

# virtual typography

adj  
almost or nearly as described,  
but not completely or according  
to strict definition

n  
characters or letters  
that are printed or shown  
on a screen



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**BASICS**

**TYPOGRAPHY**

**C1**

**Virtual Typography**

**Matthias Hillner**

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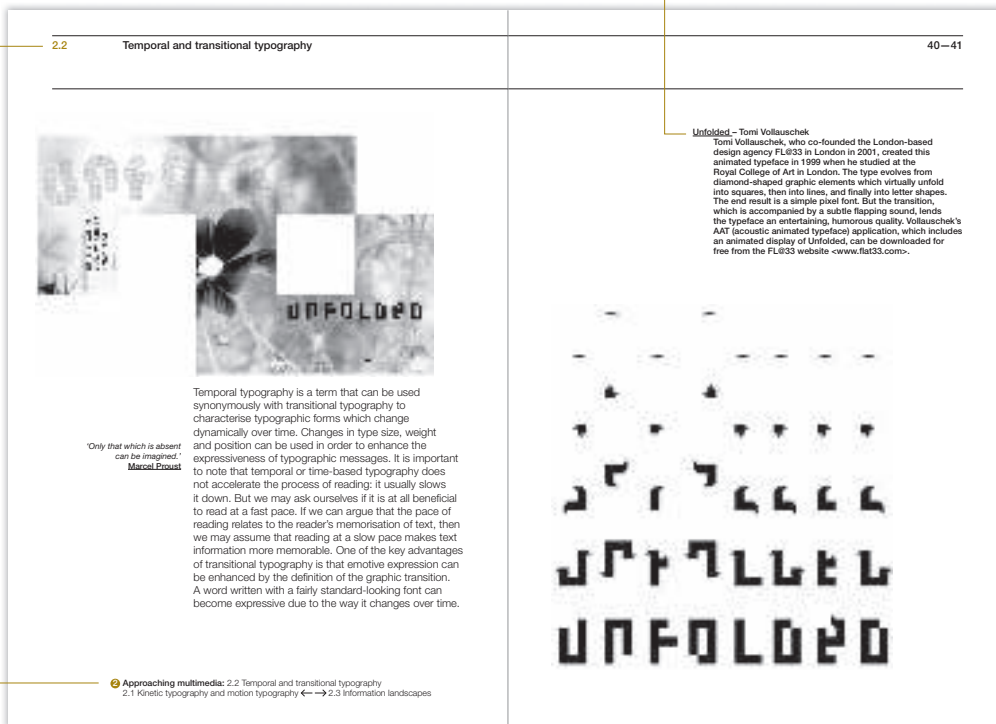
This book introduces different aspects of virtual typography, via dedicated chapters for each topic. Each chapter provides numerous examples of work by leading designers, annotated to explain the reasons behind the design choices made. The examples shown include a range of screen-resolution works and diagrams, which, when combined with detailed analysis in the text, create a fascinating insight into the world of virtual typography.

**Section header**

Each chapter is broken down into sub-sections, the title of which can be found in the top left corner of each spread.

**Image caption**

Image captions provide in-depth information about the images shown.




**Chapter footers**

This shows the current chapter and sub-section, and also shows past and future sub-sections.

## Running glossary

Clarification and explanation of key terms is provided alongside the main text.

<p>5.4 The prospective interpretation of text contents</p>	<p>128—129</p>
 <p><b>How do you define a journey?</b> – Adam Field Adam Field was a student at the London College of Communication when he created this large-format print. Field hoped to break down words to allow for multiple interpretations of his typographic composition. The type communicates on two layers: the question appears from the omission of type in certain areas and becomes increasingly illegible towards the end, yet the seemingly random letters surrounding the letters that shape the question invite the reader to search for words within the chaos of the type. While the words, which evolve from the gaps between letters, phrase the question, the form of their visual presentation point towards an answer. A journey through text defined by chance?</p> <p>● <b>Typography and the process of reading:</b> 5.4 The prospective interpretation of text contents 5.3 Saccadic eye movements ← → 5.6 Time consciousness</p>	<p><b>Edmund Husserl</b></p> <p>In the context of philosophy, Edmund Husserl (1889–1938) is seen as the founder of phenomenology, a branch of philosophy that considers all knowledge to be rooted in people's subjective experience. Many other philosophers including Heidegger, Merleau-Ponty, Sartre and Derrida drew on Husserl's theories. Husserl taught philosophy at various universities in Germany until he retired in Freiburg, where he was superseded by Martin Heidegger in 1928.</p> <p><b>Time and tension</b></p> <p>As much as one sentence points to the next to come, it also relates to the expectation triggered by the previous one. By fulfilling or contradicting the expectations made, each sentence modifies the understanding of what was previously said. So the text is constantly re-evaluated and the reader's memories transformed. In a wider sense, this process of continuously rethinking the past and the future reflects the way people perceive temporal progression in general. According to <b>Edmund Husserl</b>, a German philosopher, the present moment can only be perceived indirectly through the dialectical tension between past and future events. In other words, people develop their awareness of the present through constantly comparing their expectations of what is about to happen in the future to that which has happened. Husserl refers to the anticipation of future events as 'protensions' and to memorised sensations as 'retentions'. Like the present moment in real life, the content of a written text remains constantly dynamic. Depending on the sequential structure of sentences and contents, new thoughts are evoked and the reader's perspective is shifted. The continual interplay between protensions and retentions can result in a constantly upheld tension. Following Iser, protensions in the context of literature should therefore not lead to fulfillment, but to a succession of protensions. This allows for the constantly upheld tension that sustains the reader's interest and perpetuates the joy of reading.</p> <p><i>"Faced with the beautiful, analytical reflection restores the tempo: clarity through the medium of its antithesis. Analysis illuminates in beauty."</i> <b>Theodor Adorno</b></p>

## Quotes

Additional quotes from subject experts and practitioners.



Graphic design is a means of visual communication, but only one of many: people also communicate through gestures, facial expression, body posture, images and written words. Animals also communicate through gestures, facial expression, body posture and images, but without words. Words constitute verbal language, which is exclusive to mankind. The colourful striped pattern of a bee or a snake signalises danger and such image patterns constitute graphic signs which are capable of conveying more or less basic messages. But the flexibility of graphic or ideogrammatic systems is always limited to the number of signs available. The messages we exchange within human societies can be very complex, so they require more sophisticated means: words and writing.

Verbal languages consist of words and letters, the orderly arrangement of which allows for an infinite number of meanings. Civilised societies would probably have never developed without written languages. Without words, life in a civilised world would be too difficult to organise. In ancient times and during the medieval period, reading and writing was reserved for the leadership of societies so iconic imagery was used to communicate religious and political issues to illiterate people where required. But following Johannes Gutenberg's introduction of movable type, text has increasingly replaced images. This has spread over the course of the last 500 years, thus spreading knowledge and understanding throughout society, in particular since public education was established throughout most of Europe and America in the nineteenth century.

At present, a reversal of this process appears to be taking place. Over the course of the twentieth century, people's lives have become so interlinked and information so accessible, that we struggle to put up with the infinite amount of information with which we are confronted every day. The exchange of information that once enabled us to enhance social interaction is

**Virtual Typography**

now often seen as a burden. The growing information overload has led to a change in the use of language. Where there is no time left for reading, we return to the use of images as substitutes for words.

Images can be perceived at a glance. Traffic signs, for example, provide mostly ideogrammatic information as discussed in *The Fundamentals of Typography* (Ambrose and Harris, 2006). A red circle with a horizontal white bar is perceived much more quickly than the words 'do not enter' and its perception does not depend on the information recipient's individual language background. Texts need to be read, and reading is an analytical and therefore time-consuming activity. But even if images can be perceived quickly, how swiftly are they understood? Meaning conveyed through images is usually less explicit than that which is delivered through words. Traffic signs are comparatively easy to interpret. A cross, on the other hand, can vary in meaning depending on the context. The word 'Christianity' offers more precision in semiotic terms than the abstract image of a 'cross'. So do the words 'plus', 'death', 'first aid' and so on. Images are always subject to the viewer's interpretation. The more complex an image is, the more room there is for interpretation and potential misinterpretation. People say a picture is worth a thousand words, but it is as if these thousands of words are all spoken simultaneously without any particular structure involved. Grammar rules force a speaker, a writer or a typographer to articulate words in a structured manner. This is why text communicates meaning with more precision than images.

So we still need to use text information where we want to avoid the misinterpretation of our message. Typography can be understood as the visual interpretation of verbal language. But how do we best communicate typographic information in a world of images? Virtual typography is time-based. Thus it operates on the borderline between image and text.

It attracts the viewer's attention due to its image-like appearance before developing into a written message. Virtual typography is consequently not simply a matter of extruding conventional fonts, letting type bounce across the screen or making it spin randomly within three dimensions. It is about producing sensible solutions for conveying text messages gradually and effectively within media environments. Typography is the visual arrangement of words and letters. Where such arrangements are time-based, the conventions we have in place for judging static typography are no longer sufficient. New principles apply.

### **1 From visual poetry to modern typography**

Before assessing contemporary time-based typography, we need to deepen our understanding of the modern achievements in printed typography. This first chapter shows how the pioneers of modern typography broke with typographic conventions in the past in order to create typographic compositions which were (and possibly still are) ahead of their time.

### **2 Approaching multimedia**

This chapter provides an overview of recent concepts of multimedia typography. It will enable us to develop a conceptual understanding of the role of time and space in the context of virtual typography. In response to the emergence of new expressions, this chapter also helps to avoid terminological misunderstandings.

### **3 Typography, information and communication**

With the help of a range of case studies, this chapter explains some of the fundamental principles behind typographic communication in general and behind virtual typography in particular. Step by step, we establish a theoretical basis for the time-based communication of typographic information.

#### **4 Digital typography**

Following the invention of movable type and early twentieth century avant-garde art movements, the introduction of digital media was probably the most radical change in the context of typographic communication. This critical review of celebrated designs puts digital typography into perspective. It also highlights how quickly the digital revolution ran out of steam.

#### **5 Typography and the process of reading**

Typographic communication cannot be understood without understanding the process of reading. This chapter explains a number of existing concepts concerning the visual and intellectual perception of text. Understanding reading as a time-based process provides a better understanding of the benefits of virtual typography.

#### **6 The significance of ambiguity**

This final chapter sums up and explains the aesthetic principles of virtual typography. A wide range of examples illustrate how virtual typography can be used to enhance the communication process.

It must be acknowledged that this book addresses a fundamentally new way of typographic communication. Some of the scientific and philosophical principles which led to its rationale are still subject to speculation. The book may well be just one first step into a new form of visual expression.



Typography is the visual representation of text information. One could argue that every typographic arrangement constitutes the image of a text, however abstract this image may be. Johannes Gutenberg's method of printing with movable type in the fifteenth century reinforced the convention of writing in straight lines, from top left to bottom right. It was not until the turn of the nineteenth century that artists began to rebel against those rules. Alongside the likes of Christian Morgenstern and Stéphane Mallarmé, Guillaume Apollinaire introduced the revolutionary idea of visualising poetic writing. This attempt to fuse text and image into visually challenging typographic compositions inspired many forms of typographic art, including futurism, Dadaism and even constructivism.

*Eulogy for HNW* – Joshua Reichert

Joshua Reichert, a renowned German printer and typographer, created this printed piece of typography as a tribute to the famous Dutch printer Hendrik Nicolaas Werkman, who inspired Reichert's experimental typography.

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**Guillaume Apollinaire**

Guillaume Apollinaire was part of the artistic community of Montparnasse in Paris, France, to which Pablo Picasso, André Breton and Marcel Duchamp also belonged. Apollinaire is mainly known for his avant-garde poetry and he is credited for coining the term 'surrealism'.

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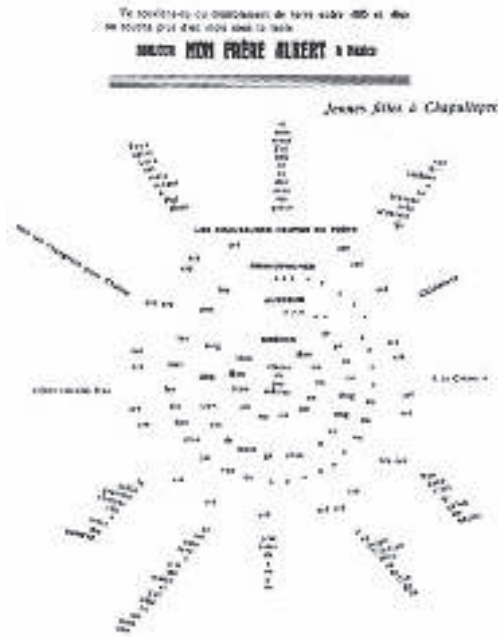
**Ferdinand de Saussure**

Ferdinand de Saussure, a Swiss-born linguist, provided a foundation stone to linguistic philosophy with his seminal book *Course in General Linguistics* in 1916. His approach differed from earlier contemporaries' because it focussed on language in any one time and place rather than language in one place developing over time. He viewed language as a system of words and signs and as such proposed that the specific language spoken by someone directly affected their conscious awareness of the world. The significance of verbal language in the context of human perception remains an important subject of investigation.

Visual poetry broke with the conventions of traditional typography well before modern and postmodern forms of typography emerged. The beginnings of the movement are usually attributed to the early twentieth century even though there are much earlier examples of pictorial representation of texts. Visual poets returned to the use of pencil and paper in protest against the mechanisation of reading. The mechanical characteristics of reading are closely related to the mechanisation of writing. Despite the fact that **Guillaume Apollinaire** commissioned letterpress artists to print his poems, he initially drew them by hand. As they were composed without any technological constraints Apollinaire's ideograms escaped the conventions of linear writing and forced readers into a perceptual struggle. A visual poem confronts the reader with an initially confusing piece of information. One cannot tell if one is looking at an image-like text or at a text-like image. Visual poetry thus undermines **Ferdinand de Saussure's** early twentieth-century theory of a structural relationship between people's mental concept of an object (image) and the word used to name the object (linguistic sign). In contrast, according to Saussure, the word constitutes the second-order **semiological system**, the image of an object constitutes the first-order semiological system. Visual poetry reverses this relationship by translating the written word back into an image. The written word here becomes the first-order signifying system, and the image becomes the second-order signifying system. This is why we may consider visual poetry as a truly revolutionary step in the context of visual communication.







*La colombe poignardée et le jet d'eau* and *Lettres Océans* – Guillaume Apollinaire  
 Apollinaire's *Mon Frère Albert*, from the series of *Lettres Océans* is much more abstract in comparison to *La colombe poignardée et le jet d'eau*.

- 1 From visual poetry to modern typography: 1.1 Visual poetry  
 → 1.2 Dada

Que mon  
 Flacon  
 Me semble bon !  
 Sans lui  
 L'ennui  
 Me nuit,  
 Me suit.  
 Je sens  
 Mes sens  
 Mourants,  
 Pesants.

Quand je la tiens ,

Dieux ! que je suis bien !

Que son aspect est agréable !

Que je fais cas de ses divins présents !

C'est de son sein fécond, c'est de ses heureux flancs  
 Que coule ce nectar si doux, si délectable,  
 Qui rend tous les esprits, tous les cœurs satisfaits.  
 Cher objet de mes vœux, tu fais toute ma gloire.  
 Tant que mon cœur vivra, de tes charmants bienfaits  
 Il saura conserver la fidèle mémoire.  
 Ma muse à te louer se consacre à jamais,  
 Tantôt dans un caveau, tantôt sous une treille,  
 Ma lyre, de ma voix accompagnant le son,  
 Répètera cent fois cette aimable chanson :  
 'Règne sans fin, ma charmante bouteille ;  
 Règne sans cesse, mon flacon.

*Rabelais Bottle* – Charles-François Panard

This typographic arrangement by Charles-François Panard (1694–1765) proves that visual poetry existed long before the turn of the nineteenth century when figurative arrangements of type became popular.

*'Invest your money in Dada! Dada is the only savings bank that pays interest in the hereafter!'*  
**Kurt Schwitters**

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### Kurt Schwitters

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Kurt Schwitters was one of Germany's most prominent representatives of the Dada movement. Schwitters managed to combine artistic ambitions with commercial interests. He initiated the periodical *Merz*, which is an abbreviation of the German word *Kommerz*, and co-founded the Ring Neuer Werbegestalter, an association of advertising designers. Under the right-wing regime in Germany in the late 1930s Schwitters' work was considered as degenerate art. He emigrated to England in 1940 to flee the Nazi regime.

The Dada movement emerged from anarchist and socio-political initiatives in Zurich in 1915. The political neutrality of Switzerland throughout the First World War had led to a sense of frustration amongst artists. Dadaism constituted a seemingly anti-functional approach to typography. As it was often devoid of any literal content, typography was reduced to a visual form of expression that, ironically, did not always result in the revelation of meaningful information. What seemed a medium without a message had in fact begun as a cynical response to what was perceived as a lack of common sense in politics. Dada quickly spread across Europe and reached as far as New York. **Kurt Schwitters** became one of the leading representatives in Germany. Similar to visual poetry, but in a less exclusive fashion, Dadaism helped to question many established conventions about graphical and typographical arrangements. By defying any notion of hierarchy in the composition of text and image elements, Dadaists aimed for a quasi-chaotic simultaneity of information fragments. This formal aesthetic anarchy was used as a means to encourage political criticism and to foster scepticism towards cultural settings. Later it inspired the surrealists.



**New Jersey Performing Arts Center – Paula Scher,  
Pentagram Design**

With her exterior design for the Lucent Technologies Center for Arts Education in Newark, New Jersey, Scher took typographic expression into the third dimension. Words, which do not necessarily want to be read, cover the façade making the building stand out from the surrounding brick-wall architecture. The words wrap around the walls as if they are staging their own energetic performance. Type becomes pure attitude.

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### Pentagram Design

Pentagram Design is a well-known international design consultancy with offices in London, Berlin, New York, Austin, and San Francisco. What makes Pentagram Design unique is its unusual business concept. About 20 partners work with their individual teams independent from one another in different parts of the world. The profits generated are shared equally between the partners at the end of the year. The name Pentagram derives from the fact that there were originally five partners who set up the company in London in 1972.

Despite the persistent popularity of Dada, there are very few contemporary designs truly comparable to works belonging to the movement. Paula Scher joined **Pentagram Design** as a partner in 1991. The promotional posters created for the Public Theater in New York in the late 1990s reflect some of the characteristics of Dadaist typography: type varies in size and weight and point in all possible directions. Letters and words, which are sometimes hand-drawn, move through the gaps, filling the page in an exuberant manner. As opposed to Dadaist collages, which were often black and white, colour is used to further enhance the visual agitation. Before being able to read a single word, the viewer is already overwhelmed by the explosive energy that lies behind the restless compositions.

### New York Public Theater – Paula Scher, Pentagram Design

Due to the intense competition in New York's theatre promotion and a growing similarity between poster styles, Scher redeveloped the visual identity of the Public Theater in 2008. Inspired by De Stijl graphics, she applied a much tamer approach by using text elements predominantly at a ninety-degree angle.

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BY DAVID WALKER

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**Futurist manifestos**

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Futurism was a rebellious movement that spread across many countries in Europe and influenced various forms of art including painting, architecture and music. Numerous manifestos appeared to spread radical messages in rejection of traditional principles, such as academic formalism and classical concepts of harmony. Futurists explicitly embraced energy and fearlessness – even war itself. Many of the futurists were very patriotic, so the interpretations of futurist principles often varied from one country to another.

*'A new beauty has been added to the splendor of the world – the beauty of speed.'*

**Filippo Tommaso Marinetti**

Futurists pushed the borderline of typography even further towards the virtually typographical. A distinction between text and image could often not be made anymore. By making reading often impossible, futurist collages forced the viewer to simply look at the accumulation of typographic fragments rather than to unveil their possible meaning through reading. To what degree a futurist piece of art was supposed to be considered an image, collage or typographic piece of art could often be determined only by the individual observer. Futurism originated in Italy where it was partly inspired by visual poetry. By turning typographic art into a less literal form of expression, futurists managed to escape the contextual constraints of poetic writing. Visual poetry became visual poetics. Futurism was an expressive response to industrialisation. It was meant to appeal to all members of society rather than just art lovers. Machines became the focal point of attention and the praise of speed the underlying agenda. Even though it originated in Italy, futurism had a widespread influence on art forms elsewhere in Europe. Whereas the **Futurist manifesto** was published in Milan in 1909, the *First Almanac of Futuristic Poetry* was issued in Warsaw in 1920. Filippo Tommaso Marinetti, the leader of the futurists in Milan, visited St Petersburg in 1910 and 1914 to present a series of lectures, spreading the influence eastwards.



*Glory to the New Born King and Imagine* – Alan Kitching

Alan Kitching is not a futurist designer. He is a contemporary letterpress artist whose approach to design transcends any style. However, the work shown here reflects some of the characteristics of futurist typography. Type is placed at dynamic angles; type sizes are varied to express a sense of motion, growth and tension. Kitching printed *Glory to the New Born King* (above left) with wood type on to translucent Japanese paper. This poster belonged to a series that was commissioned by a London music publisher for a Christmas window display. *Dante's Inferno* (above right) is part of a series of personal works for which Kitching printed coloured type onto black paper. What appears as white here was in fact type printed in silver. Kitching's use of colours and overlapping letters goes well beyond what was seen in the 1920s, or in fact ever since.



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