PATTERN

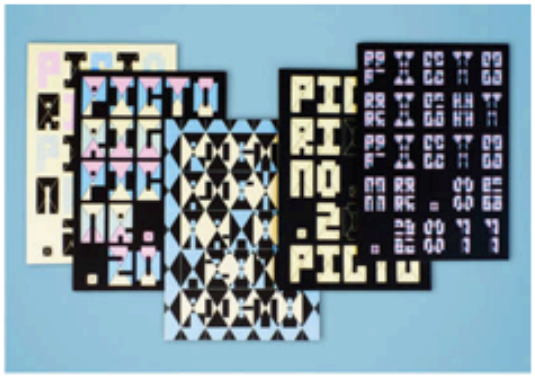
A pattern is a recurring set of objects, elements, or events, repeated at regular intervals (which is known as *periodicity*). Patterns exist in both space and time and are often based on relationships that can be described as mathematical formulas.

Visually, we experience patterns over time (sequences of flashing lights, for example) or through space (as in the alternating squares on the chessboard). Patterns can be simple and easy to discern or, as in the case of many mathematical sequences, deep and highly complex. We discover patterns in nature (Figure 3.74), and seem to be pattern-seeking animals, even when the absolute periodicity of obvious repetition is missing.

While mathematical patterns follow precise rules, we accept more variation in visual patterns, still recognizing recurring approaches to form among the elements despite subtle changes. De Designpolitie's system for Pictoright, a service that deals with copyright infringements for artists, reveals a paradox at the heart of the modern use of the term *pattern*. Not

only does pattern reflect rules-based repetition but also a collection of elements we perceive as a whole that exhibits logic from one to the next. The Pictoright system varies slightly across applications but seems consistent in principles for their composition (Figure 3.75).

Figure 3.74
Patterns occur throughout nature.



PICTO RIGHT

Figure 3.75
Pictoright, 2008–2016 Concept and Design: De Designpolitie
Pictoright deals with copyright infringements for artists. De Designpolitie's solution to the graphic identity was to repeat patterns with small variations across formats, a visual reference to duplication of artists' work.

Figure 3.76
Aurora, 2011 Garbage In, 2011 Harmen Liemburg
Liemburg collages images in his large silk-screen posters

from ephemera collected on his travels. His work includes repeating patterns that serve as an organizing structure for the complex array of elements.

Dutch designer Harmen Liemburg creates very large, multicolored silk-screen posters comprised of signs and symbols collected from his travels (Figure 3.76). Like the previous examples, these complex designs have an underlying structural logic that allows dissimilar forms to appear as repeating patterns. Not only do we perceive the overall layout as patterned, but we find many smaller repeating patterns within the larger composition. This second level of patterning holds our attention, inviting a "second reading" of the form in the details.

Inspire
Diversify
Transform
Teach
Innovate
Connect
Gat

Figure 3.77
Platform Summit identity, 2013 Pentagram Partner and Designer: Eddie Opara Associate Partner and Designer: Ken Deegan Designer: Pedro Mendes

Pentagram's Opara branded Platform, an organization dedicated to increasing participation by underrepresented groups in entrepreneurship and technology. The ThreeSix II font, designed by MuirMcNeil, conveys technology and is the basis of a set of icons developed by Opara for the organization's summit. Similar units are recombined to form a consistent pattern when used together.

Eddie Opara's design for the Platform identity also shows slight variations in icons composed of the same elements. When arranged in a line, they appear as a pattern despite their individual differences (Figure 3.77). To read as a pattern, it is important for each icon to occupy similar space and to appear roughly the same in the distribution of black and white. The identity continues the idea of pattern in other design applications in its conference setting.

Type design relies on pattern. The twenty-six letters of the alphabet are made up of recurring forms (strokes, counterspaces, ascenders, descenders, angles, and so

forth). The general goal in typeface design is to create an optically even distribution of these elements so that no single character draws attention over others in typeset text. Fixation on single letterforms interrupts the flow of reading and distracts readers from the content of the message. The pattern of these typographic elements determines the texture and value in blocks of text.

Pattern in text is created not only by the repetition of elements in the design of letterforms but also by the recurring intervals of space between elements. As with the design of typefaces, the goal in decisions about point size, line spacing, and column width is often to create an even distribution of black elements and white space. When type is justified on too narrow a column, however, the spaces between words are often uneven as the computer program attempts to reconcile differences in the number of characters in each line of type. These "white rivers" interrupt the regularly patterned distributions of black and white in text, arbitrarily drawing unwanted attention that slows down reading (Figure 3.78).

In protest of the modernist preferences for highly refined typographic form, designers in the late decades of the twentieth century used irregularities in letterspacing for expressive purposes, often referring to pre-digital technologies and handcrafted work. These unpredictable spaces are reminiscent of spacing problems that arose in letterpress printing. In metal type, spacing could not be controlled between certain letter combinations. When digital technology overcame this limitation, adjusting spaces optically with increasing levels of perfection, designers chose to introduce exaggerated interruptions in the regularity of typeset patterns (Figure 3.79). These irregular interruptions in pattern brought attention to the designer's presence by referring to the unique qualities of an older handset craft.

Pattern, therefore, is more than decorative. It identifies formal similarities and differences among elements in a composition, determines reading flow, and attracts attention to elements that represent a break in the regularity of the pattern.

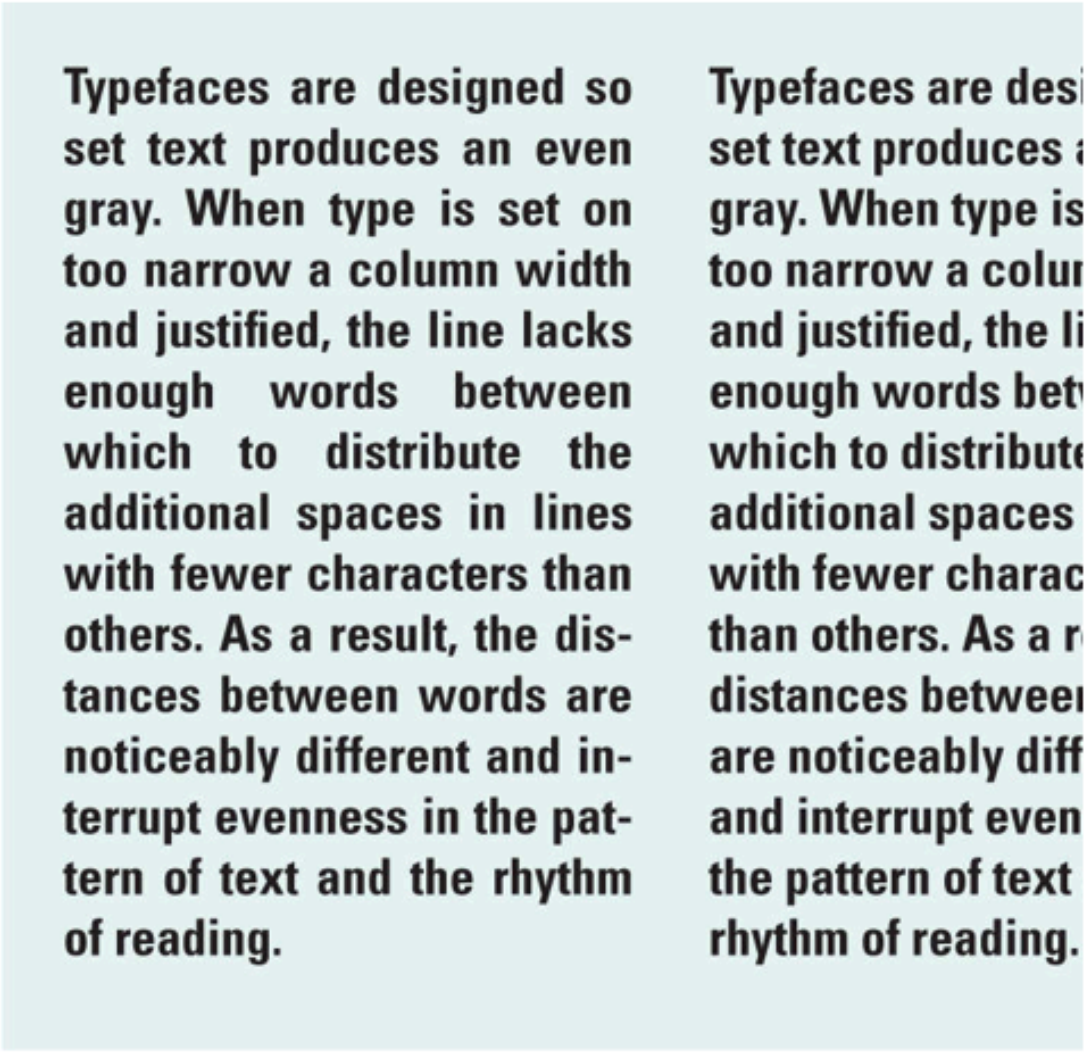


Figure 3.78
White rivers

Justified type (in which both sides of the column align) often creates uneven spaces called "white rivers" when the column width is too narrow.

Figure 3.79
Color; Future Agency: F/Nazca Saatchi & Saatchi Creative Directors: Fabio Fernandes/Pedro Prado/Rodrigo Castellari Art Director: Rodrigo Castellari Copywriter: Pedro Prado

The very simple typography in these posters gains interest through variable letterspacing. The designer separates one typographic unit from another through patterns achieved through spacing, rather than changes in size or typeface.