Proportion Calculator

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Beta version 1.0

Proportion Calculator is a utility to assist graphic artists in scaling photos and artwork for publication. Its function and features are based on my experience in producing magazines, and are aimed at simplifying the process of page layout as well as tagging the art for the litho prep process. After years of scaling photographs with a calculator, scratchpad and tracing paper, I decided to program a new approach. If you're using Quark Xpress and a scanner to lay out publications with reflective originals, then you may not find Proportion Calculator as useful as someone using PageMaker or even traditional keyline methods.
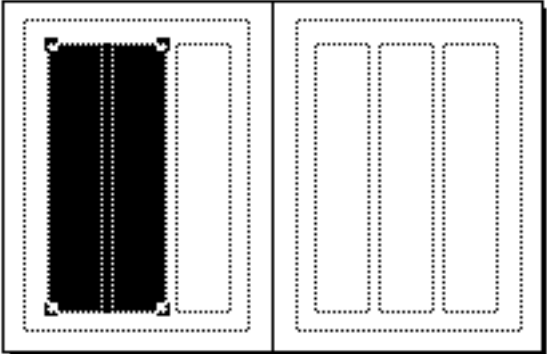
The program this documentation accompanies is a beta version, and is released for your critique and suggestions only. It currently includes only the barest of necessities for a utility program of this type, but I have documented below some of the planned features for the final release. I'd appreciate your feedback on what I have implemented or planned here, as well as any suggestions you care to offer to make Proportion Calculator a more useful tool for the professional graphic artist.

If you're like me, you couldn't resist trying the program out before reading the documentation. You probably noticed, then, that the program works on the premise of a minimum and maximum live area for both the original and reproduction sizes. This gives you a range of sizes your photos can be shot at, which makes it easier to group them for the stripper (ganging four-color separations can be a real money saver!). Proportion Calculator figures horizontal and vertical measurements separately to allow for situations where one measurement is more critical than the other, such as photos that are cropped close to the sides of the subject, but has lots of foreground and background above and below it.

Here's how we might scale a photo: Generally, we know the original size and have a good idea of at least one dimension of our reproduction size, so we'd select the Calculate Scale radio button. Type in your original dimensions (use either the minimum or maximum section, it really doesn't matter unless you plan to actually use both of them) and at least one of the reproduction dimensions. Then press the Return or Enter key or click the Recalc button. This will cause the calculation of the percentages for the width and height entered. Press the Unify Width button to copy the percentage from the height calculation to the width (both the minimum and maximum sections are copied), or Unify Height to copy the width percentage to the height.

Now, some questions: Is it necessary, or even useful, to copy the percentages from the minimum to the maximum or vice versa? If so, what would be an efficient way to operate this? With a button, as with the Unify buttons? Maybe each of the buttons could have a command-key equivalent, such as command-[cursor key]. Would it help if the command copied all of the fields, and not just the percentages?

Fit to Page/Columns:

29p0 x 60p0

Apply to:
- ○ Min. Repro.
- ○ Max. Repro.
- ● Both

[Cancel] [Apply] [OK]

If you're like me, you probably fit photos to a set page grid. Instead of typing in the same numbers all the time, how about a button or menu item that brings up a dialog box where you can stretch a box on a miniature spread that snaps to column margins, half-bleed marks and page edges. When you click the OK button, your minimum and maximum repro sizes are updated. Of course, the miniature page has to reflect the grid of your publication, so a Page Setup dialog box would let you define your page. The value you enter in the Stripping Bleed allowance would be added to the repro size of the photo (maybe we need a check box in the main window to turn this on or off). When calculating your columns, you can choose to enter either the column width or column spacing, and the software will figure the other value.

Page Setup:

Page Width:	51p0	Inside Half-Bleed:	1p6
Page Height:	66p0	Outside Half-Bleed:	1p6
Inside Margin:	3p0	Top Half-Bleed:	1p6
Outside Margin:	4p0	Folio Height:	2p0
Top Margin:	3p0	Columns:	3
Bottom Margin:	3p0	● Column Spacing:	1p0
Stripping Bleed:	0p6	○ Column Width:	14p0

[Cancel] [OK]

Type Page: 44p0 x 60p0
Centerspread: 94p0 x 60p0

Well, folks, if this all seems useful (or even potentially so), here's where I need your input. Naturally, the final form of the program should not run as a modal dialog box, since this doesn't

run alongside of your page layout program, even under Multifinder. Do you need to run something like this along with your page layout program, as I do? If so, is Multifinder a problem for you? I understand that System 7 will be multitasking, so an application would then be just as available as a DA. Do you plan to NOT run either System 7 or Multifinder? What this all boils down to is, is it worth the additional programming hassle to program this as a desk accessory?

I plan to add the ability to allow you to add standard original sizes, such as a 35mm slide, 4x5 print, etc. To allow custom sizes, I expect a dialog box in which you'd enter the name and dimensions for each. The canned sizes would then be available in a menu. Do you have a preference for hierarchical or popup types? What's a reasonable limit on the number of entries here?

In this beta version, there's no bleed allowance, but here's how it might be implemented. Upon recalculating, the software will compare the minimum and maximum repro sizes. If the difference is less than the amount of stripping bleed, then the maximum sizes will be enlarged accordingly. Regardless of whether the main window is set to calculate the percentage, the percentage will be adjusted, because we can't risk enlarging the original's maximum area beyond the actual image.

I'd like to see this program do much more than a simple calculator, though. Here's how: Say you've got a stack of 35mm slides, and you'd like to gang as many as possible for 4/c separations. To accomplish this, the program has got to be able to save a database of all your calculations. Perhaps it could print a list of your photos and sizes, sorted by minimum percentage. I hesitate to allow the computer to choose the groups to be ganged, though, because of considerations such as color, contrast, and the aesthetics of cropping closer to the minimum vs. maximum size. Perhaps the list should also be broken down into 4/c and B&W. To identify photos in the printout, we'd need some sort of code or description, so we'd have to add a text edit box to the main window.

With our final percentages chosen, we can go back and adjust the percentage settings as necessary. This may be a good time to use a feature that unifies the minimum and maximum percentage, and sets the repro sizes to the trim and bleed dimensions. Your suggestions are really appreciated here, but I sort of envision the operation of this by entering the trim size in the minimum repro fields and actual percentage in the minimum width field. Then I push a a button, select something from a menu, or do an option-click or option-enter or something, and 1) the percentage is copied to all other percentage fields 2) the maximum repro size is set to the minimum repro size plus the bleed allowance, and 3) the original sizes are all calculated. It could also verify that the new original sizes are between the minimum and maximum values previously set.

Finally, with all the photos sized and identified, it would be nice to print out tags to identify them for the stripper.

Of course, you and I will both have to keep in mind that I'm an illustrator, not Bill Atkinson, so my abilities and resources are limited. Nevertheless, I'll do my best to incorporate as much of this as possible. I'd really appreciate your suggestions and comments.