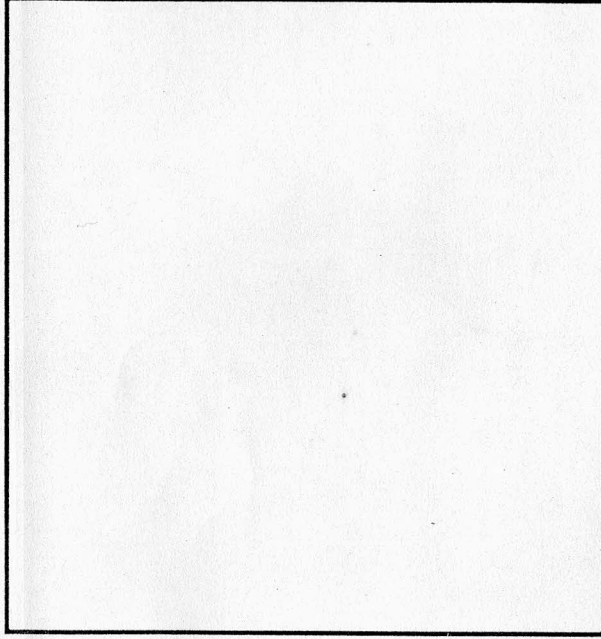
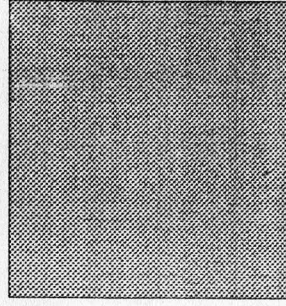
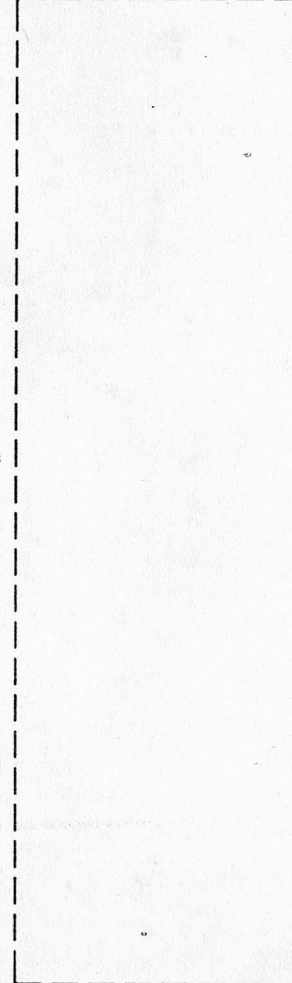
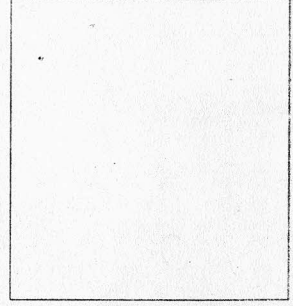
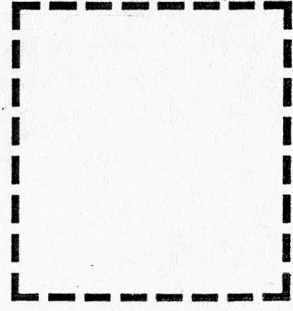


VCMSR-7
जी. व. केंद्र पुस्तकालय
I. D. C. LIBRARY.
744 VC 1990-92
✓ SPECIAL PROJECT
By : Neeta Mugwe
Guide : Prof. R.K. Joshi



METHODOLOGY OF PLANNING GRIDS IN CONTEXT WITH THE INDIAN STANDARD
PAPER SIZES AND TYPOGRAPHICAL STYLE SHEETS SHOWING USE OF GRIDS
WITH SPECIAL REFERENCE TO MAGAZINES IN DEVANAGARI (MARATHI)



INDUSTRIAL
DESIGN
CENTER,
IIT, POWAI,
BOMBAY
400 076

VCMSR-7

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INDUSTRIAL
DESIGN
CENTER,
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BOMBAY
400 076

Methodology of planning grids in context with the Indian standard paper sizes and typographical style sheet showing use of grids with special reference to magazines in Devanagari (marathi)

SPECIAL PROJECT

Guide :
Prof. R.K. Joshi

By :
Neeta Mugwe
90625001

Submitted in partial fulfilment of the requirements for the
Master of Design in Visual Communication

Industrial Design Centre
Indian Institute of Technology, Powai
Bombay 400 076

APPROVAL SHEET

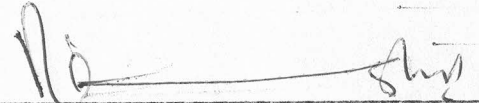
Research project titled **"Methodology of planning grids in context with the Indian standard paper sizes and typographical style sheet showing use of grids with special reference to magazines in Devanagari (marathi) "** by Neeta Mugwe is approved in partial fulfilment of the requirement for a Masters Degree in Visual Communication.

Chairmen

External Examiner

Internal Examiner

Guide



CONTENT

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Summary

In India publishing and printing is burgeoning in languages, circulation, complexity and quality. Print products on paper continue to increase in spite of television, video and computers. Industry today where technology plays an important role, precision is in the lead. In a publication design, placement of the various components that constitute the design, giving importance to the right elements is important.

Grid forms the foundation of these varied publication designs, giving structure and form to it.

Grid can broadly be termed as division of space in a systematic manner to incorporate the various elements of a design layout.

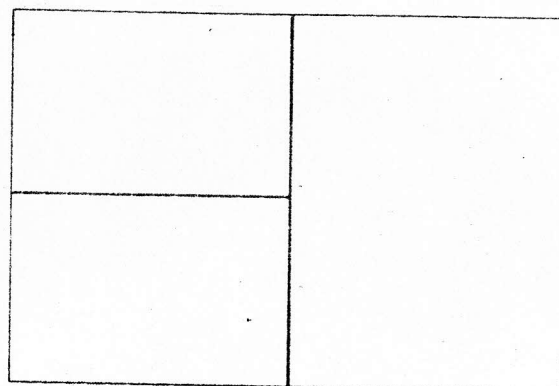
If the grid is used with skill and sensitivity it can lead to the production of handsome and effective pages and it can give the overall design a sense of cohesion and continuity that has a distinctive unifying effect.

In this project attempt has been made to analyse a few Marathi magazines of various natures i.e. dealing with different subjects, to study the kind of grids used and the stylesheet followed in these regional magazines. Analysis has been made and some points have been noted as to the methodology followed in planning of grids for these magazines.

The second part of this project deals with designing of grids for E4 size page. Attempt has been made to convert few of the existing magazines into this E4 size grid to see its capabilities. Looking forward to various modern technology the grid has been designed with the help of computers (Apple Macintosh - PageMaker)

It has been seen that a great deal of paper wastage occurs in obtaining A4 size page as the Indian paper sizes differ to the International paper sizes. Therefore with the use of RE size paper and using the obtained size adjustments are made causing great damage.

Therefore publishers today use the existing A4 size grid for the sizes obtained without paying much heed to the damage done.

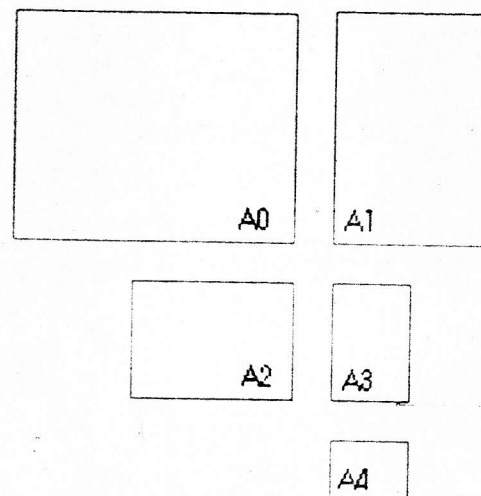


STANDARD UNTRIMMED SHEETS

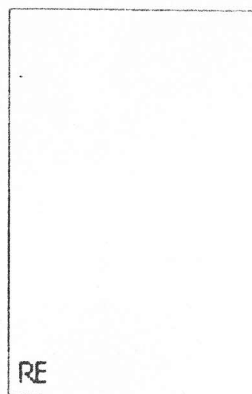
RA0	48.03 x 33.86
RA1	25.02 x 33.86
RA2	25.02 x 16.93
	millimeters
RA0	1220 x 860
RA1	610 x 860
RA2	610 x 430

STANDARD TRIMMED SIZES

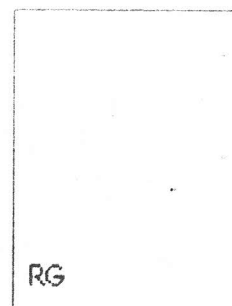
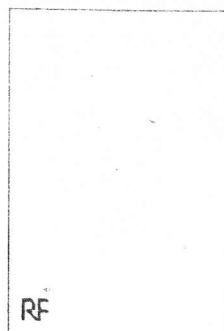
	Inches	Millimeters
A0	33.11 x 46.81	841 x 1189
A1	33.11 x 23.39	841 x 549
A2	16.54 x 23.39	420 x 549
A3	16.54 x 11.69	420 x 297
A4	8.27 x 11.69	210 x 297
A5	8.27 x 5.38	210 x 148
A6	4.13 x 5.38	105 x 148
A7	4.13 x 2.91	105 x 74
A8	2.05 x 2.91	52 x 74
A9	2.05 x 1.46	52 x 37
A10	1.02 x 1.46	26 x 37



INDIAN STANDARD UNTRIMMED SIZES



	inches
RE	23 X 36
RF	20 X 30
RG	22 X 28
	millimeters
RE	580 x 910
RF	510 x 760
RG	560 x 710

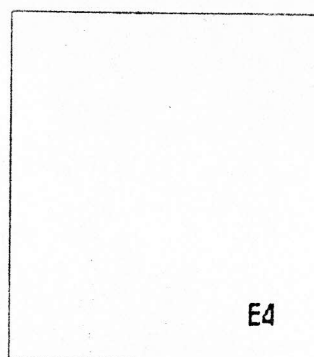
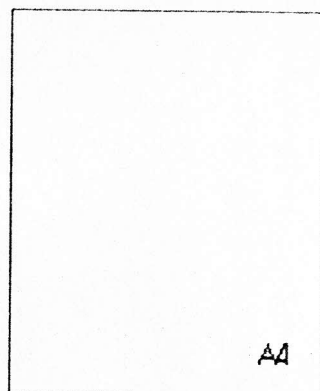


RECOMMENDED TRIMMED PRODUCT SIZES

	inches	millimeters
E1	21.00 x 34.50	530 x 870
E2	21.00 x 17.00	530 x 430
E3	10.50 x 16.54	267 x 420
E4	10.50 x 8.27	210 x 267
E5	5.25 x 8.27	210 x 133
E55	3.50 x 8.27	210 x 89
E6	4.14 x 5.25	105 x 133
E7	4.14 x 2.67	105 x 68
E8	2.10 x 2.67	53 x 68

indian standard sizes

Use of E4 size page format is not generally seen in the Indian / regional magazine, this could be because of the use of A4 size grid that is being used. The International



untrimmed paper size being 48.03 x 33.86 the resulting A4 size is 210 x 297 mm where as the Indian standard paper size being 23 x 36 inch giving E4 size of 210 x 267 which is slightly

smaller than A4. Paper used now being RE size a lot of paper goes waste to produce A4 size, therefore compromises are being made in sizes as well as the grid for publication. This leads to a bad output showing inefficiency of grids. Therefore in this project, analysis of existing grid and style sheet of a few magazines (marathi) have been done and new grids have been designed on E4 size for them.

A4 / E4 paper sizes

Division of paper or
an area for
incorporating the
various elements that
constitute the design
is called a grid. *A grid
may be used in a
design so as to have
a format for a set of
pages, to give it a
feeling of order.* As
seen normally a grid
seems to give a very
static or structured
look to the whole
format leading to
some kind of rigidity
in ones layout but an
able designer can
break away from the
structured look by
making effective use
of the grid.

However if it falls into
the hands of a less
able designer who
would give
importance to the
structure rather than
the creative aspect
the grid can then
become a
straitjacket that
produces dull layouts
and a rigid format

A grid constitutes of various elements
like the margins, columns, gutter space,
field etc. and there are a few elements
that effect the construction of a grid for
example the page size, the page
numbers, printing technology used etc.

grids

MARGINS

Margin is the space left along the sides of the page to define the print area. The four margins left, top, right and bottom are defined separately which gives the designer flexibility to manipulate the print area and the amount of space required on each side separately.

Normally one gets to see more space being left on the left of the page so as to facilitate the reader with ease of hold without losing out on the matter. On the right margin is left with the consideration of the binding method used by the publication.

On top and bottom margins left are normally smaller than the right and left margins as they don't hold any specific function apart from carrying the page numbers, publication name and issue.

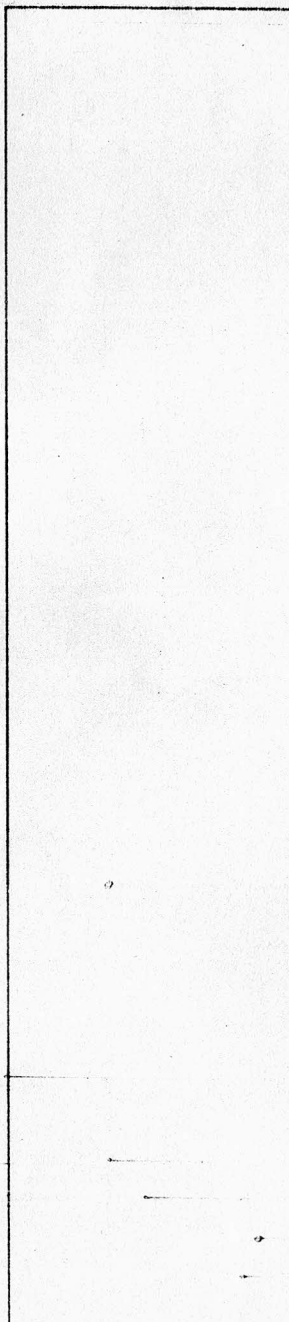
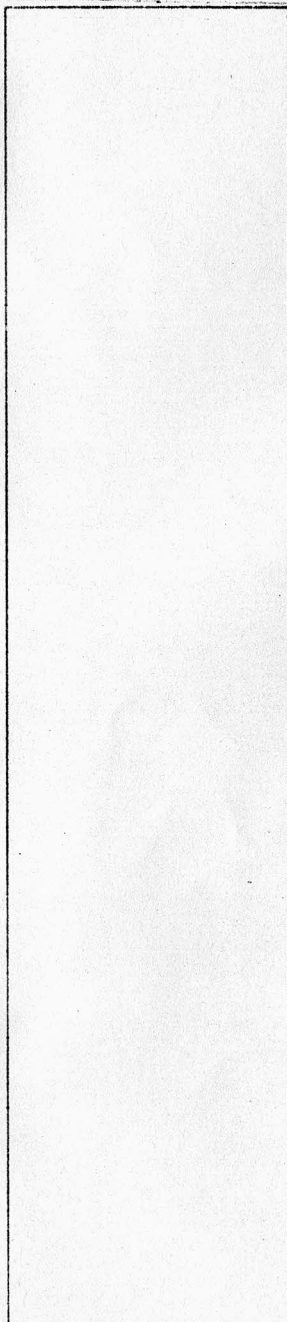
These margins also help in preventing the matter from being cut during the trimming process.

PRINT AREA

The area obtained after leaving the margins desired on the sides is called the print area.

This area is further divided into columns and fields.

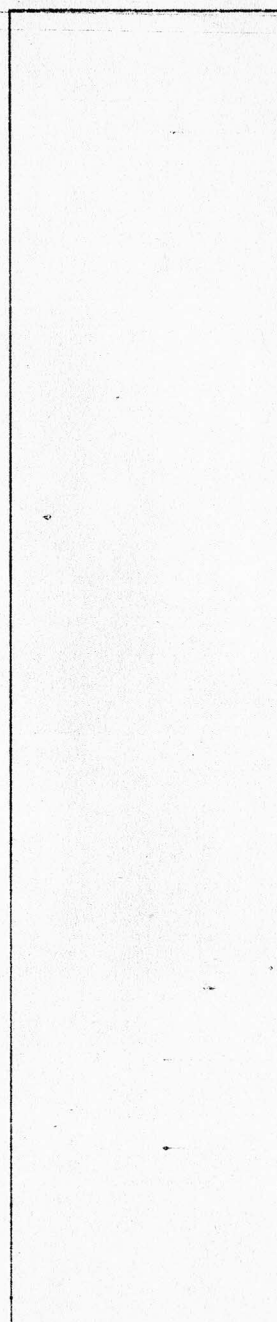
69



COLUMNS

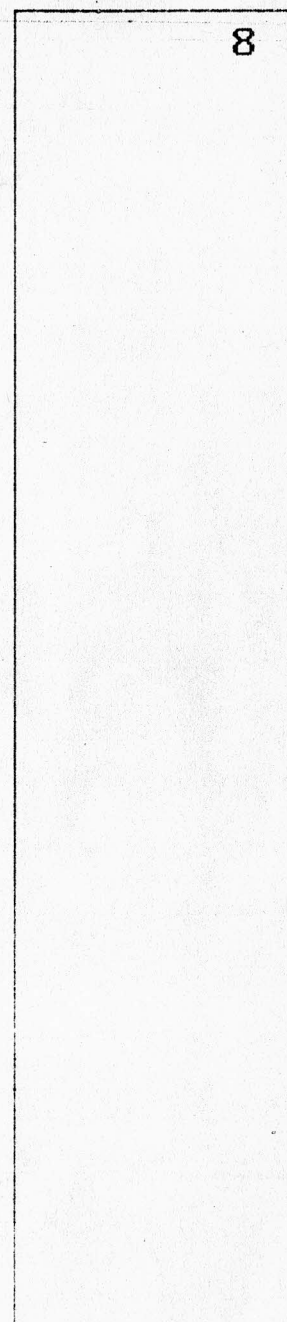
Columns divide the print area vertically into sections defining the width of the matter.

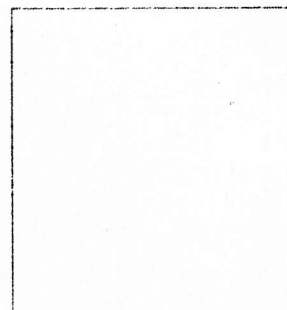
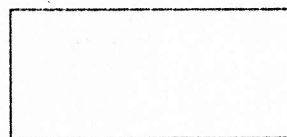
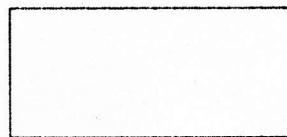
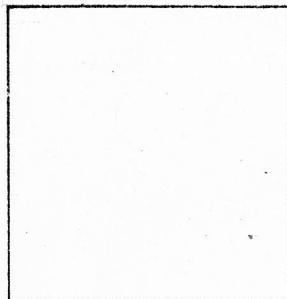
A print area can have as many number of columns as possible as per the designers requirements. Columns widths are deciphered as per the point height and the back sweep involved.



GUTTER

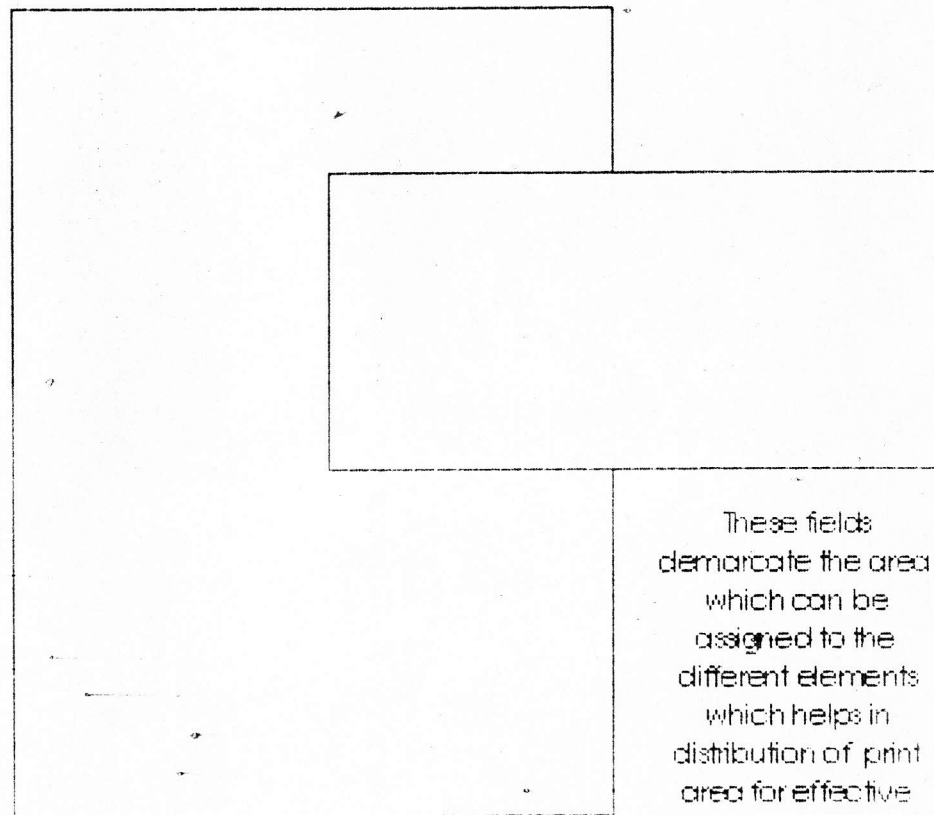
Gutter space is the space left inbetween any two columns. This acts as a runway that separates the two chunks of matter in the two column.





FIELDS

When an area is divided horizontally into various sections the resulting area obtained with the combination of columns gives rise to fields. These are sections that divide the print area into squares or rectangles which help in mainly layouting the illustration and photographs in combination with text.



These fields demarcate the area which can be assigned to the different elements which helps in distribution of print area for effective design output.

METHODOLOGY OF PLANNING GRIDS

10

While planning a grid there are various factors that are taken into consideration which results into a effective grid incorporating the various design elements.

1

In todays publication industry where the designing and the printing technology is on move, consideration is first given to the technology used.

2

The various constraints of the project such as space, time and the inevitable budget.

4

Nature of the magazine, the kind of information it deals with.

2

Communication problem, the objective of the grid to the potential response of the reader.

5

Distillation of all the forces into a single design concept.

7

The group and class of people to whom the magazine is aimed at.

8

The time span between two issues, wether it is a weekly, monthly or a quarterly magazine.

9

The typographical elements of the design problem - where the point heights being used for the various types, leading etc. which would make the style sheet are all considered for the resulting output.

6

Physical requirements, the nature of the material and the space it will occupy, the order of continuity that is best suited for the presentation of the content, and the degree of emphasis that each element may require.

methodology

1

Grids were used to plot locations on maps, this older concept still continues in a slightly different manner where the grid is now used to tell the artist the placement of the components of the design problem.

2

The function of the content and the design concept directly affects the form of the grid. This is because each grid is custom made to fit the parameters of that particular project of the designer to give unlimited variations and form.

3

Grids are used as tool for planning out any design problem.

4

Defining a fixed area for the design elements

5

To demarcate exact location of a text, graphic or photograph.

6

Continuity in pages, if it is a set of pages dealing with the same topic.

7

Ease of manipulation of the various design elements.

form and function

Magazines are a combination of newspapers and books. They are classified as newspapers as they are issued periodically but also act as books when preserved and read over a long period, at the same time are general as compared to books. Magazines could be either daily, bi-weekly, weekly, monthly or quarterly may it be political, social, economic or general. Magazines are very popular in India, especially those published

in regional languages. In marathi magazines one gets to see lot of variety in literature and other topics. A great deal of readership / circulation is there in marathi magazines catering to all age groups. Majority of the magazines being general in nature encompassing a large group of readership. Due to the advancement in technology the quality of the magazines content, design and printing has improved and giving hope for further improvements.

magazine

When designing and detailing is done for any publication a style sheet is made which guides the artist to execute the design solution.

A style sheet has detailed instructions right from dingbats, typographic details etc. On designing a grid style sheet is always given alongside. Information is given in form of style sheets by the designer to the artist so that after briefing or in absence of the designer the artist does not make any mistakes and can follow the set design system properly.

A style sheet consists of general guidelines for typesetting, margin specifications, master page specifications, type styles, screens used, dingbats, styles for various sections etc.

As a part of this project few style sheets have been designed for existing design of magazines and also for the new grid made.

style sheets

Grids form the framework of any publication design, and careful designing of this can lead to exquisite results giving rise to unique outputs.

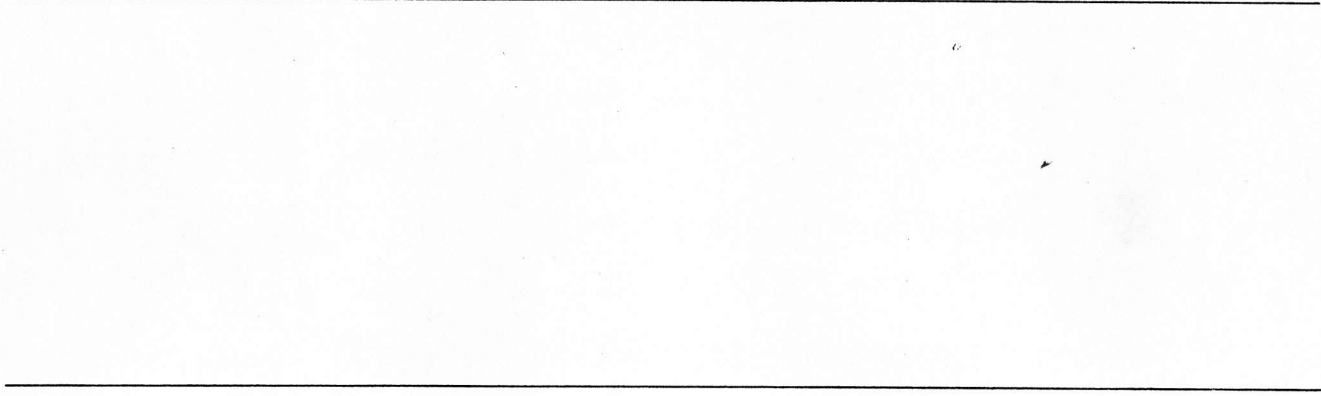
In Indian magazines this need for designing of grids is necessary. Marathi magazines though rich in content fail to show much design input, a great deal of

compromises have been made to suit their needs. Careful designing of grid itself is required being the skeleton of the design input.

Designers should give first importance to the grid on which the design construction can be built, if this foundation is weak then the construction can fall weak or breakdown.

summary □ □ □ □ □ □ □ □

EXISTING GRID



GUIDELINES FOR TYPESETTING

The basic grid is of three columns.

Column width

12p5 picas

Gutter space

2p4.4

Page size

47p3 x 67p3 picas

MARGINS

Inside = 2p5 picas

Outside = 3picas

Top = 7p5.5 picas

Bottom = 4p5.5 picas

MASTER PAGE SPECIFICATIONS

Two straight lines of

1 point appear

inbetween the column in the gutter space.

Name of the

magazine 'Saptahik

Sakal' with the date of

issue set in Devanagari

font, 10 pt. bold appears

on the centre bottom of

both the pages

Page numbers set

in Devanagari font, 10pt.

bold appears on the

right and left bottom of

the two pages

respectively

TYPE STYLES

Head lines, titles etc :

Devanagari, Bold 36

point, alignment as

desired

Brief:

Devanagari bold, 24 /

26 point, centralised.

Writers name:

Yogesh bold, 12 point.

this is always preceded

by 2mm square

Normal text :

Devanagari bold,

14points, justified

COLUMN WIDTHS

Single column = 43

picas

Two columns = 21

picas

Three columns = 13

picas

Four columns = 9p5

picas

STYLES FOR VARIOUS SECTIONS

Content page :

Three column grid

used

Logo appears on the

top right of the page in

the third column with a

reverse rectangle of 45 x

65 mm on the top side.

This same logo also

appears in 180 degree

rotation on the first

column i.e the left

bottom of the page

Date of issue etc.

set in Devanagari 10

point normal appears

below the top right

corner logo

Name of the

contents set in

Devanagari 10 point

bold followed by a back

slash and then the page number

Name of author set

in Devanagari 10 point

normal

Other matter i.e

office address, editors

name etc. set in

Devanagari 10 / 12

point normal placed on

the left side column

above the inverted logo

GUIDE LINES FOR LAY- OUT

Cover page :

Logo appears on the

top centre of the page

The date of issue in

Devanagari bold 12

point appears above the

logo

Photographic cover,

use of photographs to

show the content and

the titles of the main

topics written on top.

This is a four colour

offset printed cover

SECTION LAY-OUT

The various sections

here being, *Vishesh lekha,*

lekha, katha, sadram,

ishti, and kavita where

STYLE SHEET FOR
EXISTING GRID

GRID DESIGNED FOR E4

1	2	3
4	5	6
7	8	9
10	11	12
13	14	15
16	17	18
19	20	21
22	23	24

FIELDS

GUIDELINES FOR TYPESETTING

The basic grid is of three columns.
Column width = 14p2.5 picas
Gutter space = 2 picas
Page size = 49p7.3 x 63p0.9 picas

MARGINS

Inside = 2p5 picas
Outside = 4p5.5picas
Top = 3p5 picas
Bottom = 3p5 picas

MASTER PAGE SPECIFICATIONS

Two straight lines of 1 point appear inbetween the gutter spaces which demarcates the column

Name of the magazine 'Saptahic Sakal' is set in Shridhar font, 10 pt. bold and appears aligned to the second column bottom of the both the pages

Date of the issue is set in Shridhar font, 10pt. bold appears along with the magazine name

The page numbers set in Shridhar bold 10 point aligned to the right and left of the two pages respectively

TYPE STYLES

Head lines, titles etc :
Face :Shridhar + Bold + 10
% condensed, Size : 28
point, Leading : auto,
Alignment : right, No indent,
Kerning above : 26 point,
Auto-hyphenation

Brief:

Face :Shridhar + Bold+ 10% extended, Size : 14 point, Leading : 14, Alignment left, No indent, Kerning above : 12 point, Auto-hyphenation

Writers name :

Face :Shridhar + Bold + 10
% condensed, Size : 10
point, Leading : auto
Alignment left, No indent,
Kerning above : 10 point,
Auto-hyphenation, this will follow the section name

Normal text :

Face :Shridhar + Normal,
Size : 12 point, Leading : auto,
Alignment left, Indent : 1p5 pica, Kerning above : 12 point, Auto-hyphenation

COLUMN WIDTHS

Single column = 41p5 picas
Two columns = 19 picas
Three columns = 13 picas
Four columns = 6p5 picas

Synopsis text column width

The width will always run across the column 2 and 3 enclosed between digbats which change as per section

STYLES FOR VARIOUS SECTIONS

Content page :

Four column grid used
Logo appears in the fourth field
Date of issue etc. set in Shridhar 10 point normal appears in field number 1, centre aligned

Name of the contents
set in Shridhar 12 point
bold appears in column 2
and 3

Name of author set in
Shridhar 10 point normal

Other matter i.e office
address, editors name etc.

set in Shridhar 10 / 12 point
normal placed in fields 7,10,
13, 16, 19 and 22, centerly
alligned

GUIDE LINES FOR LAY - OUT

Cover page :

Logo appears in field 4
on the cover page

The date of issue in
Shridhar bold 12 point
appears above the logo

SECTION LAY - OUT

The various sections here
being *Isit, misarga,*
sathasradha, mule sari
sasen, doordarsan and
vishesh are treated in
different manner as per the
subject. The name of the
section always appears in
the 4 column along with the
title set in font : Shridhar +
bold + 10 % condensed, size
: 26 point, Leading : auto,
Alignment : right, Kerning :
not below 26 point, Auto
hyphenation

combination of fields

The photograph in the
background on the cover
page is full bleed

Cropping of photographs

In case of photographs
cropping should be done
preferably height wise in
fractions of 6 picas to get
the desired image and
discard the rest

The photographs are
outlined with lines of
hairline thickness

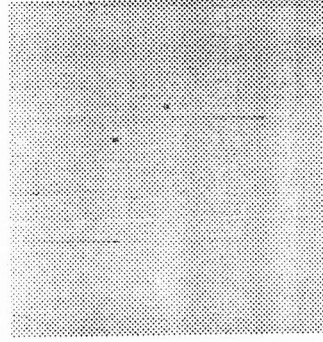
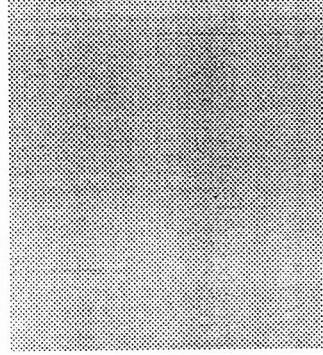
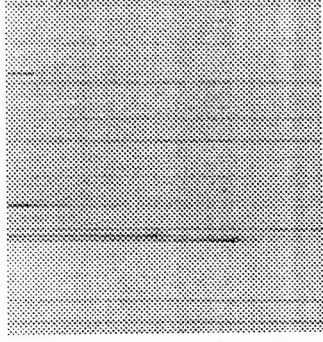
Bleeds

Bleed of photographs
or images can be used to
give more importance

PHOTOGRAPHS

Suggested sizes of
photographs are shown in
the accompanying figure. It
could be 1 field or 8

EXISTING GRID



GUIDELINES FOR TYPESETTING

The basic grid is of three columns.
Column width
13p5 picas
Gutter space
1p5
Page size
48p5.1 x 63p0.9 picas

MARGINS

Inside = 2p5 picas
Outside = 3picas
Top = 4p2.5 picas
Bottom = 5p5.5 picas

MASTER PAGE

SPECIFICATIONS

Four straight lines of 1 point appear on the right and left margin lines and inbetween the column in the gutter space.

Name of the magazine 'Stri' is set in Devanagari font, 10 pt. bold and appears on the right bottom of the left page with the page number on its left.

Date of the issue is set in Yogesh font, 10pt. bold appears on the left bottom of the right page with the page number on its right.

TYPE STYLES

Head lines, titles etc :

Devanagari, Bold 36 point, alignment as desired

Brief:

Devanagari bold, 24 / 26 point, centralised.

Writers name :

Yogesh bold, 12 point. this is always preceded by 2mm square

Normal text :

Devanagari bold, 14points, justified

COLUMN WIDTHS

Single column = 43 picas
Two columns = 21 picas
Three columns = 13 picas
Four columns = 9p5 picas

STYLES FOR VARIOUS

SECTIONS

Content page :

Three column grid used

Logo appears on the top right of the page in the third column with a

reverse rectangle of 45 x 65 mm on the top side. This same logo also appears in 180 degree rotation on the first column i.e the left bottom of the page

Date of issue etc. set in Devanagari 10 point normal appears below the top right corner logo

Name of the contents set in Devanagari 10 point bold followed by a back slash and then the page number

Name of author set in Devanagari 10 point normal

Other matter i.e office address, editors name etc. set in Devanagari 10 / 12 point normal placed on the left side column above the inverted logo

GUIDE LINES FOR LAY- OUT

Cover page :

Logo appears on the top centre of the page

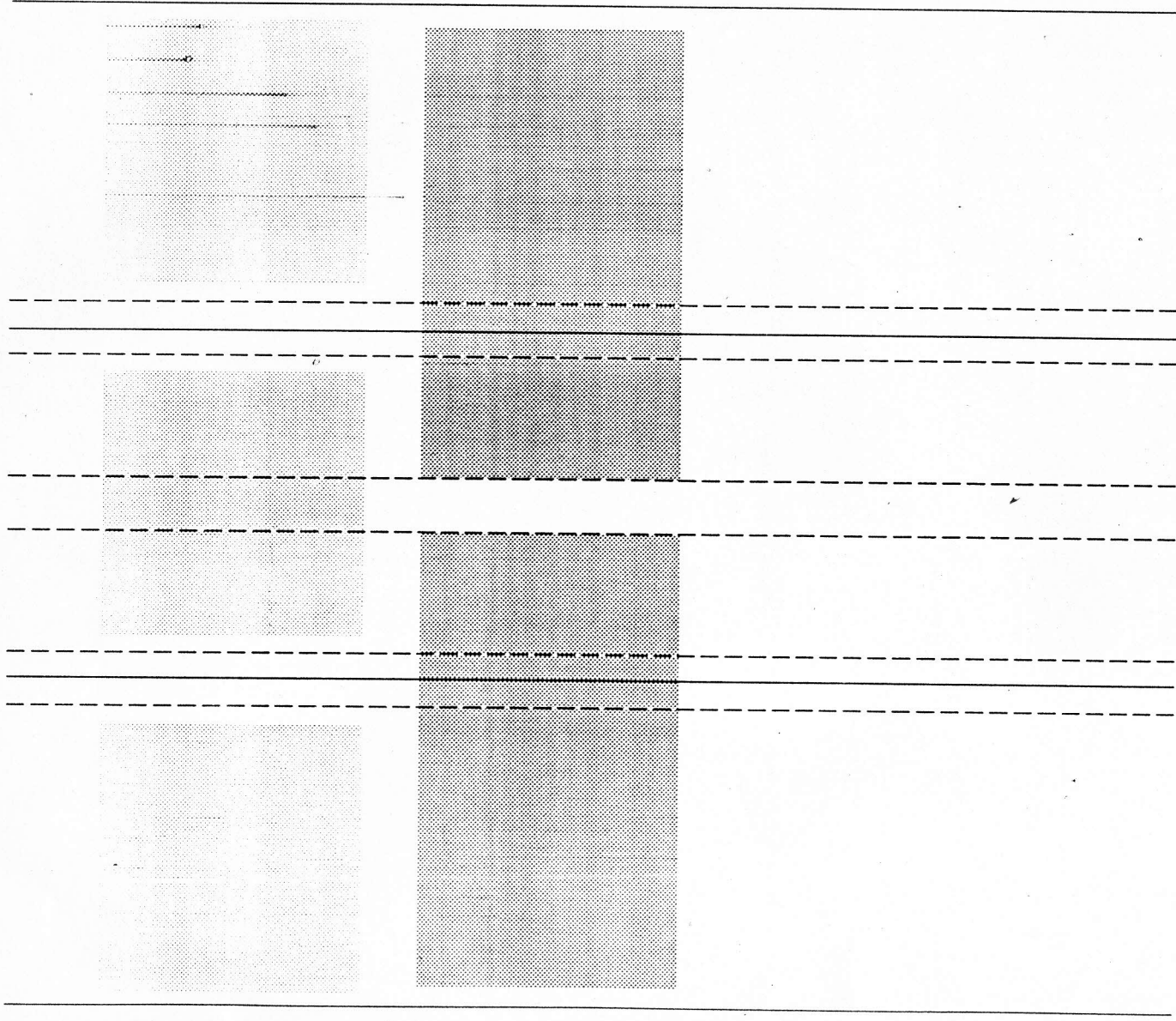
The date of issue in Devanagari bold 12 point appears above the logo

Photographic cover, use of photographs to show the content and the titles of the main topics written on top. This is a four colour offset printed cover

SECTION LAY-OUT

The various sections here being, *Vishesh lekha, lekha, Lekha, sadram, Isit, and Isavita* where the treatment of the master items change as shown

EXISTING GRID



GUIDELINES FOR TYPESETTING

The basic grid is of two columns.

Column width = 21 picas

Gutter space = 2 p4.4

Page size = 48p5.1 x 64p5.9

MARGINS

Inside = 1p5.4 picas

Outside = 3picas

Top = 3p5.1 picas

Bottom = 8p5 picas

MASTER PAGE SPECIFICATIONS

Two straight lines of 1 point appear on the right and left margin lines.

Name of the magazine 'lokraj' is set in Yogesh font, 12 pt. bold and appears on the right bottom of the left page.

Date of the issue is set in Yogesh font, 12pt. bold appears on the left bottom of the right page.

Page numbers are placed on the left bottom of the left page and the right bottom of the right page.

TYPE STYLES

Head lines, titles etc :

Yogesh, Bold 22 / 28 point, flush left

First word : Drop letter :

Yogesh, Bold 28 point

Other letter :

Yogesh bold, 12 / 14 point,

Brief:

Yogesh bold, 12 / 14 point, justified.

This is always accompanied with two

1 point lines of column width on top and bottom

Writers name:

Yogesh bold, 12 point. this is always preceded by 2mm square

Normal text :

Yogesh normal, 12 / 14 points, justified

COLUMN WIDTHS

Single column = 44 picas

Two columns = 21 picas

Three columns = 13 picas

Four columns = 9p5 picas

STYLES FOR VARIOUS SECTIONS

Content page :

Three column grid used

Logo appears in a rectangle with 5mm right sided shadow on the top right corner of the page

Date of issue etc. set in Yogesh 10 point bold appears on the top left corner of the page

Name of the contents set in Yogesh 12 point bold preceded by 2mm square (line- 5mmfill)-none)

Name of author set in Yogesh 10 point normal

Page numbers in Yogesh 12point normal

Other matter i.e office address, editors name etc. set in Yogesh 10 / 12 point normal placed on the left side column below the logo

Cover page :

Logo appears on the top right corner of the page

The date of issue in Yogesh bold 24 point appears below the logo, both centrelly aligned

Photographic cover, use of photographs to show the content

GUIDE LINES FOR LAYOUT

Cover :

Photograph in the background is used as full bleed

The master head details lie in the third column i.e the right most one

Photographs :

Suggested sizes of photographs are shown according to the fields occupied

Photographs are all black and white transparencies

All photographs are enclosed by an outline of 5mm

GRID DESIGNED FOR E4

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