



## Preparing material for print layout Common problems and practical solutions

### Additional questions that arise

#### Computer platforms

Just occasionally we do get queries regarding potential computer platform clashes. In reality – regardless of the platform used by designer, customer and printer – design sharing software is completely compatible across different platforms.

PDF file are readable regardless of platform, text files are compatible across all platforms. Kavita Graphics uses Apple Mac computers. This reflects the niche market that this platform once held in the design and pre-press market and, therefore, our resulting experience rather than any particular preference. Most of our clients use PCs so we have to be professionally set-up to be able to work with all the files we receive from these customers so as to provide our service.

#### Text file translation

One occasional problem we find is with older software files – particularly with *Microsoft Publisher* files. These are not readable on an Apple Mac. Very occasionally we are sent much older software format text files which cannot be opened – the resolution to this problem is to supply 'text only' (".txt") or 'rich text format' (".rtf") files.

Another occasional problem is conversion between right-to-left reading (Arabic, Urdu, Farsi etc) language documents – usually regional variations of *Microsoft Word* documents – and left-to-right reading publishing software. This is also easily resolved with compatible software (*Mellel* or the open-source – free – *Open Office* are particularly recommended) and the designer can also share compatible cross-platform *OpenType* or *OpenType/TrueType* (a hybrid format for screen viewing but generally *OpenType* compatible) typefaces to ensure correct character translation.

#### Typeface/Font use

We felt it worth offering some general information on Typeface/Font use because it is a question that occasionally arises.

There are a number of different digital Typeface formats – the main one's used to be *Postscript* and *TrueType*. Most of the typefaces bundled for free with one's computer system software are *TrueType* format fonts. For print ready layout *Postscript* typefaces were required. While *TrueType* fonts appeared perfectly well on-screen (which is the purpose they were intended for), problems often occurred when the press-ready files were being processed using the postscript language required for print preparation.

This problem (and the incompatibility of *Postscript* typefaces across different computer platforms) is being resolved with the introduction of cross-platform and ready-for-press '*OpenType Postscript*' fonts. Increasingly, good design software packages, such as the *Adobe Creative Suite* even bundle high-quality *OpenType* fonts as part of the package. Newer versions of basic system software also include a number of *OpenType* fonts.

Importantly, *OpenType* fonts can have many more individual characters – full Unicode standard compliant fonts can include characters suitable for use in many languages ensuring consistency across publications produced in multiple translations or as multiple languages.

Computer screen fonts and 'Web' only fonts (another new development) remain just that though – they should not really be used for press-quality printing. Not only are they not good for postscript production but, as importantly for the design of a publication, the spacing and letter shapes are designed for the specifics of working visually on a low-resolution, light-based colour spectrum screen – not for high-

resolution printed pages. What looks good in one medium simply does not work in another.

Specialist software is still required to work with typefaces in different languages though – particularly where a language flows in a different direction to others (for example combining a Latin 'left-to-right' and a non-Latin 'right-to-left' language in one document).

Occasionally a designer will be asked if they can 'share' a font or font family. Unfortunately, professional – full (and expensive...) *Postscript* and *OpenType* font families are copyrighted – they should not be shared with other parties. To do so would break the contract one has accepted when buying the right to use from a type foundry. Those parties are meant to buy the rights to use of typefaces on their own computer. Good designers will have invested heavily in high-end fonts and, occasionally, may have to pass on the cost of buying specific fonts if these specific fonts are required.

Typeface copyright laws are broken constantly and cheap sets of fonts are available – usually poor copies. As with all cheap options, one only gets what one pays for. If you are paying a professional they will be buying in high-end typefaces as part of their work for use in your material.



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#### Colour spectrums

For preparation of print ready material, for proofing and for logo preparation, colour spectrums are very important.

##### *Colour in print and on-screen*

If one views Litho printed material with a magnifying glass one can see that the vast, vast majority of this material is printed using a combination of four dotted colours – Cyan, Magenta, Yellow and Black (known as the 'Key' colour in print). Therefore 'CMYK' printing.

If one views a computer screen with a magnifying glass one can see all the visible colours are a combination of three – Red, Green and Blue, hence 'RGB'. This has changed slightly with the development of new screen technology – but the principle is much the same. Office inkjet print outs tend to fall 'somewhere in-between' – but, even if fully calibrated (which is unlikely in most offices), they are still only trying to *emulate* CMYK press colour.

The CMYK spectrum is a subtractive colour system (see: [http://en.wikipedia.org/wiki/Subtractive\\_color](http://en.wikipedia.org/wiki/Subtractive_color) for more information). The RGB spectrum is a light-based, additive colour spectrum (see: [http://en.wikipedia.org/wiki/Additive\\_color](http://en.wikipedia.org/wiki/Additive_color) for more information). The two spectrums can only try and *emulate* each other – therefore when one is viewing a pdf proof online, or a layout on a computer screen, one is seeing an *emulation* of how the proof will actually print. This is why designers and printers use standardised CMYK colour charts – usually the *Pantone* model – to ensure accurate colour reproduction rather than 'mixing colours' on an RGB computer screen.

##### *Spot colours for print*

There are exceptional 'Spot' colour – special ready mixed fluorescent, metallic and pastel colours for example but these are the exception to the general rule – and have the same problems of *emulation* on a computer screen or as an office inkjet printout as CMYK when being proofed.

##### *Logos/Branding and colour use*

This is also why professional logo/branding design includes different versions of the same logo – one for online (RGB) and one for print (CMYK). A logo bundle certainly should include these different options – a designer needs to find, for example, colours that are as close to each other visually from the different colour spectrums used if that logo is to look the same online and in print.

##### *Colour for print*

In addition, designers should be using special calibrated computer screens – and these have to be constantly re-calibrated – so that the on-screen representation is as close to the final cmyk printed colour as possible. And, where this is simply impossible (certain shades of green/blue for example) – an intimate knowledge of pre-press – the differences between one's own equipment and the press one is working with – is required. We feel that anyone doing such work who is not aware of the dangers should probably not be doing such work.

##### *High-end art image reproduction*

The varying colour spectrums are a particular concern when proofing high-end art reproduction on a screen in preparation for print. There is no easy way around the process when the intention is very accurate reproduction. We would strongly suggest that an artist or publisher goes to the press (after preparation for press by a knowledgeable pre-press designer) and then proofs and works directly with the skilled print technicians when that work is being printed. A skilled team will be able to 'tweak' the finish – they will know their equipment inside-out and what they can get out of it, just as an artist knows their materials – cameras, paint pigments etc.

Some printers are still able to offer carefully calibrated, high-end scanning of art images but this is now the exception rather than the rule as the technology has been almost phased out.

#### Design templates

Templates are the setting up of page layouts, type specifications and colour specifications for a publication.

Where a designer/layout person is asked to prepare an initial template – one that the client wishes to use themselves – we would always recommend access to, and some training in, one of the main desktop publishing (dtp) software packages by that client – *Adobe Indesign* or *QuarkXPress*. A little hands-on training – an introduction in how to use a particular template – is always going to be an advantage as well.

Such template production and hands-on training is never going to be cheap but it is a one-off cost. The client will need to purchase sets of typefaces, the software and regular images to be used and the designer is, in effect making themselves redundant after setting up the template so they will, quite understandably, figure this into their working costs by charging a higher fee.

The introduction of computers as everyday household and office items opens up the possibility of easy self-publishing. It does not though replace hundreds of years of development of typography and page layout skills just as owning a set of painters brushes does not mean one can automatically start creating great art.

##### *Microsoft Word templates*

We are often asked about creating templates in *Microsoft Word*. Unfortunately, *Word* is *not* a proper dtp software package as much as it tries to be 'all things to all people' – one cannot control type settings across different versions of *Word*. The most useful application of design skills to *Word* we have found is use of background images – creating static 'text' areas – over which letters and suchlike can be typed. This is effective for branded stationary and similar material for organisations – once the letterhead template has been set up for use across an organisation.