4. Layout

4.1. Organizing the layout

4.1.1. Layout in terms of page structure or the story

Typography provides the basis for layout. A publication uses an overall typography specifically designed for it. The typography of single pages is compatible with this overall typography. These together create a recognizable identity for the paper or magazine.

Different elements of the layout are headlines (19-78 points), visualization (pictures, figures and graphics), text (7-15 points), special effects (lines, boxes, rasters, colour, negative texts, etc.) and white space. By making use of these the designer creates an informative and economical design for the page.

The layout can be either fixed or flexible.

In a fixed layout the location of the different stories on a page has already been determined. This means that when a journalist gets a topic for his story and starts to write it, he knows for which page and which space he is writing. Thus he knows exactly how long the story is supposed to be. He cannot write too short or too long a story; it has to be of precisely the required length.

If whole-page stories have been assigned regular places in the publication, it only remains for the designer to place the story in them.

In a flexible layout the page format or layout design does not restrict the length of a story; this is the decision of the writing journalist. Thus the space needed in a flexible layout is based on the length of the story itself.

An advantage of a flexible layout is that the journalist has a free hand in writing as long or short a
story as the topic allows and the journalist sees as appropriate.

A fixed layout, on the other hand, restricts the journalist's freedom. The space for the story has been determined in advance. The journalist has no right to alter the length of the story. If he wants to do so, it has to be separately agreed on with the editors.

An advantage of a fixed layout is that the journalist knows exactly the length of the story he is to write. Thus, when writing the story, he can build the story to the specified length and use the information acquired in such a way that the finished story fills the allotted space and covers the most essential features of the topic.

4.1.2. Vertical and horizontal organization of a layout

The dominant lines of a page can be either vertical or horizontal. Accordingly, the layout of a page is called either vertical or horizontal.

A horizontal line conveys a peaceful message. Hence a horizontal layout is considered to suggest coolness and intelligence. This is a very appropriate style for the layout of stories which are intended as serious articles presenting profound background information.

A vertical layout is the opposite of a layout utilising horizontal lines. The message it conveys is opposite to that of a horizontal layout as it breaks our normal binocular field of vision. A vertical layout is considered to be impressive and to convey emotion visually to the receiver. Thus it is a suitable layout, for instance, for features and other subjective stories.

The visual messages, emotional and intellectual content of a vertical or horizontal layout can be used to support the inner message of some of the stories on the pages in question. It is then being used functionally. However, the basic structure of a page, especially that of news pages, requires stories to be placed in a certain way regardless of their content. Thus on routine pages the structure of the layout itself is more emphasized than the message.

In a vertical layout the dominant lines are vertical, ie. upwards and downwards. For instance, a broadsheet page may be divided into bars of 1-4-3 columns or a five-column tabloid into bars of 2-3 columns. These bars rule the page from the upper edge all the way down.

An advantage of a vertical layout is that it makes it easy to arrange stories on a page - especially if the designer has a large number of short stories to make up. Stories are placed in the bars so that the shortest ones are in a one-column bar and the longest, for instance, in a four-column bar. The stories start and end at different points on the page, but the dominating vertical lines ensure the elegance of the page - the less noticeable horizontal elements which separate the stories do not disturb the vertical elements, but separate the stories vertically from one another, and hence the systematic structure of the page is retained.

In a horizontal layout the dominant lines are horizontal. In its simplest form the stories are broad and are placed across the page below one another. Thus they form one broad bar across the page, all the way down. In a more complex form stories can be placed side by side, but assembled so that the horizontal white space and possible line
which separate them are more salient than the vertical elements separating the stories.

A horizontal layout is most suitable when the designer has a number of long stories to fit in. When a long story is run across several columns, each separate column is shorter than it would be if the story was confined in a narrower space. Thus short columns give the reader the subconscious impression of a short story, making it easier to start reading the story. A story which appears long has a higher threshold than a short one.

A vertical and a horizontal layout can be combined. The upper section of a page can be horizontal and the lower section vertical - or vice versa. This is called an interchange layout.

An interchange layout is justified if the designer has stories of different lengths which it is difficult to accommodate into either a vertical or horizontal layout alone. A page may start with a horizontal layout, in which 2-3 long stories are placed on the upper section of the page. After this a change is made to a vertical layout, which makes it possible for the designer to arrange the shorter stories at his disposal in a rhythmic and logical order on the page.

In a layout opposite to the one above, the main news stories are placed in the upper section of the page, whereas in the lower section, for example, an extensive story containing much background information might run in a horizontal layout across the page. In this case, the point size of the headline of the story in the lower section has to be smaller than that in the main headline so that they do not compete with one another for the attention of the reader. For instance, a fac-
tual background story can be placed in the lower section, thus making use of the layout to support the style of the story.

In addition to a vertical and a horizontal layout a circular layout is also possible. It aims, through its irregularity, at breaking up the structure of the vertical and horizontal types of layout. Here, it is not the purpose to create a systematic column structure for the page. Large headlines and plenty of typographical effects can be used. The pictures used can be large, too, and might sometimes even be irregular in shape or arranged diagonally.

In a circular layout the main story is set in the middle of the page and the other stories grouped around it. The result is varied but in it lies the danger of a confusing appearance, making perception of the whole difficult.

A circular layout is usually used by tabloids and sensation-seeking magazines. They use a circular layout to attract attention, to support their daring style of reporting and to present their pictures in a spectacular way. A circular layout is not, however, confined to tabloids alone, but it is also used in moderation in the layout of daily newspapers.

A photo-centered layout is similar to a circular layout. In this type of layout even more emphasis is given to pictures, which are the most noteworthy element in a newspaper or magazine. Pictures are placed on a page in such a manner that they form a path from the main picture to the others. The order of the pictures in the path is determined according to their size and locations. Thus the most attractive elements on a page, the pictures, receive prime locations and
an internal preference.

After the pictures have been arranged, the story connected with the main picture is placed next to it, the second headline is placed next to the second picture, and so on. Stories without pictures are arranged along the picture path in the proximity of the picture to which they are connected - either above or to the left of it - according to the order in which the stories are presented.

In a diagonal layout the main story begins at the outer edge of the page. The headline is broad and the end of the story a narrow tail. Thus the headlines are more prominent and the dominant direction, guiding the reader, is from the upper outside edge of the page down towards the inner edge of the page.

Along with computerized layout, newspapers are increasingly resembling magazines. The construction of their main newspages and first pages of sections are based on large pictures and an impressive layout.
4.2. Preference guides the reader
4.2.1. Hierarchy of stories as starting point

The starting point when designing a layout for a page in a newspaper is usually the page, which forms a whole. The direction in which a page is perceived is from the top downwards. In a magazine, however, the starting point is a series formed of pages, and the pages are perceived from left to right, from one page to the next. A tabloid falls between these two: the pages are usually constructed in one-page units, but a unit of several pages may also be treated as a whole.

The aim, when designing a page, is to create a hierarchy or preference for the stories and to arrange the stories and pictures on the page so that the reader, when scanning the page, will notice all the stories. A preferential reading order can be created for the page by the use of a different story path or paths or the position of the pictures and the attractiveness of the pictures. The reader is also guided by the use of pictures which are positioned next to the most important stories on the page.

4.2.2. Story paths guide the reader

The most important or head story, is usually placed in the upper left-hand section or the centre of the page in a vertical or horizontal layout, and in a circle layout in the middle of the upper section of the page, close to the optical point. The point size of the main headline is the biggest and the column breadth the broadest of the headlines on the page. The large point size directs the reader to start scanning the page from the main headline. A picture which is large in terms of the number of columns it occupies is usually placed next to the main story to catch the reader’s attention and to direct it to the main story. Thus the reader starts scanning the page from the main story.

The Western tradition of reading is also the starting point in designing a horizontal layout: a book is read from left to right and downwards, which makes the upper left-hand corner also the natural starting point for a page.

The story second in importance is placed next directly below or very close below the main story so that the reader is guided towards it from the main story. Furthermore, the third story is placed below the second, and thus a story path is created which the reader will follow to the end. The reader has now followed the first path on the page.

The second path of the page starts from the top next to the main story or below it on the right. The headline of the second path is placed so that the reader will notice it when he has finished the first path. Thus the reader will follow the second path, after which he will start a third and possibly also a fourth path.

All the headlines set on a page should have a hierarchy of their own. They constitute downward paths as well as place stories which are side by side in an order of reading preference. Two headlines of equal size should not be put side by side on a page: it should be made clear to the reader which of the stories is to be read first. On the other hand, the hierarchy of reading from left to right allows headlines of equal size if there is a picture between them. In this case the hi-
The Main Headline is the largest

The Second Headline is the second largest

The Third Headline is the third largest

The Heads in a baulk are similar

The Heads in a baulk are similar

The Headlines in a baulk are almost similar
erarchy of the stories based on the paths is not obscured. If, however, the column division 1-5-2 is used, a hierarchy based on the point size of the headlines will be stronger than that of the natural reading direction. It will guide the reader first to the five-column headlines, then to the right to the two-column bar and, finally, left to the one-column bar.

The point size of the headline and the position of the story on the page path create a reading hierarchy and ensure that the reader will notice every story on the page.

Usually the point size of the headline, column width and news value coincide, i.e. the most important story gets the largest point size and the broadest column width. The sub-editor, too, aims at this when making up the headline. Important stories in a tabloid run into 3-5 and in a broadsheet 4-5, or sometimes as many as 7-8 columns, whereas minor news items are allotted a smaller number of columns. To make the headline rhythm of a page work, headlines of different widths must be given different point sizes.

Occasionally column width and also the width of the headline will depend on the length of the story: a long story requires more columns to fit comfortably on the page. Hence the headline will also be broader. To enable the hierarchy between the stories to function, the position of the story and the point size of its headline should be in proportion to the value of the other headlines on the page.

Secondly, it is determined into how many lines a headline governing a story running into a certain number of columns can be divided. Usually the main headline is on one or two lines; if it is divided into more, e.g. three or four lines, its large point size would make it heavy and it would break the balance of the page. However, a headline running over one or two columns and with a small point size can be divided into several lines without disturbing the balance of the page. To make sure that the rhythm of the page remains well-designed and neat, a different number of lines is determined for the headlines of stories which are arranged across different numbers of columns and are printed in different point sizes.

The headlines on a broadsheet, for instance, can be divided into the following groups:

<table>
<thead>
<tr>
<th>Columns</th>
<th>Points</th>
<th>Lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 col</td>
<td>19 p</td>
<td>2-5</td>
</tr>
<tr>
<td>2 col</td>
<td>30 p</td>
<td>2-4</td>
</tr>
<tr>
<td>3 col</td>
<td>40 p</td>
<td>2-3</td>
</tr>
<tr>
<td>4 col</td>
<td>45-55</td>
<td>1-2</td>
</tr>
<tr>
<td>5 col or more</td>
<td>55 p</td>
<td>1</td>
</tr>
</tbody>
</table>

When the headline contains more than one line, the upper line will be narrower than the lower line. In this way the direction of the lines guide the reader from the headline towards the text.

The point sizes of headlines one to three columns wide should be consistent in relation to the number of columns occupied: one-column headlines, for example, should always be 19 points and headlines of two-column stories 30 points.
The reader should notice the major lines and those parts of the layout which guide him through the page. Horizontal, vertical and circular organization, as well as the sizes of pictures and headlines guide the reader along the story paths on the page. The other elements of the page - small details of the stories, the size of minor headlines, the structure of subtitles and the beginning of first paragraphs - should be made inconspicuous. They are only to be noticed and to guide the reader when he moves from the story path to look at a particular story on the page more closely. Additionally, polished details add style to a page.

Normally one-column stories are arranged next to each other, as this causes them to be more easily noticed. One-column stories are placed either in a box or in a bar of one column; two-column stories similarly go into a bar of their own.

All the headlines in a bar should be justified in a similar manner: either all at the left end, or all centred. The chosen style should be kept all through the paper.

Because headlines governing the same number of columns may have a different number of lines, this should be taken into account when designing the layout: those with the same number of lines are placed in one bar or below each other so that the uppermost headlines have the most number of lines and, descending, the number of lines decreases gradually. The most prominent headlines, with several lines, are placed uppermost.

In addition to story arrangements based on story paths and picture centres, the upper right-hand corner of the right page of an opening can be distinguished; this corner has traditionally been consid-
ered one of the most noteworthy spots on a double page. When the reader leafs through a paper page by page, his eyes anticipate the stories located on the next turn of the page. When he does this, the story placed in the right-hand corner of the next right-hand page is revealed first to his eyes. Hence the story in question, even if in one column only, hardly ever fails to attract attention. The right-hand upper corner is an attention-getting spot.

4.2.3. Front page alternatives in a tabloid

The page size of a tabloid is smaller than that of a broadsheet and, naturally, it can accommodate a smaller number of stories. Usually one of four alternatives is used when designing a layout for the front pages of a tabloid.

Firstly, the front page can be used as a poster containing one dominant item presented in a very visual way with little support from the text of the headline; secondly, one large impressive picture can be used with the headline and text as elements of equal importance. Thirdly, the layout of the page can be based on the headlines, the text and two or three pictures. The fourth alternative is to build the front page as a miniature newspaper, arranging a larger number of stories, usually 5-7 stories, on the page.

4.2.4. Layout of a magazine - a double page as the starting point

A picture is usually a more dominant element in a magazine than in a newspaper. So the layout of a magazine can well be approached
through the arrangement of pictures.

In a magazine the reader’s eyes are directed at the double page as a whole. A whole page and a double page are perceived with one glance. Often the stories in a magazine form a unit of several pages. In stories of this kind the direction in a layout is not down one unit but to the right and forward.

An example of a layout based on a main picture is a design in which one page of an opening is reserved for the picture and the other page for the headline and the text. The text is arranged over a number of columns determined by the format of the magazine. The size and the location of the picture may vary: the picture can be placed on one page of the opening or it can extend onto the text page, forming a square. In a vertical format, the picture is placed eg. down left, crossing the centre line onto the left-hand section of the right-hand page.

When the main picture is located in a vertical format in one corner of a page, the text will surround the picture. This alternative approaches a picture-centred layout.

In a picture-centred layout the main picture and other pictures are arranged in the middle of the layout unit, surrounded by the text. Even though the pictures have a central role here, a prominent position is reserved for the headline - traditionally it is placed in the upper corner or in a central section of the page, close to the main picture.

A third alternative is the opposite of a picture-centred layout, ie. a text-centred layout. In this case the text is arranged in the middle of the page and the main picture and the other pictures around the text, on the borders of the layout
Picture and text units can also be placed symmetrically so that neither pictures or text are dominant—for instance, one page is assigned to the text and the other to the picture.

A basic idea in the use of pictures in a magazine is to utilize visual expression so that an independent unit is created: a visual story, or a composition of pictures which elaborates the subject in a visually rich way.

At its simplest, a layout can be used to decrease the space given to the text. If one of the pages of an opening is given to the main picture, the other pictures are arranged, for instance, along the edge of the opposite page above each other, and the text is located between the picture units. There can be two to four, even five, pictures above each other, depending on topic. In a visual story or composition, the pictures can be arranged either according to a picture- or a text-centred layout.

Layout can also be seen in terms of relative density. In a dense layout, the different elements, which are often small, are placed close to or even overlapping one another. The purpose is to jolt the reader, and to suggest the abundance of information.

A spacious layout uses plenty of empty space in order to generate an elegant and sophisticated impression.

Special effects also include, for instance, contrasts created by picture content. In this case, the event as a whole can be illustrated in the main picture and the secondary picture can be used to elaborate one detail of the main picture. Or, if an even stronger effect is desired, the secondary picture may illustrate the whole event and the main pic-
ture one detail of it.

On a cuttings page a large number of small textual and visual elements are used. The grid system in particular is useful when arranging them.

A magazine page offers plenty of alternatives as regards the arrangement of illustrations. To be able to benefit from them all, the layout designer must have the appropriate skill and knowledge pertaining to the various ways in which pictures and visual language can be arranged.

4.2.5. A layout unit has a rhythm

When doing the layout of a broadsheet, tabloid or magazine, attention must be paid to the overall layout by which the identity of the publication is maintained, as well as to fully utilizing the different available alternatives. The smaller the size of the page and the longer the paper or magazine, the more important it is to create a rhythm for the pages by using story units of different lengths and also cuttings pages. Thus a functional rhythm is created for the publication, and the final result is varied and interesting.

4.3. Designing a layout to include pictures and graphics
4.3.1. An illustration attracts attention

An illustration is the most attention-getting element on a page. Stories with pictures are noticed best. The bigger the picture the more likely the number of readers of that particular story increase.

At least 2-3 visual elements should be placed on the page of a newspaper: pictures, graphics or drawings. The layout designer selects one of those available as the main picture and gives it the largest space on the page. This means...
that - in the same way as one of the stories - one of the pictures is also selected as the main picture for that page. It dominates the page together with the main story. Together they guide the reader’s eyes to the starting point of the path which is to be followed first. Other pictures are given less space than the main picture. Thus a preference, contrast and a path based on picture size are created to guide the reader from the larger pictures towards the smaller ones.

The main picture should be 3-4 columns wide, and it must be the best possible as regards both its content and quality. If it is difficult to find a main picture, the main picture and the main story do not necessarily have to be the most salient ones on the page. In view of the layout, even more important than to create a preference with regard to the content of the stories is to create a logical order for the stories by means of paths. If, for instance, there are no suitable pictures for the most important story, it can be placed later along the story path to be observed by the reader as he proceeds. In this case the first story on the path can be the story which is considered second or even third in importance on the page.

4.3.2. Art work as a guide to the story

A picture usually has a direction, i.e. the picture unfolds in a certain direction. The direction is implied by e.g. the perspective of the picture: the reader’s eyes are led in the direction taken by that perspective. The picture may also contain elements which interrupt that direction. In this case the picture usual-
ly unfolds in the opposite direction. For instance, a dominant building or tree which has been cropped in the left corner of a photo stops a leftward gaze and guides it to the right, which is the direction in which the photo unfolds. Also the direction of the gaze of people in a picture guide the reader’s gaze in the same direction.

A picture is placed on a page in such a manner that the direction of the picture directs the reader’s eyes to the story connected to that picture. Because a picture is usually noticed first on a page, it will signpost the beginning of the first path for the reader. For their part, the other pictures will guide the reader further in following the story paths. Thus the picture has a function of its own in guiding the reader around the page.

In the first place, a picture gives a direction to the story connected with it. Secondly, a picture points towards the middle of a double page. In this way an attempt is made to keep the reader’s attention focused on the paper. Should a picture guide the reader’s eyes over the edge of a page, it would be wrong, because, firstly, the picture would guide the eyes away from the story connected with it, and, secondly, the picture would guide the eyes outside the paper which, at worst, would make the reader stop scanning it and turn to something else.

4.3.3. The form of the picture as a frame of reference for the message

A picture is most commonly a horizontal or vertical rectangle. A picture can also be square in shape. The most useful picture shape for designing a layout is the horizontal
rectangle. A horizontal picture portrays the world like our gaze: because we have two eyes side by side, we see the world as a horizontal image. This means that a horizontal picture on a page of a newspaper or magazine is a ‘natural’ view of the world. Thus by conforming to our normal field of vision a horizontal picture supplies the kind of frame for the information which will not fatigue the reader. A horizontal picture wears repetition well.

A vertical picture, on the other hand, breaks the normal boundaries of our field of vision. The breaking of these boundaries halts the reader and makes him pay more attention to a vertical picture than to a horizontal one. This is why posters, for instance, are often designed in a vertical shape - it is the function of a poster to stop the passer-by and draw his attention to the subject displayed on it. A vertical picture can be used as a special effect in a newspaper, but the reader will grow tired of it more quickly than in the case of a horizontal picture. As a rule, in order to preserve the special effect provided by a vertical picture, horizontal pictures are used.

A picture can also be a square; however, this is for a picture, the most unusual shape. It certainly attracts attention, like a vertical picture. However, a square is a difficult shape for a picture. Where it is used, the starting point must be a subject and content such that it can be cropped into a square.

In terms of picture arrangement, a square is considered, on the one hand, static; it contains an element of monotonousness. This may mean that not all readers will find square pictures pleasing. On the other hand - also in terms of picture arrangement - it can be said that different kinds of geometrical shapes are attractive to the eyes of the viewer. Thus a circle, a triangle or, indeed, a square can be attractive frames of reference for a picture.

4.3.4. Cropping clarifies the message of a picture

When selecting a picture for a page of a newspaper the layout designer aims at simplifying the information in it. This is done by cropping. Usually the photographer himself crops the picture, as effectively as possible with regard to both the transmission of information and picture arrangement. However, the message of a picture, the way it is used or the original cropping do not always correspond with the purpose it is used for on the page of a newspaper. It can then be improved by further cropping.

By means of cropping, information is relayed more effectively because everything inessential is cut out. At the same time, the reader will understand the picture better in the sense the layout designer or the journalist had in mind when selecting the picture. Finally, the picture is anchored to the story by its legend, ie. by using a legend the reader is guided so as to read the picture in the desired way and to notice the features considered essential.

Roughly speaking, a picture can be used in two different ways. Firstly, a picture with details can be used, by which it is made specifically clear to the reader what has actually taken place in the event described in the news story. Secondly, a picture can be used to give background information. In this
case, the picture portrays the background and surroundings of the news event extensively, whereas the subject itself remains a minor detail in e.g. the middle of the picture.

4.3.5. Graphics - a form of information

Graphics, like a picture, constitutes a visual element on the page of a paper, but one which lies between a picture and a text as it contains, for instance, readable information in the form of text or figures. The simplest form of graphics is the graph, which elaborates the content of a story: at its most complex, graphics can be used to narrate an extensive story. Graphics has also been described as the ‘third language’ of a publication, in addition to text and pictures. In some quality papers graphics are used instead of pictures.

Where text, pictures and graphics are used, information is relayed in the most effective way if the headlines, text, pictures and graphics form a closely integrated whole, avoiding information overlap.

Graphics are often divided into three different levels of complexity: the first level includes simple factual graphs which elaborate the content of the text, i.e. barographs, diagrams or circles; at the second level information is presented by using several kinds of graphs and other means of elaboration, e.g. pictures and maps; and at the third level, different kinds of graphs, pictures and maps are used to compile a story told entirely in graphics.

When graphics are arranged on a page it is important to take into account the directions of gaze im-
licit in the graphic presentation in order to create a successful layout.

4.4. An electronic newspaper

A printed product can also be designed to be used on a VDU screen. A screen differs from a printed page. Firstly, the layout space on a screen is horizontal and, secondly, it is smaller than the page of a newspaper or a magazine. The space is often also restricted by the program used to view the product.

If the direction in a newspaper layout is downwards and to the right and in a magazine to the right and forward, in an electronic product it is downwards by scrolling the screen (if a whole page is too large for the screen) or inwards by means of icons or hypertexts. An icon opens routes to other pages and hypertexts give key words with which to access more detailed information on the subject indicated by the key word.

The front pages of electronic newspapers can be divided into five categories: Simple pages, from which there is access to inner pages through a logo or buttons; text-dominant pages which are built on the basis of headlines and articles; picture-dominant pages on which link buttons, headlines and the text are grouped around a picture; 'department stores' which offer an abundance of information via various buttons, headlines and advertisements; and newspapers which imitate traditional printed papers even though their design is determined by the monitor. Features of horizontal, vertical and circular layout can be found in these newspapers.

It is interesting that a diagonal layout, which was forgotten in printed newspapers and magazines when hot lead was used, has proved
useful on the web: it is easy to place
the logo of the newspaper high up
on the diagonal, and the links lower
down on the diagonal. Sections of
articles are placed in the inner
parts.

When opening an electronic pa-
per on the screen, the logo opens
first in front of the reader, with the
icons (and possibly also hypertext)
which provide the routes to the
inner pages. The design of the logo
and the icons gives the paper its
identity. Similarly, the icons and
the headlines and intros of the ma-
jor stories which have been de-
signed to be used in connection
with the logo give character to the
paper. The headlines usually have
a similar design to those of a print-
ed paper, but the intros are longer
than is customary. They should con-
tain more kernal information than
a normal intro. So the reader is giv-
en a better opportunity to find ex-
dactly the stories he wants to read
in the paper - and less time needs
to be spent in scanning the pages
and searching different hypertext
sections.

The typography and layout are
designed for the pages of an elec-
tronic paper, like those for other
newspapers as well, by making use
of the principles of the visual lan-
guage of layout. The text of the sto-
ries is larger than it is in printed
papers in the interests of legibility
on VDUs of various qualities. Gen-
erally electronic papers use one
column only, ie. the text is typed
across the screen.

It is also possible to incorporate
sound and a moving picture into an
electronic paper. These enable
more varied kinds of information
to be relayed, but their use has to
be restricted to occasions when
their special characteristics - sound
and/or movement - are genuinely
needed for the message to be put
across.