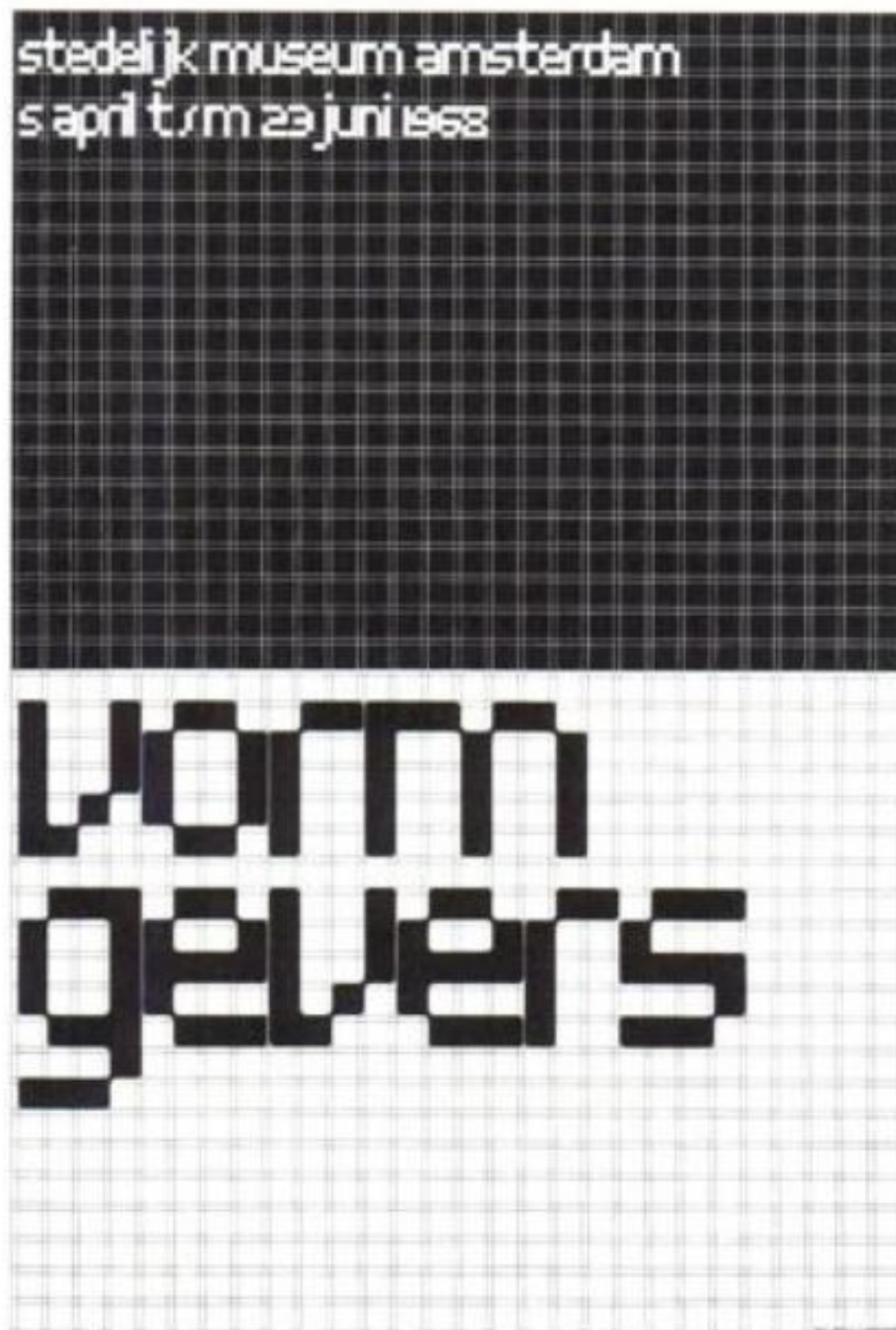# Functionalism and the grid

The Dutch movement, or mode of operation, that in the 1960s became known as 'functionalism', was in many ways a continuation of the research carried out by the pre-war pioneers of functionalist graphic communication. For more than a decade after 1945, Dutch graphic designers largely ignored this modernist heritage. The leading figures of the pre-war movement – Schuitema, Kiljan and Zwart – remained active throughout the 1950s but their output was small and had little impact on the development of the profession. The teachings of Schuitema and Kiljan in The Hague were of invaluable importance to individual students who in turn became teachers and designers (as well as photographers, writers, television directors, etc.); but these pupils lacked the charisma and the vigour to bring Dutch rationalist design back to the fore. Besides, the 1950s in Holland did not provide an ideal climate for innovation. It was a period of restoration and middle-class tastes; advertising and graphic design were expected to be reassuring and friendly – painterly, craftsman-like and colourful.

Towards 1960, the climate changed. The Nieuwe Zakelijkheid – a democratic and functionalist approach to building which had started around 1920 and was resumed after the war – appealed greatly to a younger generation of graphic designers. Their main influence, however, was the International Style of graphic design, which in Holland was mostly referred to as Swiss Style or Swiss Typography.

Switzerland – which had remained neutral during both World Wars – was the only country in Europe where functionalist graphic design had been able to transcend its initial experimental phase and develop into a national visual language. Designers such as Karl Gerstner, Josef Müller-Brockman and Max Bill proposed a reductive, unadorned graphic design that aimed for objectivity and efficiency. Their purist ideals did not exclude a strong sense of beauty. Swiss design managed to obtain maximum aesthetic effect by the simplest means: black-and-white photography, unjustified, homogeneous blocks of sanserif text, a conscious use of white space as a compositional element and the grid as a guiding principle. Towards the end of the 1950s, the Swiss 'school' even gave birth to its own typefaces: *Helvetica/Neue Haas Grotesk* by Max Miedinger and *Univers* by Adrian Frutiger. Swiss typography became the International Style when its principles were adopted in the United States, where the soil had been prepared by Bauhaus-affiliated German designers who had fled there in the years preceding the Second World War.

In Holland, the Swiss were greatly admired by many designers. But not many were inclined to emulate them, let alone appropriate their principles and procedures in order to develop a Dutch, pragmatic version of the functionalist working method. For this achievement, all credits go to the two graphic designers who, in 1963, co-founded Total Design: Benno Wissing and Wim Crouwel.

Functionalism and geometry

The pragmatism of Benno Wissing

Born in 1923, Benno Wissing trained as a painter at the Art Academy in his native city of Rotterdam. After 1945 he became active in the Rotterdam art world, co-founding a cultural centre which united artists, architects and film-lovers. Later he was a member of the Liga Nieuw Beelden (League of the New Image) which advocated the integration of architecture, art and design. When travelling through Eastern Europe, Wissing had become aware of the relativity of modernist ideals: 'I visited Yugoslavia. That made a tremendous impression on me ... The confrontation with the bare necessities of life was so terribly direct, that I soon understood that there were more elementary things than the whole elementarism of the functionalists in Holland after the war.' [1]

From 1949 to 1966 Wissing worked as a designer for the Boymans Van Beuningen Museum in Rotterdam. His posters were only sparsely illustrated; he let the typography do most of the work, choosing freely from the large and diverse collection of display faces at the City Printing Office. From the outset his approach to structuring information was very systematic; even his earliest posters and catalogues, when he was an absolute beginner, show an underlying grid. Occasionally, Wissing seems to have designed his own letterforms: a narrow face based on ovals and circles for a Henry Moore exhibition (1953), two-tone lettering constructed with triangles and squares for a Frank Lloyd Wright poster (1952). By the time he began working for the industrial sector, around 1958, his typographic work had evolved into a straightforward, clear style which used the grid as a basis for a dynamic layout. In 1962 Wissing teamed up with interior designer Kho Liang Ie for his biggest assignment so far. He was invited to design the directional signs for the interior of the new Schiphol Airport. A period of intensive research resulted in a solution which was to become a shining example of rational signposting. Illuminated signs – using *Akzidenz Grotesk*, with no capitals except for the gate numbers – were attached to the ceiling, so that passengers would not block each other's view. All decisions were made for pragmatic, not ideological reasons. The one question Wissing and Ie had asked themselves was about why nervous, hasty passengers managed to lose their way in other airports and how this could be prevented at Schiphol. [2]

The founding of Total Design

During the preparation of the airport project, Wissing became involved in the creation of the first multi-disciplinary large-scale design studio in the Netherlands. Its name was a programme in itself: TD Association for Total Design. Wissing's creative partners were Friso Kramer, an industrial designer, and Wim Crouwel who, like Wissing, had designed numerous trade fair stands and exhibitions but was mainly regarded as a graphic designer. Total Design took its cues from similar design firms in Switzerland, Britain and the United States. Like its models, Total Design would take up large projects which involved many disciplines and specializations, distributing the various aspects of the work among several teams. The approach to design projects was systematic and, more often than not, modular. 'Friso, Wim and I had seen very quickly that, in dealing with large projects, a number of things had to be normalized so that the arrangement of information could be more easily programmed, and more time would be available for handling intrinsic problems. If there were to be variations in the final product we preferably searched for variations within a modular system, so that mutual relationships, inter-connection, clustering and related industrial production would not need follow-up care. The principle was applicable in architecture, industrial design and graphic products. That's the history of the birth of the grid! A cuckoo in the nest?' (Benno Wissing in 1983) [3]

One of Total Design's most systematic and most thoroughly researched typefaces was conceived by Wissing: the alphabet for the Rotterdam events venue Ahoy' (1970). The two other designers on the team were Hartmut Kowalke and Josephine Holt. Apparently, much of the actual research and design work was done by Kowalke, a young German designer who had been 'discovered' by Wissing while presenting his graduation project at the Ulm Academy. The Ahoy' alphabet was not the first modu-
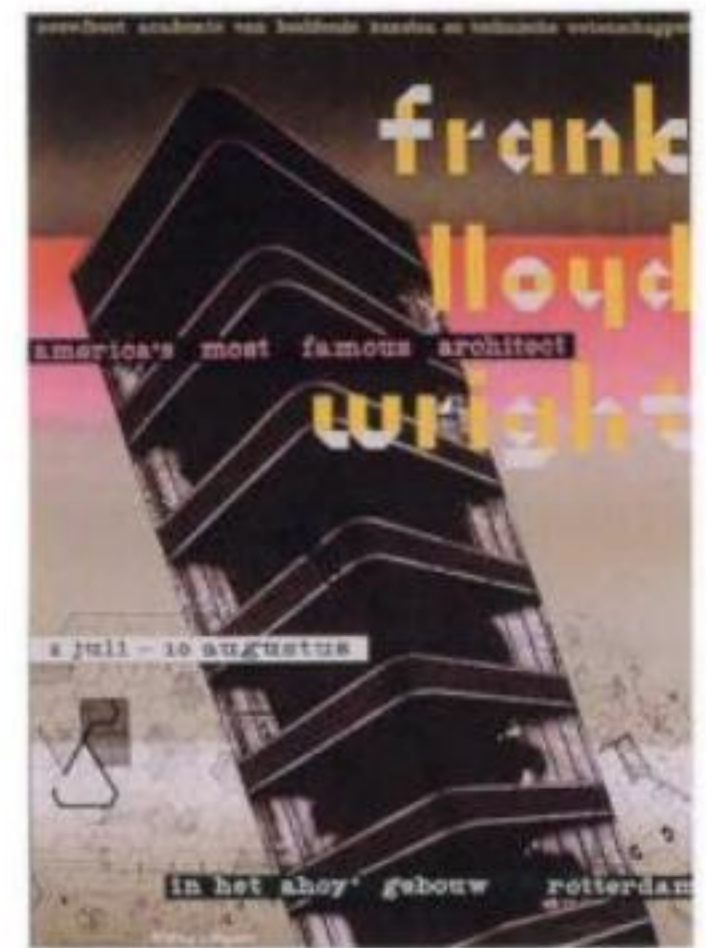
* Wim Crouwel's famous poster for the 1968 Vormgevers (Designers) exhibition at the Stedelijk Museum. The grid that Crouwel had been using for his designs of the museum's catalogues became the poster's central theme as well as the guideline for the alphabet that was drawn for it.

* Benno Wissing, poster for a Frank Lloyd Wright exhibition at the Ahoy' centre, organized as part of the 1952 centennial celebrations of the Rotterdam Academy of Arts and Technical Sciences. Wissing used a specially designed alphabet of constructed letterforms; the triangles and squares refer to basic shapes in Wright's work.

1   Kees Broos, *Ontwerp: Total Design*, Utrecht 1983, p 7.

2   Cf. Dingenus van de Vrie (ed.), *Benno Wissing*, Rotterdam 1999, pp 64 – 65; see also: Ben Bos, 'An interview with Benno Wissing' in Crouwel and Bos, *Benno Wissing*, Amsterdam 1993.

3   From a long letter to Kees Broos, who was then preparing Total Design's twentieth anniversary book: Broos 1983 (cit.), p 11.
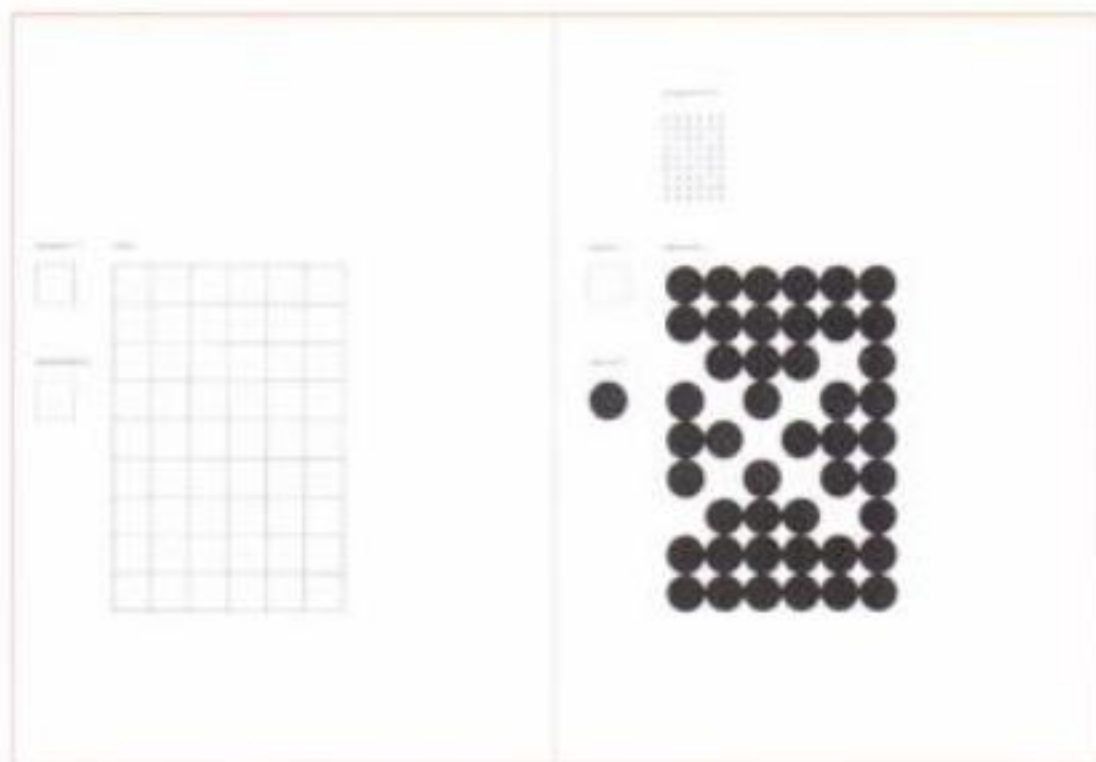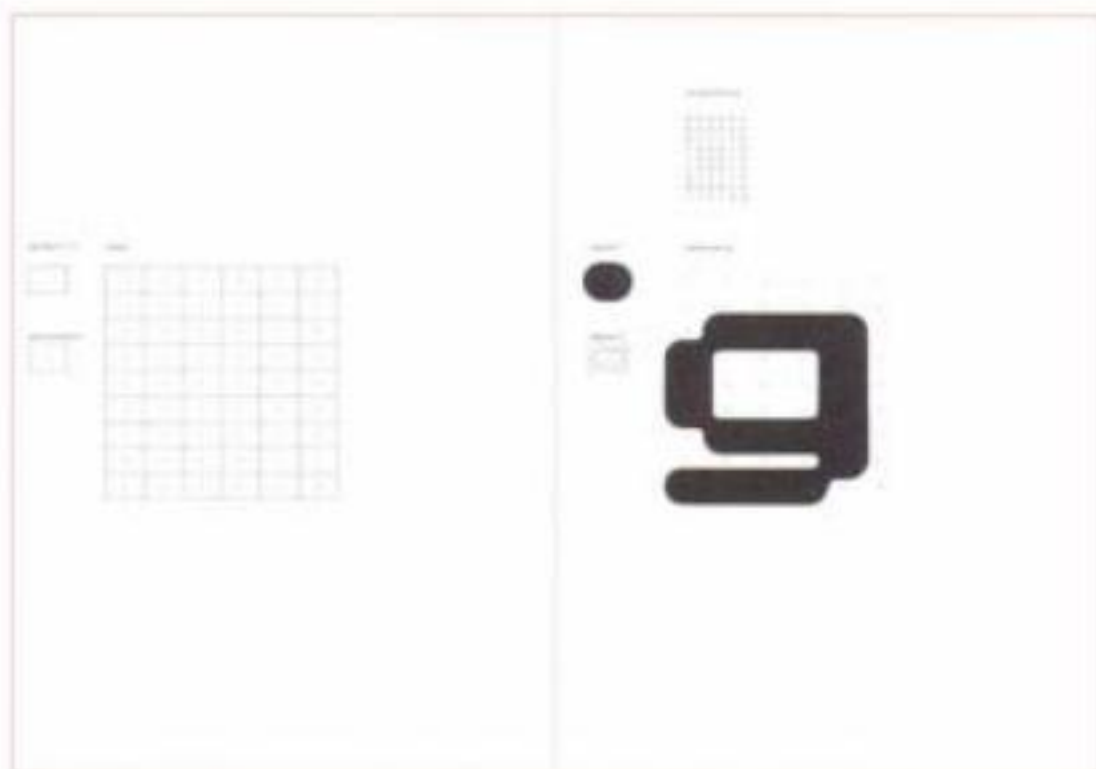
lar or grid-based alphabet conceived at Total Design: more examples will be shown below. But in this case, the use of the grid was based on purely functional consider- ations. The Ahoy' is a large, flexible space for sport, concerts and exhibitions that can accommodate audiences from a few dozen up to over 10,000. Initially the sign- age was conceived to be equally flexible. Several audience mobility programmes were tested in a transparent scale model. A system was proposed to electronically create variable texts by making individual lamps light up to form letters. Hence the idea to use simple, matrix-based letterforms, for which several models were tested with on-off (1-0) schemes. While the illuminated news trailer (*lichtkrant* in Dutch) was the original model for this proposal, the resulting typefaces were presented as the outcome of a process which took into account 'the possibility to produce letter- forms in all kinds of ways, without a loss of characteristics.' All alphabets were based on a 6 by 9 grid; by varying the 'signal' for each unit or pixel (square, circle or ellipse), it would be possible to generate different typefaces or styles. The signal could be 'chosen according to the circumstances and is not limited to any particular shape or colour, size or dimension.'[4] Unfortunately the electronic signalling system proved too expensive; eventually the signage was produced with conventional fixed signs. But the matrix-based lettering was retained, resulting in letterforms which were rather unusual and immediately recognizable.

Modular structuring and grids remained the trademark of Total Design's output throughout the 1960s and '70s – from interior projects to logos and single letters. The 'authorship' of the grid has often been credited to Wim Crouwel, who was nick- named 'the system general'. In 1980, Emil Ruder paid the ultimate tribute, writing 'If the typographic grid started with the Bauhaus, the movable grid with Karl Gerstner, then the total grid can be attributed to Wim Crouwel.'[5] For those involved in TD, it has always been clear that grid-like systems were the outcome of a group process; if there was one 'system ideologist' within TD, it was Wissing rather than Crouwel. Nevertheless, of all the founding partners of Total Design, Wim Crouwel probably had the most complex attitude towards rationalizing and structuring design.

Wim Crouwel and Dutch Calvinism

Wim Crouwel (1928) is from Groningen, the northern Dutch province known for its down-to-earth mentality and ethic of hard work. He trained as a painter, but was soon attracted by the ideals of the Nieuwe Zakelijkheid movement in design and architecture – *zakelijk* meaning both 'objective' and 'businesslike', or 'no-nonsense'. In 1951, he moved to Amsterdam to take evening classes at the graphic design department of the IVKNO or Instituut voor Kunst Nijverheids Onderwijs (Institute of Applied Arts Education; later the Rietveld Academy). Significantly, his typography teacher was Charles Jongejans, who had been a student of Schuitema and Kiljan at the Hague Academy. In the daytime Crouwel designed exhibition stands for a specialized firm. Occasionally he worked for Dick Elffers, one of the most successful graphic designers in post-war Holland. Elffers had been assistant to both Paul Schuitema and Piet Zwart, but had abandoned the dogmas of modernism and moved on to a more painterly approach.

During this period Crouwel first made contact with Swiss typography. In 1952 he met Karl Gerstner; he met Gérard Ifert and Ernst Scheidegger the following year. 'Crouwel was impressed', Hugues Boekraad wrote, 'by the strategically structural approach, by the daring and clear typography and by the minimalism of the formal elements they used.'[6]

The formal solutions proposed by the Swiss designers provoked in Crouwel a kind of 'shock of recognition'. His affinity with their sense of order, their aesthetics of the elemental, was not merely professional. It touched on a very personal internal paradox. 'I have such a compulsion to create a certain order in everything,' he confided to Max Bruinsma (*Items* magazine) in 1993[7]; colleagues at TD have caught Crouwel cutting the slices of cheese on his sandwiches into exact squares. But there is also a flamboyant, almost dandyish side to him: for decades he has been driving British sports cars such as MG, AC and Morgan, he wore tailor-made suits as soon as he could afford them and is an admirer of expressive works of art and design which have no relation whatsoever to the functionalist principles he has advocated so enthusiastically for the past 40 years. At 24, he made dynamic abstract drawings which betray his admiration for the work of Alexander Calder and Ben Nicholson, with many lush curves and a precise balance between solid and feathery forms. The costume designs he did at the age of 26 for a production of *Peer Gynt* by Theater, a company from Arnhem, were downright sexy.

Why did Crouwel renounce this more joyful, sensuous aspect of his talent when he turned to the grid? His purist attitude can be traced back, at least in part, to the influence of Calvinism, that typically Dutch, stern brand of Protestantism. 'I am a functionalist who has had too much trouble with aesthetics!' said Crouwel in the *Items* interview – an analysis he has made on other occasions too. When I asked him if it wasn't the other way around, that perhaps he was, also, an aesthetician who was

4   *Geprogrammeerde belettering Ahoy'*, Amsterdam 1970, an internal publication issued by Total Design. Additional information provided by Hartmut Kowalke.

5   In Helmut Schmidt, *Typography today*, Tokyo 1980, p 74. See also Huygen and Boekraad, *Wim Crouwel – Mode en module*, Rotterdam 1997, p 15.

6   Hugues Boekraad, 'Lines. About the designer Wim Crouwel', in *Affiche* 7, September 1993, p 58. Dutch version published, with modifications, in Huyghen and Boekraad 1997 (cit.).

7   Max Bruinsma, 'Wim Crouwel interview' in *Items* 5/6, December 1993 (with English translation in supplement).

Catalogue of an exhibition of work by the painter Edgar Fernhout at the Van Abbe Museum, Eindhoven, 1963. The letterforms were inspired by the vertical brush strokes Fernhout used in his abstract landscapes. The same lettering was used for the poster but in different, more earth-like colours.

Exhibition catalogue for the Stedelijk Museum, Amsterdam (1964), designed with a constructed variation on a condensed grotesque. Crouwel had used a similar letterform much earlier, in the 1957 Hiroshima poster (cf. *Wim Crouwel Alphabets*, 2003, pp 40 – 41).
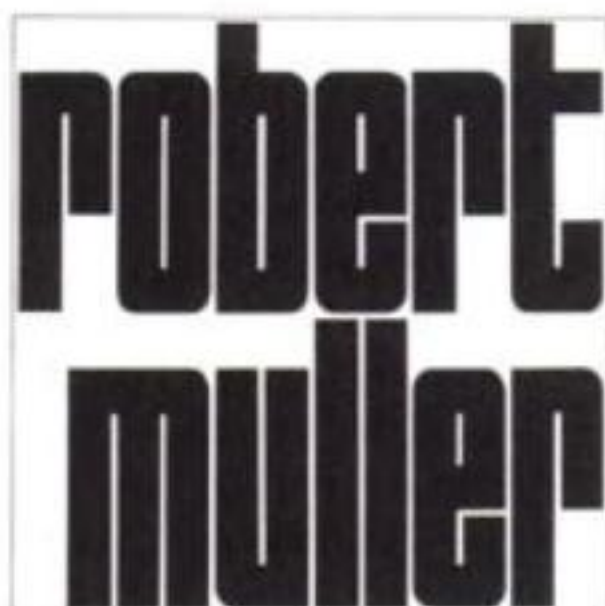
bothered too much by Calvinism, he answered, 'Exactly. It certainly has to do with a Calvinist background, with that kind of morality which forbids you to abandon a path once taken. ... Being consistent with oneself was always a principle which I held in extremely high regard. It would happen to me that I established a certain line, a system or grid, and when designing things that were based on it, realized that the result would be better or more beautiful if I deviated from that line; I forced myself not to do so because I thought being consistent throughout the project was more important than the success or beauty of a single part. Sometimes it was hard to forgive myself. Rather silly, if you think about it.'[8]

As Hugues Boekraad has pointed out[9], it is difficult to interpret Crouwel's position and body of work without taking into account the self-image he has projected in his writings and earlier interviews. There is little doubt that he is the single most influential graphic designer in post-war Holland, and has been instrumental in turning the Netherlands into a laboratory of rational graphics. But while he has always tended to present himself as a straightforward embodiment of post-war modernism, filtering out inconsistencies, the real picture is more complex.

In the *Items* interview, Crouwel summed up his functionalist ideals: '... Certainly, there is a social vision behind it. The primary thing that fascinates me about Functionalism is its spirituality. My guiding principle is that in a certain sense design must order things, in order to provide people with the greatest possible clarity. Their spiritual development, and raising society to new levels, is served by this form of normality, this no-nonsense simplicity of Functionalism.'[10] Yet as a designer of telephone directories, corporate identities, catalogues and posters, Crouwel has not always limited himself to the purest, simplest and most 'normal' solutions. There was sometimes a touch of madness to his method, hidden in uneasy colour schemes, in hazardous juxtapositions of abstract forms, type and imagery.

More importantly (at least for our purpose) there were the letterforms he invented: type that was not a variation on the rational grotesques he admired and used almost exclusively (mainly Akzidenz Grotesk and Univers), but display faces which, although being based on a grid, were also highly unusual, quirky and personal.

Wim Crouwel and type design

Crouwel wrote in 1980: 'Experimental typography and functional typography are, up to a certain point, opponents of each other. Experimental typography is not only reflecting a cultural pattern, but gives primarily a self-reflexion. As soon as we carry out experiments in order to improve a certain typographical solution, that means as soon as we do research, we cannot speak of experimental typography; experimental typography never results in a solution for a certain problem.'[11]

Typefaces are, of course, the bricks of any typographical solution. In 1950s Holland, the advocates of modernist typography found it hard to get hold of typefaces which had the neutrality they wanted. The Amsterdam Type Foundry had a virtual monopoly in the printing world, and the firm's only sanserif typeface with modernist aspirations was *Nobel* – that hybrid reworking of *Berthold Grotesk*. 'We hated Nobel', says Crouwel, 'because it was a characterless piece of trash, a bad copy of *Futura*. We would have liked to have used the original Berthold Grotesk. We tried to find samples of Akzidenz Grotesk. But the publisher, Bauersche Gießerei, only had very limited distribution in the Netherlands because the Amsterdam Type Foundry controlled the market. For small jobs I used to cut out single letters and glue them in position – I have done that in certain posters for the Van Abbe Museum. I had discovered Akzidenz Grotesk when collaborating with Gérard Ifert on a large exhibition presenting the United States' Marshall Plan to the Dutch public. Ifert worked for the United States Information Service in Paris. They used big rubber stamps of Akzidenz, typographic stamps with which they printed their displays. I could not afford to buy one of those sets, they were completely hand-made and frightfully expensive; but on some occasions I was able to borrow them.'[12] So in the late 1950s, Helvetica and Univers came as gifts from the gods. Crouwel used Univers for many jobs, including the Dutch telephone directory, which he redesigned with Jolijn van de Wouw in 1977, setting the listings in lowercase only.
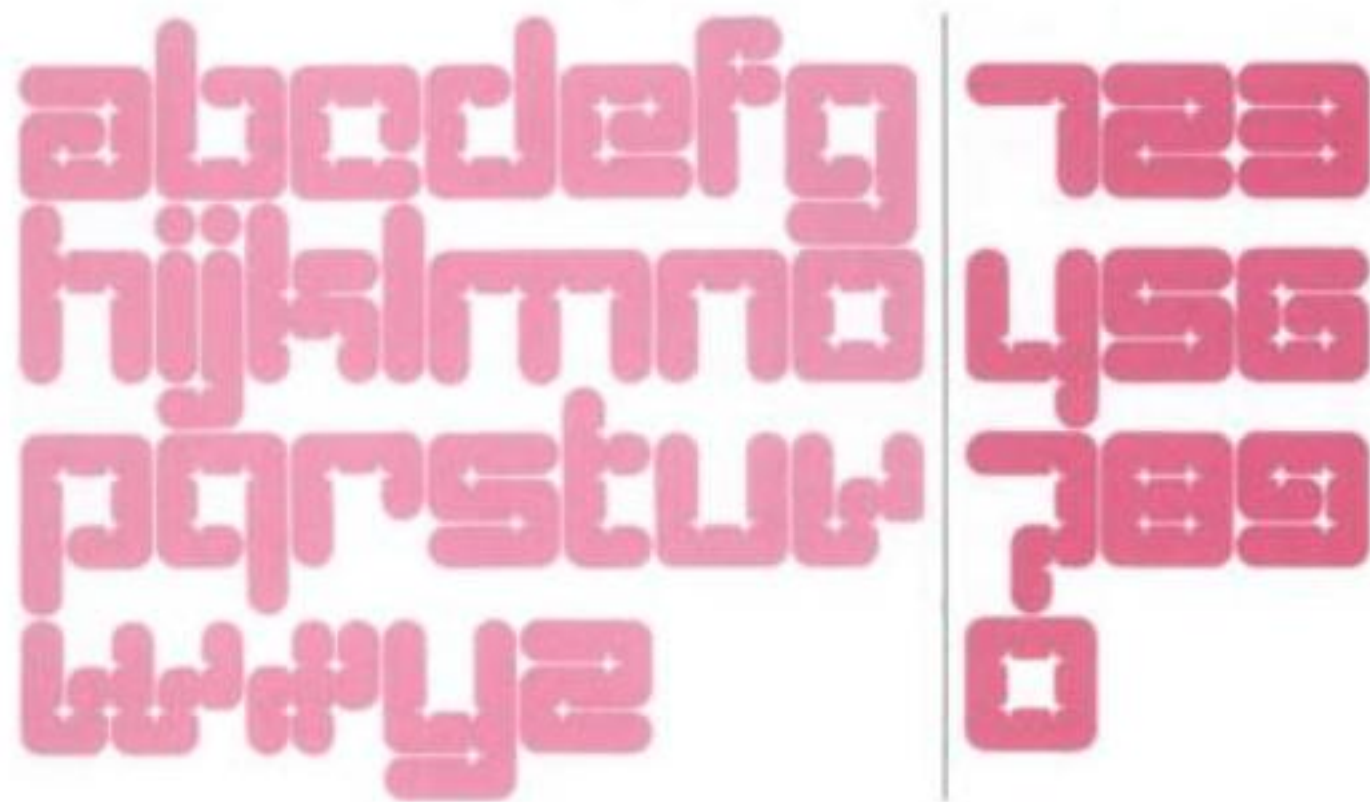
As early as 1957 letterforms appeared in Crouwel's designs (notably his posters and catalogue covers for the Van Abbe Museum in Eindhoven) that did not come out of the typecase but were hand-drawn. They were simplified letters, constructed from squares, triangles and circle segments – legitimate heirs, as it were, of Josef Albers's *Kombinationschrift*. Most of these faces have remained incomplete. They were meant for a single occasion, and consequently only those characters needed for a particular name or title were drawn. There is the word 'olanda' designed on a 4 × 7 grid for the Dutch entry in the 1960 Venice Biennale; and a slightly more complex variation for a Jean Brusselmans exhibition that same year. The most subtle of these is a type drawn in 1963 for the poster and catalogue of an exhibition by the painter Edgar Fernhout. It is built on a grid of four rows: two for the x-height, one for the ascenders and one for the single descender of the g. Its main elements are rectangles and quarter circles, but Crouwel opened up the strict geometry of the basic grid by cutting off the short segments at an angle. Crouwel: 'The Fernhout typeface referred to the way in which Fernhout painted. He used a little flat brush with which he painted short rectangular strokes, one next to the other. That way of organizing the painting appealed to me. But of course I departed from it and drew those letters my way, so that only Fernhout specialists realize that there is a connection.'[12]

Total Design: logotypes and alphabets

Once Crouwel had entered the realm of corporate design with Total Design, type design took a different course. This need for original letterforms is obvious when thinking about corporate identities and trademarks. At times, TD took a fundamentalist approach to the logotype by setting it in Helvetica capitals, as was done with the TD logo itself – much to the merriment of their critics. Symbolic pictograms were often created in the geometric style which one identifies immediately with that period and with TD (and their peers abroad). TD's twentieth anniversary book says: 'The reduction to basic forms and strict stylization was prompted … by the stipulation of an optimally broad application and by recognizability under negative circumstances.' Soon, however, literally everybody started doing logos with circles and triangles, and recognizability was reduced to a minimum. This prompted TD to reintroduce more legible and playful trademarks.[13]

Logotypes spelling out the brand names were often drawn by hand as well. PAM and Calpam by Wissing; Intradal, a stylized rendering of handwriting with the broad-nibbed pen, by Crouwel; ARC, based on a grid of hundreds of circles, by Ben Bos. Although 'designing complete alphabets never was an ambition of TD'[14], some of their most successful custom letterforms were extended into larger series, or corporate typefaces. The alphabet by Benno Wissing and Harmut Kowalke for the Rotterdam Ahoy' exhibition venue has been dealt with in the previous pages. Crouwel's logo for Al Futtaim Electronics in Dubai was made into a double alphabet

8 Conversation with Wim Crouwel.

9 Huygen and Boekraad (cit.), pp 46–57.

10 Bruinsma, 'Wim Crouwel interview' (cit.).

11 Crouwel in Helmut Schmid, *Typography today* (cit.), pp 18–25. I quote the English text as published.

12 Conversation with Wim Crouwel.

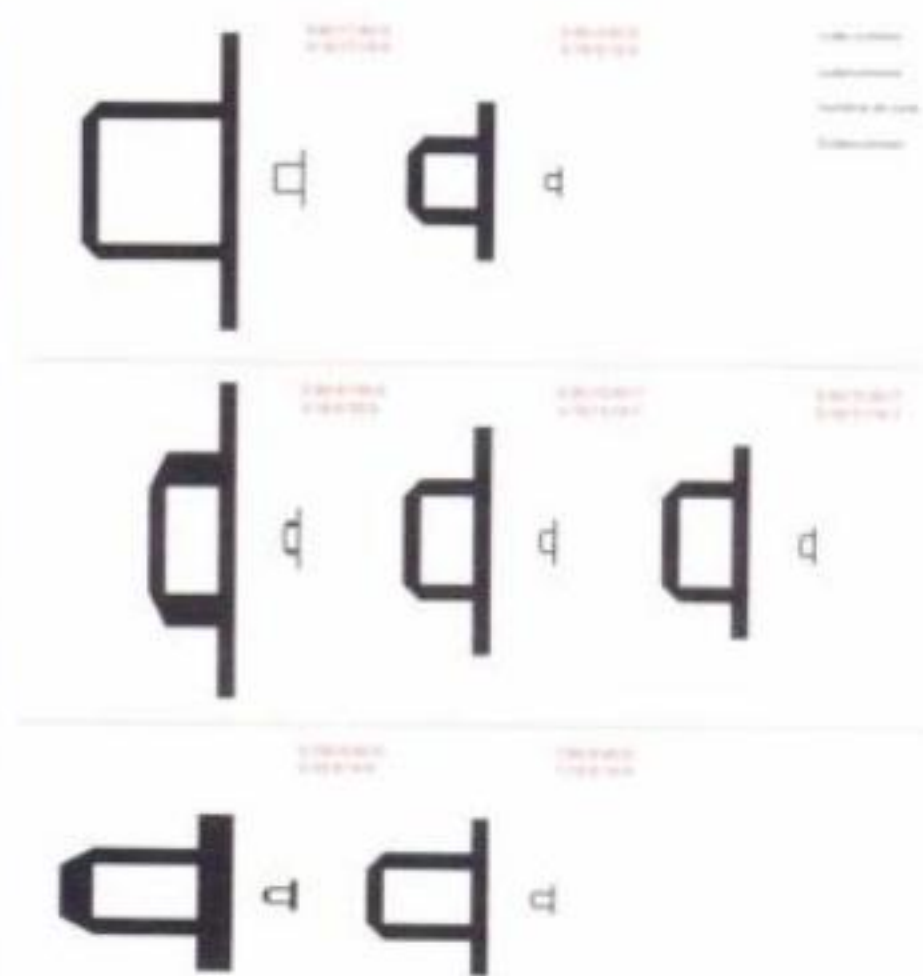13 Broos 1983 (cit.), pp 19–22.

14 Ibid., p 22.

neu
alphabet

an
introduction
for
a
programmed
typography

* Page from the New Alphabet booklet showing the bold, condensed and extended variants with their respective 'code numbers'.

: Cover of the booklet announcing the New Alphabet, published in the Kwadraatbladen series of the printer Steendrukkerij de Jong, 1967.

neu alphabet

one two three

* The cover of the Italian magazine *Linea Grafica, rivista bimestrale delle arti grafiche* (1968) was probably the only commissioned design Crouwel made with the New Alphabet.

* Digital version of Crouwel's New Alphabet in three weights, The Foundry, 1997.

of lowercase Latin letters and arabic characters, with outline versions of both. Ben Bos designed an alphabet for the Randstad temping agency (> p 123). Another alphabet derived from a one-word lettering project was *Oldenburg*. For his poster announcing an exhibition of Claes Oldenburg at the Stedelijk in 1970, Crouwel conceived a typeface that recalled that artist's large, soft objects. As a present for Oldenburg, a personal friend, Crouwel drew a complete alphabet based on these forms.

New Alphabet

In TD's fourth year, Crouwel made the national headlines with a typeface he had developed as a personal project. The *New Alphabet* was made public in October 1967 in an issue of the Kwadraatbladen, the series of square-format goodwill publications edited by Pieter Brattinga for the Hilversum printer Steendrukkerij de Jong. The 20-page quadrilingual brochure contained a detailed 'Proposal for a new typeface that, more than the traditional types, is suited to the composing system using the cathode-ray tube.' The publication of the New Alphabet was a sign of the times. The graphic world had seen a fast transition from the world of metal type to that of phototypesetting, from mechanics to type reproduction at the speed of light. In his introduction, Crouwel argued that traditional alphabets '[whose] letters are individually designed with meticulous care' belong to an era in which typesetting, too, was a task performed by hand, allowing for subtle corrections and subjective interventions. With the advent of new technologies, Crouwel wrote, it had become necessary to create new letterforms that were better suited to these new developments.[15] Crouwel's solution was, to put it mildly, unorthodox. The New Alphabet was drawn on a variable grid of a minimum of 5 by 9 units; the basic form of these units was square, but the system allowed for horizontal and vertical scaling. All the variables (number of units, number of scan lines per units, relative x-height) were to be represented in a five-number code. This scientific-looking system was a clear sign that Crouwel's proposal was intended for a high-tech world which had not even been fully realized: although the moon landing had yet to take place, the New Alphabet brochure already carried a picture of an astronaut floating in space, printed in a futuristic-looking line screen.

The letterforms Crouwel had devised were equally unconventional. The typeface was a single alphabet with no capitals; it was rectangular, constructed with just horizontal and vertical lines, with 45-degree sheared corners. About half the characters were clearly recognizable, the others looked so unfamiliar that one would have to learn to read them anew. Crouwel says he did not invent these peculiar characters in order to create something astounding or controversial. 'I simply wanted to make a consistent alphabet on the basis of that grid of squares. I did not want any cluttering of vertical stems and did not find a solution within the conventional structure of the characters. So I began researching the past, looking for alternative signs with which

Functionalism and geometry

I could replace the conventional forms. One could have made them up, but I wanted them to have some kind of footing in the history of type.'[16] The technical drawings of the typeface were done by hand, without the help of any mechanical or electronic device, by Crouwel's father, who had worked as a retouching artist at a lithographer's workshop.

The New Alphabet raised a lot of dust. In late 1967 it got more newspaper coverage than Total Design had received in its first four years. Crouwel had obviously intended his alphabet to be speculative, deliberately opting for an extreme proposal that was open to debate. 'I think I have always inclined not to bother too much about things that have been developed through tradition. It's good to create a breakthrough and then see how you can adjust it.' But many of Crouwel's peers thought his proposal went too far and wasn't realistic. Gerard Unger, who had himself begun researching the correlation between letterforms and technology, published A Counter-proposal, also in the Kwadraatblad series. He proposed creating new letterforms which, although adapted to the particular demands of the new technology, were firmly rooted in tradition: 'One should find new subtleties for the old forms, which can be reproduced well by the new machines.'[17] Which is exactly what he went on to do in the following decades.

In 2001, type designer Evert Bloemsma re-evaluated the New Alphabet in the light of subsequent developments. He wrote that 'Wim Crouwel's New Alphabet can be regarded as the last attempt to maintain the correlation between the means of production (digital imagesetter, electronic page layout) and the result (the letterform). After more than thirty years it stands out as the most consistent demonstration of the idea of the oneness of modern tools and their products.'[18]

### Fodor and the Stedelijk: type as grid

Crouwel continued experimenting with grid-based letterforms. He had become interested in crystallography and saw parallels between regular crystal structures and the 'on and off' dot patterns generated by means of early computer technology. At the same time, Crouwel made a series of photographs of pre-digital bitmap type: vernacular lettering with roof-tiles and bricks. These preoccupations led to several typographic experiments.

In 1968 the Stedelijk Museum – for which Crouwel had designed most of the printed matter since the early 1960s – presented an exhibition of graphic and product designers. The 'Vormgevers' poster has become a classic, 'probably the Crouwel poster that was most often reproduced in design literature,' according to Hugues Boekraad, who wrote that it represents 'the most essential image of design from Crouwel's point of view'. Its most striking feature is that the grid is made visible – the same grid used in his designs for the Stedelijk Museum catalogues. It is taken as a starting point for a new, experimental letterform (but more practical than the New Alphabet). The construction of the characters, writes Boekraad, 'becomes the core of the design'.[19] The alphabet was never developed beyond the word Vormgevers until the London-based Foundry offered to digitize it, and created the Stedelijk font.

One of Crouwel's most interesting alphabets is the one he created for the small Fodor Museum. For the cover of the museum's bulletin he conceived a basic design in two colours which was to be overprinted in black for each issue. To save money on typesetting, the black text was 'set' on an electric typewriter which Crouwel had at his disposal at the Stedelijk (it came with a typist). Crouwel liked the contemporary look of the square typeface, and also the idea that the monospaced characters formed both horizontal and vertical lines. This was made visible by a regular pattern of pink dots on the orange background. The characters f o d o r and the numerals were created on top of this grid. What could have been a straightforward modernist construction became quite a remarkable typeface through a simple but brilliant intervention. By breaking through the outlines and counters of each character with rounded notches, Crouwel at once created a computer-style, 'futuristic' feel and a forward movement which refers to formal writing and the traditional typefaces derived from it. A complete corporate alphabet was developed from the principles used in the fodor logotype: an admirable hybrid indeed.

fodor 18

Jörg Remé
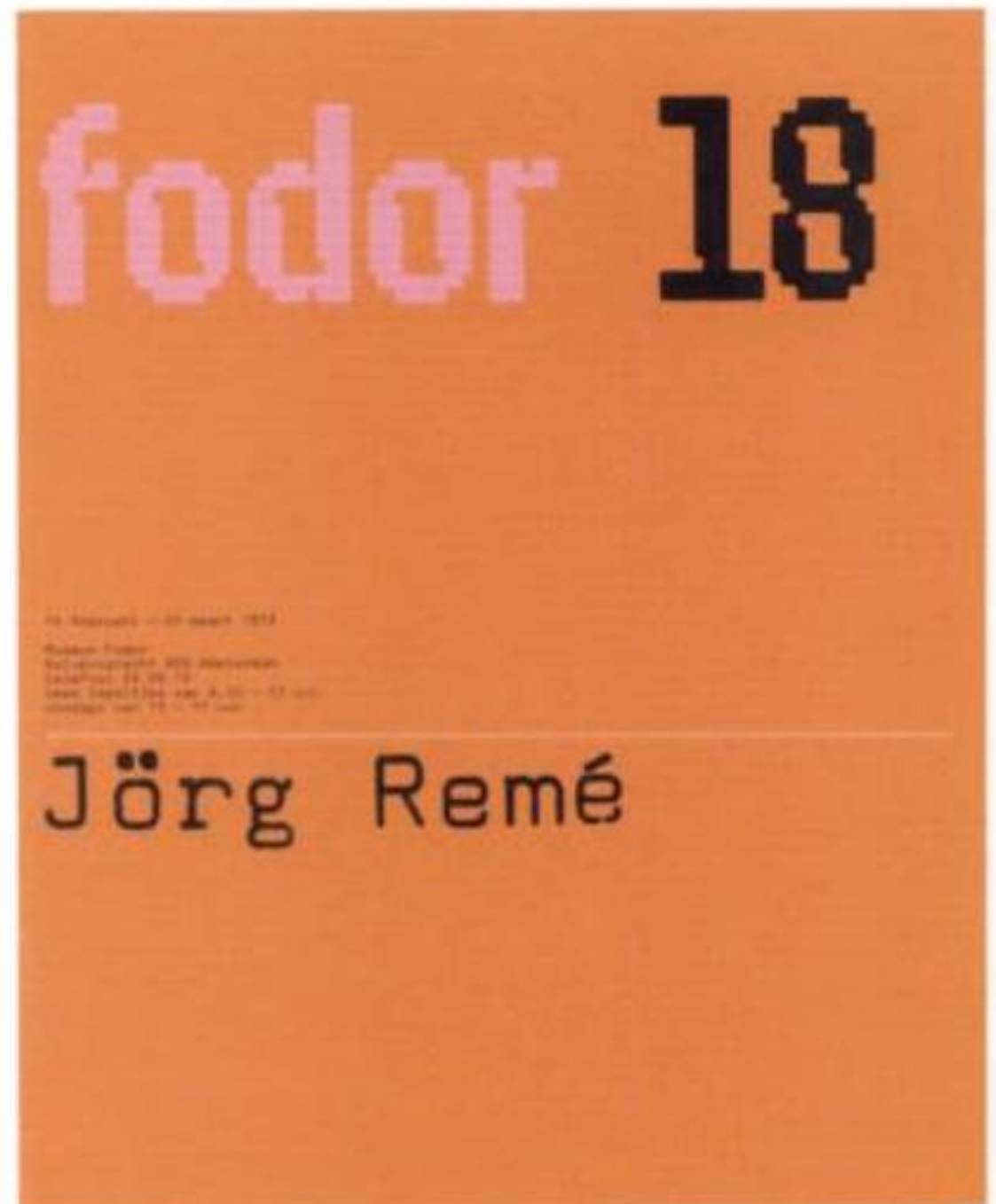
fodor alphabet
om kort te gaan, er is nog nooit een deugdelijk historisch bewijs ten gunste van haarlems regt op de eer der uitvinding geleverd

15 Wim Crouwel, New Alphabet, Hilversum 1967. English text quoted as published.

16 Conversation with Wim Crouwel, 1999.

17 Gerard Unger, A counter-proposal, Hilversum [1968].

18 Evert Bloemsma, 'Balance, Avance, Cocon', in Van Rixtel and Westerveld (eds.), Letters, Eindhoven 2001, p 77.

19 Huygen and Boekraad (cit.), p 332.

Hamburgifons

affilare tipologia onore teologia canale parallelepipe canale traente continente grafologia trotterellare citofono noleggiare pioppella film incognita politecnico fotocopia attaccare cancet concetto girata aereo carreggiata galleggiante proiettile cofano recitare tecnologia litigio filarello grafico contrapporre alterare alligatore lettera italiano poi oggetto poliglotta tinteggiare longilineo

Foundry Gridnik

Light Regular **Medium Bold** Over de feestviering van 1823 kan ik niet medespreken; maar dit kan ik getuigen, dat die van 1856 niet geweest is eene openbaring van nationale eenheid, maar van de goedhartigheid eener provincie-stad, welke zich er over verheugde dat een harer oudste en geachtste ingezetenen voortaan rustig sterven kan, zonder te scheiden te hebben van zijn bekend stokpaard.

From Olivetti to stamps

Around 1974 Crouwel was invited by the Italian manufacturer Olivetti to design an alphabet for electric typewriters. He found himself in good company: Olivetti had simultaneously commissioned a typeface design from Josef Müller-Brockmann, the leading figure in Swiss typography, as well as Perry A. King and Herbert Lindiger. As shown by the Fodor project, Crouwel was interested in typewriter typography. He was convinced that typewriters demanded a totally different kind of letter design than typesetting and had expressed his annoyance when IBM released a system with variable widths, which made typewriting look like printed matter.

After various possibilities had been sketched, including seriffed and monospaced characters, with and without contrast, Crouwel proposed a monoline sanserif with three widths, which Olivetti named *Politene*. Not unlike the New Alphabet, the basic form is a rectangle, with 45-degree corners. In close-up, the type has some subtle typographic features, such as rounded corners and terminals set at slight angles. While Crouwel, Müller-Brockmann and the others were developing their fonts, the interest in electric typewriters began to wane in favour of more flexible electronic systems. By the time the faces were completed, Olivetti had no need for them any more. The firm had decided not to issue the machine for which they were intended. For Crouwel this had one advantage: the copyright to the typeface went back to him. In that same period Crouwel was commissioned to design the standard numeral stamps for the Dutch PTT (published from 1976). He drew a special version of the Olivetti Politene design, consisting solely of the word 'nederland' and the numerals to indicate the value.

The 1997 and 2003 re-releases

Since the early 1980s, young graphic designers have used photocopied versions of the New Alphabet, often replacing its less readable characters by alternatives of their own devising. British designer Peter Saville 'quoted' the type on his album cover for Joy Division's *Substance* and the 12" single *Atmosphere*. This brought Crouwel's 1960s experiments to the attention of a new audience; but it also gave an unfaithful representation of his ideas. After the advent of PostScript would-be type designers began issuing illegal and modified digital versions of Crouwel's types. When David Quay of The Foundry in London approached Crouwel with a proposal to revive the New Alphabet and some other type designs as part of The Foundry's Architype series, Crouwel hesitated, as the fonts had never been meant to be used by third parties. He finally consented, realizing that an authorized revival would give him an opportunity to help put an end to bootlegging and set the record straight.

Fodor and *Stedelijk* are pretty straightforward reissues of, respectively, the Fodor alphabet and the 1968 Vormgevers design. Quay and Freda Sack have added a few characters, such as quotes, brackets and the $ and £ signs, but without extending the

Functionalism and geometry

à b c d p q r s
é f g h t ü v x
i j k l w : y z
m ; n o ? - ˇ ; !

acht
rare
a set
vie

alphabets into complete character sets with diacritics. The same goes for the New Alphabet, which was carefully reproduced with all the idiosyncrasies and 'illegible' characters of the original. Crouwel's original *Proposal for a New Alphabet* included the possibility of extended and condensed varieties, which on paper seemed less satisfying as graphic forms than the core version, constructed around a square. It is, naturally, the square that has been taken as starting point for the Foundry revival, which consists of three weights.

The most commercially successful of The Foundry's Crouwel faces is *Gridnik*, based on the Olivetti and postage stamp designs. 'I still had piles of technical drawings for the face,' says Crouwel, 'so reproducing the forms was comparatively easy. But as the typeface had been designed for a typewriter with three standard widths, it took some time to fix the spacing.' Gridnik (the new name was thought up by Sack and Quay) is the one Crouwel revival which has been conceived as a complete text typeface. There is a single font, simply called Gridnik, which is a more or less faithful revival of the original alphabet, with added accents and other diacritics. The other version is called *Foundry Gridnik*; it is a family of four weights (light, regular, medium, bold) which Quay developed from the original design under Crouwel's supervision. Crouwel is happy with the result. 'I'm even using it on my own typewriter,' Crouwel admitted to me a few years ago. By this he meant that he had installed the face on his Macintosh. Having retired from his position as director of the Boymans Van Beuningen Museum in Rotterdam in 1993, Crouwel had returned to being an independent designer and consultant. Still active at 75, he uses the computer as a supplemental tool – leaving the actual studio work to others.

In 2003, international public attention for Crouwel's work reached new heights. He was the guest of honour at the first edition of Grafic Europe, an international conference which took place in Barcelona, and lectured to a full house at the celebrations of the International Society of Typographic Designers (ISTD) in London which, like Crouwel, turned 75 that year. A well-illustrated book introducing Crouwel's alphabets was conceived by David Quay, with interviews by Kees Broos. A visually stunning book about the New Alphabet was produced as a thesis by the young Italian designer Paolo Palma. Towards the end of the summer The Foundry announced a new digital Crouwel typeface: *Foundry Catalogue*, based on the 1970 alphabet for Claes Oldenburg. With Catalogue, one of Crouwel's most idiosyncratic and humorous typographic designs has become available to today's graphic designers.

catalogue

soft solid soft outline