## REVEALING HIDDEN DETAIL - A USEFUL NEW RESOURCE

## Paul Wreglesworth

If you have ever struggled to identify a postmark, an overprint, or some fine detail of the stamp design, but been frustrated by the presence of a heavy cancellation, or other confounding marks, then there is an online analytical programme *retroReveal* (www.retroReveal.org) that might help.



Do not be put off by the fact that this is a sophisticated tool hosted by an academic institution, in this case Utah University's J Willard Marriott Library. Their web-site states "retroReveal provides documentation and web based image processing algorithms designed to help people discover hidden content". The image processing provided assumes no

specialised image editing knowledge and therefore is designed to be used by a broad spectrum of researchers. It is very simple to use and can produce some very interesting results.

If you go to the site and register (e-mail address and password) you can upload a scan of the item you are struggling with. There are a few basic guidelines that will both improve the results and, importantly, minimise the impact on the server that is hosting the programme where storage space is at a premium and speed up the computations. Firstly straighten the image and crop away any surplus background (mounts etc) and save the image, before uploading, as a TIFF or PNG file – not as a JPG file. This will ensure much better results as JPG (JPEG) files lose quality at every saving.

Once uploaded click on the image and this will open the 'channel inspector'. Click again to begin processing. Within a few seconds *retroReveal* produces a series of black and white images to review and download. The *retroReveal* website provides lots of background information to explain the manipulations that the programme performs but this will be of academic interest to most.

I have tried the programme with a number of postmarks that were giving me difficulty. I found it particularly useful with manuscript markings hidden behind heavy postmarks. I also submitted a couple of stamps with very faint 'SPECIMEN' cancels and the results are shown below (Figures 1 and 2).







Figure 1: A 4d 'Second Sideface' with 'SPECIMEN' overprint together with two of the images produced by the 'retroReveal' process.







Figure 2: A 5d 'Second Sideface' with 'SPECIMEN' overprint together with two of the images produced by the 'retroReveal' process.

I also uploaded a stamp with an O.P.S.O. overprint hidden beneath a very heavy Wellington concentric ring postmark. The processing performed by *retroReveal* certainly cleared the postmark out of the way. One of the manipulations is shown (Figure 3)





Figure 3: A 1d 'Second Sideface' with 'O.P.S.O.' overprint together with a 'retroReveal' image which eliminates the heavy postmark.

Whilst I found the *retroReveal* programme produced some interesting results don't expect miracles. If a postmark was poorly inked when applied then this programme will not help – it cannot find what was not there in the first place! Those who are expert in the advanced options available in photo manipulation software such as *Photoshop* may well be able to achieve similar results – in some cases. However, *retroReveal* does have the advantage of being very simple to use.

Postscript: In communication with the brains behind retroReveal, Hal Erickson of Utah University, I am told that 80% of retroReveal's current user base are philatelists and account for 90% of the server load! In order to maintain access to this facility it is important that users follow the guidelines mentioned above (straighten and crop images and save as a TIFF or PNG file). Hal is hoping to move philatelic users to a customised gateway on the site and provide some philatelic tutorials so please have a look at these if you want to use this valuable resource.—PW.

