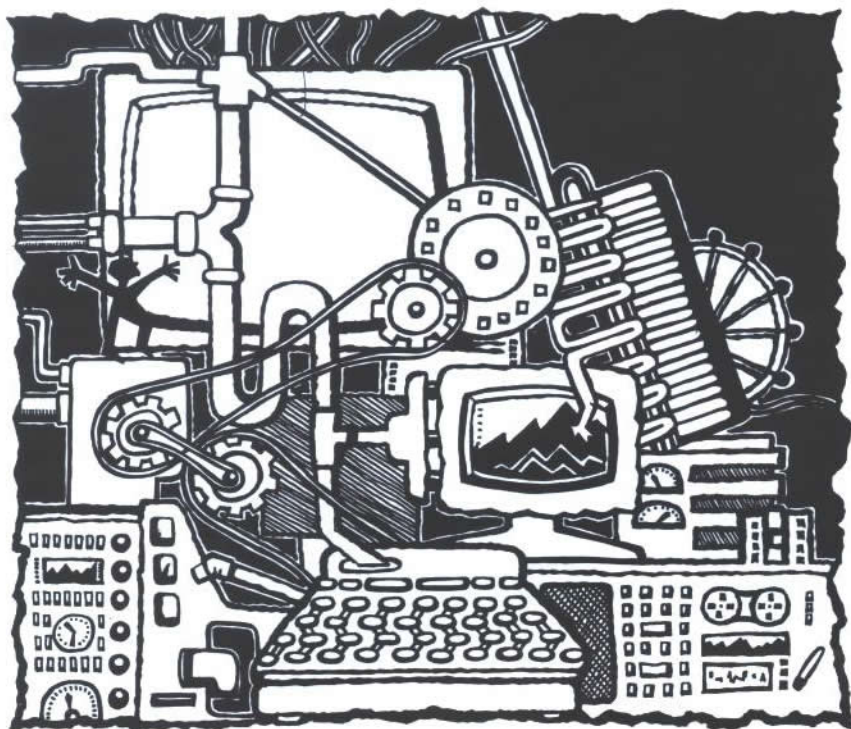


By A major revolution has begun in South Africa's mainstream newspaper industry, bringing
Gutenberg stunning change to the methods and mindsets by which
it's an City Lates and City Finals have long been made. ¶ For centuries, journalists took it for granted that
exciting they should surrender their material to non-journalists who would
way to prepare it typographically for the press. ¶ Now clever machines can do all the pre-press work
make a printing craftsman used to do —
a newspaper!
electronically
invisibly
more accurately
and with **awesome** speed.


ANDRÉ MEYEROWITZ
was Assistant Editor of the *Pretoria News* when he was asked to lead its conversion to electronic pagination as a pioneering project for the Argus Group. He is now helping to install pagination at *Business Day* and the *Sunday Times*.



Think of the computer games which today's children play, or the video arcades where teens can now be found mis-spending their youth and pocket money. If the same technology which goes into those games is engineered somewhat differently, and put in the hands of the journalist, it can be used to produce his end-product.

All that newspaper people have to do, in effect, is buy a few computers with the right graphics capabilities, load them with word-processing and publishing software, let them communicate with each other through a network of cables, and link them to an output engine.

Such a method is known in the industry as the Fourth Wave of typesetting technology.

It would be an obstinate denial of the redundancy inherent in the Fourth Wave simply to re-equip traditional composing rooms with electronic pagination computers. It's sad for journeyman printers to go the way of the quill and the dodo, but the fact is that the new technology lets editorial operatives do all the typesetting themselves.

Owners and managers see it as good business. For an outlay of a few millions, they can do away with their works departments, watch the rapid recovery of their investment out of the wage packets they no longer hand over, and then sit back and lap up the cream that comes with being ever more competitive.

What it means for the journalist is that he is no longer restricted to merely conceiving the design of his product: he can actually execute it as well. He seizes the high ground of publishing, controlling exactly what is to be published and when, with no interpretation by an outsider. Mozart conducted by

Von Karajan is good; Mozart conducted by Mozart is the best.

There have been nibblings at electronic pagination in South Africa before now, with some papers trying to use off-the-shelf software packages. Examples are the recently-closed *Sunday Star* (QuarkXpress on Apple Macs) and *Sowetan* (Aldus Pagemaker on IBM clones).

But last year the major newspaper groups looked seriously for the first time at industrial-strength Fourth-Wave technology – suitably customised, because shrink-wrapped DTP software like Quark is written with mass markets in mind and cannot really meet either the copy-flow or publishing-speed requirements of metropolitan broadsheet *Business Day* and *Sunday Times* operations.

The Argus Group is the leader of the pack in the sense that one of its metropolitan dailies, the *Pretoria News*, is already "fully live". All editorial and most advertising elements of that paper come together on make up terminals running customised Mediasystemen software in what used to be the editorial floor but has become the de facto production area.

The *Pretoria News* was seen by Argus as a pilot for its other (bigger) papers in Durban, Johannesburg and Cape Town, which are now gearing themselves to follow it – armed with forewarning of the many pitfalls and heartaches discovered during implementation.

It was a cardinal principle of the Pretoria project that the new technology would be made to serve the way the *Pretoria News* wanted to operate, rather than letting technology dictate how the newspaper should be made.

For reporters and other writers, little has changed. They enter their copy on ordinary, cheap PCs running word-processing software which mimics to some extent the Atex system they were used to before the conversion.

The background difference, although they don't need to notice it, is that their workstations are not linked to a Third Wave mainframe computer but seamlessly interfaced instead to hi-tech application servers, pagination terminals and imaging devices.

Photographers too, remain photographers, although with an added skill: instead of submitting prints or transparencies as their finished product, they can scan their pictures directly into the Fourth-Wave system, ready to be placed on the pages.

Sub-editors, however, have been transmogrified by this revolution, which shifted the burden of page production entirely onto their shoulders – or, more precisely, onto their TV-sized pagination screens (R70 000 each, thank you). They are the ones who now crop or deep-etch the pictures, ensure that the adverts are there, lay down the colour washes, make the borders, handle the half-tone headlines, put in the column rules, check page furniture such as folio



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FOR THE TECHNICALLY-MINDED

? The *Pretoria News* has moved to "open" Unix-based client/server PC networks with more than 100 editorial, advertising and system management workstations.

? Two 5Gb Raid 5 486/66s running Sybase are the main dataservers, backing each other up in real time with access to an 8Gb tape streamer.

? There are six application servers to manage the various front ends; text, display/classified ads and illustrations. A bridge separates high-res and low-res images. Accounts and subscriptions also run through a bridge.

? Image-setting is by way of two ECRM Prinoxes with Hyphen RIPs, yielding a nominal output flow of four minutes per full-colour broadsheet page.

numbers and datelines, and generally complete the pages in finest computer-assisted detail – to their own design – before outputting them to high-speed image-setters (R250 000 apiece, please).

Initial training was just five days' worth, although it took several weeks for full proficiency to take hold. Now the subs have grown into new beings who could rightly call themselves pre-press production operatives.

They remain true journalists, of course. Computer literacy does nothing in itself to enhance news judgement or wordsmithing or the general knowledge which enables a good sub to cluck at "John Hopkins" and change it to "Johns Hopkins".

And yet personnel experts would be wrong to claim that a page make-up terminal is just another type of pencil – that you can teach anyone to use a better tool to do the same old job because the best Fourth-Wave subs bring to their task the aptitude and ability to get the best out of the new technology.

The complement of journalists at the *Pretoria News* has not increased as a result of the conversion. It takes only slightly longer to complete a page on-screen than it did to conceptualise one by drawing lines and instructions on a paper dummy. And the marginal few minutes lost are more than made up for by saving all the time it used to take the works department to make up the pages to press-readiness.

The net result is significantly faster production, and thereby greater editorial capacity (not least in terms of colour pictures which, at a push, can be on their pages only 25 minutes after the photographer took them). This, for a multi-edition afternoon paper such as the *Pretoria News*, is great news. Moreover, the look of the product is crisper, cleaner and neater.

Editorial copy-flow at the *Pretoria News* has not changed, although the floor-plan has. The paper's seven make-up terminals are grouped in a circle known to the staff as the "bullpen", which can best be described as a hub from which radiate the spokes of the newsroom, the sports department, the picture/graphics section, the arts-supplement staff, and the text-editing area.

But there are no elitist layout-only subs at the *Pretoria News*. All subs can design pages on demand – whether news, sport, entertainment, finance, motoring, special supplements, or whatever. They move

from their text-editing "home" workstations as assigned by the chief sub to visit the bullpen for as long as it takes to make up a page, always in a gentle hot-seat swirl.

If the principles of editorial copy-flow have stayed the same, advertising copy-flow has a new route: the work of ad designers finds its way via the electronic network also to the "editorial" bullpen and thus directly on to the newspaper's pages, while an advertising operative occupies a bullpen chair at the appropriate time of day to paginate the classified section.

Pretoria's new philosophy of newspapering includes the notion that an advert fetched for the paper by an advertising rep is no different in principle from a news story fetched by the court reporter. The ad rep and the reporter are both seen as brickmakers, as indeed are artists and photographers; all bring their bricks to the sub-editors at the bullpen, who are the bricklayers.

With no works department in the old sense, partnership and communication between what used to be the editorial and advertising departments is crucial. They are on their way to becoming one pre-press production entity. This is illustrated by the role of the newspaper's graphics unit, which today has both advertising and editorial as its "clients".

The bullpen, where everything comes together, serves as a communications-and-control centre; it is presided over by an officer who might in the past have been referred to as a production editor. His job is to make the final check, as the editor's trusted delegate, of what text and images and adverts are about to be published, and to ensure timeous flow to the image-sellers.

But Pretoria sees the new system as philosophically too majestic for a mundane job title, so editor Deon du Plessis invokes Greek mythology for the image of a huge figure bestriding a narrows through which the torrent must run, and the production editor at the *Pretoria News* therefore goes by the name of The Giant. In the background, down in the Information Technology Department and unseen by ordinary mortals, sit the five Raid-array dataservers – suitcase-sized boxes full of the little electrons which natter away to each other in Sybase and make it all possible.

By Gutenberg! It's an exciting way to make a newspaper...



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