PROTO- SINAITIC	PHOENICIAN	HEBREW	ARABIC	EARLY GREEK	LATIN
\sum_{ox}	<	×	١	Α	A
house	7	コ	Ļ	В	В
stick	1	٦	<u>ج</u>	Γ	C
hand	K)	ای	k	K
water	m	מ	م	\sim	M
snake	Ч	ב	ن	Ν	N
eye	0	Y	ع	O	О
Nead	4	٦	ر	P	R
tooth	W	W	س	٤	S
mark	X	ת	ت	Т	T

Alphabets and Abjads

The Latin alphabet is the most widely used script in the world today. It is an adaptation of the first Greek alphabet from 800 B.C. The letters from the Latin alphabet can be traced back to the three-thousand-year-old Egyptian hieroglyphs, as shown in the evolution of alphabets on the left. It is from the Egyptian writing from which the first true alphabet developed in Greece. 'True alphabet' is how alphabets are called in which both consonants and vowels are treated as equal letters. Not all alphabets do this. The Phoenician, Hebrew, and Arabic alphabets use mainly consonants as letters. Most vowels are spoken, not written, or marks are added to note vowels. This kind of alphabet is called 'abjad', after the first letters of the Arabic alphabet. 'Abjads' like Arabic and Hebrew do contain some vowels, like the letter 'a' which is a direct descendent from the Egyptian hieroglyph for ox, but most of the vowels are spoken, not written.

Characters and Letters

Alphabets and abjads have the advantage that they only need a small amount of letters, usually a set ranging between twenty to thirty-five, while logographies can have hundreds or even thousand of characters. Abjads have fewer vowels than true alphabets, but that does not make them smaller. The basic Arabic alphabet has twenty-eight letters, two more than the English Latin alphabet. Each alphabet has evolved to fit its linguistic needs, with its unique letters and diacritics (accents). Cyrillic alphabets tend to contain more letters because they add letters rather than using diacritics. The Kabardian and Abkhaz alphabets from the Caucasus are the largest in the world, with fifty-eight and fifty-six letters, respectively.

The following pages use the Arabic and Chinese scripts as examples to show how different scripts can influence design decisions and visual communication in general.

[←] Evolution of alphabets. Image by Ruben Pater.

 $[\]downarrow$ Apple Emoji. Designed by Apple, based on Japanese emoticons. Apple Computer.

[≥] Egyptian Hieroglyphs from the Louvre. Photo: Echelon Force.

Characters Without a Heart

Research by Yin Aiwen

A culture war is going on between traditional Chinese and simplified Chinese. Taiwan, Hong Kong, and parts of the Chinese diaspora use traditional characters, while simplified Chinese is used in mainland China and Singapore.

Traditional Chinese has a long history, but it was institutionalised during the Qin dynasty in the third century B.C. These elaborate characters could only be read and written by the elite, and some traditional characters needed as much as eighteen strokes to be drawn.

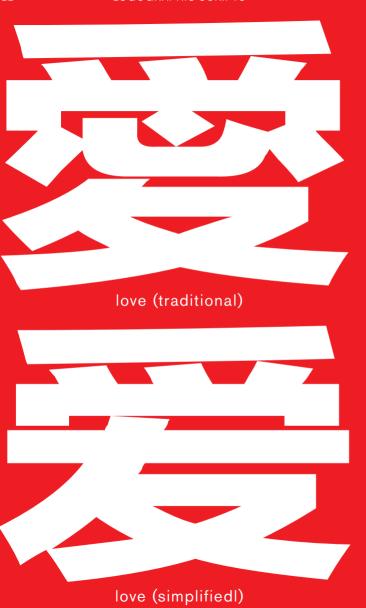
The characters had been simplified for practical reasons in every day use, but they were not made official until Mao's cultural revolution in 1956. The communist regime wanted to standardise the language by introducing simplified Chinese throughout the whole country, which would strengthen the economy and help raise literacy rates.

The first version of simplification was rushed and had inconsistencies in symbol replacement, making it prone to errors. Over decades, rounds of character modifications were needed to correct the inconsistencies. Taiwan and Hong Kong kept traditional characters. They argued that the 'authentic' aesthetic of Chinese writing was lost in the process of simplification.

Proponents of traditional Chinese claim that those who write in simplified characters 'have no heart', because the traditional character for love (\mathfrak{F}) has the symbol for heart ($\dot{\mathfrak{C}}$) inside it, and by simplifying the character (\mathfrak{F}) the heart was replaced by the character for friend ($\dot{\mathfrak{D}}$). As a counterargument, proponents of simplified Chinese argue that those who use traditional Chinese 'have no friends'.¹

This is how the aesthetics of language have played an important role in the cultural tensions between the Chinese-speaking countries.

 Huang, Yuqi. 'Simplified Chinese "Family can't see", "Love has no heart"? Mainlander: Why not "party without darkness", "Team has talent", SETN News Net, 2014. www.setn.com/News.aspx?NewsID=51705.





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80 COLOUR AND GENDER COLOUR AND CONTRAST

Colour and Gender

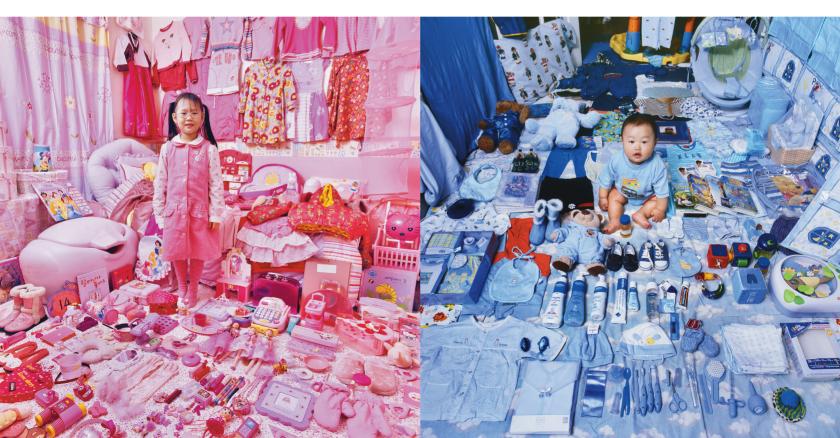
Why is pink the colour for girls and blue the colour for boys? In the nineteenth century, girls and boys were both dressed in white because it was easier to clean. After World War I, department stores in the U.S. realised they could make more money if baby products would be gender specific. Pastels were in fashion, and it was decided that pink would be the colour for boys, and blue for girls.

In the 1940s, market research in the U.S. suggested the colours should be the other way around, and the 'baby boom' generation was the first where the girls were dressed in pink and the boys in blue.¹

Children are not gender aware until age 6 or 7.2 Exposing them to visual stereotypes at an early age creates an artificial view of gender. Now that parents can know the child's gender before birth, gender specific baby items have increased in popularity. Parents stock up on baby merchandise even before the baby is born. Jeongmee Yoon wrote her thesis on colour and gender, and since then has photographed children around the world with their pink and blue things.

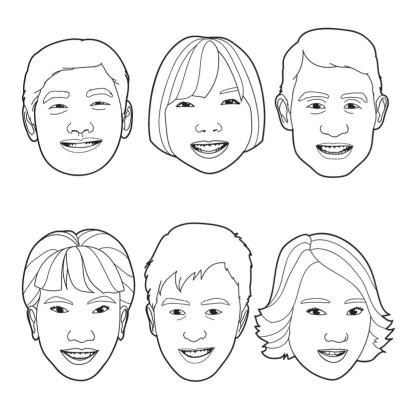
u Sehyun and Her Pink Things, 2007. u Jake and His Blue Things, 2006. Jeongmee Yoon, *The Pink Project*, 2005-ongoing.

- Maglaty, Jeanne. 'When Did Girls Start Wearing Pink?' Smithsonian Magazine. April 7, 2011. www.smithsonianmag.com/arts-culture/when-did-girls-start-wearing-pink-1370097.
- Halim, May Ling and Diane Ruble. 'Gender Identity and Stereotyping in Early and Middle Childhood' in: Handbook of Gender Research in Psychology, 495-525, Springer 2010.



88 COLOURING COLOUR AND CONTRAST 89

CELEBRATE CHINESE NEW YEAR BY COLOURING THE CHINESE PERSON



(Remember, there are Koreans, Japanese, Filipinos, and other Asian races on this page!)
Only colour the Chinese person!

HIPSTER or HOMELESS?

USE MAGIC MARKERS TO MAKE THE MAN ON THE RIGHT INVISIBLE TO SOCIETY!



SECRET HINT: While both hipsters and hobos share a mutual appreciation for beards, old clothing, and dirt, most hipsters give themselves away via their unwavering commitment to colour-coordination



Responsible Images

Designers, advertisers, and photographers have to realise they have responsibilities when they depict men and women. Sexual stereotypes and unrealistic beauty standards cause harm to women and men, and are accomplice to plastic surgery, low self-esteem, and eating disorders. Men grow accustomed to a distorted image of female beauty and sexuality. The excuse 'sex sells' has been debunked by a study at Ohio State University from 2015. It was shown that consumers are less likely to buy a product if an ad has sexual content.⁵

Some brands show initiative in questioning beauty conventions and create new role models. The Dutch retail chain HEMA advertised a push-up bra shown by transgender model Andrej Pejic in 2011.



↑ Doom & Dickson, 'Andrej Pejic for HEMA'. Photo: Wendelien Daan, 2011. Campaign © HEMA.
5. Lull, Robert B. and Brad J. Bushman. 'Do Sex and Violence Sell?' Psychological Bulletin,
Vol 141(5), Sep 2015, 1022-1048.

The New Maasai



If you are travelling in Kenya or Tanzania, you will probably visit a Maasai village and take photographs. Artist Jan Hoek noticed how the Maasai are always photographed the same: jumping in nature while wearing bright red traditional outfits and jewellery.

It is an 'authentic' image of Africa that photographers embrace. With no trace of modernity, frozen in pre-modern times. Jan Hoek recognises that many of the Maasai living in urban areas find the stereotypes less flattering. Instead of photographing Maasai in a different way, he talked with seven Maasai and asked them how they would like to see their own representation.

Whether a member of the Maasai community chooses to adopt a rural lifestyle, an urban lifestyle, or a mixture of both, Jan Hoek's project acknowledges that people represent themselves in a very different way than they are seen through the eyes of outsiders.

Learning from Cave Paintings

Trying to communicate to aliens and future humans pushes the limits of our cognitive abilities. Artist Trevor Paglen makes a comparison with our attempts to understand the cave paintings in Lascaux in France: 'Cave paintings, or even things like pyramids or the Moai of Easter Island, are deeply strange artefacts to us-so strange, in fact, that some of the most popular shows on TV are about trying to "uncover their mysteries."'3

In fact, new mysteries are still being found in cave paintings. In 2010, paleoanthropologist Genevieve von Petzinger discovered reoccurring symbols that could indicate some sort of symbolic language. Similar basic symbols have been found in other caves, as far away as South Africa.

New Horizons

The newest project to communicate to aliens is already under way. Jon Lomberg, who worked on the golden record in 1977, proposed a version 2.0 for the New Horizons spacecraft, which was launched in 2006. People from around the world can send in messages, images, sounds, and video, which will be streamed digitally from the spacecraft once it passes Pluto. This crowdsourced stream of communication from earth will be edited by Lomberg and NASA to ensure no inappropriate messages make the selection.

In the meantime, Voyager I and II have left our solar system, and the golden record is the manmade object farthest-away from Earth. The records will not be out of service anytime soon since they are made to last a billion years.

Trevor Paglen sums up what this all means: 'To design a message for the figure of the alien-alien is by definition impossible; doing so would mean being able to think radically unhuman thoughts, and to imagine beyond the limits of human imagination.'4

- Designing a Nuclear Warning Symbol That Will Still Make Sense in 10,000 Years.' Slate
 May 14, 2014. www.slate.com/blogs/the_eye/2014/05/14/_99_percent_invisible_by_
 roman_mars_designing_warning_symbols_for_the_nation.html.
 Wagner, Steve. 'Introduction to WIPP Passive Institutional Controls', Presentation.
- Sandia National Laboraties, February 27, 2012.
- 3. Thompson, Nato. 'The Last Pictures: Interview with Trevor Paglen.' e-flux, 2012.
- www.e-flux.com/journal/the-last-pictures-interview-with-trevor-paglen.
 4. Paglen, Trevor. 'Friends of Space, How Are You All? Have You Eaten Yet?' Or, Why Talk to Aliens Even If We Can't." Afterall Journal, Issue 32, 2013. www.afterall.org/journal/ issue.32/friends-of-space-how-are-you-all-have-you-eaten-yet-or-why-talk-to-alienseven-if-we-can-t.

Reading Images

How does one learn about cultural differences through images? This test was made to explain visual cultural differences to volunteers in the Netherlands that give language lessons to newcomers.

> Which facial expression fits the expression 'the shadow side of life' best?







Describe the development you see here in a short sentence, using the words trees and thunder.

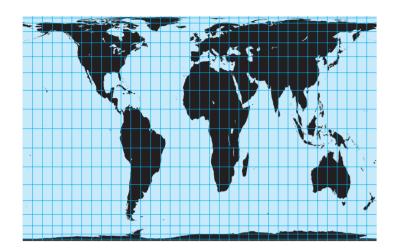


In the first image people from colder climates might be inclined to choose the right expression, as shadow is considered cold and less pleasant. People from hot climates would perhaps choose the left one, since shadow is seen as something that is cooling and positive.

In the second example, a person that reads from left-to-right would say 'the thunder is coming towards the trees', but someone who reads from right-to-left would say 'the thunder is moving away from the trees'. These examples show how culture influences not just the reading of text, but also the reading of symbols.

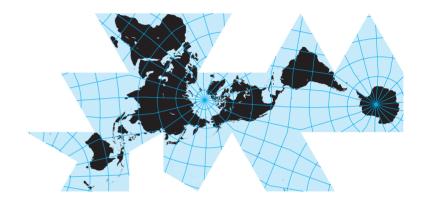
[↑] Image and text from: Introductiecursus voor vrijwilligsters van het Amsterdams Buurvrouwen Contact. Amsterdam, January 2015.

The Politically Correct World Map



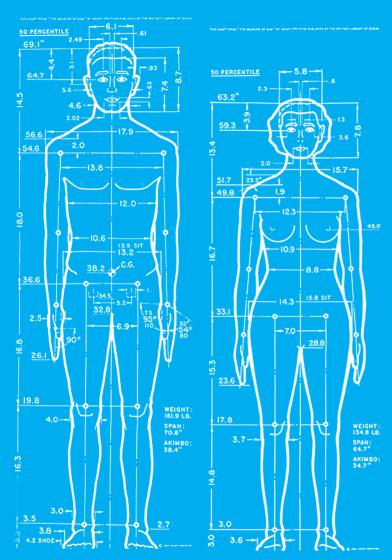
When the German Filmmaker Arno Peters criticised the Mercator map in 1973 for being colonial, he also presented a more equal alternative. His solution was an equal representation of areas, so it could be used to compare the size of continents and countries. It turned out James Gall had done the same in 1855, and the map became known as the Gall-Peters map. Each area on the map represents an equal area of land. It might look strange to those who are used to the Mercator map, where Africa and South America are always depicted too small. The Gall-Peters map is considered one of the best world maps, and it is promoted by the United Nations as a standard and it is used in British schools. Its only flaw is that it distorts the shape of continents to make the areas equal. The arctic appears too flat, and the equator too tall. If you want a map that represents equal area size, this map is the politically correct choice.

The Best Designed World Map



Why do world maps always face north? Why do they need a certain continent in the centre? These are choices that are subject to cultural bias, and they are an unfortunate consequence of the mapmaking profession. That is why in 1943 the designer and inventor Buckminster Fuller designed a world map without top or bottom, left or right: The Dymaxion map. By dividing the map into twenty triangles it could be folded into a sphere-like icosahedron. This way the map could be viewed in a way preferable to the user, not just the way the mapmaker envisioned. Its only flaw is that Fuller was not a cartographer. By using a different longitude and latitude on each triangle the directions are seriously flawed, and areas over multiple triangles are distorted. The Dymaxion map might not be very useful for serious cartography, it does show all continents interconnected and offers a vision for a post-nationalist world. The 'one island earth', as Fuller called it.⁴

180 BODY STANDARDS INFORMATION GRAPHICS 181



↑ Image from: Dreyfuss, Henry. *The Measure of Man.* Whitney Library of Design, 1959. Copyright 1993 Henry Dreyfuss Associates.

Standards and Deviants

The average woman stands 160.5 cm tall and weighs 62.5 kg. The average man is 175.5 cm and weighs 78.4 kg. If these standards do not apply to you, you are not normal by design standards.

The drawings on the left are from *The Measure of Man* from 1959, written by designer Henry Dreyfuss. He implemented body measurements in product design on a large scale, and thanks to him we are less likely to hurt ourselves by designed objects. Dreyfuss and his team drew all sorts of measurements for seating, standing, and driving, which have become international standards ever since. His book has been reprinted as *The Measure of Man and Woman* and is still used as a textbook at design schools and universities.

Standards are useful for mass production, but they also create a false sense of truth. The image on the left from his book is in many ways problematic. It projects a binary view of gender, ignoring the variety of gender types which make up our society. In 2014, Facebook introduced 58 choices for gender, among which: androgyne, cisgender, genderqueer, bigender, mither, pangender, and transgender.²

The measurements of men in Dreyfuss' book are based on data from the U.S. military, which means that bodies that are outside of the military norm are simply not included. By using measurements of young military men, Dreyfuss states that the ideal body type of a man is a young and physically fit body of West European descent. Not everyone in the world shares these body standards, and Dreyfuss' design standards that are based on that (idealized) body type are hardly universal. For instance, the average female in Bolivia is 142.2 cm and the average male in the Dinaric Alps is 185.6 cm.

Dreyfuss explained his flawed standards as such: 'It is not customary to design for everyone. The few at either end of the normal curve may be so extreme that an encompassing design could become too large or expensive to produce.'

^{1.} Tilley, Alvin R. *The Measure of Man and Woman*. Whitney Library of Design, 1993. 10.

Goldman, Russell. 'Here's a List of 58 Gender Options for Facebook Users.' ABC News. February 13, 2014. abcnews.go.com/blogs/headlines/2014/02/heres-a-list-of-58-gender-options-for-facebook-users.