RAILWAY SANS

is a previously unpublished work, originally digitised by my late friend and partner, the typographer Justin Howes, in 1994, some seventy-eight years after the first appearance of Johnston's 'Railway' type in 1916. Using an old SPARC station, some bitmap-to-vector software which I'd written which output in ASCII Type 3 font format and a Crosfield drum scanner to initially capture the outlines, these were then converted from bitmaps into vector font data.

Justin had wanted to capture and make an experimental font of this version, drawn directly from Johnston's original artwork of 1913–1915 as part of the book he was writing on Edward Johnston and other Johnston-related research, and later revisions and variations which were originally the only characters in the typeface in various samples and working proofs kindly lent by Andrew Johnston. These included the famous arrows and alternate forms, which are contained in this digitised version.
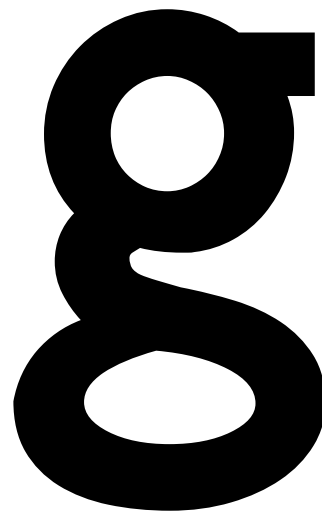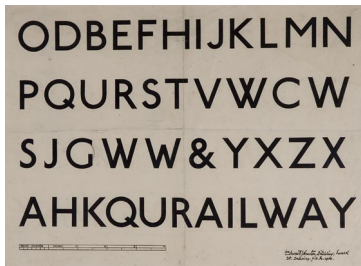
Johnston (or Johnston Sans) is a humanist sans-serif typeface designed by and named after Edward Johnston. It is well-known for its use by Transport for London. Commissioned in 1913 by Frank Pick, Commercial Manager of the Underground Electric Railways Company of London

Figure 1: Johnston Sans

Seven years after Justin's tragically premature death (and 96 years since Edward Johnston's revolutionary sans, "Railway", was first revealed to the world), I've decided to release an open source version of the "fount". I've done very little to his original work except to minimally adjust the kerning and add a few pictorial glyphs, along with composite accented forms. I've been using the very excellent *FontForge* and I've included the .sfd spline database file from which the font has been edited and compiled. This font is licensed under the terms of the Open Font License.

The face was commissioned between 1913 and 1915 by Frank Pick (1878–1941), Commercial Manager of the Underground Electric Railways Company of London, UERL, (also known as 'The Underground Group'), as part of his plan to strengthen the company's corporate identity.

Frustrated at the diversity and seemingly endless variations of poor or unsuitable typefaces that were, at that time, in use across the system, one of his first key actions was to introduce a standardised approach to advertising and lettering.

Pick's brief to Johnston was essentially that a typeface was needed that would ensure that the Underground Group's posters would not be mistaken for advertisements; it should have "the bold simplicity of the authentic lettering of the finest periods" and yet "belong unmistakably to the twentieth century". Johnston's new Sans face first appeared in a poster of July 1916. Inspired by the proportions of classical Roman lettering, based on square and circular forms, it is a vehicle of bold clarity and a perfect example of typography as a powerful,
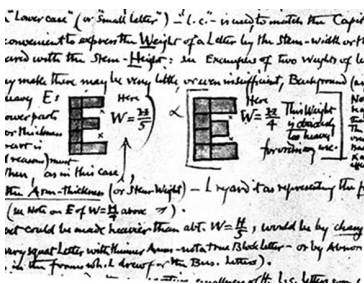
authoritative information tool. It has been used, almost unchanged in essence, continuously and timelessly in signage, posters and publicity for nearly a century.

In 1933, The Underground Group was absorbed by the London Passenger Transport Board and the typeface was adopted as part of the London Transport brand. The typeface was originally called Underground. It became known as Johnston's Railway Type, and later, simply, Johnston or New Johnston Sans. Today, Transport for London uses updated versions in many weights of the original face, known as *New Johnston Sans*. This is not commercially available, except under strict TfL license. Railway is not based on or derived from the official New Johnston Sans in current use by Transport for London. Instead, it predates New Johnston by sixty-three years.

why this version?

This version of the original Johnston typeface of 1916, in both TrueType and OpenType format, will work with Macs, Linux and Windows computers and will provide authenticity when recreating Underground signage. This is why I am making this version available for enthusiasts who seek an authentic-looking digital version of the original Underground type. **It is not derived from the Banks's and Miles New Johnston Sans** (so brilliantly realised by Eiichi Kono, 1979). Nor is it a copy or in any way a facsimile of any existing commercial typeface, such as p22's excellent version, Underground. It is rendered entirely from proofs done by Edward Johnston himself at the time the face was commissioned. **No copyright infringement is intended**.

This is a *display* face, designed to be used at ≈72 point or larger. There is no italicised or bold (Heavy) version. When used at display sizes the font will be the correct optical balance for optimum legibility.

Figure 2: Gants Hill Station. Notice the arrows …

FURTHER READING

- **Howes, Justin** (2000). *Johnston's Underground Type.* Harrow Weald: Capital Transport. ISBN 1-85414-231-3.

- **Green, Oliver**; **Rewse-Davies, Jeremy** (1995). *Designed for London: 150 years of transport design.* London: Laurence King. pp. 81–2. ISBN 1-85669-064-4.

- **Barman, Christian** (1979). *The Man Who Built London Transport: A Biography of Frank Pick.* David & Charles. p. 43. ISBN 0-71-537753-1.

- **Banks, Colin** (1994). *London's Handwriting: the development of Edward Johnston's Underground railway block-letter.* London Transport Museum. ISBN 185476098x.

- **Kono, Eiichi** (2004) *(Pen to Printer – New Johnston Sans).* (University of Brighton, Arts Faculty Staff member page).

- *Font Designer – Edward Johnston.* **Linotype GmbH**. Retrieved 2007–11–05.

Greg Fleming, July 2012

ABCDEFGGHIJKKLMNOP
QQURSTUVWWWXXYZ
abcdefghijklmn
opqqrstuvwxyz
£!?&* "" , . : ;
1234567890

Railway – *partial rendering*

G J K QU W X
J
Q W

Railway Alternates

KEYMAP

In the main font (**Railway**), the alternate characters and arrows are mapped to Greek and Mathematic character positions as follows:

DESCRIPTION	SYMBOL	KEYSTROKE(S)
Right Arrows	⟫○→ ⟫→	» *or* →
Left Arrows	←○⟪ ←⟪	« *or* ←
Alternate QU Ligature	QU	Y
Edward Johnston Calligraphic Initials (just for fun)	∉	α
Original Calligraphic Roundel		γ
Edward Johnston signature (just for fun)	*Edward Johnston*	β
Alternate upper-case G	G	Γ
Alternate upper-case K	K	K
Alternate W – v1	W	Σ
Alternate W – v2	W	ς
Alternate X	X	Ξ
Alternate lower-case long-tailed *q*	℺	υ

However, these arrows and alternates are also available in the **RailwayAlternate** font in more conventional (and possibly more accessible to certain software) locations. The individual left-right arrow elements (arrow-head, roundel and arrow-tail) are composed of individual characters which when placed together, will form the arrows complete. For example: **klm** will form a right-arrow with roundel and **nop** will form a left-arrow with roundel.

Note: in some applications, there may appear to be a slight space between the individual arrow elements on-screen, but when printed, they will appear solid:

DESCRIPTION	SYMBOL	KEYSTROKE(S)
Right Arrows	⟫○→	lower-case k, l and m
Left Arrows	←○⟪	lower-case n, o and p
Alternate QU Ligature	QU	Q
Edward Johnston Calligraphic Initials (just for fun)	∉	lower-case e
Original Calligraphic Roundel		lower-case r
Edward Johnston signature (just for fun)	*Edward Johnston*	lower-case f
Alternate upper-case G	G	G
Alternate upper-case K	K	K
Alternate W – v1	W	W
Alternate W – v2	W	lower-case w
Alternate X	X	X
Alternate lower-case long-tailed *q*	℺	lower-case q