

# GRIDS

**GRID** - A NETWORK OF UNIFORMLY SPACED HORIZONTAL AND PERPENDICULAR LINES FOR LOCATING POINTS BY MEANS OF COORDINATES; LINES THAT DEFINE UNIFORM AREAS IN A LAYOUT; A PLAN FOR DESIGNING FORMATS.

**MODULE** - A STANDARD OR UNIT OF MEASUREMENT; THE SIZE OF SOME ONE PART TAKEN AS A UNIT OF MEASURE BY WHICH THE PROPORTIONS OF A COMPOSITION ARE REGULATED; REPETITIVE UNITS OF SPACE OR MASS.

**SYSTEM** - INTERACTING, INTERDEPENDENT, GROUP OF ITEMS FORMING A UNIFIED WHOLE; A MANNER OF CLASSIFYING, SYMBOLIZING, OR SCHEMATIZING; ORDER FROM ARRANGEMENT.

**WHY GRIDS?** THERE ARE MANY WAYS TO APPROACH DESIGN PROBLEMS. NO ONE METHOD IS BEST. GRAPHIC DESIGNERS SHOULD AT LEAST CONSIDER GRIDS AND HAVE AN INTIMATE WORKING KNOWLEDGE OF THEM. THEY WON'T HELP SOLVE EVERY VISUAL PROBLEM BUT OFTEN WILL SUGGEST A RATIONAL APPROACH.

**GESTALT DATA REVEALS THAT HUMANS TEND TO PREFER ORGANIZED VISUAL AND VERBAL INFORMATION. GRID SYSTEMS ALLOW THE DESIGNER TO SATISFY VIEWER GROUPS WITH RESPECT TO EQUILIBRIUM, SIMILIARITY, AND CONTINUATION. THEY HELP THE DESIGNER TO AVOID VISUAL AMBIGUITY.**

**GRID SYSTEMS ARE VALUABLE FOR BUILDING "FAMILY RESEMBLANCE" INTO A SERIES OF VISUAL PIECES. CORPORATIONS WHICH PRODUCE HUNDREDS OR EVEN THOUSANDS OF DIFFERENT PRODUCTS MUST DEAL EFFECTIVELY WITH UNIFIED METHODS OF CATALOGING AND PROMOTING THEM THROUGH BROCHURES, SALES SHEETS AND ADVERTISING. IBM AND WESTINGHOUSE UNDER THE GRAPHIC GUIDANCE OF PAUL RAND, HAVE LONG USED GRID SYSTEMS TO BRING ORDER TO THEIR THOUSANDS OF PRINTED PIECES DEVELOPED EACH YEAR. SWISS AND GERMAN GRAPHIC DESIGNERS WITH THEIR DESTIJL/BAUHAUS ROOTS ARE EXPONENTS OF GRID DESIGN. THE JAPANESE, WITH THEIR TATAMI MAT MODULAR BUILDING SYSTEM HAVE LONG BEEN GRID SENSITIVE. MOST NEWSPAPERS THROUGHOUT THE WORLD HAVE USED GRID-LIKE SYSTEMS TO SPEED LAYOUT AND GIVE A CONSISTENT APPEARANCE.**

**GRID SYSTEMS CAN WORK WELL FOR SINGLE PRINTED PIECES. WHEN AN ABUNDANCE OF VISUAL MATERIAL (PHOTOS, ILLUSTRATIONS, TEXT, HEADS) MUST BE UNITED**

**ON A SINGLE FORMAT, GRID SYSTEMS OFFER A POTENTIAL SOLUTION. ADS, NEWSLETTERS, BROCHURES ANNUAL REPORTS, MAGAZINES, BOOKS POSTERS, SIGNAGE AND FILM/TELEVISION GRAPHICS FIT THIS CATEGORY.**

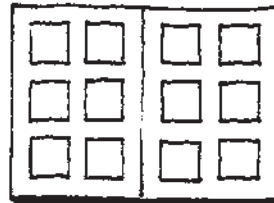
**GRID SYSTEMS CARRY WITHIN THEM THE ORGANIZATION POTENTIAL TO MAKE EXTREMELY COMPLEX INFORMATION UNDERSTANDABLE. LISTS, TABLES, SCHEDULES, FINANCIAL MATERIAL, SCIENTIFIC DATA, AND LEGAL INFORMATION CAN BE MORE EASILY HANDLED BY USING GRIDS.**

**GRID SYSTEMS DO NOT NECESSARILY LEAD TO DULL, BORING, VISUAL IMAGES AS SOME MIGHT SUGGEST. IF A GRID IS LOGICALLY DESIGNED, AND VISUAL ELEMENTS ARE EXCITING, THEN THE GRID-DERIVED SOLUTION CAN BE EFFECTIVE. GRIDS GIVE YOU A PLACE TO PUT THINGS. THE GRID SOLUTION BUILDS IN ORGANIZATION. VIEWERS SHOULD FEEL COMFORTABLE WITH GRIDS (GESTALT). DESIGN PLACEMENT POSITIONS ARE CUT DOWN DRASTICALLY, SPEEDING LAYOUT TIME. THUMBNAILS COME QUICKER WITH GRIDS. MARGINS, TYPE SIZE, LINESPACING, LINE LENGTH, AND PAGE NUMBERING CAN ALL LOGICALLY DERIVE FROM A CAREFULLY CONCEIVED GRID SYSTEM.**

**WHAT IS THE GRID?** - THE GRID IS A SKELETAL UNDERSTRUCTURE TO BRING COHESIVENESS TO A VISUAL PIECE. IT'S AN ORGANIZER AND TIMESAVER AND HELPS BUILD CONTINUITY.



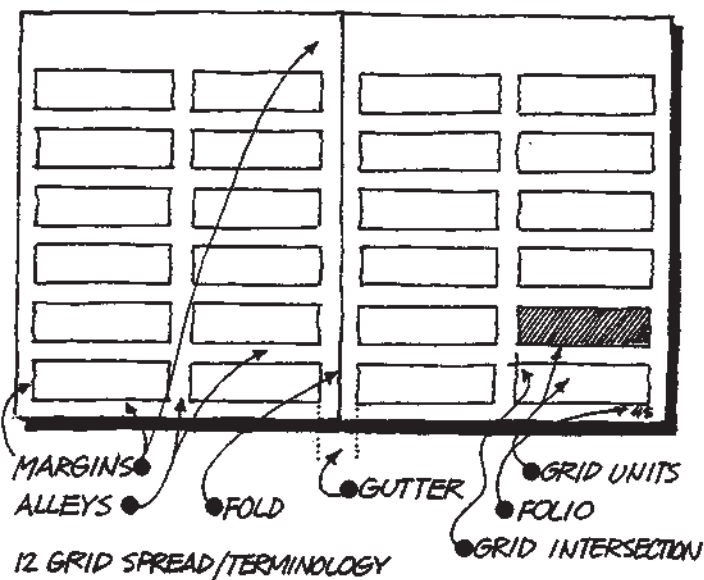
● GIVEN A FORMAT SIZE, LAYOUT A SPREAD (TWO OPEN PAGES). ANALYZE INFORMATION PHOTOGRAPHS, HEADS, CAPTIONS, ETC. REQUIRED.



● DESIGN A GRID. APPLY IT TO THE SPREAD. THIS IS A SIX UNIT GRID. IT DETERMINES MARGINS, GUTTERS, ALLEYS, ETC. THIS IS SKELETON FOR LAYOUT.



● FINALLY, POSITION ELEMENTS ON THE GRID: HEADLINES, TEXT TYPE, PHOTOS, ETC. THE GRID DEFINES, RELATES, AND SEPARATES VISUAL/VERBAL INFORMATION.



**MARGINS** - THESE OUTSIDE BOUNDARIES AROUND PAGE CONTENT CAN BE UNEQUAL IN DIMENSION. THEY FRAME PAGE OR PANEL CONTENT AND PROVIDE A VIEWING GROUND FOR IT.

**GUTTER** - "INSIDE MARGIN", SPACE ON EITHER SIDE OF THE FOLD. PROVIDES SPACE FOR BINDING, AND SEPARATES PAGES. ARBITRARY.

**ALLEYS** - INSIDE HORIZONTAL AND VERTICAL SPACE CHANNELS WHICH SEPARATE GRID UNITS. AGAIN, ARBITRARY, THEY HELP SEPARATE HEADS, TEXT, PHOTOS, AND ILLUSTRATIONS.

**GRID UNITS** - SPACE MODULES WHICH SET THE BASE SIZE AND PROPORTIONS FOR PHOTOS, THE PICA LINE WIDTH FOR TEXT TYPE AND HEADS, AND RHYTHM FOR THE PANEL OR PAGE.

**GRID INTERSECTIONS** - WHERE HORIZONTAL AND VERTICAL LINES CROSS, THEY CONTROL THE POSITION OF TYPE, PHOTOS, ILLUSTRATIONS. THEY SERVE AS GUIDELINES FOR PASTE-UP.

**FOLIO** - PAGE NUMBER AND SOMETIMES VOLUME/DATE WHICH ARE NEARLY ALWAYS PLACED CONSISTENTLY (SOMEWHERE) IN THE OUTSIDE MARGIN.

**FOLD** - LINE ALONG WHICH THE PAGE IS BOUND. CENTER OF THE GUTTER, INSIDE BOUNDARY OF PAGE OR PANEL. INTERRUPTION OF THE SMOOTH PAGE SURFACE. BE CAREFUL ABOUT RUNNING TYPE OR IMAGES ACROSS THE FOLD.

**NAMING THE GRID** - GRIDS ARE LABELED SIMPLY BY THE NUMBER OF GRID UNITS IN A PANEL. DON'T CONFUSE THE PANEL WITH THE SPREAD, WHICH IS TWO PANELS OR PAGES. THE GRID ON THE LEFT IS A 12 UNIT GRID, BUT THE SPREAD HAS 24 GRID UNITS.



- 2 UNIT VERTICAL GRID ON A 2 PANEL SPREAD
  - 3 UNIT HORIZONTAL GRID ON A 3 PANEL SPREAD
- NOTICE NEITHER OF THE ABOVE GRIDS IS DIVIDED BOTH VERTICALLY AND HORIZONTALLY. THE VERTICAL-ONLY GRID HAS COMMON USE IN NEWSPAPERS, NEWSLETTERS, BOOKS, AND MAGAZINES.

**DESIGNING GRIDS** - GRIDS ARE ARBITRARY. DESIGNERS CONTROL THEM, NOT VICE VERSA. GRIDS ARE ONLY IMPOSED ON THE DESIGNER WHERE AN EFFECTIVE LAYOUT SYSTEM IS A TRADITION (LIKE A NATIONAL MAGAZINE WITH A TRACK RECORD). IN ALMOST EVERY OTHER INSTANCE IT IS THE DESIGNER'S ROLE TO CREATE A GRID TO SOLVE THE PROBLEM AT HAND. GRID DESIGN IS REALLY THE KEY TO SUCCESSFULLY USING THE GRID SYSTEMS APPROACH. AN INFINITE NUMBER OF DIFFERENT GRIDS ARE POSSIBLE, BUT ONLY A FEW WILL PROVE REALLY EFFECTIVE. HOW DO WE FOCUS ON THOSE THAT PROMISE SUCCESS?

- CAREFULLY EXAMINE THE GIVEN VISUAL INFORMATION; HEADS, TEXT, PHOTOS, ILLUSTRATIONS, GRAPHS, ETC.
- LOOK FOR SIZE SIMILIARITIES WHERE ITEMS CAN BE GROUPED. FOCUS ON PHOTOS AND ILLUSTRATIONS RATHER THAN TYPE HEADS AND TEXT. TYPE IS FLEXIBLE!
- THE SMALLEST PHOTOS OR ILLUSTRATIONS WILL HELP DEFINE THE GRID. THE KEY IS THE SMALLEST USABLE GRID UNIT, WHICH BECOMES THE SYSTEM BUILDING BLOCK.
- DIVIDE YOUR FORMAT INTO GRID MULTIPLES. EACH GRID UNIT SHOULD BE THE SAME SIZE, SHAPE (USUALLY RECTANGULAR). SEPARATE THEM WITH ALLEYS, GUTTER.
- USE DRAFTING INSTRUMENTS FOR PRECISION. MEASURE EXACTLY IN PICAS. DIVIDERS ARE VERY USEFUL.
- LAY GRID ON PASTE-UP SURFACE AND PREPARE CAMERA-READY ART. FOR REPETITIVE GRID USE, INK THE GRID PRECISELY AND HAVE MULTIPLES PRINTED IN NON-REPRO BLUE INK.

# GRIDS

**ABOUT GRID SIZE** • A STRONG REASON FOR USING A GRID IS TO PROVIDE PERCEPTUAL ORGANIZATION FOR AN AUDIENCE. WHEN CHOOSING THE NUMBER OF GRID UNITS BEWARE OF TOO MANY OR TOO FEW. DESIGNERS CAN NOT COMMUNICATE EFFECTIVELY ABOVE OR BELOW THE PERCEPTUAL LIMITS OF A VIEWING AUDIENCE. VIEWERS MUST BE ABLE TO DECIPHER A GRID AND SENSE ITS COHERENCE TO BE COMFORTABLE. TWO OR THREE GRIDS PER PANEL ARE TOO FEW MODULES. 72 OR 124 ARE TOO MANY, AS THE AUDIENCE HAS GREAT DIFFICULTY SORTING OUT THE ORGANIZATION. THE MORE GRID MODULES AND INTERSECTIONS, THE MORE LAYOUT POSITIONS EXIST FOR THE DESIGNER. HOWEVER SMALL GRID UNITS ARE DIFFICULT TO CONSTRUCT, IMPEDE DECISION MAKING AND ARE NOT COMFORTABLE TO THE AUDIENCE. THE GOAL THEN IS TO ADJUST CONTENT TO THE NUMBER OF GRID UNITS WITHIN A ZONE OF PERCEPTUAL ACUITY. CHALLENGE THE AUDIENCE VISUALLY, BUT DON'T COMPLETELY REMOVE CLUES TO THE GRID.

**USING GRIDS** • IT IS IMPORTANT TO UNDERSTAND THAT EVEN THE WELL-CONCEIVED GRID, ACCURATELY DRAFTED WILL NOT INSURE EFFECTIVE DESIGN. THE GRID CAN ONLY PROVIDE LOGICAL POSITIONS FOR PLACING VISUAL MATERIAL, NOTHING MORE. DESIGNERS MUST USE THE GRID CREATIVELY TO MAXIMIZE COMMUNICATIONS POTENTIAL. "WHERE SHOULD I PUT IT?" IS A QUESTION THAT GRIDS CAN HELP ANSWER.

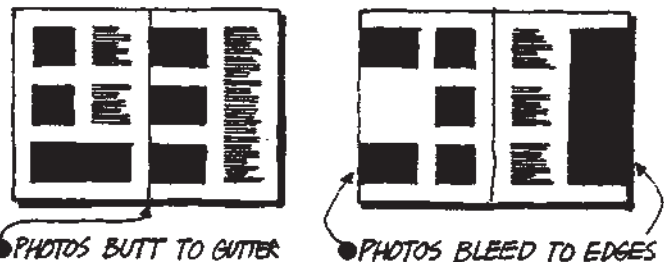
**WHERE TO PLACE GRAPHICS** • GENERALLY, KEEP CONTENT INSIDE THE GRID UNITS AND OUT OF THE MARGINS, GUTTER AND ALLEYS. THESE SKETCHES SHOW FULL-EMPTY ZONES.



ALTHOUGH THESE GRIDS ARE VERY SIMPLE, THE INHERENT ORGANIZATION IS OBVIOUS. THE GRIDS ARE TOTALLY FILLED AND WE PICK UP THE PATTERN AND RHYTHM OF THE REPETITIVE MODULES. NOTICE HOW EACH GRID UNIT IS TOTALLY FULL, NOT PARTIALLY USED, OR HALF EMPTY.



USING THE IDENTICAL 6 UNIT GRID, NOTICE SOME SIMPLE VARIATIONS. PHOTOS EXPAND TO FILL 2 AND 3 UNIT HORIZONTAL GRIDS. THE LARGE PHOTO EXPANDS TO FILL 4 COMPLETE UNITS. NOTICE HOW THESE PHOTOS EXTEND ACROSS ALLEYS. ONE GRID IN THE LEFT-HAND SKETCH IS EMPTY. ALL MODULES DO NOT HAVE TO BE FILLED. THE GRID AND ITS VISUAL COHERENCE ARE STILL APPARENT.



PHOTOS BUTT TO GUTTER

PHOTOS BLEED TO EDGES

HERE WE USE THE SAME 6 UNIT GRID AND "BLEED" OR RUN OUR PHOTOS OFF THE EDGE OF THE SHEET. WE ALSO "BUTT" OR RUN OUR PHOTOS TO THE FOLD LINE ACROSS THE GUTTER. SEE HOW THE TEXT BLOCK CAN ALSO FILL CONSECUTIVE GRIDS BY FLOWING ACROSS ALLEYS.



LARGE PHOTO BUTTS TO GUTTER AND BLEEDS TOP AND RIGHT SIDE

PHOTOS BLEED TO TOP AND BOTTOM EDGES

ABOVE ARE TWO GREATLY DIFFERENT "LOOKS" USING THE SAME 6 UNIT GRID. BLEEDING AND BUTTING PHOTOS AND ILLUSTRATIONS ARE USEFUL TECHNIQUES FOR ADDING VARIETY TO GRID LAYOUTS, WHILE RETAINING VISUAL ORGANIZATION. REMEMBER, YOU CAN ALSO BLEED A VISUAL IMAGE AND COVER ONE OR TWO ENTIRE PANELS. NOTICE THE TEXT TYPE DOES NOT BLEED OFF THE PAGE, AS THAT MIGHT SERIOUSLY AFFECT CONTENT READABILITY.