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Piet Zwart



rebel primitive of the technical epoch

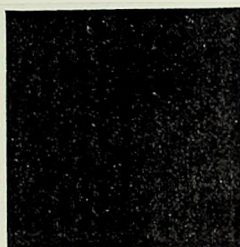
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Piet Zwart: rebel primitive of the technical epoch.
by Neil Gurry.

Submitted for Degree of Bachelor of Design in Visual Communication.

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INTRODUCTION

Piet Zwart was one of a group of seminally influential typographers whose pioneering work of the 1920s and 1930s irreversibly altered the course of typographic design. Initially, I set about researching the typography of the 1920s with the intention of writing a comprehensive study of this especially vibrant period of typographic history. However during the course of my research, I came across a lavishly illustrated book in St. Bride's Library of Printing, the first and only book I have found devoted exclusively to Zwart's typography. What struck me about the book, "Documents in the visual arts, Part one: Piet Zwart" edited by Friedolin Muller, was the quite remarkable sophistication of Zwart's typography and how little it has dated. Indeed, so enthralled was I by this discovery, I decided there and then to make Zwart the sole subject of my thesis.

Typography, one of the more obscure design disciplines, is never an easy subject to research as it is rarely ever comprehensively documented or analysed. In the case of Zwart, the problem was compounded by the fact that he is no longer living and all his work is in Dutch as he worked exclusively in the Netherlands. Because, unlike many of the typographers of this era, he was never directly involved with any of the major art movements of the time, of which there were many, his typography has never been extensively documented in English.

However, despite these drawbacks, it was possible to compile quite a thorough study of Zwart's work. This thesis examines the conditions, both technological and art historical, that influenced his work, the composition and dynamics of that work and also tries to indicate the effect his efforts have had on typography, both then and since.

This thesis was made possible through extensive research into articles published in a wide variety of periodicals but most important of all was the invaluable assistance received from the Stedelijk Museum in Amsterdam, St. Bride's Library of Printing in London and through personal correspondence with Kees Broos (former curator of modern art at the Gemeentemuseum in The Hague and the foremost authority on Zwart's work) and also Dr. Paul van der Lem (Head of Design Department at the London College of Printing), without all of whom it would not have been possible.

In order to fully appreciate why Piet Zwart and other like-minded typographers of the 1920's are regarded as the pioneers of modern typography, it is necessary to understand what the prevailing attitudes of the era were, and why they led to the birth and spread of Modernism. In the context of graphic design, these stylistic developments are inseparable from the changes that took place in the printing industry from the second half of the 19th. century onwards. The rise of the graphic industry in the Netherlands is quite representative of the rest of Europe.

In the Netherlands the number of printing firms increased from about 175 in 1850, to 450 in 1880, and 638 in 1890, as a direct result of the steady growth in the graphic industry. This growth was primarily caused by the rising need for information by means of books, newspapers and magazines, which was mainly related to greater school attendance. The development was also a consequence of the beginning of industrialization in the Netherlands and the resultant growth in the demand for commercial printing, which was needed to promote trade and the search for new markets for the growing production. This demand was complemented by the introduction of the steam engine in 1850, which facilitated automated printing techniques. Technical innovation, inevitably also led to the mechanization of typesetting, so that by the end of the century, production capacity and speed had increased greatly.

After this period of steady growth, there was a tempestuous development between 1890 and 1910, due to accelerated industrialization, which saw the number of printing shops rise from 683 in 1890 to 1,000 in 1909. This increase led to

overcapacity and inevitably to a considerable drop in prices in a wave of price-undercutting, which took nearly a decade to resolve with the introduction of fixed-rates. Dutch neutrality during the First World War had a favourable effect on the development of the graphic industry due to the dropping away of foreign competition. From 1921 on however, many printing orders went to Germany due to a competitive rate of exchange. Thus a complex pattern of changing fortunes emerged which made it difficult to establish a balance of supply and demand. These difficulties persist even today as printing remains one of the fastest accelerating, technically developed industries.

In the Netherlands, the increase of mechanization in the late 1800's had no direct consequences for design. The existing preference for foreign and historical elements of style, that were used in combination regardless of period or technique, continued to be dominant. No co-ordination with the character of the mechanical method of production was attempted. In the 1890's, due to the influence of William Morris and the revival of the art of printing books, an awareness that a reorientation in graphic design was necessary, was growing in the Netherlands. The deterioration of the art of printing books was blamed completely on increased industrialization and it was generally accepted that the decoration of a book must again be given attention. However the contribution of designers was as yet limited to the ornamentation of the page, binding and dust-jacket, that is to say, to special decorative, surface design. Typography, which as yet had no aesthetic significance, was not involved in the design. About 1895 a change took place whereby the decorative treatment of the separate parts gave way to the consideration of attempting to unify all the compositional parts of the whole

design. This led to the typographical arrangement of the page as an ornamental element in the overall decoration of the book.²

The next phase of development in book production began about 1900, when attention was focussed on the function of books and the emphasis shifted from the ornamentation to the design of the type. Book type, decorative and legible, then became the departure point for ornamentation, and as a result received new significance. With this new emphasis on type there was a growing awareness of the importance and need for new and contemporary typeforms. However, it was not until 1912 that the first Dutch typeface was introduced. Designed by S.H.de Roos, the chief characteristics of "Hollandsche Mediaeval" were simplicity, harmony and legibility (fig. 1).

In the years following 1910 the two most significant trends in Dutch graphic design were typified by S.H.de Roos and H.Th. Wijdeveld. The essence of de Roos's style was a simplicity, balance and harmonious arrangement of type around a central axis, which although it may have been quite wholesome, it was not particularly animated (fig. 2). Wijdeveld's tendency was towards excessive ornamentation as a space filler. This attempt to "beautify" the page, led every available space to be occupied by ornamental flourishes which resulted in excessively decorated or meticulous type designs which by and large were totally unreadable (fig. 3). The first real challenge to this state of affairs in the graphic industry, came as a result of the artistic movement that swept across Europe in the first quarter of this century. Loosely termed as Modernism, it was a reaction against the perception of art as an anti-utilitarian phenomenon. Art Nouveau "had shown that the attempt to give adequate expression to a new sense of life merely by adding novel formal

trappings was doomed to failure".³ Modernism was a quest by artists, especially those in the applied arts, to analyse themselves and the human situation, and to seek the pure and the essential in their art. More than ever before, they realized that their work must be inspired wholly by their awareness of the new conditions of life. They saw their task as the reshaping of the world around them to reflect the consciousness of their day and age. With a faith, that is today difficult to comprehend, " they believed that they stood on the threshold of the brave new world of their dreams and plans ".³

The most convincing evidence that this was a reaction to a pervasive social and historical situation, is the fact that artists' response to this challenge, scattered though they were in different countries, was in most instances remarkably similar. Modernism signalled the whole-hearted acceptance by artists of industrialization and technological advance which was the cornerstone of their " brave new world ".

One of the earliest and most influential modern movements started in the Netherlands in the late summer of 1917, when the De Stijl movement was formed. They were deeply concerned with the spiritual and intellectual climate of their time and wished to express the " general consciousness of their age ".⁴ They believed that the world war was sweeping away an old age, and that science, technology and political developments would usher in a new era of objectivity and collectivism. The founder of the group was Theo van Doesburg who, through his journal " De Stijl ", spread the theory and philosophy of the movement. They were concerned with the purification of art to its simplest form; their visual vocabulary was limited to the use

of primary colours (red, yellow and blue) with black and white, and shapes and forms were limited to straight lines, squares and rectangles. They also advocated the absorption of this pure art by the applied arts, so that the spirit of art might then permeate society through architecture, product and graphic design. The De Stijl movement was to have a profound effect on the Bauhaus in Weimar, Germany, as did east-european constructivism, however the Dutch dogma was rejected as being too narrow, too one-sided in its rejection of every round shape. The Bauhaus having come under the influence of both De Stijl and Constructivism at the same time in 1921 adopted functionalism as its enduring creative principle. Walter Gropius, head at the Bauhaus, summarized in the following phrases the new attitude which functionalism presupposed :

- " determined affirmation of the active environment, of machines and vehicles."
- " organic shaping of things dictated by the presence of their own law, without romantic palliation and playfulness."
- " restriction to typical basic form and colour, intelligible to all."
- " simplicity in multiplicity, concise utilization of space, material, time and money."
- " The creation of models of useful items for everyday use is a social necessity." ⁵

Although the work of Piet Zwart, both his typographic work and also his interior design output, corresponds quite closely to these Bauhaus principles of functional design, it was not

through their teachings or activities that he came to design in this manner. Rather, his design principles were arrived at, through careful rational analysis of the problems at hand, which led him to functional solutions.

Piet Zwart was an eminently socially minded person and he therefore looked at design problems from a social angle. Through his early training at the School of Arts and Crafts in Amsterdam (1902 - 1907), he became interested in social and humanitarian doctrines, like those of theosophy (which, with its aspirations to a suprapersonal, universal view of life, exercised an important influence on many of his fellow artists, particularly Piet Mondrian³), Hegel, Marx and modern socialism. These ideologies were fundamentally important to his work and are central to any assessment of his creative achievements.

To Zwart the regeneration of typography was something which concerned the reader as well as the reading matter. " The reader had to be freed from his dependence on lines and columns, from the bondage which compelled him to go on and on, turning his gaze from the end of one line to the beginning of the next until the rhythmic movement robbed him of all ability to use his eyes, even when the text was most exiting." ⁶ Zwart realized that the act of reading had to be injected with new life so that the reader could make a choice, could arrive at a suitable decision, something which is essential in advertising. He also realised that the typographer had to tackle the problem of time, since reading is of necessity a time-consuming activity and the realities of the time were such that people had less time to read an ever increasing amount of printed matter. What the reader needed was to be enabled to read more quickly, to be directed, in order to be able to decide at a glance what interested him or her in a page of print, without having to wade through the entire array of lines and columns.

Thus Zwart sought ways and means of clearly organising text whilst attempting to create a rhythmic, dynamic design, which actively involved the reader in the exercise of reading. The criteria for this organisation were obvious to Zwart : function came first and foremost.

Zwart was able to clarify his ideas of functional typography in posters and advertisements in the expanding field of publicity, which due to their comparatively recent appearance on the scene were less influenced by the traditional conventions of symmetrical and uniform composition.

Explaining his basic philosophy on typography, Zwart said that " The task of functional typography is to create a form of typographical design in harmony with the present age, a form free of traditional conventions and as animated as possible; it is to find a clear, well ordered means of visual expression which shall be decided by modern typographical problems, modern methods it is to break with the spirit of handwork." ⁶ Zwart was very quick to accept the introduction of technological advances such as machine-setting, photo-typesetting and photography, and was always ready to re-evaluate his work with a view to accommodating and exploiting the benefits of new technology; " every technical discovery has its own power. It can never be undone and compels to new possibilities that create new problems." ¹

Although today, the principles of functional design are very well established, in the 1930's Zwart's work was seen as a corruption of typographic principles by many of the well established figures of Dutch typography. S.H.de Roos was a very influential Dutch typographer and a contemporary of

Zwart's, who produced a " happy and wholesome " ⁷ typography and who, although his work would be considered quite mainstream, had these harsh words to say about Zwart and other like-minded typographers :

"There was van Doesburg with his " Stijl " which mocked everything based on construction principles, purity of materials, and the demand of harmony, his dadaistic nonsense and then the crazy chair by Rietveld were daggers in the back of design, just when the nation needed all efforts to overcome the Catastrophe of 1914 - 1918. Evil does not punish itself ; after van Doesburg, hotheads like Piet Zwart and Paul Schuitema, without a proper typographic training, jumped into the profession and designed rough shouting things for Cables Ltd. and Van Berkel Ltd. All architects with daring plans for front gables and plenty of theories about art and technology, but incapable of carrying out simple detail work; nothing in their work was of any use for normal publications." ⁷

This quote from de Roos raises an interesting point about " normal publications ". What he failed to appreciate is that Zwart, Schuitema and others like them were developing a form of typography to satisfy the requirements of advertising. De Roos and others of his ilk, seem to have believed that the quiet, understated typography they had developed for book design was also appropriate for advertising. However they completely misunderstood the nature of the problem, whereas " hotheads " like Zwart, who because of his " amateur " status was uninhibited by rules and methods of traditional professional practice, were able through functional analysis to get to the root of the problem. Not only did they " develop a good advertising typography " ⁷ but from " the ideas of Zwart and

Schuiteima, a far softer and richer range of design recreated books with added design value." ⁷

Piet Zwart was undoubtedly a rebel but he was also a product of his time and had ample justification for his rebellion. He was rebelling against a typography that had lost all distinction and was inappropriate to the social and historical conditions of its time. It was a self-indulgent form of typography which pursued an outdated notion of beauty for its own sake. Zwart believed that " beauty is one of the factors that plays its part, but which by itself is too unimportant to play a dictatorial role." ¹

Although Zwart may have set out to consciously avoid creating beautiful typography, there can be little doubt that he produced some of the most eloquent typographic statements of the century. To me they are beautiful, not always pleasing to look at, but through their functionality they possess a rare beauty, full of ingenuity, intelligence, dynamism and wit. Although expressive of a by-gone era, his work possesses an enduring quality which makes it look as vital and fresh today, as it was then.

In 1919, Zwart had his first contact with various members of De Stijl and began working for Jan Wils, one of the leading architects of the movement. although in the course of his work with Wils he had occasionally been required to design printed material, it was not until he had started work at the offices of Berlage in 1921, and in the same year through an introduction from Berlage, he began designing promotional material for the Lagafabriek in Vickershouse.

In this early work for the Lagafabriek (figs. 4-6), the very strong influence of the typographic style of the De Stijl Movement is immediately recognizable in Zwart's designs. It is clear from these examples that Zwart had decided to emulate the De Stijl principles of composing type in tight rectangular blocks and of eliminating curved lines through the favouring of sans-serif typefaces and a horizontal or vertical emphasis (figs. 7,8). The structure of these Lagafabriek designs is very basic; in essence each of the designs is a simple exercise in composing a series of rectangular shapes within a larger rectangle. There is no evidence of any real attempt to analyse the text further than the emphasis, by virtue of an increase in size or weight of type, of the most important words. The sole logic behind the organization of the text would appear to have been that it must form a rectangle. The quite overbearing density of these compositions is in stark contrast to the lightness of touch manifest in Zwart's designs after 1925.

In 1923, Berlage introduced Zwart to the Board of Directors of the Nederlandsche Kabelfabriek (Dutch Cable Works) and over the next decade Zwart was responsible for designing most of the company's publicity material, including over 300 typographic advertisements and the famous 64 page promotional catalogue of 1927 / 28. It was to prove to be one of the most significant commissions of Zwart's illustrious career, for although he had been designing letterheads and promotional leaflets since late 1921, this NKF commission was a quite massive undertaking in comparison and made Zwart realize that he really knew nothing about printing techniques or the possibilities of typography :

" The first drawing for an advertisement I did completely in ink. But since the magazine for which it was intended appeared before I had finished the drawing, I realized that this was not the proper method. I picked up the principles of typography from an eighteen - year - old printer's devil in a small office. During the lunch hour I would show him my sketches and together we puzzled out the possibilities of setting them in type. I started without the slightest idea of typography and did not even know what the expression ' lowercase ' meant".⁸

This then, would appear to indicate that Zwart's acceptance of the NKF commission was ostensibly the beginning of his typographic career. The increasing attention that Zwart paid to his typography is clearly demonstrated by the rapid development of his style away from an imitation of De Stijl typography towards a highly articulate and functional typography, on which his reputation is based. Indeed from 1923 onwards, I have found only one example of Zwart's work which

still bears a marked resemblance to the typography of De Stijl. (fig. 9) However, even though the design still incorporates a number of large black rectangles as rather gratuitous compositional elements, there is evidence of a heightened sensitivity in Zwart's use of type. The unremitting density of the page area, evident in the earlier Lagafabriek designs, is in this instance somewhat mitigated by the increased attention paid to the composition of the text. Although still arranged in rectangular blocks, the type is far lighter and more legible than before as a result of an increased amount of space left between each line and also the areas of white space left between each block of text. Other notable features are the inclusion of lowercase type (which, by virtue of its ascenders and descenders offers a contrast to the blocky regularity of a line of type set all in capitals), and the absence of the heavy black rules evident in some of the Lagafabriek designs.

Although the earliest, and arguably the crudest, examples of Zwart's typography display an overbearing De Stijl influence, its rapid disappearance after 1923 indicate quite clearly that it was only a stylistic point of departure for Zwart. In the climate of Dutch typography in the early 1920's, it is understandable and entirely in character that Zwart should have been attracted to, what was considered nationally to constitute, the " extreme left-wing " ⁷ (typographically speaking, though not necessarily politically speaking). For all its stylistic excesses, the De Stijl movement must still be credited with having broken the typographical stalemate, existent in the Netherlands at that time; a breakthrough Zwart was quick to capitalize upon. However, before embarking

on a detailed analysis of some of Zwart's work for the NKF, it is important to acknowledge another important influence on his early stylistic development, that of Dada.

The Dada movement born in Zurich in 1916, was chiefly represented in the Netherlands by van Doesburg (who had also founded the De Stijl Movement there in 1917) and Kurt Schwitters. Schwitters, who is alleged not to have been allowed to join the Dada movement in Zurich " because of his bourgeois face," ⁹ campaigned vigorously for Dadaism in the Netherlands, to which he devoted the first issue of his publication Merz in 1923. (fig. 10) Dadaist typography had inherited many of the characteristics of Italian Futurist typography which aimed " to redouble the expressive force of words " ⁹ and was typified by the anarchic distribution of words and sentences over a page area, and the use of a variety of different coloured inks and different typefaces (often as many as 20 different typefaces on one page) (figs. 11,12). Schwitters however, in the early 1920's had also met the Russian Constructivist El Lissitsky, who had a profound effect on Schwitters' typography. It was through Schwitters that Zwart was introduced to El Lissitsky in the Spring of 1923, a meeting which greatly encouraged Zwart as he discovered that his views coincided with those of Lissitsky " and made him aware that people in other countries were working along the same lines." ⁸

This Dadaist influence on Zwart's typography is quite clear in two designs he did in 1924 for margarine wrapping paper, which are among the busiest of any of Zwart's designs. In the first of them (fig. 13) he has used a number of different

typefaces in a variety of weights and sizes, with large bold letters contrasting with the text in small type. These large bold letters immediately arrest the reader's attention, which is then directed by a series of dingbat hands and arrows that point to lines of text in smaller type. This clever combination has the effect of bullying the reader's gaze, around the margarine wrapper, from one piece of information to the next. It is a very brash piece of typography which demonstrates Zwart's facility for clever wordplay; sometimes through his repetition of certain key words and sometimes through giving visual expression to his use of alliteration, by emphasising the first letter of each word in a large bold character.

In the second of these designs for margarine wrappers, it is the repetition of words which determines the structure of the design. (fig. 14) Zwart has again contrasted large bold letters with the lighter weight of type used in the smaller lines of text. Although the influence of Dada is still evident, the structure of Zwart's design is much tighter than that of most Dada compositions. (figs. 15, 16) The strengths of this design lie in the way Zwart has used the patterns, formed by the repetition of similar lines of text, large condensed capitals and numbers, to give a disciplined structure to the diagonal thrusts of the composition. It should also be remembered that, by the nature of their purpose, margarine wrappers are intended to be folded. Therefore, there is a logical purpose behind both the abstract pattern of the first example (fig. 13) and the more definite pattern of the second example (fig. 14), which is that the wrappers retain their visual interest even when folded. The dingbat hands, in the top right-hand corner of the

second example, which have the appearance of pointing out of the wrapper, in the course of the wrapper being folded assume a new function.

Among other things Zwart designed which display Dada-inspired touches are an announcement and letterhead produced for an experimental theatre society in 1925. (figs. 17, 18) The announcement (fig. 17) displays Zwart's ability to clearly organize quite a large amount of text while still maintaining a visually stimulating composition. The information is broken into clearly distinguishable sections, by the repetition of the words " Wij Nu " in bold type at the beginning of each new section. Other information is separated by rules of different thicknesses which visually enclose individual spaces. Contained within these spaces are some rather pleasing virtuoso treatments of individual pieces of information, like that of the large number 3, just left of centre. Again, this element is used by way of contrast to the smaller informational text but what I especially like about it (although hard to tell from a black and white reproduction), is the way Zwart seems to have overprinted some text on the number in a different colour (probably black type on a red number as the original was printed in just these two colours). This is a technique Zwart was to employ, to stunning effect, in some of his later designs which incorporated photographs.

Zwart rarely seems to have displayed any Dadaist touches in the series of NKF advertisements, although in one, which I think must date from 1924, he has attempted what I find to be a rather uncomfortable mixture of type of varying weights

and sizes. (fig. 19) This is the only design I have come across in which Zwart has mixed different typefaces, different sizes and weights of type and upper and lowercase letters all within the same word. It is quite clearly an experimental piece of work as virtually none of the stylistic devices Zwart has used in it appear in any of his later works. In a sense, this design is an attempt by Zwart to try too many things at the same time. The end result is a disorganised piece of work and a lacklustre composition which is very difficult to make sense of. The reason this design fails is that the stylistic excesses are completely irrelevant to the product being advertised. Zwart would initially have been attracted to Dada typography for its avowed intention of imparting an expressive force to type. However, having experimented with it through his commercial work, he would appear to have come to the conclusion that, although it may have been appropriate to some form of self-expression, it was not a particularly suitable form of typography for effective communication in advertising.

Peter F. Althaus, in his introduction to Friedolin Muller's book on Zwart, points out Zwart himself was quite aware that his early designs :

" were quite empirical : he made a rough draft, sent for letters, blanks and symbols from the printers, and played around with them , trying to give his ideas concrete form. In this way he began to see what could be done with typographers materials; and five years after his first attempts, he was able to reverse this empirical process. Now that he knew what each typographical element was capable of expressing, he could achieve precisely the effects he envisaged in his composition

through his mastery of the craft." ³

And this is where the important difference between Zwart and other typographers like Schwitters and Van Doesburg lies.

Zwart was primarily concerned with function and clarity of proportion, where others were more concerned with expression through typography. Wim Crouwel, a leading Netherlands typographer, has said that in order to understand certain aspects of typography, it is important to distinguish " experimental typography from experiments of research in typography." ⁹

Experimental typography leads the way to " completely uncontrollable and unknown " results and is " a form of art, a pure means of expression." ⁹ Experiments of research in typography are " always carried out to achieve a better solution for a given problem." ⁹ As painters, it is understandable that Van Doesburg and Schwitters should have been drawn to experimental typography. Zwart, on the other hand, had worked as an architectural assistant, and through his interior design projects, he had shown himself to be increasingly concerned with function.

This concern with function is crucial to a proper appreciation of Zwart's typographical output and clearly marks him as fitting into the category of typographers who carried out experiments of research in typography. Although Wim Crouwel describes experimental typography as being " always carried out to achieve a better solution for a given problem," ⁹ this does not mean that a typographer concerned primarily with function, cannot

produce highly stimulating and original work. Indeed, I find Zwart's work to be far more aesthetically pleasing, precisely because it is primarily functional. It is clear, direct and displays an inventive intelligence at work. If the purpose of typography, is to communicate, information or ideas, then once released from this obligation, it loses its meaning.

It appears to have taken about 5 years, from when Zwart first started to dabble in typography as a lunch-time hobby, for his intuitive approach to typographical problem-solving to crystallize into solid theory. In his work, dating from 1925 onwards, it is evident that Zwart had started to follow his own, self-formulated typographical convictions. This is demonstrated quite clearly in the series of advertisements he was producing for NKF. When one examines the best of these NKF advertisements, it is hard to discern any strict self-imposed typographic rules, other than that of remaining truthful to function of the advertisements. Indeed, it is a hallmark of Zwart's work that, in dealing with each new problem, he was always alive to the possibilities that could be distilled from the text being used.

Zwart often functioned as his own copywriter for these advertisements, with the result that he had unlimited scope for developing a simultaneous verbal / visual solution to the client's communications needs. He was quick to realize that one of the typographer's objectives must be increased legibility and ease in reading. This followed logically from the increased pace of living imposed by more efficient machines, the greater volume of printed matter and the dwindling amount of time people had for reading it. Therefore it is interesting to note

how economical these NKF advertisements were, with their use of text. Rarely is more than one aspect of the company emphasised in any one advertisement and more often than not the message is expressed in one simple, brief and compendious slogan. Zwart realised that as text was intended to attract attention, commend goods and provide information where necessary, it was the task of the typographer to ensure that the reader was stimulated and his interest enlisted. Whether one has a professional interest in copper cables or not, Zwart's NKF advertisements are so compellingly dynamic that one's attention is emphatically arrested.

In one such NKF advertisement dated 1925, the very simple copyline of " Ask our advice," is emphasised by three different-sized question marks arranged in the uppermost portion of the page area. (fig. 20) The varying size of the question marks suggests that the company is prepared to answer any queries their clients, or prospective clients, may have regardless of how major or minor a query it may seem. The wording " Vraagt ons advies " (ask our advice) is placed diagonally in the centre of the area and reads down. The word " Vraagt " (Ask) is bolder and larger than the other two words, and complements the boldness of the largest question mark directly above it, which gives the symbol a written emphasis. The vertical bias of the question marks is complemented by the vertical arrangement of the letters N.,K.,F. and although the eye is drawn to the lower right-hand corner by the diagonal type, it is drawn back to the lower left corner by the boldness of these three letters, the initials of the company, whose identity is revealed in full by the horizontal line of type at the base of the advertisement. The most subtle touch though, which for my mind holds the design together, is the short, thin, black

rule which divides the two smaller question marks in the upper right corner. This horizontal rule echoes the line of horizontal type at the base, and gives the whole area the balance that asymmetry requires to make it work. This horizontal line of type is quite remarkable in that it is a serified typeface, and the only instance I have come across in which Zwart used a serified typeface.

Zwart, like many of his contemporaries, believed that only sans-serif typefaces were consistent with 20th. century living; only sans-serif typefaces corresponded with the age of mechanisation. Serified typefaces were considered too self-expressive, individualistic and vain and therefore incompatible with effective, direct communication. Zwart is quoted as saying " The more uninteresting a letter, the more useful it is to the typographer " ³ because it is untainted by historical associations and as a consequence the only properties it may have are determined by the typographer and relate specifically to the text.

This is clearly illustrated in some of Zwart's NKF advertisements in which he uses type to visually interpret the text's message. Two superb examples of this date from 1927 and are clear indications of why Zwart is regarded with such respect by many of today's leading typographers. They are among the most stimulating pieces of typography I have come across; for the dynamism of their composition, their clarity of thought, their use of contrast in size and weight of type and the resourcefulness of incorporating typewriting as a design element.

The first of them carries the message that NKF produces a variety of cables which range from very light to very thick. (fig. 21) Even to someone who speaks no Dutch, like myself, the message of the advert is self-evident, from the contrast between the two words. The l of " licht " (light) is made from a very, very thin, black, vertical rule, which leads the eye from the first word of the text, through the word " licht " and onto the next item of the message. This item is to explain that the company not only produce light cable, emphasised by the delicate treatment of the word " licht ", but that they also produce extremely thick, durable cable. This is impressed upon the reader by the size and boldness of the letters c,h,t, of the word " kracht " (thick). What is most surprising about this, is that it somehow manages to remain very elegant. The reasons for this are that Zwart has chosen only to emphasise these three letters and not the whole word, with the result that the density of the central area is mitigated by the lightness of the smaller letters k,r,a. Also instrumental to the maintenance of this delicate balance, is the choice of lowercase letters which with their ascenders create a crucial interplay with the white space above and echo the vertical thrust of the l in " licht ". The k,r,a of " kracht " also correspond with the word " voor " in the top left-hand corner of the area and in the same way the bold N. K. F. in the lower right-hand corner relates to the word " kabels " just below the dominant c,h,t.

This advertisement is exquisitely balanced from the interaction of different weights and size of type to the unexpected compatibility of sans-serif and typewriter type. Zwart's use

of typewriter type would appear to indicate that at around this time he must have had access to some form of photographic reproduction technique. Although an American typewriter typeface was available in hot-metal setting at that time, to me, it would not seem to be in keeping with Zwart's approach to typography, to use something as insincere as a typeface designed to artificially replicate the effect of typewriting. There are other things in the structure of the advertisement to suggest photographic reproduction and they are the thinness of the rule which makes up the l in " licht " and also the broken line underlining the phrase " hooge doorslagszekerheid ". If this is the case, it means that Zwart must have used type produced on a typewriter as artwork for this advertisement and also the l in " licht " must have been hand drawn. This is quite significant as it means that Zwart no longer had to rely solely on the elements to be found in a case of type, from which to create his designs, but could easily and efficiently reproduce hand drawn elements as well. The introduction of photographic techniques added tremendous scope to the range of effects a designer could produce and also meant that photographs could be easily reproduced which as we shall see was something Zwart was quick to grasp the significance of and exploit very effectively.

In the next advertisement I wish to examine, also from 1927, it is evident that Zwart was quick to make use of new techniques. (fig. 22) Previously, the only way he could have produced the two large Os which are the centrepiece of this advertisement would have been to construct them from the furniture

the printers used to lock type into position for printing. This was the method Zwart formerly had to use as is evident from the 1925 advertisement (fig. 23) in which both the L of " Laag " and the H of " Hooge " have been constructed in this manner. They display thin white breaks between the individual elements employed. In this 1927 advertisement however (fig. 22) the two Os have not been created in this way but rather they have been drawn by hand as has the thin diagonal rule which connects the two horizontal lines of type in which the Os have been exaggerated.

What strikes me most about this advertisement is the sheer elegance of the shapes and the simple construction. Again Zwart shows his sensitivity to contrasting light and bold elements and also the dynamic possibilities of using diagonals. From what I can ascertain with a limited knowledge of cables and the Dutch language, the advertisement is intended to impress upon the viewer that NKF's " normaal kabels " (normal cables) are abnormal in shape. One's first impression of how a normal cable would appear in cross-section is that it would be circular, however the NKF's normal cable design is not circular but rather an elongated slightly oval shape. Zwart may have exaggerated this impression of a cross-section of the " normaal kabels " slightly, in order to communicate it more explicitly. The copy line reads " De eigenschappen van onze normaalkabels. Zijn abnormaal " (the characteristics of our normal cable are abnormal). By using the Os of the word " normaal " Zwart doubly enforces the message of this advertisement, for whatever one may or may not know about copper cable, everybody knows

that the letter O is usually circular. Although the message of this advertisement is carried by the two large and distorted Os, the visual success of the advertisement hinges on the inclusion of a thin diagonal rule which extends from the end of the word "normaalkabels" to the punch-line of the text "Zijn abnormaal". Not only does this rule function to connect the two important pieces of text by leading the eye through the two large Os to make the relevant connection, the rule provides the element of tension within the advertisement which transforms it from being an interesting solution to an awkward problem, to being a vibrant and intelligent piece of graphic communication. (fig.24)

It is the subtleties of construction in Zwart's work which at times elevates them to the sublime. Once again his mastery of contrast is evident from the way he has dared to keep the text type so small. This is something he could only have done safe in the knowledge that the weight and size of the two large Os used in conjunction with the thin diagonal rule, could be relied on to carry the message of the advertisement, thus enabling him to keep the balance of elements by using very small type. The NKF must be applauded for their faith in Zwart's capabilities as a communicator; many a managing director would have palpitations at seeing the name of his company so small at the bottom of an advertisement he was paying for.

There are many fine examples from this period which demonstrate how Zwart would often use the shape of a letter as a springboard for the development of a striking composition. The three letters that seem to figure most prominently as dynamic visual elements in these NKF advertisements are, the letters V, H and as we have already seen, the letter O.

In its exaggerated form, the letter V becomes an elongated right angle which can then be used to provide a vertical / horizontal thrust or more usually in the work of Zwart, a diagonal emphasis. In this first example from 1927, Zwart has used a very large V shape turned on its side, which gives the advertisement a downwards and diagonal movement (fig. 25). The shape and weight of the V also forges a striking contrast with the unprinted area, thus initiating an interaction between the printed text and the active white space. In many of Zwart's compositions the background functions as an active element in the design, and in this way turns the whole area into a field of tension. In this example the shape of the V leads the eye in a zigzag fashion from the top right corner down to the first piece of information which reads downwards. The viewer's gaze is drawn to the second line of text by the first letter, also a V, which is of a boldness corresponding to that of the large V but which is considerably smaller. The dynamics of the two Vs are underlined, literally, by the company's name which runs diagonally in the same direction the eye has travelled through the Vs.

In the second example the tension is created through the contrast between the very bold V in the top left corner and the thinness of the larger second V immediately below it. (fig. 26) The shape of these Vs is clearly mirrored in the combination of the two lines of type in the lower half of the advertisement. The boldness of the type in the line " N.K.F. Delft " also complements that of the V in the top left corner and emphasises the diagonal thrust from left to right. In this composition

Zwart has also seen the possibilities of the two letter Vs acting as directional arrows which point downwards, leading the viewer's gaze through the information to the bottom of the page.

Zwart has used this device again in the third example, where the two elegant thin Vs point down to the rest of the word. (fig. 27) Having read through the three words " Vulmassa uit Voorraad ", the second V points down to the small diagonal line of type immediately below. Having read through this line of text, the size weight and bias of which all complement the two Vs, the reader's attention is captured by the bold line which reads down on the right-hand side. The mechanics of how this advertisement is read are flawless in their logic, and the composition is testament to the sophistication of Zwart's typography just six years after he first started.

Also belonging to this category of exaggerated letterforms and among my favourite Zwart compositions are two NKF advertisements promoting their three different strengths of " Hoogspanningskabel met papierisolatie " (high power cable with paper isolations). (figs. 28,29) In both pieces Zwart has exaggerated the numbers and the Hs, as the basis for two dynamic compositions, which are interesting to compare. In the first example he has used an ingenious system of rules to section the four numbers 1,2, 5,0 into new numbers 10,25,50. (fig. 28) These numbers correspond to the number of k.v.s each of these three cables carry, and is a witty and inventive way of avoiding having to use a large 10,25 and 50. It also

acts as a visual puzzle for the reader which is anyway explained in the downward reading vertical line of small type. The H of the word " Hoogspannings " in this line has been exaggerated horizontally to complement the horizontal rules at the top of the page.

In the second example Zwart has repeated the visual puzzle with the numbers but has this time exaggerated the H with a vertical emphasis. (fig. 29) This emphasis is to complement the downward force of the condensed number forms and the line of small type which reads from the edge of the number 5, to the bottom of the page. The horizontal line " Hoogspanningskabels " just below centre, relates to the crossbar of the large H and helps to interfere with the empty space and add a tension to the lower half of the area. There is one minor irritating factor, in the way he has repeated the H of the horizontal " Hoogspanningskabels ", which is out of character with his other designs, in which an exaggerated letterform still reads as the first letter of the word. However this inconsistency in no way detracts from the elegance and fluid rhythms of this composition.

The piece of work for which Zwart is best known, is the 64 page catalogue he produced for the NKF in 1927 / 28 in which he pioneered a devastatingly effective and functional combination of photographs, photograms and typography.

" The perfection of printing techniques and photochemical reproduction had now made the flexible use of photographs in printing possible, and starting in 1924 Piet Zwart occasionally used photograms and photographs for commercial art." ⁸

Zwart had been taught the technique of making photograms by El Lissitzky in 1923, however he was reluctant to use this technique and used it " only where it had a real function." He rejected the indiscriminate or decorative use of photograms, because he saw them as being too much chance creations." ⁸

Zwart was quick to realise that photography possessed enormous potential as a means for graphic persuasion and although he had spent a number of years developing a sophisticated system of purely typographical communication, he now set about the task of discovering how best the photographic medium could be incorporated to enrich the vocabulary and scope of his designs. For as Zwart himself pointed out,

" It is, after all, not a case of what I have to say, but what my clients wish to say, and I must try to make their message carry as far as possible. Therefore as a professional I have the duty to grasp the photographic and typographic possibilities and to know their full significance. " ¹

The NKF catalogue, on which he started work in the summer of 1926, can be seen as the first in-depth attempt by Zwart to develop a harmonious synthesis of photography and typography.

The catalogue is designed such that the layout has a basic unit of two facing pages. The compositions are bold and asymmetric and again make use of dynamic diagonal emphasis. They are built up of text and sharp photographic close-ups of electric cables. The basic unit of two facing pages generates an exciting sequence of images in which the centre

of gravity is constantly shifting. The design is also full of clever and innovative functional devices like the black bars on the upper left-hand and lower right-hand edges, beneath which or above which the page numbers are located, which serve as compositional elements and through their repetition on each double spread give the catalogue a continuity from page to page. Not only do they serve this purpose but they also function to prevent the pages from becoming dirty-looking during repeated handling.

There is a series of three consecutive double page spreads which I find particularly inspiring, in which the left-hand pages display a photograph of a cable and the right-hand pages display a close-up of a section of the photograph on the opposite page. (figs. 30-32) In this series he has used a different device on each page to clearly show which section of the photograph on the right has been selected for close-up on the left. In the first of these spreads each of the two cable shots is enclosed in a black strip which runs diagonally from the top right corner to the bottom left corner of their respective pages. (fig. 30) Zwart has used a sort of bracket device with a black dot on the top to display which section of the cable on the left-hand page is displayed on the right-hand page. The two diagonal lines of type contrast with each other in size thus complementing the way in which the two brackets also contrast in size.

In the second spread Zwart has used a system of thin and thick horizontal rules to indicate the section of cable chosen for the close-up, again on the right-hand page. (fig. 31)

Without these thick rules the enlarged section of cable would appear to float, however the photographic illustration is in essence locked into place by the rules and also the diagonal line of type and the vertical black bar on the extreme right-hand edge. This page has three different emphases, vertical (the black bar at the edges of both pages), horizontal (the two thin rules and two thick rules which function with the illustrations) and diagonal (the illustrations and the two lines of small type), all of which creates a skillfully animated, spacial tension, spread over the two pages.

The third in this series of spreads makes use of circles as a device for pinpointing the section of cable that is shown in enlarged form on the right-hand page. (fig. 32) Although I have no colour reference for these pieces of work, it appears that Zwart used colour in such a way that enabled him to highlight the relevant portion of the cable on the left. The halftone reproduction of the cable was probably printed in a blue, over which, the circle would have been printed in red, with the result that the area, where the red overlapped the blue halftone, would appear purple. This colouring is not repeated for the large circle on the right-hand page, which instead is printed contrastingly in black and white.

Due to the scarcity of colour reproductions of Zwart's work it is difficult to illustrate the functional way in which he used colour as an active element in his design. However this quote from 1934 is an illuminating summary of his attitude to the use of colour;

"I have nothing against colour, but everything against flirting with colour. Colour is a creative element but no trimming. " 1

The colours he used were those of De Stijl --- primary blue, yellow and red. On the opening double page spread of the catalogue, the way in which Zwart used colour to intensify the dynamic forces of the shapes within the composition, is clearly displayed. (fig. 33) The halftone reproduction of an aerial photograph of the NKF premises in Delft, is printed in blue and over this is printed a red wedge. The area of blue overprinted in red thereby becomes purple and this purple area isolates the actual factory buildings from the surrounding buildings in the rest of the photograph. The yellow circle on the left-hand page, on which the catalogue date is overprinted in black, is asymmetrically balanced against the wedge printed in red.

In my opinion, this catalogue ranks as Zwart's greatest piece of work, as it displays a wide range of his many talents. The first of these talents is the clarity of purpose behind the logo he developed for the NKF which is used on the front and back covers of the catalogue and is an unambiguous, simplified representation of a cross-section through a cable. (fig. 34) On the front cover it is used in conjunction with the company's initials and two rules of different thicknesses intersecting at right angles, which are meant to represent the different types of cables produced by the company. On the back cover the symbol is repeated larger, by itself and in a negative version of the other circle. The catalogue is also an example of functional design at its very best; logical, precise and free from ornamentation. The strengths of the design are drawn from the nature of their function. Zwart demonstrates an

uninhibited use of photographs as compositional shapes in bold and dynamic asymmetrical layouts. The dynamic potential of these photographs is counter-balanced by an equally dynamic use of typography and the use of colour as an active design element.

" The old typography was flat,static. When it used woodcuts or other illustrations, it did so in a decorative way. But the application of photography as an integral part of the composition makes the new typography three-dimensional and dynamic. Space and movement are incorporated into its field of action.... The contrast between three-dimensional image and flat type is the active element in the composition. It is the task of photo-typography to unite these elements and build them into an explicit form. " ⁸

This quote of Zwart's is an accurate summary of just what he did manage to achieve in his 1927 / 28 NKF catalogue; a harmonious synthesis of photography and typography giving rise to a new and " explicit form ".

SECTION 4 : Piet Zwart: photography

Although Zwart is sometimes credited with taking his own photographs for the 1927 / 1928 NKF catalogue, this seems highly unlikely. Zwart started work on the catalogue in the summer of 1926, and because the catalogue is dated 1927-1928 on the cover, it would seem likely that it was printed sometime in late '26 or early '27. It is also unlikely that Zwart would have started designing the catalogue prior to receiving the photographs to be used. Indeed in this quote, Kees Broos points to the photographs used in the catalogue as the main reason for Zwart's decision to start taking his own photographs :

" The photographs used in the NKF catalogue had been made by a professional photographer whose preference for soft-focus images irritated Piet Zwart more and more. In 1928 he bought a studio camera and some books, and, as with typography, taught himself the trade." ⁸

Although his disappointment with the catalogue photographs was undoubtedly an important factor in his decision to begin photography, there was also an important encounter with nature in 1927, as this quote from Zwart explains :

" For me it started in the winter of 1927. A sunny day after a few days of frost.... A very thin layer of ice, the size of an irregular square metre, supported by reed stalks, had remained suspended above the ice layer on the lowered and refrozen water.... the whole a scale of greys, a sight which could only be captured by photographic means." ¹

Although he missed his opportunity then, he did manage to capture a similar image in 1930 with his newly acquired photographic skills. (fig. 35)

It would seem likely that from 1929 onwards Zwart would, as far as was practicable, have used his own photographs in his advertising work, although I have no clear evidence to substantiate this. Undoubtedly though, Zwart through his own endeavours, would have had a heightened appreciation of what could be achieved by photographic means. Some of his phototypographic achievements are demonstrated in the work that he did for the Netherlands postal, telegraph and telephone service (PTT). Zwart received the PTT commission in 1929, which offered him the chance to apply his functional design principles in a domain that had until then been governed exclusively by traditional rules of design. Zwart was appointed as the designer for PTT (a position he held until 1940), by the extremely progressive, Secretary-General of the time, J.F. Van Royen. Zwart was given commissions to design booklets (promoting PTT services), posters, formsheets, exhibition stands and even postage stamps and franking machine indicia.

One of the promotional booklets produced by Zwart for the PTT which bears the title : " ook post voor u ? " (letters from you too ?), was to advertise the PTT's airmail service in 1929 / 30. The cover design is a photomontage of three component parts; a circle which contains a map of part of Europe, an aerial landscape shot and a hovering aircraft (fig.36) The circle has a very global feel to it, and the map within gives a sense of the Netherlands as the start-point from whence the letter may be flown to anywhere in the world. The aerial photograph, which although it could be anywhere, gives a sense of a specific location to which the letter will be delivered. The aircraft is of course the means by which the letter will be transported and thus the combined effect of the three images

is to impart a concise expression of airmail.

On the second page of this brochure, Zwart has once again used a photo-montage, in this instance as a pun to demonstrate the speed with which airmail reaches its intended destination (fig. 37) The left-hand side of the page is a photographically illustrated diagram of the relative speeds at which different means of transportation travel. At the top of the diagram is the aircraft which at 145 "meters per seconde" obviously ranks as the quickest means of transportation. The right-hand side of the page is an illustration of the world and 2 arcs, which it would appear is intended as a visual interpretation of the speed at which the world revolves; 29,700 meters per second. Although this is a rather idiosyncratic piece of design, it is perfectly functional and also shows a sense of humour, which must be a good thing in designing for a national institution like the postal service.

Zwart was also commissioned by Van Royen to produce a number of postage stamps, which were the first to be based on photo-montage. (fig. 38) Characteristic to most of the examples I have seen, is a quite large circle, which contains either the head of the then Queen of the Netherlands or a pair of hands involved in some form of physical labour. The compositions are very bold and in one, which I suspect is for the promotion of airmail itself, a number of aircraft hover over the circle containing the head of the Queen. These designs have very bold dynamic compositions, often with the type running at angles rather than horizontally (how many countries, even nowadays, would permit the production of stamps like these ?). In the examples that I have seen of

Zwart's stamp designs, the photo-montages all seem to have an industrial theme, which by the nature of photography itself are portrayed quite explicitly and not by romanticised watercolour or line illustrations as so often is the case with stamps today. This quote elucidates Zwart's functional approach to his stamp designs :

" I think that by stating the elements which played a role in the design of a stamp, I made clear that the primary goal of the design was not the designing of a so-called beautiful stamp; the aim was to design a stamp by using the, for our time, characteristic technical possibilities, composed in a reasonable manner with functional elements and post-office use in mind." ¹⁰

Although most of Zwart's photographs were intended for use in his commercial design work, he also produced photographs for his own pleasure and was secretary of the Netherlands delegation to " Fifo ", the international photography exhibition in Stuttgart in 1929 where, together with the like-minded photographers Paul Schuitema and Gerrit Kiljan, he showed his commercial work. Zwart was overwhelmed by the superior quality of American, Russian and German contributions to the exhibition and realizing that the Dutch lagged far behind, he undertook to improve this state of affairs, through sharp criticisms in several articles and also through his own work by trying to show new approaches. (fig. 39) This quote from Zwart in 1961 explains why these designers took to photography and what they were trying to achieve :

" We used the camera, and nothing but the camera, as a contemporary new medium of expression and design, which offered possibilities possessed by no other technique, possibilities which the eye moreover could not fully perceive and endeavoured to develop a characteristic photovision." ¹

This notion of " photovision " featured very strongly in Zwart's teaching. Indeed many of his "free" photographs (those not intended for commercial use Fig. 40) were taken specifically for lectures, to illustrate the potentialities of the photographic image and teach his students "photovision" :

" Photography is a new and characteristic medium of expression of our vision of the world. Photovision is an extension of natural vision. It offers new and different possibilities of expression. On the ground- glass the visionary problem takes on form. Photovision pins down the phenomena of life and nature as a whole or in detail." ⁸

In 1982, an exhibition called " After De Stijl : The new photography in Holland " was held in the Prakapas Gallery in New York. The exhibition was concerned with the interesting phenomenon that, in the late 1920's and early 1930's, a remarkable group of photographers from throughout Europe lived and worked in Holland, having been attracted there both by its political neutrality and its thriving art scene. Central to this influx of artists to the Netherlands were the various strains of Modernism, and in particular Constructivism, which already had firm roots there. Among the immigrant talents were such photographic reputations as Lazlo Moholy-Nagy, Paul Citroen, Erich Salomon and Erwin Blumenfeld, all of whom

were represented in this exhibition, alongside the local talents of Piet Zwart, Paul Schuitema and Cas Oorthuys. In his review of the exhibition in Artforum, Charles Hagen said that : " Despite the all-star cast of foreigners, the show's standout was a homeboy, Piet Zwart." whose work demonstrated " an extremely reductive approach to form and a concern with the social utility of the artwork." ¹¹ In comparing the work of Schuitema to Zwart, Hagen finds that although Schuitema shares a similarly simplifying eye, his pictures " lack the otherworldly absolutism of Zwart's."

Zwart's photographic work demonstrates quite clearly that the functional principles to which he adhered were most conducive to illustrative work, in which breathtaking compositional tricks were applied to relatively vacuous subjects such as copper cables. Even today, the sense of excitement and discovery that Zwart felt at the time, is still apparent.

Piet Zwart's influence on successive generations of typographers. Not only in the Netherlands, where he lived, worked and taught all his life, but also in Europe, and even elsewhere. Typography is an obscure artform in comparison to painting or even architecture. But those who truly had practice in the realm of Zwart's work and importance in the history of typographical design. Therefore to any historian, his great influence on the design of the 20th century is undeniable.

SECTION 5: the legacy of Piet Zwart

From 1918 - 1931 Zwart taught night classes in Design and History of Art at the Rotterdam Academy of Art where "His pedagogical influence was immense".¹² Through the years, he had developed his own ideas about the design process, with the notion of a "shaping machine" and the responsibility for adding content to form. Design is the curriculum for which he was responsible, and in 1922 proposed a completely new framework for art education in the Netherlands. In 1925, he was invited by Henny Meyer to the Academy in Rotterdam to be a guest lecturer for a week. In 1927, he was dismissed from the Rotterdam Academy for "inciting his pupils to rebellion and interfering with Communist ideas".¹³

As might be expected, one of the aspects of Zwart's work most influential on Dutch design, is the work he executed for the PIT. Indeed many of the design principles he had established for the PIT during his appointment, were adopted by the PIT's design group who succeeded him in this position. For instance, Wim Groenink (who is perhaps the most important Dutch design typographer after Zwart) was influenced by Zwart in terms of his design of the PIT's design group and his influence on the PIT's design group. In terms of his design of the PIT's design group and his influence on the PIT's design group.

Piet Zwart's influence on successive generations of typographers, not only in the Netherlands, where he lived, worked and taught all his life, but throughout Europe, has been enormous. Typography is an obscure artform in comparison to painting or even architecture, but those who study and practise it are aware of Zwart's work and importance in the history of typographical design. Needless to say however, his greatest influence has been on Dutch design.

From 1919 - 1932 Zwart taught night-classes in design and history of art at the Rotterdam Academy of Art where " his pedagogic influence was immense." ¹² Through the years, he had developed his own ideas about art education, with the Bauhaus as a shining example and was responsible for adding courses in basic design to the curriculum for which he was responsible, and in 1929 proposed a completely new framework for art education in the Netherlands. In 1931, he was invited by Hannes Meyer to the Bauhaus in Dessau to be a guest lecturer for a week. In 1932, he was dismissed from the Rotterdam Academy for " inciting his pupils to rebellion and infecting them with Communist ideas." ⁸

As might be expected, one of the aspects of Zwart's work most influential on Dutch design, is the work he executed for the PTT. Indeed many of the design principles he had established for the PTT during his appointment, were adhered to by the designers who succeeded him in this position. For instance, Wim Crouwel (who is perhaps the most important Netherlands typographer today and who succeeded Zwart as PTT designer) adhered to the policy advocated and instigated by Zwart in the 1930's, whereby the PTT adopted a programmatical use of

lowercase type only. His argument, which ran that 'Holland is as unmotivated as hOLLAND', " shocked many right-minded countrymen, above all when they saw ' Dutch East Indies ' printed as ' dutch east indies '.⁸

Having had, in the course of my research for this thesis, occasion to consult the Dutch telephone directory and also to refer to the writings of the Bauhaus, both of which are set exclusively in lowercase type, I can testify to the hazards it imposes. To me, it is the most non-functional example of standardization which, although it is perfectly accessible when used for headings or short isolated sentences, is impenetrable when used in long columns or lengthy portions of text.

There can be little doubt that Piet Zwart and other pioneers of modern typography in the 1920's made what is the most significant contribution to typography this century. The principles of functional typography, as initiated by Zwart, Lissitsky, Tschichold, Bayer and others, eventually culminated in the " International Typographic Style " or "Swiss Style " in the 1950's and 1960's. As the name suggests, the style originated in Switzerland but also had an enormous influence on American typographic design. The chief characteristics of the style were a cool clarity and almost scientific objectivity, the use of sans-serif typefaces, all lowercase headings, a " Mondrian-like insistence on horizontal and vertical organization"¹³ and tight grid structures.

In the late 1960's the " Swiss style " had become so refined and proliferated throughout the world that "it had reached an anaemic phase " ¹³ and a reaction against it was inevitable. Perhaps the most articulate reaction to it came from Wolfgang Weingart who studied in Basel with the most influential of the " Swiss style " typographers, Emil Ruder. When Weingart began to teach, after Ruder's death in 1970, he began to question " the typography of absolute order and cleanness " ¹³ and with his broad technical knowledge and disdain for dogma, embarked on a course of incessant, intuitive experimentation. (figs. 41-43) There can be no typographer today who so exemplifies the spirit of Piet Zwart, than Weingart. Indeed Weingart readily acknowledges his debt to Zwart, whom he considers a " genius discoverer ", ¹⁴ and from 1968 until 1974 worked with lead type and the letterpress system of printing in an effort to re-create the sense of invention and discovery that Zwart and his contemporaries must have felt.

Although the most influential aspect of Zwart's work has undoubtedly been his typography, it should also be remembered that he was a very talented industrial, interior and product designer (figs. 44-46) and highly respected photographer. As with his typography, in all these disciplines, his design principles followed a strictly functional intent.

He was also an ardent campaigner in the Netherlands for standards of industrial normalization (such as the DIN-sizes in Germany) and for the acceptance of industrial mass production of " types ", as an economic and social necessity. In 1937 he

designed the Bruynzeel kitchen which had an enormous influence on the modernization of this critical domestic space (fig. 47) and after the interruption of war, he designed a modular kitchen for Bruynzeel which was also extremely influential.

CONCLUSION

Piet Zwart once described himself as a " primitive of the new technical epoch ",¹ which may sound rather self-effacing, but is really a literal truth. The first section of this thesis examines the fresh challenges which faced designers, arising from the increasing industrialization and technological advances made in the graphic industry, during the first quarter of this century. The thesis is a study of piet Zwart's response to these challenges and of how his response has affected the course of typographic design.

Zwart's vigorous approach to problem-solving emanated from his principles of functional design. His belief that " design is not a matter of tastes " or " of individual whim " but an expression of an attitude towards life, is central to all his work. The analysis of his work, in the third section of this thesis, shows how these guiding principles gave rise to Zwart's unique brand of compelling and dynamic typography. It also shows how he, successfully and imaginatively, assimilated photography into his design vocabulary. The fourth section examines Zwart's photographic ambitions more thoroughly and emphasises that, although he considered himself a " primitive " of the " technical epoch ", he was always eager to accept and master technological advances in an effort to enrich his techniques of visual communication.

In assessing Zwart's contribution to modern typography, one is faced with the peculiar contradiction that, although he is little- known, his work has been enormously influential.

The reasons for this are too numerous to examine in this thesis, suffice to say that those who know and care about typography are well aware of his contribution. Indeed this thesis is itself testimony to the continuing influence of Piet Zwart on successive generations of typographers.

" Among the few whom I indicated, is there no dynamic man of action, the rebel who helps to determine the aspect of the collective expression of tomorrow ? Ponder this question and know that to make beautiful creations for the sake of their esthetic value will have no social significance tomorrow, will be nonsensical self gratification. Every era contains the conditions for producing a rebel." 1

REFERENCES.

1. Zwart, Piet: Keywords, Stedelijk Museum, Amsterdam. 1966.
2. Cove, Jacqueline &
Lankhof-Hoogenboezem, Emy: Industry and Design in the Netherlands 1850-1950 (pp. 124-127), Stedelijk Museum, Amsterdam. 1986.
3. Meggs, Philip B.: "The De Stijl movement", A History of Graphic Design (pp. 321-328), Allen Lane, London. 1983.
4. Althaus, Peter F.: Introduction to, Documents in the visual arts. Part One: Piet Zwart (pp. 7-13), Tiranti, London. 196?.
5. Gropius, Walter: Bauhaus Book No.7 (pp. 4-7), 192?.
6. Jaffe, Dr.H.L.C.: "Piet Zwart, a pioneer of Functional Typography", New Graphic Design (pp. 2-19), June 1961.
7. van der Lem, Dr.Paul: Personal Correspondence, Feb. 1987.
8. Broos, Kees: "Piet Zwart", Studio International (pp. 176-180), April 1973.
9. Crouwel, Wim: Typography Today (pp. 18-21), Seibundo Shinkosha, Tokyo. 1980.
10. Brattinga, Pieter: "The formative years of Dutch graphic design", Typographic (pp. 4-7), August 1986.
11. Hagen, Charles: "After De Stijl: The New Photography in Holland", Artforum (p. 80), December 1982.
12. Cohen, Arthur A.: Exhibition Catalogue; Ex Libris, New York. 1980.
13. Meggs, Philip B.: "Post-Modernism", A History of Graphic Design (pp. 483-490), Allen Lane, London. 1983.
14. Weingart, Wolfgang: Typography Today (pp.4-5), Seibundo Shinkosha, Tokyo. 1980.

BOOKS.

Bool, Flip &

Broos, Kees : Fotographie in Nederland 1920 / 1940,
Haags Gemeentemuseum, The Hague.

Spencer, Herbert: Pioneers of Modern Typography,
Lund Humphries, U.K. 1969.

Fricke, R. : Retrospektive Fotografie, Edition Marzona,
Bielefeld, West Germany. 1981.

Belleguie, Andre: Le Mouvement de l'espace typographique,
Jaques Damase, Paris. 198?.

CATALOGUES

Broos, Kees : Piet Zwart, Haags Gemeentemuseum, The Hague. 1973.

Author unknown, Piet Zwart ; Tpotekt, Stedelijk Museum, Amsterdam.
1961.

" " Piet Zwart in PTT, Haags Gemeentemuseum, The Hague.
1968.

" " Piet Zwart ; the image of Bruynzeel's pencil factory
Museum Boymans - van Benningen, Rotterdam. 1983.

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Beuningem Museum, Rotterdam.

PERIODICALS

- Luidl, Philipp : " Piet Zwart ", Novum gebrauchsgrafik (pp.30-35),
September 1986.
- Frampton, K. : " The work and influence of El Lissitsky ",
Architects Yearbook, 1968.
- Schulze, F. : " O,Brave New World ", Art News, May 1982.
- Bool, F. : " On the occasion of the exhibition of Piet Zwart "
Museumjournal (Netherlands), July 1973.
- " Printing today : Netherlands " Print Jan. 1964.
" Umschlag des Niederlandischen Katalogs NKF "
Pantheon, July 1973.
- Arts Magazine December 1967.
- Graphis 6 1950.
- Industrial Design November/December 1983.
- Museumjournal December 1970.