing additional work on their part goes a long way towards the success of a document.

The benefit of effective technical communication is that it makes information more useable and valued; it decreases anxiety and frustration, which in turn advances the goals of the companies or organizations that employ them. Technical communication is about clear and concise writing, but it is also about well-structured documents that employ information architecture principles, typographic design principles, and clean aesthetics.

Some examples of information architecture techniques include Richard Saul Wurman's 'Five Hat Racks', better known as LATCH. LATCH is an acronym for **Location, Alphabet, Time, Category and Hierarchy**, and identifies five different ways to organize information. Categories may be used on their own or in conjunction with each other to strategically arrange information. Information mapping is another technique for organizing and dividing information. Robert E. Horn determined six common information types — **Procedure, Process, Principle, Concept, Fact, and Structure**.

# Methods for Organizing Information



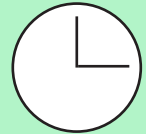
## LOCATION

Organize by geographical location or place of origin

AaBbCc

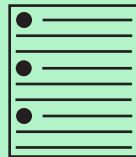
## ALPHABET

Organize alphabetically



## TIME

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## CATEGORY

Organize by colour, style, type, size, departments, models, etc.

## HIERARCHY

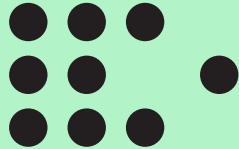
Organize on a scale: small-large, old-new, cheap-expensive, black-white



# Using Gestalt Principles

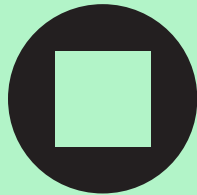
## PROXIMITY

Objects in close proximity are mentally grouped together as one object



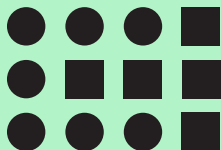
## FIGURE/GROUND

An object is visually separated from the background



## SIMILARITY

Similar-looking objects are visually grouped together



## CLOSURE

Incomplete objects are mentally closed off



Horn also proposed that the basic paragraph be replaced by an information block — a block of information focused on one main idea. Information blocks can be sorted by content and relevance and then made recognizable by ‘chunking’ and using white space. In addition, information blocks should be identified with a logical label to allow efficient scanning of the document.

Clear and concise writing styles that are applicable to the audience and combined with effective structuring principles assist with cognition and understanding. Typographic choices also affect these outcomes. Generally considered an aesthetic attribute, typography greatly influences and affects the speed at which a document is read (readability) and the recognition of words and letters (legibility). **Gestalt Principles of Perception**, such as the principles of proximity, similarity and figure/ground to name a few, also affect the way information is read and understood. Aligning elements to a grid (vertical and horizontal lines arranged on the page) also creates visual clarity through clear organisation, movement and grouping of content.

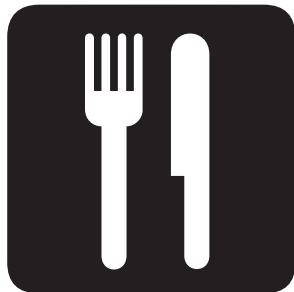
Technical communication is an integral part of information design. It takes skill and practice to collect a vast amount of information and compress it into an effective and usable document. Regardless of the specific label one may apply to their profession within this field, they all have a common user-centered approach with the goal of providing the right information to the right people at the right time.

# Icons and Pictograms for Wayfinding

JILLIAN BEAR CHIEF

**Picture a family that has just moved to Calgary from another country — a family that cannot speak or read our English language. They arrive at Calgary International Airport and do not know their way around.**

**How would they understand where to go?**



**Icons like these are not language-specific and are able to communicate messages to a wide variety of people**

Information designers have to keep an intercultural audience in mind when designing wayfinding systems. They must use symbols and pictograms to communicate large amounts of information in a single visual representation. In settings such as airports, hospitals, buildings and streets, symbols have to speak to different language users and deliver a clear message.

Symbols represent words or images by association while pictograms are images that represent an object. Common symbols and pictograms include arrows, people, transportation and route markers. The challenge lies in creating symbols and pictograms to satisfy an intercultural communication need.

## WAYFINDING

A good wayfinding system is built on clarity, legibility and consistency that can help people orient themselves in an unfamiliar environment. People have to be able to successfully navigate within a physical space using posted symbols and pictograms on signs. Consider a family that just moved to Calgary. They have to be able to find customs, baggage claim, and transportation after they have arrived. The symbols they see have to convey the same meaning across various languages and cultures.

Pictograms have to be legible and use appropriate colours, size and contrast to give a snapshot of information quickly. When driving, people only have a moment to glance at signs. If people see a sign that has a purple symbol on a black background, they will not be able to distinguish between the colours. The best high-contrast colour combinations are: white/black, yellow/black, and white/green. In addition to being legible, pictograms need a consistent look and feel to make them look like they belong in the same visual family.



## AIGA

The American Institute of Graphic Arts (AIGA) in collaboration with the U.S. Department of Transportation, (DOT) designed a system of 50 symbols. The symbols were meant to be used in large international locations such as airports and transportation hubs to guide passengers and pedestrians. Before the project, other systems such as Otto Neurath's International System of Typographic Picture Education (ISOTYPE) were designed to visually communicate societal, economic and political information through pictograms. AIGA and DOT built upon Neurath's pictograms and succeeded in designing symbols that have become the standard in visual communication.

The most common wayfinding symbol is the arrow. It creates movement and identifies direction. Most importantly, it transforms information into order by controlling our behaviour. For example, if we see an arrow pointing right, we go right. We place great importance on this little symbol. Imagine the frustration we would feel if we were misled by an arrow pointing in the wrong direction. It can make us late to meetings, cause missed flights or make us take the wrong turn-off on the freeway.

### The Arrow

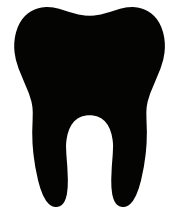
The symbols and pictograms that we rely on for wayfinding have to be tested for user recognition and comprehension. Through usability studies, people are surveyed to check the effectiveness of symbols and pictograms. Designers have to know what kind of approach to take based on usability findings. Sometimes, a simple depiction of a tooth is all that is needed to signify 'dentist' while, at other times, using a hospital bed and nurse in a pictogram might also be needed to add a storytelling element.

### User Testing

User testing will also indicate if symbols and pictograms are unclear and ambiguous. Using cropped images of people can confuse users who need to see the entire image. The use of metaphor in pictograms is also challenging because the meaning may not translate across different cultures.

Symbols and pictograms play a significant role in how we make our way around unfamiliar spaces. Arrows direct our movement while pictograms show us where we are going by representing objects and locations. Remember the family at the beginning of the article? By seeing pictograms of an arrow, a suitcase, a car, and a uniformed officer, they would know which direction to go. They would be able to find their way because information designers used visual communication tools to speak their language.

**It is much easier to understand this image...**



**...as opposed to this one, which is too complex**

**An icon like this has no known meaning**



**Successful navigation relies on quick-glance, universal icons like these**



# PAVING

the road for...

## Information Design

**Exclusive interview with the chair of the Mount Royal University  
Information Design Program**

by Lyndelle Gonzalez & Santiago Lazala-Silva



Photo: Mount Royal University Archives  
Top: Dr. Glenn Ruhl

The Information Design program at Mount Royal University is one of a kind in Western Canada. We had the opportunity to interview the Chair of the Information Design program, Dr. Glenn Ruhl. This interview showed how, with great leadership steered in the right direction, information design is continuing to develop into a successful growing program.

## About Dr. Glenn Ruhl

Dr. Glenn Ruhl is the Chair of the Information Design Program and associate professor in the Faculty of Communication Studies at Mount Royal University. He was the driving force behind the establishment of the Information Design major in the Bachelors of Communication degree — one of the first intensive academic programs at Mount Royal University. He teaches information design foundations, rhetoric and ethics. He has a passion for writing, research and design.

## What inspired you to set up the information design at MRU?

Glenn Ruhl - As part of the transition to university status, an extensive review of existing programs revealed some interesting facts about industry needs and academic trends.

I have always loved this field of work. My lifelong passion for design, art, writing and the visualization of data, which was a major theme in my doctoral work, is brought together by information design. I am passionate about the information design process and its importance and knew many people shared my sentiments.

We started by reviewing successful European and North American degree models and their related curricula. The process involved numerous focus groups and consultations with both academics and industry professionals. Noting the admonishments of Richard Saul Wurman — an extraordinary pioneer in the practice of making information easily understandable — our efforts resulted in a program designed to provide students with the tools and theoretical framework needed to make information accessible and usable.

## You are so passionate about the information design program. How do you gauge its success?

GR - I am intrigued by the elements of information design; in fact, I would do this even if I wasn't teaching it! I am very proud of our program. We are focused on undergraduate teaching and the undergraduate experience for students. Our success is, in fact, measured by our students.

Our students are passionate about their work and its importance. They participate in designer collectives and many outside organizations such as the International Institute for Information Design (IIID). Like the Bauhaus tradition of bringing things together,

**“I have always loved this field of work. I have always had a passion for design, art, writing...”**

the program synthesizes technology, design, typography, documentation and aesthetics. The whole idea of function is really important. We don't just talk and translate a theory, we teach students how theory can be applied to everyday use, and that is really exciting.

## What do you see in the future for information design?

GR - The dramatic growth and influence of social media has resulted in many people desperately seeking a sense of individual identity. The paradox of the virtual on-line environment is that as much as it brings people together, it can also isolate people. It often contributes to behaviors where people tend to be bolder and more brazen on-line than they would normally be in person.

A future challenge is for information designers to acknowledge individualism and a sense of “contact” without feeling that the “machine” has taken over. We will see the importance of “cloud” computing continue to rise and the development of applications designed to customize the user experience. Future apps will create this connection. We are in the formative stages of applying many of these considerations to real life situations. We will see a lot more develop in this regard in the future.

## What are the most important things we do as information designers?

GR - We take the complex and make it usable. Einstein's formula for relativity  $E=MC^2$  sounds simple because, as he said: “All physical theories . . . ought to lend themselves to so simple a description that even a child could understand them.” It's very important for information designers to take a similar approach by making the complex easy to understand.

## How has the program or field of information design evolved since the beginning of its instruction at MRU?

GR - There has been a huge increase in students interested in the program. I've also seen what happens when our students' passion translates into something tangible. Students entering the program tend to like working individually. As they progress through their

studies, I've noticed just how collaborative they become. I've seen the students grow and test traditional viewpoints. That is really important. It's not a 'you and us'

**“Information design is not a transition, it's a destination.”**

between teachers and students. It is recognizing the fraternity of information design that, as our students move closer to graduation, they become part of. We recently held an employer's appreciation evening for people who have hired MRU graduates and one of the employers told me "I used to hire all your applied degree students, but now I hire your information design students, wow do they bring a different perspective!"

### How do you manage other people's perception of information design? For example — "all we can do is build websites and design posters"

GR - I like to use the analogy that in a way we are like architects — an architect may not know how to hammer a nail but they know what the house looks like and so we may not be able to hammer all the nails in a website, but we know what the website needs to look like to make it work. A portfolio really helps, and all students will finish their degree with a portfolio to help them demonstrate to potential employers what they can do.

### If you could do anything different with the program, what would it be?

GR - I would love to offer advanced courses in certain areas and it would be fantastic to have a usability lab. Although we have proposed it, I would love to see it come true! And I would love to have a publication, something we can call our own on a regular basis, like an academic journal that can be attached to our faculty.

I am also excited about the recent discussions concerning developing a newsletter for recent immigrants for whom English is a second language. Instead of being text heavy, this newsletter will deliver the news in a graphical format. It would be really exciting to have our information design students involved in work on the newsletter as it will incorporate many different elements and contribute to intercultural awareness which is so important in the future. Being more involved with a global perspective would be terrific for our students.

### What do you think information design will do for the world?

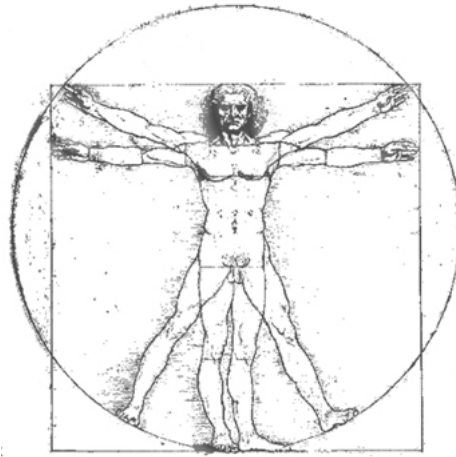
GR - Misunderstanding creates arguments in relationships, conflict between human beings, and challenges the distribution of wealth and knowledge. Information design creates understanding. If you have understanding and recognize where people are coming from and what it means to other people, you

can incorporate that understanding and deliver clarity to help the world. If people understand how wealth is distributed and how information is distributed, you have a better opportunity to transform it into something that you want — unfortunately, what is wanted can be good or bad!

### Has information design changed the way you look at the world?

GR - Absolutely! We are bombarded with so much information every day. Information designers, like physicists seeking a "unified theory" for the universe, want to know how and why. The best thing in life is a satisfied mind and, as information designers, we are constantly thinking and asking questions to help us feel satisfied and understand the world around us. We are constantly striving to answer these questions and at the same time understand the beautiful harmony

of the universe. There is always a sense of wonder associated with information design and once you are hooked you can't escape it. There is beauty in harmony, how can you not look at a creature on this planet and marvel at how it is designed from a life perspective to a rock formation or the sky? If you call yourself an information designer, you will be an information designer for the rest of your life: even if you go into another field I'm convinced that you will always have a passion for "making sense."



**'The Vitruvian Man'**  
Information Design is a process that, like the Vitruvian Man, is perfect in theory but will likely never happen so perfectly in real life.

### How does information design influence your everyday life? Can you give an example?

GR - It shapes who I am: I love to craft, build and write. These passions define my personality and allow me to appreciate quality. Like Pirsig suggests in Zen and the Art of Motorcycle Maintenance, we need to embrace the philosophy that quality matters. For example, there was a time when a woodworker would spend an entire week's wages to buy a hand plane. The woodworker would love and care for the tool. It wasn't disposable and it would be a tool they would keep. They would use the tool to plane wood flat and to a desired dimension. In the process of creating a product, they might use a coping saw to cut trim molding, use Tung oil or shellac as a finish and, finally they would marvel at the work they had hand crafted. Today, the "craftsman" is often replaced by mechanization. Modern day equipment enables work to be done quickly and with a higher profit margin. Just as software allows today's designer to accomplish a technique; however, modern "tools" often diminish the feeling of accomplishment. Products are now fabricated and prefinished. For example, there is

a different feel when you use a hand plane. When gossamer wood shavings lift off wood using a well-tuned hand plane, you appreciate it: the sound, the feel, the inner satisfaction. This same feeling is instilled when pen and ink are applied to paper by hand. Drawing the letterform by hand and following the “flow” to the ultimate creation of a font — there is a quality to it and that quality attaches itself to the aesthetic and that shapes me. Regardless of the tool you use, embrace the feeling that quality matters. I am constantly trying to see this quality in my students, in my program, in my university, my friends and myself. That is how information design shapes who I am.

### What do you love most about information design?

GR - I love how information designers can have so many different interests; all with the single purpose of creating understanding. Many information designers are like butterflies, fluttering around, and landing on something that looks attractive and interesting then, when feeling satisfied or one’s interest wanes, off to something else, like Da Vinci — who was notorious for not finishing his work — and forever looking for “Vitruvian man” perfection.

### Who is your favourite information designer?

GR - It’s hard for me to pick just one. I like that everyone builds on everyone else. It is so interesting when I see something that is well designed. It seems simple and makes me ask: ‘What was the process involved that lead to the design?’ When something “works” perfectly, you just know it can’t be improved. I’ve always been intrigued and humbled by many of the classical artists. I marvel at how Phidias, for example, employed the concept of divine proportion. I am also impressed with modern designers, such as Steve Jobs and the great products he and his team at Apple developed and the process they used.

### What are your information design pet peeves?

GR - Information design is a process involving many elements and I don’t like it when people label us as either writers or designers. Of course students can use what they learn in our information design program for other things, but I wouldn’t want them to get stuck in a different field and wish they were doing more information design. Learn to love using your information design skills — embrace them: If you do this, you will be happy.



Source: [http://commons.wikimedia.org/wiki/File:Goulds\\_Book\\_Arcade\\_BookStack.jpg](http://commons.wikimedia.org/wiki/File:Goulds_Book_Arcade_BookStack.jpg)

## How do you organize your information on your computer?

GR - I am meticulous about my projects, and organize them flawlessly, but sometimes I just get side tracked. I have good intentions to organize the information on my computer, but it's my "butterfly" mentality; if I am planning to sort out my computer files and something really interesting entices me, I totally forget all about organizing my computer!

## What are your favourite information design websites?

GR - I'm an information design news junkie, and I go everywhere on the web to view news feeds. To select one depends on the day. On a regular basis, however, I am very fond of The Economist. Their Infographic blog always intrigues me - there always seems to be something stimulating and controversial on their site.

## How many books do you own?

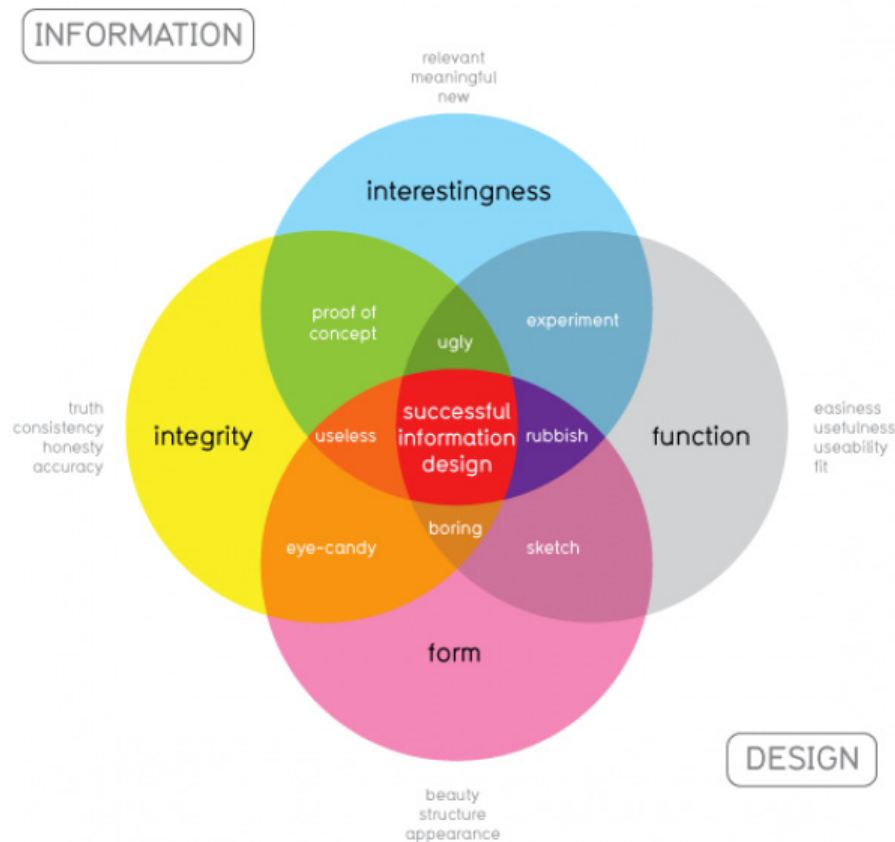
GR - Books are a real passion for me and I'm notorious for never letting them go. I've even kept books from my childhood. Not only do I love to read, but I love how books are designed. So to quantify how many books I have, I'm just going to say a lot!

## Note from the Authors

Throughout the interview, we could not help but feel a sense of pride in the Information Design program. The smiles on our faces gleamed, as Dr. Ruhl eloquently spoke of information design with such passion and optimism.

Since our first year in the Information Design program, we have grown into knowledgeable, well informed students with a willingness to learn. We are multi-talented in the area of communications, having the ability to switch areas within our field, when in need of change.

This is the reason why we are here; to feel the passion, to embrace new ideas and to be clear and concise to all our audiences.



## What Makes Good Information Design?

How can WE continue

# PAVING

the road?

# Transport Typeface

WIKIPEDIA

Transport is a sans serif typeface designed for road signs in the United Kingdom. It was created between 1957 and 1963 by Jock Kinneir and Margaret Calvert [1] as part of their work as designers for the Department of Transport's Anderson and Worboys committees.

## History

Before its introduction, British road signs used the capitals-only Llewelyn-Smith alphabet that was introduced following the Maybury Report of 1933 and revised in 1955–57. Older signs, known as fingerposts, tended to use a variety of sans serif alphabets as supplied by their manufacturers. For the kinds of roads on which either of these alphabets was likely to be seen, legibility was not a pressing issue, but the planning and building of Britain's first motorway in the 1950s was a catalyst for change.

The Ministry of Transport appointed an Advisory Committee on Traffic Signs for Motorways under the chairmanship of Sir Colin Anderson in 1957 and Jock Kinneir and his assistant Margaret Calvert were appointed as graphic designers to it. All aspects of signing were investigated and tested, initially on the Preston bypass (1958, now part of the M6 motorway), before their introduction on the (London–Yorkshire) M1 motorway a year later. The committee looked at examples from other European states as well as the USA but Kinneir and Calvert found them somewhat harsh and unsatisfactory. Instead, they developed a more rounded typeface with distinctive tails to 'a', 't', and 'l', and bar-less fractions, all of which helped legibility.

The department, seeing the successful early results of this work then appointed another committee, under the chairmanship of Sir Walter Worboys and again using Kinneir & Calvert as designers, to look at Traffic Signs for All-Purpose Roads. Work for this also resulted in the introduction of the pictogram signs based on those recommended by the 1949 United Nations World Conference on Road and Motor Transport, often referred to as the Geneva Protocol.

## Characteristics

Two forms of the typeface exist; Transport Medium and Transport Heavy. Both have the same basic form, but Transport Heavy is boldface, to allow easier readability for black letters on white backgrounds, such as those used on non-primary roads, while Transport Medium is lighter, and is used for white letters on dark backgrounds, such as the green primary route signs.



Source: [http://commons.wikimedia.org/wiki/File:Road\\_sign,\\_Comberton\\_Hill,\\_Kidderminster\\_-\\_DSCF0998.JPG](http://commons.wikimedia.org/wiki/File:Road_sign,_Comberton_Hill,_Kidderminster_-_DSCF0998.JPG)

The Transport typefaces are the only ones allowed on UK road signs (except for motorway signs, where route numbers appear in their own separate typeface known as Motorway). Signs containing other (usually similar) fonts are found occasionally in some places, but these are strictly forbidden in the government guidelines and are technically illegal.

Transport

Transport

Transport

Source: [http://commons.wikimedia.org/wiki/File:Transport\\_font.svg](http://commons.wikimedia.org/wiki/File:Transport_font.svg)

# Connecting the Dots

Wikipedia

## The Short History of Transit Map Making

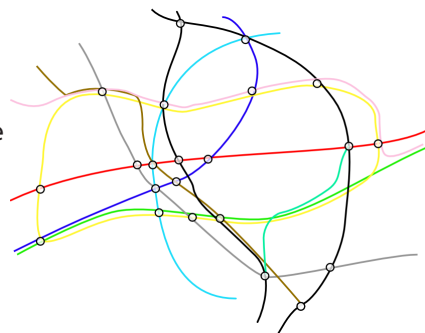
A transit map is a topological map in the form of a schematic diagram used to illustrate the routes and stations within a public transport system—whether this be bus lines, tramways, rapid transit, commuter rail or ferry routes. The main components are color coded lines to indicate each line or service, with named icons to indicate stations or stops. Transit maps can be found in the transit vehicles, at the platforms or in printed timetables. Their primary function is to help users to efficiently use the public transport system, including which stations function as interchange between lines. Unlike conventional maps, transit maps are usually not geographically accurate—instead they use straight lines and fixed angles, and often illustrate a fixed distance between stations, compressing those in the outer area of the system and expanding those close to the center.

### A Short History of Transit Maps

The mapping of transit systems was at first generally geographically accurate, but abstract route-maps of individual lines (usually displayed inside the carriages) can be traced back as early as 1908 (London's District Line), and certainly there are examples from European and American railroad cartography as early as the 1890's where geographical features have been removed and the routes of lines have been artificially straightened out. But it was George Dow of the London and North Eastern Railway who was the first to launch a diagrammatic representation of an entire rail transport network (in 1929); his work is seen by historians of the subject as being part of the inspiration for Harry Beck when he launched his iconic London Underground map in 1933.

**"If you're going underground, why bother about geography?  
It's not so important. Connections are the thing."  
~ Owen Massey**

**Zone One of the London Underground.**  
Unlike the standard map, this image preserves the actual locations of the stations and lines.

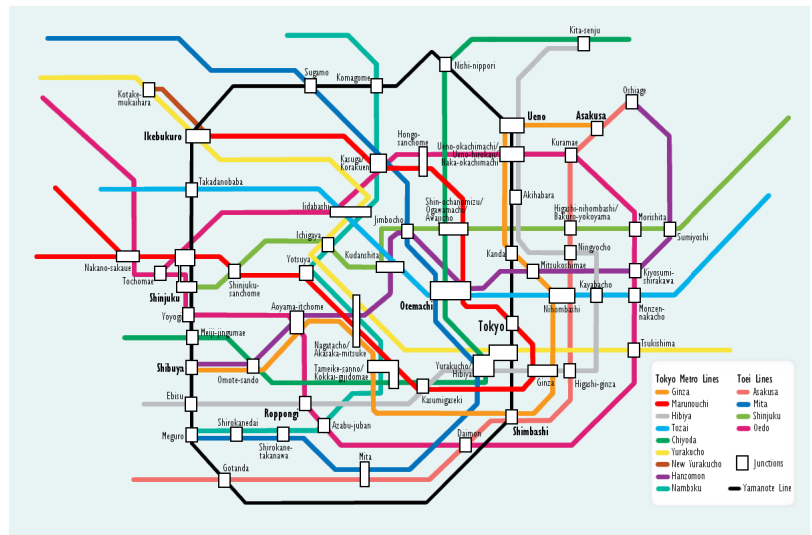


Source: [http://commons.wikimedia.org/wiki/File:London\\_underground\\_zone\\_one.png](http://commons.wikimedia.org/wiki/File:London_underground_zone_one.png)



After this pioneering work, many transit authorities worldwide imitated the diagrammatic look for their own networks, some while continuing to also publish hybrid versions that were geographically accurate. Early maps of the Berlin U-Bahn, Boston T, Paris Métro and the New York Subway also exhibited some elements of the diagrammatic form.

The new Madrid Metro map (of 2007), designed by the RaRo Agency, took the idea of a simple diagram one step further by becoming one the first produced for a major network to remove diagonal lines altogether; it is constituted just by horizontal and vertical lines only at right angles to each other. Transit maps are now increasingly digitized and can be shown in many forms online.



Map of Tokyo Subway system, including Tokyo Metro and Toei lines 2006  
Source: [http://commons.wikimedia.org/wiki/File:Tokyo\\_subway\\_map.PNG](http://commons.wikimedia.org/wiki/File:Tokyo_subway_map.PNG)

### Helping People Find Their Way

The primary purpose of a transit map is to help riders—especially those unfamiliar with the system—to take the correct routes to achieve their travel between two points; this may include having to change vehicle or mode in the course of the trip. To help the passengers, the map must use symbols to illustrate the lines, stations and transfer points, as well as a system of geographic identification. At the same time the maps must remain simple to allow overview, also for people unfamiliar of the geography of the area.

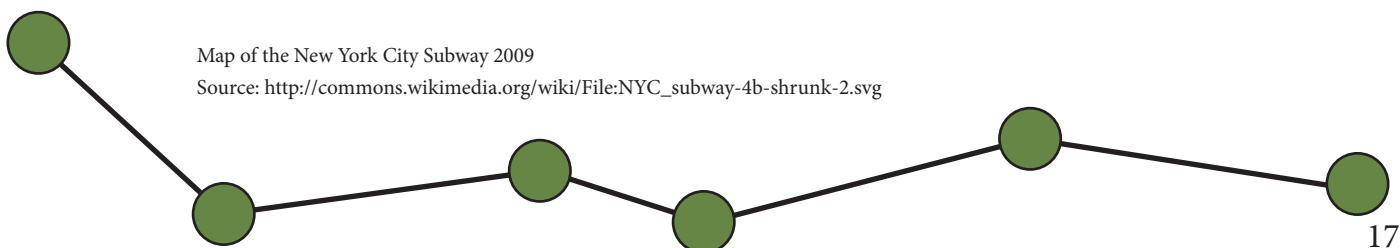
Stations are marked with a symbol that breaks the line, along with the name of the station. Users can thus use the station names as reference in relation to their travel itinerary, for instance to find their location on a street map or as part of travel instruction. Further help may be granted through the inclusion of important sites for tourists or other unfamiliar travelers to identify the specific station that serves important tourist attractions or location such as venues or the city center; these may be identified through symbols or wording.

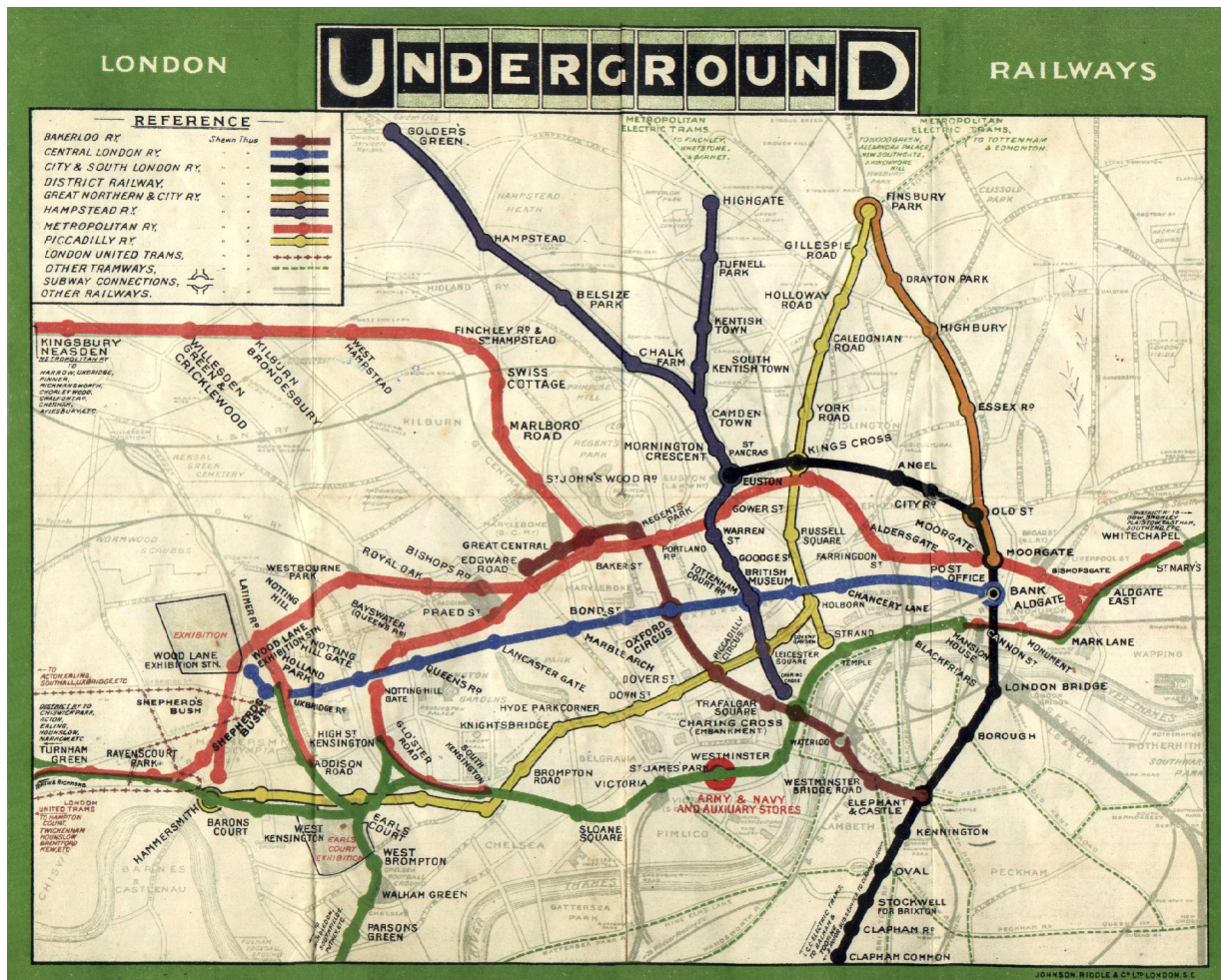


Color coding allows the map to specify each line in an easy way, allowing the users to quickly identify where each specific line goes; if it does not go to the desired destination, the colors and symbols allow the user to identify a feasible point of transfer between lines. Symbols such as aircraft may be used to illustrate airports, and symbols of trains may be used to identify stations that allow transfer to other modes, such as commuter or intercity train services. With the widespread use of zone pricing for fare calculation, systems that span more than one zone need a system to inform the use which zone a particular station is located in. Common ways include varying the tone of the background color, or by running a weak line along the zone boundaries.

Many transit authorities publish multiple maps of their systems; this can be done by isolating one mode of transport, for instance only rapid transit or only bus, onto a single map, or instead the authorities publish maps covering only a limited area, but with greater detail. Another modification is to produce geographically accurate maps of the system, to allow users to better understand the routes.

Map of the New York City Subway 2009  
Source: [http://commons.wikimedia.org/wiki/File:NYC\\_subway-4b-shrunk-2.svg](http://commons.wikimedia.org/wiki/File:NYC_subway-4b-shrunk-2.svg)





### Adaptations of Transit Maps

There are a growing number of books, websites and works of art on the subject of urban rail and metro map design and use. There are now hundreds of examples of diagrams in an urban rail or metro map style that are used to represent everything from other transit networks like buses and national rail services to sewerage systems and Derbyshire public houses.

One of the most well-known adaptations of an urban rail map was *The Great Bear* by Simon Patterson. First shown in 1992 nominated for the Turner Prize *The Great Bear* replaces station names on the London Underground map with those of explorers, saints, film stars, philosophers and comedians. Other artists such as Scott Rosenbaum, and Ralph Gray have also taken the iconic style of the urban rail map and made new artistic creations ranging from the abstract to the solar system. Following the success of these the idea of adapting other urban rail and metro maps has spread so that now almost every major subway or rapid transit system with a map has been doctored with different names, often anagrams of the original station name.

You can clearly see the differences between this map of London from 1908 compared to the modern one on page 15.

### Sample of London Underground Map 1908

Source: [http://en.wikipedia.org/wiki/File:Tube\\_map\\_1908-2.jpg](http://en.wikipedia.org/wiki/File:Tube_map_1908-2.jpg)

# The Slow Movement

MALARIE JANE SCHAFFER

## Bringing out Your Inner Tortoise



Source: [http://commons.wikimedia.org/wiki/File:Halden\\_011.jpg](http://commons.wikimedia.org/wiki/File:Halden_011.jpg)

Long gone are the days when dinner was a wholesome home-cooked meal from the garden, letters came on pretty paper via snail mail, and our furniture was all built by our fathers. 'Hand-made' is disappearing from our vocabulary, since time no longer allows for it. Somehow, during the past few decades, we have been convinced that time is a commodity and time is now money. Our culture has become so starved for time that we are oblivious to the fact that the need-for-speed could be destroying our health, relationships, and communities. We are working longer and faster than ever before.

Time is the most precious thing we have. Every hour we live, we will never get back; yet, every moment of the day seems to be treated like a race against the clock. We are constantly trying to do more and more with less and less time. Think of all the technological and industrial advancements that have

**“Slowing down may be hard to do, especially in our fast-paced society. The Slow Movement aims to remind us that a more fulfilled and productive life can be achieved by just stopping to sniff the roses every once in a while.”**

progressed over the past few hundred years to help us become more proficient around the home and office. Have they really given us more time to enjoy life as claimed or have we used this time to become even busier?

Most of us are in constant fast-forward motion whereby we are overscheduled, stressed, and rushing towards the next task. Not only are we rushing in our work environment, but we rush our food, our communication, and even our recreation. Just think about the ways we try to make things better — we speed them up. We used to dial; now we speed dial. We used to date; now we speed date. We used to have Internet; now we have high speed Internet. We used to eat food; now we eat fast-food. And the list goes on... It's beginning to appear that life has become a fast-food chain for everything.

## Introducing the Slow Movement

The Slow Movement marks a cultural shift towards slowing down life's pace. It emerged from Italy in the 1980's and has begun to make its way around the world as a revolutionary motto to live by. The Slow Movement aims to address the issue of 'time poverty' by opting to slow down our lives. Engaging with life by connecting with our environment, loved ones, and surroundings is well valued and utilized. At work, slow is more productive — taking time to look at different angles of a problem in order to make the best decision rather than rushing through and making mistakes. To help clarify the significance of this movement, we first have to tackle the cultural taboo of the term 'slow'. Synonymous with 'lazy', 'stupid', and 'slacker' — 'slow' generally tends to imply a negative connotation; but the revolutionary idea of slow is good. This fresh attitude on slow is the desired message.

Slow is not about doing everything at a snail's pace; it's about working, playing and living better by doing everything at the right speed. By slowing down at the right moments, people do things better; they eat better, they love better, they work better, and they create better. Think about it... would you get more pleasure and health from your food if you cultivate, cook and consume it at a reasonable pace or would a store-bought frozen dinner be just as good?

It's not only life philosophers who have adopted this attitude, but the 'slow' mantra has begun to take form across many professional disciplines as well. Some subcultures of the Slow Movement include Slow Life, Slow Food, Slow Medicine, Slow Cities, and yes — even Slow Design.



Source: <http://www.arkive.org/garden-snail/helix-aspersa/image-A7797.html>



Source: <http://jiscmediahub.ac.uk/record/display>

## Slow Design

Many designers can probably attest that they constantly have expectations from clients for speedy delivery. It's true that in order to survive in the world of design, being a quick thinker and executioner will indeed save your career; but there is a huge misconception from non-creatives that our minds are just a big pot of never-ending pictures and ideas. This is absolutely (well mostly) not true. We just know how to stir the big empty pot in our head until something starts to brew.

Graphic design is not particularly known for its dedication to Slow, but rather it's a world often requiring and thriving on speedy delivery. It's all about knowing your customers and responding quickly to their needs. However, we are not graphic designers; we are information designers. Though we are highly capable of the quick and creative process involved in the graphic design industry, our degree takes on a much more holistic approach and our capabilities reach far beyond the surface.

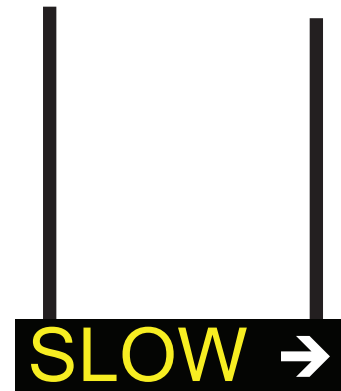
The trend for Slow Design is gradually beginning to emerge within the design world. Both professionals and clients are seeing the value of thoughtful, meticulous work rather than speeding through it. Perhaps this is why information design is gaining popularity as a reputable profession within the design scene. It recognizes that a richer experience can be created for the user through a diligent process of research, analysis, planning, testing, and production. Benefits are becoming apparent when people take the time to focus on the user and make the products easy to use. Information design, if remaining true to its form, could be paving the path for implementing Slow Design into the process of creating a more hand-crafted, meaningful world.

Information design is a mind process and requires more than the technical skills needed to accomplish a task. It's the thinking that we use the most. There is always the choice of buying into the designers with predetermined mindsets, the ones who have templates already stored in their heads that they re-use over and over for multiple purposes. But not every design is suited for every purpose, every audience member, or every subject. We specialize in hand-crafting solutions for individual circumstances and we understand that, like humans, no two are alike.

On the contrary, the results of our work do not fully support the ideas of a slow lifestyle. If anything, we are creating a totally opposite mind frame for our users where our solutions actually feed into the fast-paced life of technology and work. Ironically, we thrive on our crafted 'slow' process so that you don't have to. We are the tortoise, and you are the hare. In other words, we design slow so you can go faster and get on with your busy schedule. We weed through the data and present it in a meaningful way so that you can understand it in a fraction of the time it would take you otherwise.

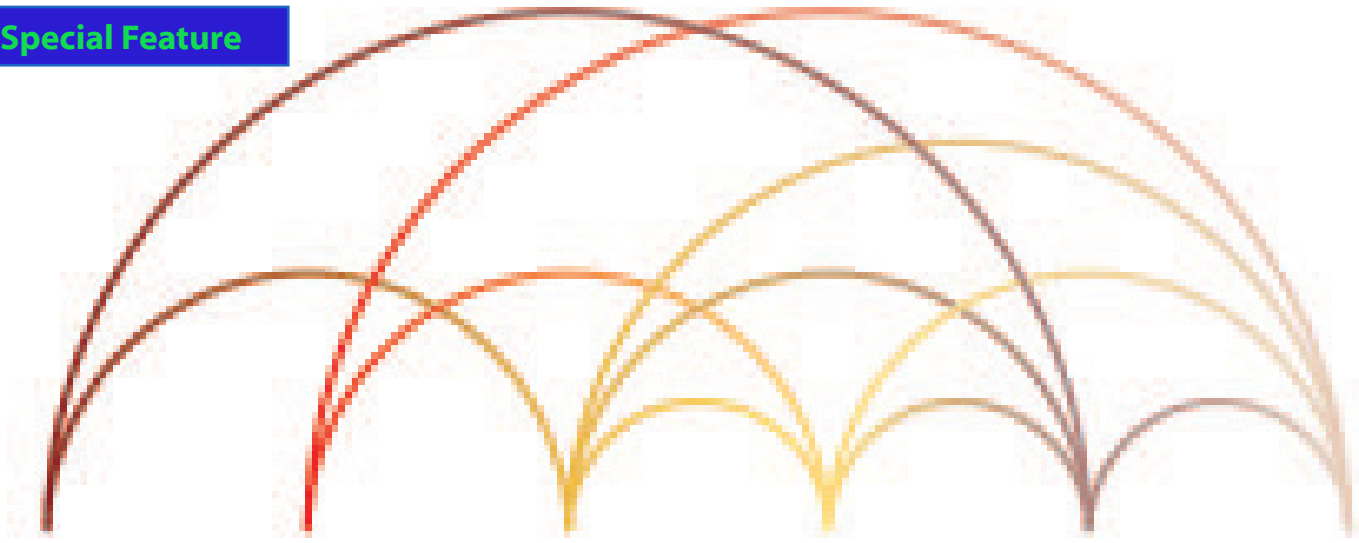
### The Reality

Though the practice of Slow Design may not be completely tolerated in the business world, its ideas are worth considering. If we stop thinking about the design industry as a revenue source and allow it to become the real craft it used to be, we just might begin to see some breakthroughs happen. Efficiency is good but not if it's confused with just doing things faster. Our education in information design has equipped us with the right tools to balance slow design principles with the fast-paced work world. We are prepared to design on the fly, but still utilize our time to apply the appropriate methods to enhance our work. In a perfect world, the design process would be the foundation upon which each and every project evolved, although we understand it's not always feasible.



Source: [http://www.123rf.com/photo\\_6568824](http://www.123rf.com/photo_6568824)

The whole essence of Slow, and the conventional understanding of how important Slow ethos is may still be many years away; but could it be a breakthrough way in designing for our world? Will Slow become the new Green, or will we continue to maximize output and disregard the bigger picture? Is it possible for us to slow down — in work and play — or will we be living in the fast lane forever?



# Just do Good (Design)

by Kelsey McColgan & Janine Tannahill

Information designers have the ability to create change for the greater good.

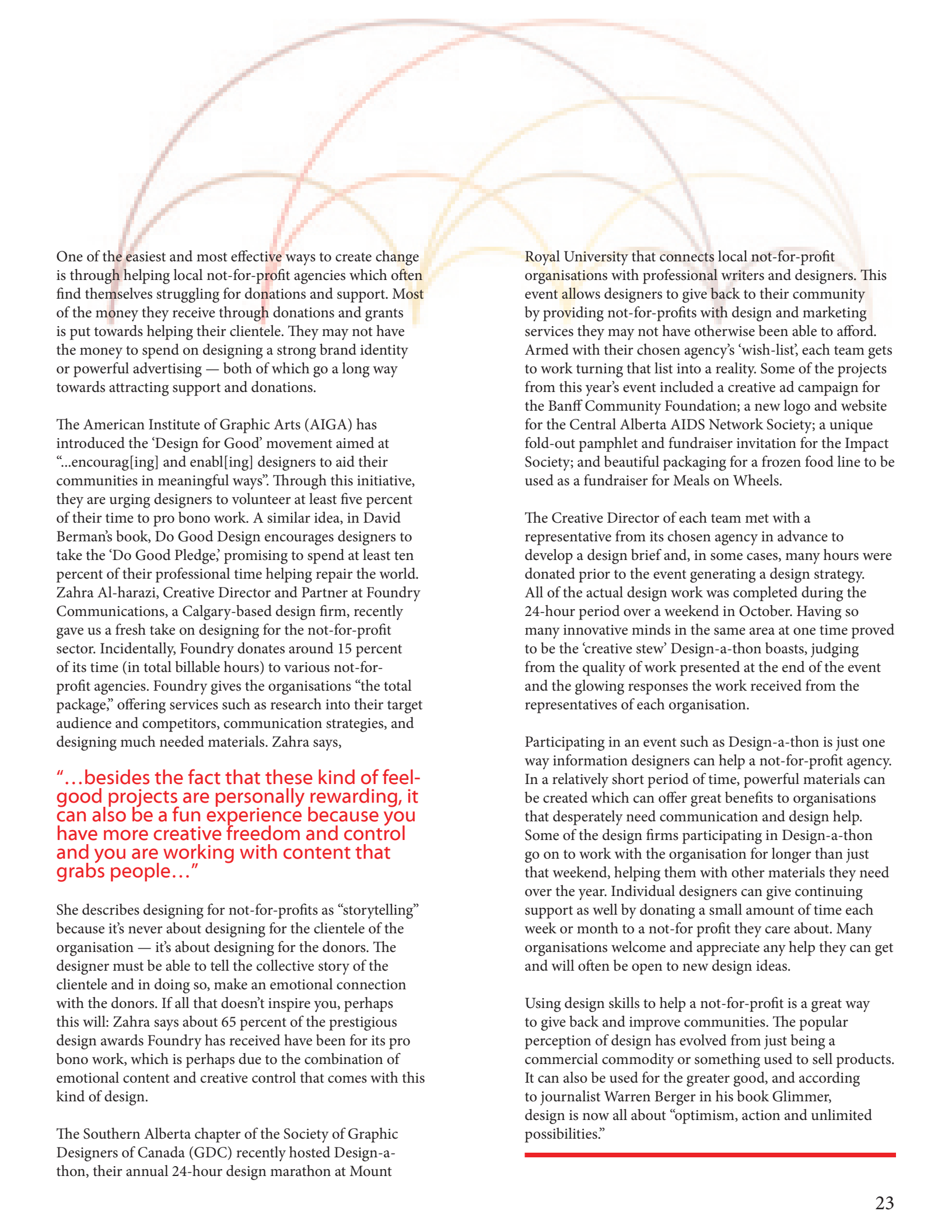
Assisting people, creating awareness, and communicating efficiently all lie at the heart of information design and make information designers valuable allies for any not-for-profit agency.



Photo by Ben Kunz

At the very core of information design is a desire to help people and make the world a better place. A tall order perhaps — but one that is possible. Through teaching, generating awareness, and advocating for their audience, information designers are constantly trying to improve communication and processes through good design. Whether it's with instructions, interfaces, infographics or icons, info designers endeavour to help people both communicate their intended message effectively and efficiently and also process large amounts of complex information. Navigating through a new airport with ease due to good signage, giving your business to a local start-up because it was easy to find something on its website, or donating to a charity for the first time because a poster moved you are some of the subtle ways information designers can assist people.

There are specific traits that lend themselves to the make-up of an information designer. These traits are varied but often include a creative mind, a curious and analytical nature, a logical approach, and an empathetic heart. When paired with the technical skillset and theoretical knowledge of an information designer, it can be an extremely valuable asset to the not-for-profit sector. Important pre-design tasks such as a needs assessment, audience profile, usability study, and website analysis can be placed on the backburner due to budgetary restrictions, but having a designer on board with the capability to complete these activities will be beneficial in the long-term to not-for-profit agencies. This is an arena where information designers can use their skills to the fullest; often with few limitations to the creative process.



One of the easiest and most effective ways to create change is through helping local not-for-profit agencies which often find themselves struggling for donations and support. Most of the money they receive through donations and grants is put towards helping their clientele. They may not have the money to spend on designing a strong brand identity or powerful advertising — both of which go a long way towards attracting support and donations.

The American Institute of Graphic Arts (AIGA) has introduced the ‘Design for Good’ movement aimed at “...encourag[ing] and enabl[ing] designers to aid their communities in meaningful ways”. Through this initiative, they are urging designers to volunteer at least five percent of their time to pro bono work. A similar idea, in David Berman’s book, *Do Good Design* encourages designers to take the ‘Do Good Pledge,’ promising to spend at least ten percent of their professional time helping repair the world. Zahra Al-harazi, Creative Director and Partner at Foundry Communications, a Calgary-based design firm, recently gave us a fresh take on designing for the not-for-profit sector. Incidentally, Foundry donates around 15 percent of its time (in total billable hours) to various not-for-profit agencies. Foundry gives the organisations “the total package,” offering services such as research into their target audience and competitors, communication strategies, and designing much needed materials. Zahra says,

**“...besides the fact that these kind of feel-good projects are personally rewarding, it can also be a fun experience because you have more creative freedom and control and you are working with content that grabs people...”**

She describes designing for not-for-profits as “storytelling” because it’s never about designing for the clientele of the organisation — it’s about designing for the donors. The designer must be able to tell the collective story of the clientele and in doing so, make an emotional connection with the donors. If all that doesn’t inspire you, perhaps this will: Zahra says about 65 percent of the prestigious design awards Foundry has received have been for its pro bono work, which is perhaps due to the combination of emotional content and creative control that comes with this kind of design.

The Southern Alberta chapter of the Society of Graphic Designers of Canada (GDC) recently hosted Design-a-thon, their annual 24-hour design marathon at Mount

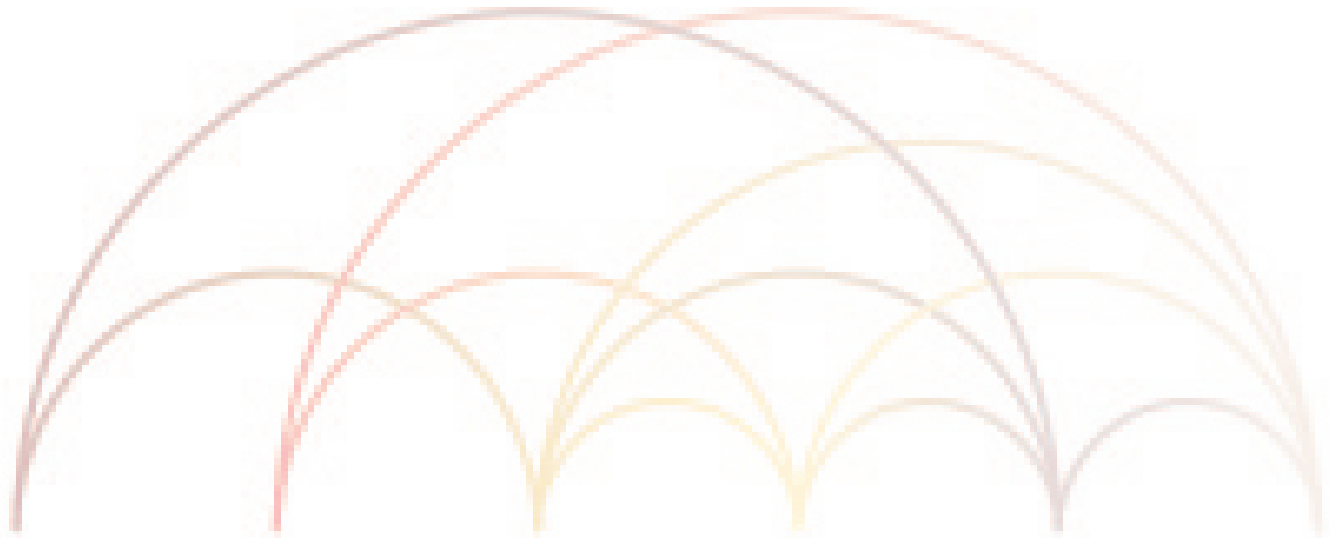
Royal University that connects local not-for-profit organisations with professional writers and designers. This event allows designers to give back to their community by providing not-for-profits with design and marketing services they may not have otherwise been able to afford. Armed with their chosen agency’s ‘wish-list’, each team gets to work turning that list into a reality. Some of the projects from this year’s event included a creative ad campaign for the Banff Community Foundation; a new logo and website for the Central Alberta AIDS Network Society; a unique fold-out pamphlet and fundraiser invitation for the Impact Society; and beautiful packaging for a frozen food line to be used as a fundraiser for Meals on Wheels.

The Creative Director of each team met with a representative from its chosen agency in advance to develop a design brief and, in some cases, many hours were donated prior to the event generating a design strategy. All of the actual design work was completed during the 24-hour period over a weekend in October. Having so many innovative minds in the same area at one time proved to be the ‘creative stew’ Design-a-thon boasts, judging from the quality of work presented at the end of the event and the glowing responses the work received from the representatives of each organisation.

Participating in an event such as Design-a-thon is just one way information designers can help a not-for-profit agency. In a relatively short period of time, powerful materials can be created which can offer great benefits to organisations that desperately need communication and design help. Some of the design firms participating in Design-a-thon go on to work with the organisation for longer than just that weekend, helping them with other materials they need over the year. Individual designers can give continuing support as well by donating a small amount of time each week or month to a not-for profit they care about. Many organisations welcome and appreciate any help they can get and will often be open to new design ideas.

Using design skills to help a not-for-profit is a great way to give back and improve communities. The popular perception of design has evolved from just being a commercial commodity or something used to sell products. It can also be used for the greater good, and according to journalist Warren Berger in his book *Glimmer*, design is now all about “optimism, action and unlimited possibilities.”

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## KOODO NATION

An online hub that connects volunteers with not-for-profits through 'micro-volunteering'. You decide what cause you want to work for, how much time you can commit and what type of work you want to do, from graphic design to copywriting.

**[koodonation.com](http://koodonation.com)**

## POWER TO THE POSTER

A "graphic design democracy project," which calls for designers to choose a subject that moves them and submit poster designs with powerful messages of social change. The posters are then available for the public to print and post in their neighbourhoods.

**[powertotheposter.org](http://powertotheposter.org)**

## DESIGN 21

"Better design for the greater good": this is a 'Social Design Network,' in partnership with UNESCO. Not-for-profits can post their 'wish-lists' or challenges, which designers can choose to undertake. Similar to micro-volunteering but exclusive to members of the design community.

**[design21sdn.com](http://design21sdn.com)**

## VOLUNTEER CALGARY

A local effort to connect volunteers possessing a wide variety of skill sets with not-for-profit organisations that need help. On this site, you can find a range of commitments, from one-day events to long term projects. This is a great way to help your local community.

**[volunteercalgary.ab.ca](http://volunteercalgary.ab.ca)**

## TACTICAL TECHNOLOGY COLLECTIVE

An International NGO working towards progressive social change by providing people with ways to harness and channel information to empower themselves. Their program, 'Visualising Information for Advocacy' uses information design to create change.

**[tacticaltech.org](http://tacticaltech.org)**

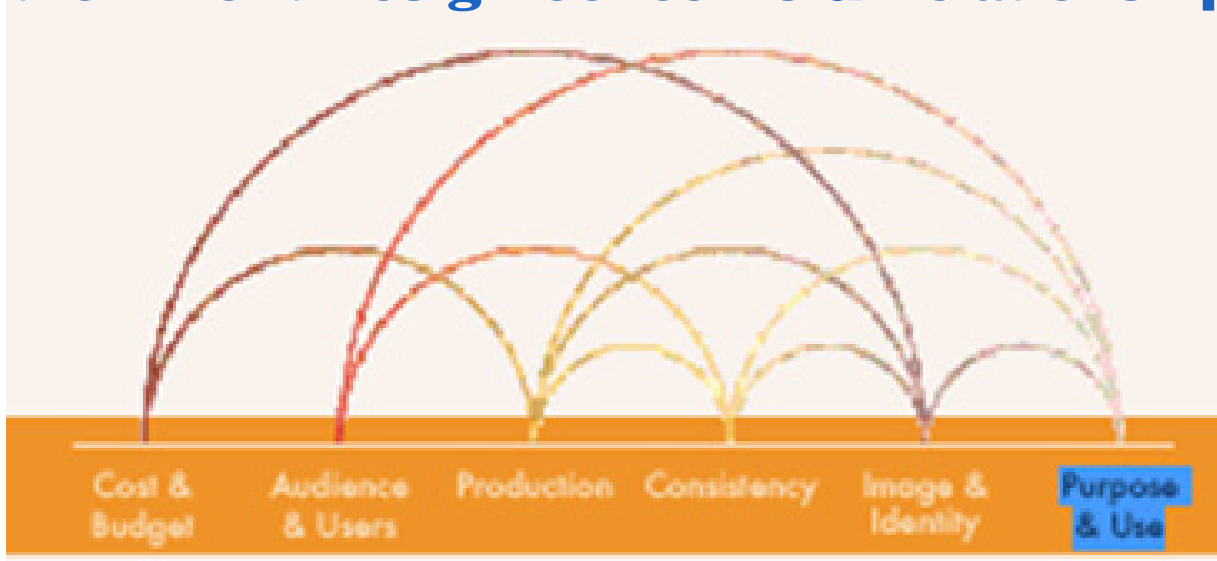
## DESIGNERS WITHOUT BORDERS

An organisation of designers working within the developing world to assist with communication and design needs. They don't believe in 'remote-design,' so the designers must actually be on location to experience the struggles and needs of the community.

**[designerswithoutborders.org](http://designerswithoutborders.org)**



# Not-for-Profit Design Concerns & Relationships



**“What if we looked at the world as a design project — how might we begin to make it better?”**  
~ Bruce Mau (from his Massive Change Exhibit)

Designing for not-for-profit agencies brings about a unique set of considerations and concerns; however, the focus, intent,

and expectations are just the same as any corporate or paying client. Being able to create a solution that fits within the agency’s parameters and expectations is where problem solving and unique design solutions become imperative. Considerations include: cost and budget, audience, use of materials, the identity of the organisation, consistency, and a balance between cost effectiveness and professionalism.

## Cost & Budget

Very few not-for-profit organisations have the money to professionally print letterheads or business cards and often choose to print much of their stationery in-house. When professional printing can be fit into the budget, extravagant printing techniques and materials should be avoided as this can leave donors questioning what their generous contributions are being used for. Materials need to be cost effective yet professional in order to send the right message to recipients. It’s a careful balance of authenticity and discretion.

## Audience & Users

Not-for-profit agencies usually have two unique audiences: clients and donors. Understanding who you are designing for and what the materials you are producing are being used for are imperative to creating a tailored solution that will work.

## Production

Understanding how the materials will be used — not just in the public sphere, but also how the agency plans

to create the materials — is also important. Will they create materials themselves? If so, what tools do they have to create or print them? What is the skill set of the people who will create the pieces? All these questions and more need to be asked and considered when creating for a not-for-profit agency.

## Consistency

A consistent brand presence is crucial for all businesses, and especially beneficial for not-for-profit agencies. When there is a consistent brand presence, the agency’s purpose and messaging also become consistent. Consistent messaging creates brand recognition and with recognition comes familiarity — a must for not-for-profit agencies.

## Image & Identity

An organisation’s brand needs to be recognisable and clear. Not-for-profit agencies rely heavily on donations and as such, the brand must emote the purpose of the organisation, be professional and consistent, and also be applicable to the audience.

## Purpose & Use

Understanding the purpose and use of the materials being created greatly affects the final outcome. It is impossible to design without knowing how each piece will be used and the reason for creating it. The goal of the material may be to attract clientele, to inform the public, or to encourage donations, and this goal must be identified before any design work begins.

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**“Design creates culture. Culture shapes values. Values determine the future. Design is therefore responsible for the world our children will live in.”** ~ Robert L. Peters

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**Blue**  
R: 27  
G: 100  
B: 195



**Green**  
R: 19  
G: 218  
B: 83



**Red**  
R: 208  
G: 62  
B: 12



**Purple**  
R: 177  
G: 26  
B: 218

Myriad Web Pro

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz.,!@()“

**Myriad Web Pro Bold**

**ABCDEFGHIJKLMNOPQRSTUVWXYZ**  
**abcdefghijklmnopqrstuvwxyz.,!@()“**

Minion Pro

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**Minion Pro Bold**

**ABCDEFGHIJKLMNOPQRSTUVWXYZ**  
**abcdefghijklmnopqrstuvwxyz.,!@()“**