

IT GOES AGAINST THE GRAIN...

In which MIKE HUDSON admonishes devotees of the book arts unaware of the difference between woodcut and wood engraving and compares practices in England, Europe and Japan over the centuries.

You may be surprised to discover that a word bandied around in the book trade for more than a couple of hundred years to describe a method of rendering an image for reproduction, is in fact, quite wrong. As a practitioner of this particular method (and others), I've found it increasingly irksome to see my work described in this misleading fashion in the various trade and auction catalogues, by compilers who should know better. This monograph, only a small proportion of which could be called a diatribe, is my attempt to rectify the confusion which has prevailed since this distinct process first made its appearance in the late 1700s.

Over the last two centuries there have been volumes of carefully descriptive explanations concerning the technical, aesthetic and even philosophical differences between the two primary wood-based methods of relief printing — particularly for use in book illustration. Despite this, the majority of today's booktraders still insist on using the somewhat sloppy and quite erroneous term 'woodcut' to describe the exquisite tonal images of artists such as Blair Hughes-Stanton or Agnes Miller Parker. I might be exaggerating when I say that those two late luminaries in particular wouldn't have known a plank of wood if one had fallen on them — but of all the examples of their work

published over several decades, I know of not one solitary *woodcut* that could be attributed to them, since they were of course, *wood engravers*.

The job description problem starts too far back for me to be certain who the originator of this irritating terminological inexactitude was. Suffice to say that Ruskin picked it up and made liberal use of the title on the few occasions he could lower his gaze from the nobler arts and focus on the artisans. In one comment, probably in an attempt to be uncharacteristically witty, he exposes his own rather cavalier viewpoint when he drops the throwaway line to describe wood engraving as 'that fine art of scratch'.

The excessive influence that Ruskin had among latter-day art historians could have contributed to the general misconception, particularly with print curators of eminent galleries and museums, who still promote the very occasional displays of wood engravings by referring to the exhibits as 'woodcuts'. Certainly, Thomas Bewick himself called the method 'engraving' when he virtually single-handedly revived and perfected the techniques (that we still use today) in the last quarter of the 18th century. But somewhere down the line we have been coerced into confusing a totally dissimilar technique (and end result)



with what is generally considered to be the method used for the first mass-production 'printing' on linen somewhere on the Indian subcontinent well over two thousand years before Bewick and his school.

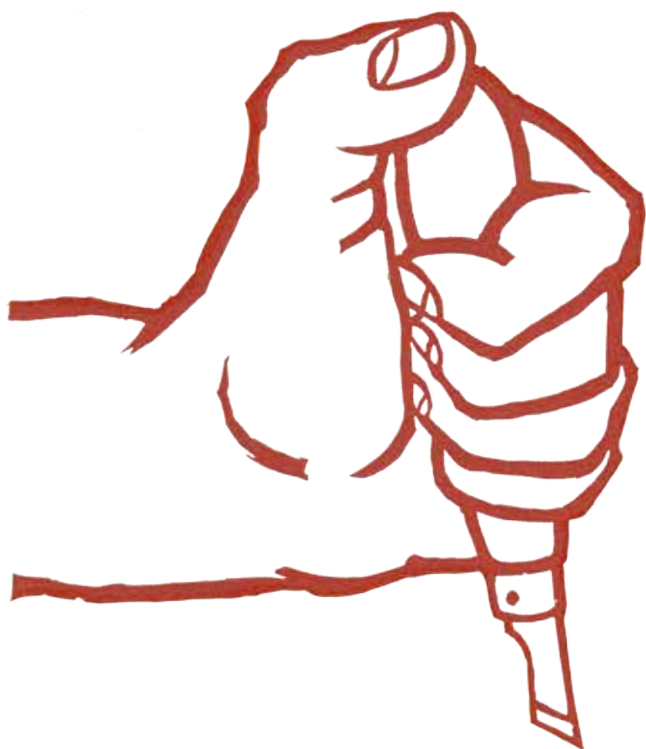
My complaint comes not from mere pedantry, or because I'm a natural born curmudgeon but from an innate desire for fair play. Gawd alone knows what dire retribution would befall the hapless sports commentator who accidentally transposes The Union with The League when reporting a Saturday fixture. 'Such a fundamental *lapsus calami* could never happen,' I hear you sniff — but I say the equivalent surely does happen whenever these two celebrated wood arts are metathesised — and it's time it was stopped!

It's safe to say that, with few exceptions, the intrinsic differences between the two techniques are clearly reflected in the finished product and, even without an identifying caption, a minimal grasp of the history of book illustration should provide the clues for a proper description.

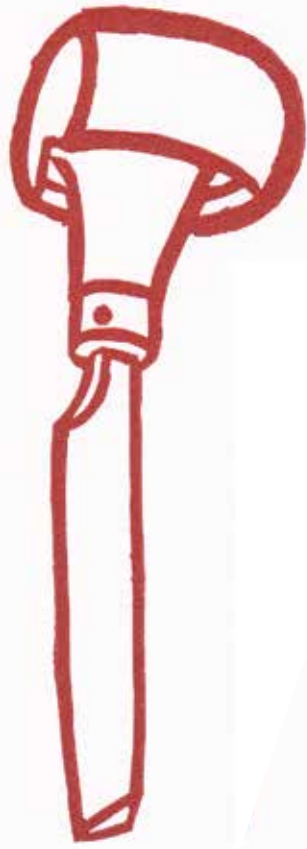
Basically, those differences begin with the material and tools through to the facility of the chosen medium to render a particular effect. Indeed, the only related aspects of the two activities are that both were created exclusively for relief printing, and both, in their purest form, use seasoned timber, albeit from different trees, as their medium of choice. As for their visual difference, in the vast majority of cases one can say that woodcutting is a 'black line' technique and wood engraving a 'white line' (or negative) one.

Surely the clincher as to what the appropriate noun or verb should be is in how the particular tools are used in each method. With the Japanese approach, the

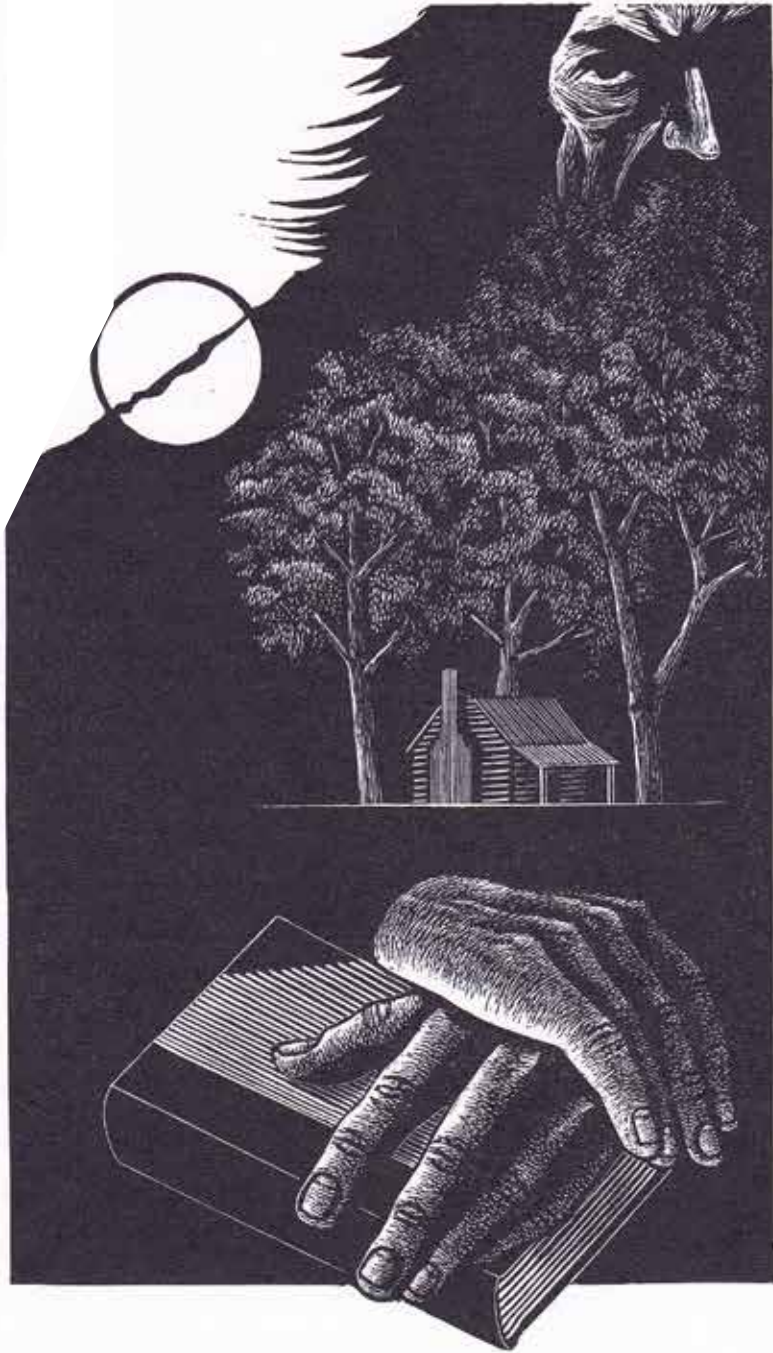
woodcutting knife is held firmly in the fist with the blade at an angle of about sixty degrees (in a manner reminiscent of a melodrama villain) and with the thumb braced on the top of the handle protruding from the four-fingered grip. The European style is to grasp the knife more like one would hold a fat pen. In both instances a cut is made by drawing the knife towards the body. With engraving, a finely-pointed tool with bevelled or angled sides is cradled in the hand (this time similar to an angry Apache dancer or a Marseilles matelot) to point forward like an extension of the arm. The action is to push the point of the tool into the surface of the wood at an extremely shallow angle to the horizontal and away from the body. There is a wide variety of tools for different purposes, but essentially the techniques of push or pull are indicative of the profoundly dissimilar responses of the timber being used for each activity.



Traditionally the material used for wood engraving came from the English Box tree (*Buxus Sempervirens*). Because of its slow growth character (around 20cms diameter of trunk in a hundred years!) the cross-cut surface is extremely close-grained. After laying down the log in the ground to cure for ten years, followed by appropriate planing, sanding and finishing treatments, the individual end-grain piece has a working surface as smooth as glass which can be penetrated by a sharp pointed tool in a similar manner to any other engraving technique; the signal difference being that here, as with woodcuts, it is the non-incised areas that will be printed. To cut *along* the grain necessitates a smooth, soft surface, hence the preferred use of fruit tree timbers like pear and cherry which, although classified as hardwood, have a certain 'yielding' quality under the knife. Also there are almost no hard ridges of grain that (as with pine) could chip or shatter, creating holes in the design. However, cutting with the grain of a plank does not allow for as fine a line as can be made by engraving *across* end-grain boxwood.



*wood engraver's
elliptical tint tool*



Breakaway; a wood engraving on boxwood by Mike Hudson, created to illustrate a Rosemary Dobson poem of the same title and published by Officina Brindabella in Untold Lives, 1992.



woodcutter's
knife

This mirror-image woodcut version of Breakaway on cherry wood was created by Mike Hudson in order to demonstrate the use of a broader, less detailed style, necessary when cutting along the grain.

Because, like most fine timbers, the present supply of boxwood is all but exhausted, engravers have resorted to testing a variety of plastics as substitutes. So far, the consensus favours the material manufactured for police riot shields, which, as one would expect, doesn't chip or shatter, gives a good sharp line and won't blunt the tools prematurely. Somehow I can't see the average riot policeman being too keen to donate his body armour to the cause of art, so I'll stick to Venezuelan Maple as a more readily achievable alternative.

Although the early *Formschneiders* who cut for Dürer and Holbein were extraordinarily fine craftsmen, even they could have found the process limited when it came to rendering tonal variations, such as would be needed to express light and shade on drapery. The fact that each line to be printed can only be made by first cutting down and outwards at an angle (for strength) along either side of a drawn line, and vertically down to meet this cut in order to remove non-printing material and leave the line proud of the surface, means there is a limit to how close each line can be to its neighbour. In later years a 'V' groove gouge was devised as an aid to this kind of parallel line work, but its 'mechanical' function made for a too-shallow incision to be universally useful. With wood engraving, the incision is made either side of a very fine line as one movement and because of the hardness of the wood, need only be the shallowest of incisions. Blair Hughes-Stanton, on a good day, could engrave as many as 60 lines to the inch without collapsing the hairlines left standing, which when printed correctly would render a subtle shade of silver-grey. It is that kind of sensitivity that elevated wood engraving over the more robust woodcut technique. In addition, since it allowed for finer detail on a smaller scale, book publishers were no longer constrained to use larger and more expensive formats to compensate for the coarser woodcuts. So, from early in the 19th century, this part practical, part mercenary rationale established wood engraving as the *sine qua non* method for mass reproduction of images in the hugely popular magazines and periodicals of the time.

The rapid growth of literacy and mass consumption of cheap illustrated journals in this post Industrial Revolution period encouraged press manufacturers to concentrate on the production of ever faster and larger machines. It was no longer possible to control the tone values of the images by lowering selected surface areas of the block to print lighter, or by judiciously applied make-readies* to emphasise the darker areas. Such things were techniques of hand printing and platen presses and were redundant to

the mass production processes that of necessity required metallic surfaces (electrotypes) to withstand the enormous pressure of the new high-speed steam-driven cylinder presses. These same technical requirements impinged on the artistic interpretation of the engravers, enforcing bland and sterile depictions because of the evenly distributed tones which were desirable to enable the automatic ink delivery system to function less problematically.

Thus the artistic potential inherent in the work of Bewick, Blake, Calvert and Palmer, degenerated into a cost-effective trade skill, employing ingenious tint-making machines for rendering the broader areas of grey tones such as skies, and photographic techniques to print pen and ink drawings directly onto the block for the engravers to excise in strict conformity with a 'black line' artist's literal concepts. The ingenuity of these inventions, whilst releasing artisans from their skilful drudgery, added not one whit to the medium's artistic possibilities.

One of the dilemmas that have dogged the progress of wood engraving as an art form since Bewick's time is that it has always been seen as a cheap rate substitute for the more refined capabilities of copper-plate engraving. Of course, this was the prevailing view from commercial publishers who had a vested interest in maintaining a disparity of costs between the practitioners of the more established *artistic* medium and the one they were keener to control and exploit. Obviously the production of images from copper (or steel) was more complicated, particularly at the printing stage, since being the intaglio process it needed another machine and different skills from that of the standard letterpress system that was the workhorse and profit-maker for the industry. In those days wood was the infinitely cheaper medium and as the wood block was made with relief printing in mind, it could be set up and printed in combination with the type matter — thereby halving printing time. With such desirable advantages of having an unlimited capacity for representation and even more importantly, being able to do it quickly with profits for the publisher, meant that wood engraving was swallowed up by the exclusively commercial process of supply and demand. If this wasn't disastrous enough for the artistic potential of the medium, in their efforts to refute accusations of being a 'B' grade technique, the engravers sought to improve its parity with copper by concentrating on *tour-de-force* methods of representing colour and tone — and in so doing they neglected the fundamentals of good art — those of form and design. Before 1830 there were perhaps fewer than a dozen wood engravers, including Bewick, operating in England. By the 1860s

*A make-ready is a hand cut, selectively shaped layer of paper pasted on the impression cylinder (or platen). By creating extra pressure, this padding — which can consist of up to a dozen layers and which is positioned with great accuracy in areas relative to the block — will transfer a greater amount of ink from the block and therefore produce a darker tone in those particular areas of the print. The Breakaway engraving had just such a device to produce an overall solid black impression without losing the detail in the foreground hands. A simple increase in the amount of ink would have achieved the desired solid black but would have also flooded and 'filled up' the finer lines on the hands, thus destroying the tonal relationship of the whole image. In contrast, the woodcut version, being more two-dimensional and having no tonal quality to preserve, needed no extra treatment at all.

there were many hundreds, mostly of creditable technical abilities but almost none with any artistic ambition, for by this time the process had produced a separation of roles between the originator of the image and the 'interpreter' (the technician) of that image for reproduction.

Throughout this period of quantitative growth for wood engraving, the woodcut suffered a corresponding decline. In Europe, where its traditional status favoured its retention for bookwork, its use overall was shrinking. The continued preference for the more compatible 'Gothic' typefaces of Germany ensured a breathing space there, but by the middle of the nineteenth century, wood engraving — and even more importantly as a sign of things to come — lithography was now beginning to be exploited for its cost effective full-colour capabilities. By the 1880s engraving had reached its nadir as a creative medium and the discovery of the photographic half-tone process virtually eclipsed its last remaining advantage as a letterpress-harmonious image maker.

One of a soon-to-be released suite of 7 wood engravings by Mike Hudson, depicting scenes from the battle of Poitiers as described by Froissart in his Chronicles. The complete suite will be featured in a future issue of Oz Arts.

It wasn't until the period between the two world wars of the 20th century that both wood techniques were resurrected by artists in their quest for new 'democratic' forms of expression. Sufficient time having elapsed since the passing of the 'discredited' medium, a whole new generation of creatives were now 'safe' to develop and exploit the 'white line' potential inherent in both processes but neglected by the trade since the late 1820s.

As if reflecting the somewhat Utopian ideals of the Arts and Crafts movement to reintroduce the 'dignity of labour' to what had become a conveyor-belt culture, European artists post WWI investigated all manner of print-making methods that could best express their particular creative and new-found social sensibilities, as well as providing a readily available 'mass art' for the lower-income members of society. Because of its exactness and generally small scale, wood engraving was favoured by individuals with a bent for draughtsmanship and a preference for drawing as the starting point for their imagery. In contrast, the widely variable sizes of plankwood allowed for a broader, more graphic interpretation, making woodcuts the first choice for the Expressionist movement and political propagandists.

The Japanese had maintained an exclusive and unbroken line of relief printmaking activity, culminating



in their favoured cherry-plank, colour woodcut tradition of *Ukiyo-E*. From its rather scurrilous origins it evolved rapidly beyond the European conventions of Dürer and the German school. In part this was due to a studio system similar to that of the French *atelier*, where as many as twenty individuals would be engaged in the hand production of one coloured print — but also as a result of the complexities of the written Japanese language, the general low level of literacy and the feudal system.

Although woodblock prints were common enough as ways of illustrating literary and religious texts from as early as the 8th century, the full flowering of this masterly process was not to happen for at least another nine hundred years, with the multi-coloured Golden Age of printmaking only emerging after the middle of the 18th century. This almost one thousand years of steady, labour-intensive development and oft times matchless art was proof against the need to mechanise, and, unlike the English experience, the *atelier* system was a positive advantage to an artist's output.

Japan's geographical and cultural isolation from European influence maintained the strict feudal character of the country with the aristocratic and military classes at the top of the ladder and curiously, from a Western perspective, the merchants on the reviled bottom rung. Farmers, craftsmen and bureaucrats all had varying degrees of clout within this rather formal society but virtually no political power — survival depended on patronage from above. Ironically it was during the years of comparative peace between the warlords, enforced by the new military dictatorship of the early 1600s, that the rigid class system, defined by law, began to break down. In their greed for possessions, the ruling Shogunate grabbed vast tracts of land from the old declining fiefdoms thereby summarily creating a society of landless peasants. These rootless poor now joined the many thousands of jobless soldiers that had been disbanded when the new laws forbidding feudatory conflict were enacted.

Without getting too involved in a potted history of Japan, it is necessary at least to indicate the underlying causes that encouraged such a sophisticated concept as *Ukiyo-E* to emerge from what was a relatively primitive society. The rationale may not be as unlikely as one might suppose for — as with any sudden influx of unregulated people into a previously well ordered and conservative environment — something had to give. In the case of Edo, the new capital city of the federation, it was those very legally enforceable divisions in society that were the first to feel the draught.

Out of the turmoil came a radical creative force that further blurred the barriers between social groups and laid the foundations for the rise of the middle class. It was from this new order that the woodcut art forms took their imagery and patronage. Practical men of trade, the despised merchant class, had risen to the top

economically but not socially. This mattered little to the glut of unemployed that sought a living wage from these affluent but culturally unsophisticated parvenus.

One can see parallels with Europe at this stage. England in the 18th century was also in an expansionist mood and new discoveries in the applied arts and sciences led inevitably to the Industrial Revolution and the subsequent rise of a similar class structure. Where the resemblance ends however is in the power base of those structures. Under the military dictatorship of the Shogunate, which was to last at least until the end of the 19th century, this agrarian population's middle classes were primarily from the trading groups, with professionals, bureaucrats and well paid artisan/craftsmen providing back up. These small elites (probably less than 15 percent of the population) had little use for mechanical or scientific innovation since there were more than enough willing hands to create an aesthetically cultivated and sybaritic environment to which they were anxious to become accustomed.

With *industrial* growth however, the sensibilities seem to require a different kind of ambience, for while the English equivalent built their country estates away from the mills, mines and foundries that gave them the wherewithal, they had little time for or interest in the kind of cultural pursuits that were so much to the Japanese taste.

All this may seem superfluous to the central theme of this monograph but I thought it necessary to mention because the economic and social conditions of any society are either the driving force behind the establishment of an applied art tradition, or its very antithesis. What it should also indicate is that the growth of an aesthetic awareness is not the result of a linear progression, but more a response to random events.

With Japan it was the blatant elitism of social climbers as patrons of the arts who stimulated a naive woodcut tradition to develop into high art. For the English it was virtually the opposite — in pursuit of the universal marketplace, the newspaper barons took an emerging art form and buried it in bland ephemeral conformity.

So there we have it, brief but sufficient to make the point that the only two basic methods of relief printing from wood have nothing whatever in common, least of all their origin, technique and tonal capabilities. With this little exegesis I would like to hope that they will never be confused again, particularly by supposedly book-affiliated people. I don't expect booksellers or book enthusiasts to know the difference between linotype and monotype setting, which can defeat even the experienced eye. But the norms of engraving and cutting are so totally dissimilar that to lump them under the general title of CUTS is as obtuse as declaring Rembrandt to be the Mr. Squiggle of the Dutch renaissance.



Above: Japanese theatre poster, late 19th C. Woodcut, 50 x 70 cm.
 Right; Same-size detail of top left corner

The Kangaroo-Rat of New South Wales
 Wood engraving by Thomas Bewick.
 From A General History of Quadrupeds,
 first published in 1790.
 Same-size as original engraving.
 (approximately 8 x 8 cm)



THE KANGAROO-RAT OF NEW SOUTH WALES

It goes against the grain... is the second in a series of eight monographs, collectively titled *Private Impressions*, concerning aspects of book arts. Hand set and printed, the monographs were written by Mike Hudson and Jadwiga Jarvis and illustrated by Mike Hudson. Monographs 1-4 were published in 1995-6 and 5-8 in 2000-1 by the Wayzgoose Press.