Abstract: There is still a lot to be considered until we can hold a finished book in our hands, after the content is ready. In this article an overview on possible page arrangement schemes is presented. Although ConTeXt already has a considerable range of possibilities built in, more arranging schemes will be added in the near future, in order to make ConTeXt even more versatile.

Key words: Page arrangement, section, booklet, flyer.

Abstrakt: V článku jsou představeny základní způsoby vyřazení dokumentu, což je nezbytná operace před tiskem podkladu. Článek se zaměřuje na formát ConTeXt a slibuje i další nastavení v době budoucí.

Klíčová slova: Vyřazování dokumentu, vyřazení stránek, příprava knižního bloku, brožurka, pozvánka, leták, pozvánky.

w (dot) egger (at) boede (dot) nl
Maasstraat 2, 5836 BB Sambeek, The Netherlands

1 Arranging pages

Once a document is made up properly, it needs to be put on paper in order to be able to prepare a book. A book can be printed on loose sheets and the book block can then be glued at the spine. The result will often be presented as a paperback. If the book is to be sewn i.e. the book block is to be made up from sections which are sewn together, then the pages of the book must be arranged in such a way, that they can be folded to form the sections.

ConTeXt is equipped with a set of page imposition schemes which are used in professional printing environments.

In order to describe the different schemes it is a necessary to divide them into different categories.

- Page arrangements for section printing
- Page arrangements for glued bookblocks
- Specials
- Flyers

It must be mentioned, that some of the described schemes are not yet belonging to the ConTeXt distribution. They will be added in due time.

2 Page arrangements for section printing

Coding of the page arrangements

In order to be able to use page arrangement schemes one needs to tell ConTeXt what it should do. The information is normally given with two to four pieces of information, separated with *.

The first value, which is 1 or 2, indicates whether the arrangement will be single-sided (1) or double-sided (2).

The second value is always an even number ranging from 2 to 16. This figure indicates the number of pages on the recto respectively on the verso side of the sheet of paper.

The third value indicates the number of sheets to be used to make up a single section.

There are arranging schemes which use another indicator in order to make them unique in the system. Usually this is one or more characters.

Classical sections for large paper sizes

Context standard

2*16  (32 pages) i.e. 2 = doublesided, 16 = 16 pages on recto and 16 pages on verso of the sheet
2*8   (16 pages) i.e. 2 = doublesided, 8 = 8 pages on recto and 8 pages on verso of the sheet
Z-folded sections

Besides the classical folding schemes which are based on cross folding a sheet of paper, it is also possible to make sections with Z-folds and a final fold in the direction of the spine. The following schemes are currently not yet in the distribution.
2*6*Z  2 = doublesided, 6 = 6 pages on recto and 6 pages on verso, Z = Z-folding
2*8*Z  2 = doublesided, 8 = 8 pages on recto and 8 pages on verso, Z = Z-folding

Figure 3  2*8*Z, (16 pages)
Folded sections composed from multiple sheets

Although it is quite uncommon to keep a large scale printer at the office, it is still quite possible to use a normal office-printer to produce classical folded sections for very small numbers of books. In order to get folded sections more than one sheet is used to assemble a single section. The following schemes will be added to the distribution.

2*2*4 2 = doublesided, 2 = 2 pages recto and verso, 4 = 4 sheets of paper
2*4*2 2 = doublesided, 4 = 4 pages recto and verso, 2 = 2 sheets of paper

The classical booklet

Although the classical booklet is not a classical section it is mentioned here. To form a classical booklet ConTeXt assembles all present pages in a document into one (large) section.
2DOWN  binding at the short edge: 2 = doublesided, DOWN= placement of the pages on the sheet of paper
2UP  binding at the long edge: 2 = doublesided, UP= placement of the pages on the sheet of paper

3  Page arrangements for glued book blocks
As mentioned above, one can produce a book block from loose sheets of paper without folding them. The sheets can be printed either single or double-sided.

Single-sided schemes
1*4  1 = single-sided, 4 pages on recto
2SIDE single-sided 2 pages next to each other on recto
2TOP single-sided 2 pages on top and bottom on recto
XY  pages are arranged in columns (x) and rows (y)

Double-sided scheme
2TOPSIDE double-sided 2 pages recto and verso, top and bottom

4  Specials
The following scheme will be added to the distribution. With this scheme one can prepare a single-sided print and fold it into a booklet in such a way, that the blank verso side is hidden.
1*8  1= single-sided, 8 = 8 pages on recto

Figure 5  1*8
5 Flyers

Flyers are widely spread information leaflets often used for promotional purposes or as attractive give-aways for many occasions. The distribution is not yet providing these folding schemes, but they will be added in due time. The range will cover the most common flyer-types.

Flyer types

Tryptichon  this flyer has 3 pages recto and 3 pages verso  
Double window  this flyer has 4 pages recto and 4 pages verso  
Z-folding flyers  flyers with 8, 10 or 12 pages  
Map-flyer (12 pages)  this flyer has 6 pages on recto an 6 pages on verso. It is a Z-fold flyer with a final cross fold.

Figure 6 Flyers
A "ConTeXt produces flyers" is an example of how to create a flyer.

Typeset with ConTeXt-MKIV

Font: \usetypescript[Seravek]

For a "double-window":

Before we start filling the pages one might want to set-up the main language, make arrangements for the ConTeXt code to be used and define other components needed for the layout. This last command is issued as

```
\setuparranging[printpaper]
```

The arranging commands for the six types of flyers looks as follows:

For a tryptichon:

```
\setuparranging[tryptichon]
```

For the coding of the flyer one needs to define the paper size, use the page for printing and the order for the pages. The page height is about 21 cm high and the pages are 10 cm wide.

For a "double-window":

```
\setuparranging[doublewindow]
```

A "tryptichon" type flyer

```
\setuparranging[tryptichon]
```

For a map-flyer

```
\setuparranging[mapflyer]
```

Before we start filling the pages one might want to set-up the main language, make arrangements for the ConTeXt code to be used and define other components needed for the layout. This last command is issued as

```
\setuparranging[printpaper]
```

The arranging commands for the six types of flyers looks as follows:

For a tryptichon:

```
\setuparranging[tryptichon]
```

For the coding of the flyer one needs to define the paper size, use the page for printing and the order for the pages. The page height is about 21 cm high and the pages are 10 cm wide.

For a "double-window":

```
\setuparranging[doublewindow]
```

A "tryptichon" type flyer

```
\setuparranging[tryptichon]
```

For a map-flyer

```
\setuparranging[mapflyer]
```

Before we start filling the pages one might want to set-up the main language, make arrangements for the ConTeXt code to be used and define other components needed for the layout. This last command is issued as

```
\setuparranging[printpaper]
```

The arranging commands for the six types of flyers looks as follows:

For a tryptichon:

```
\setuparranging[tryptichon]
```

For the coding of the flyer one needs to define the paper size, use the page for printing and the order for the pages. The page height is about 21 cm high and the pages are 10 cm wide.
6 How does page arrangement work?

Setting up the system

Con\TeX\ uses a system, where a page size is mapped onto a paper size. Both are defined as paper sizes. There are many commonly used paper sizes predefined, however it is no problem to define a custom size paper.

To get started, one needs 2 “paper” sizes.

A paper size for printing
A paper size for the pages

First we need to set up the paper and then we map the pagesize paper onto the print size paper.

\definepapersize[Printpaper][width=42cm, height=28cm]
\definepapersize[Arrangepaper][width=10.5cm, height=21cm]
\setuppapersize[Arrangepaper][Printpaper]
\setuplayout
  [topspace=.5cm, backspace=.5cm,]
  [header=0pt, footer=0pt,]
  [height=middle, width=middle,]
  [marking=color]

Once the setup is ready, one can apply the desired arranging scheme.

\setuparranging[...]

Compiling

There are two ways to prepare a document with page arrangement. It is possible to let Con\TeX\ take care of everything. To do this one issues the following command:

\textexec or context --arrange yourfile.tex

The --arrange option tells Con\TeX\ to compile the document first without applying arranging. When it is ready it does one additional run for the page arrangement.

The other approach is to compile the document with the setuparranging command commented out. The result is a document consisting of single pages. This is a good output for last checks.

\textexec or context yourfile

If the result is ok, then a single run is performed with the setuparranging command uncommented.

\textexec or context --once yourfile

It is important to keep in mind, that correct output is only obtained if the arranging run is performed a single time. Otherwise information contained in auxiliary files is overwritten, corrupted or lost.
7 Future work

For the preparation of flyers, a structure will be made available either based on Wolfgang Schusters module, which can be set up with variables, or the same approach which is used for all other page arranging schemes. Beyond the already present set of arranging schemes, those which are presented in this article and more will be added to the distribution.

Basically it is not that big an issue to add another arranging scheme. If you have a wish for a new arranging scheme it is always worthwhile to ask on the ConTeXt mailinglist.