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drop the gods and start soul searching

Suggests Ian Firth



Julia Coleman

Rick Rudd

I am in the unique position of gaining an overall view of where New Zealand potting is heading, for within the last two years I have been selector in Auckland, Hamilton, New Plymouth, Wellington and Christchurch. There are distinct features in the different regions, but the overall picture of pot making throughtout New Zealand I find quite disturbing — the number of potters making a worthwhile contribution amounting to a handful. Technically there has been advancement, but most of the work being offered for potters' group exhibitions is lacking in

even basic design principle: and aesthetics.

Perhaps this stems from the lack of training in these areas by most of the people practicing the craft in this country. Many potters are trying either to imitate or impress one another. I would suggest that they try to impress themselves as one cannot be dishonest to oneself for long and get away with it.

There is an unfortunate trend towards what I term "Betty Crocker" potters who have no feeling for the basic raw materials because they regard clay as a commodity that comes in a plastic

bag. I pray for a return to a study of the basics of design and a genuine feel for the very personal material, clay.

By encouragement I believe we can lead people towards doing better work. This was brought home to me resoundingly after selecting the Wellington potters annual exhibition. It was perhaps the worst exhibition I selected in terms of quality of pots offered, but underlying it I was able to see potential for the most outstanding work in the country. The potential is there, but it is being bogged down by overlying influences and the need to



Ann Ambler

Warren Tippett

New Zealand Potter

please others, instead of searching from within ourselves.

The answer I feel sure is to encourage individuals in every way possible to tap the energy source that is within. This has to start with the realisation that all life's experiences, in childhood, through education, in love, hope and dispair, no matter how unrelated to our creative ability they may seem, make us what we are, and should be mined as raw material for inspiration instead of denying it which seems most often the case.

When I think of the vast amount of technology and expert help available to anyone entering the pottery field today I feel sad and am glad that I came up the hard way. I had the privilege of starting my potting in 1946, without money, technical data or influence from others working in the same field. There were practically none. The experience was like that of an explorer on a voyage of discovery. I had to draw upon my instincts and extract the utmost from my limited resources, but what a triumph it was to draw a complete even if humble and crude pot from the fire; what a sense of achievement when my loss rate dropped below ninety percent.

I realise that this experience can no longer be for others as it was for me, but I do believe that unless a potter goes through the experience of finding out about his raw materials as derived from nature — learns to understand and respect them, feel some awe, then work will continue to be made in spite of clay, instead of with joy that comes from having empathy with clay. I don't think it is going too far to say that with genuine love and respect for clay, pots can flow from the hand almost like an extension of ones own physical self.





Bronwynne Cornish

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John Anderson

Pots on these two pages are from Auckland Studio Potters last exhibition



Barbara Hockenhull

New Zealand Potter

Maybe these days too many people are lumbering themselves with sophisticated and expensive equipment and materials, so that economics then dictate that they produce work for sale long before they have time to learn the basic skills of good craftsmanship. This does not have to be the case, as all the joys of potting can still be had for the minimal outlay, for those sensitive enough to know that good work will only come after the spadework has been thoroughly and caringly done.

In New Zealand we have high overall technical skills in pottery, but fewer outstanding potters in proportion to the huge numbers involved in making than could be expected. The reasons, I believe are those I have expounded earlier, and until potters start being themselves as our pioneer potters were, instead of imitating those here and there who are experts in their field, we will see no further progress.

When leading workshops I've been aware that if you can teach people to follow their intuitive responses instead of having an analytical approach, then success is guaranteed. Perhaps future weekend schools should be in the form of "encounter groups".



Denys Hadfield



Lawrence Ewing

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Aina Apse

These pots are from the Canterbury Potters last exhibition Photos: J. Connolly



Sally Connolly

New Zealand Potter

20th New Zealand Society of Potters Exhibition in perspective

The last society of potters exhibition held in Wellington in October marked the twentieth consecutive annual exhibition of members work. It has come to be known as the "national" exhibition and in former years connoisseurs of fine pots expected to find displayed here the country's best.

This latest exhibition could not strictly carry the descriptive national title because for various reasons it was unrepresentative. For a start, not represented are those potters — and there are many — such as Paul Melser, Jim Greig and Andrew van der Puten who do not belong to the society. So half the best potters don't belong and were not eligible to contribute; of the half that do belong half did not submit work; of the half that did, half were not selected. So we have left an exhibition of the work of some of New Zealand's potters. The importance of the New Zealand Society of Potters Exhibiton 1977 is therefore no more than that of any other major exhibition.

This is not intended as criticism, but a statement of fact made to show the significance of this twentieth exhibition. There were a few good pots, set out to advantage by those responsible for the display, but most of the work was forgetable.

Was this the fault of the selectors? Did they throw out the more imaginative and exuberant work? Were they striving for technical excellence and did they accept only the carefully made pieces? Peter Stichbury's safe and predicatably competent pots of unquestionable craftsmanship will always pass selection panels, but are these the kind of pots to make an ex-

In retrospect - from the display of work shown at early national exhibitions photos: Stan Jenkins hibition memorable? The same selection panel would find it easy to trip up a more direct and unconventional potter like Wilf Wright and reject his work leaving the exhibition the poorer for the loss of Wilf's vigorous pot with its unmistakeable human warmth. Does the selection system require an overhaul? Should the potters' society invite contributions from non-members?

It was interesting to compare the work of the first decade of potters from the first exhibition in Dunedin in 1957 to the 4th in Auckland in 1960 collected for a retrospective display. The pots were small, there were faults in throwing and other technical defects we would not see in 1978, but every one had the vital freshness of a decisive effort by its maker.



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Margaret Harris

Len Castle



Peter Stichbury

Barry Brickell

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New Zealand Potter

Yvonne Rust

The continuing strength of Yvonne Rust's contribution to New Zealand potting is clearly evident in the work she is doing at present in her studio on the Whangarei Peninsula.

Whangarel Peninsula. Yvonne's powerful creativity derives much from the natural environment, from cliffs and crags, sunlight and pohutukawas, mangroves sea and shore. It is hard to imagine her poring over the last issue of the ceramic journals searching for ideas. The texture of her clay, the harshness of surface, the boldness of form make their powerful impression.

Yvonne has been made a life member of the New Zealand Potters Society because she is one of the few

who have really interpreted the spirit of New Zealand in clay; and also for her great generosity in inspiring and helping younger potters. She instills in them an enthusiasm for nature and its relationship to the craft.

craft. All Yvonne's materials are indigenous. She gathers them from many parts of New Zealand including the West Coast of the South Island where she spent some years helping to find and develop clay pits. Glazes are mainly local ash and rock glazes. She oil fires a large downdraught trolly kiln and has a small kiln for salt glaze.

Flora Christeller







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photos: Auckland Star

High speed blunger.

A high speed blunger that can chop and blunge clay in any state whether it be soft, leather hard or bone dry relatively quickly is simple to design and the design described below will handle more than 100 lbs dry weight of clay

This model is placed inside a 44 gallon drum coated with plastic to prevent rusting. The drum is placed between two uprights say 100mm x 100mm (4" x 4") timber secured to the roof and floor or whatever is convenient and tied together with a 225mm x 50mm (9" x 2") about 300mm (12") above the drum. On this board are mounted two bearings to take the shaft.

An alternative method is to mount the motor on the board and lock it directly onto the blunger shaft. The ad-

.

5" PULLEY

MOTOR.

1440rpm

44 GALLON

BEARING >

BLOCK

DRUM

vantage of this method is that the two bearings are eliminated, but the disadvantage is that the speed is fixed and the cutterbars may be too big or too small for the speed of the motor and only trial and error with different size cutters will determine the right size. Also there will probably be some sideways load on the motor bearings which may not be adequate to handle this sort of load. If the motor is located on the other side of the board then different pulleys can be used to get correct speed for particular size cutters. The bottom of the shaft is tapered to fit into a bearing block made of a very hard type of plastic sold as bearing material. This is available from Allways Engineering, Avondale. Auckland and probably elsewhere.

This plastic bearing seat is located

9×2"

OR 6 * 2"

SPLIT WOODEN

TO PUMP->

DISC 3.

3/400-1°D

0

TOP VIEW OF BOTTOM BEARING

0

WHICH IS BOLTED TO BOTTOM OF D.RUM.

CATERPILLAR

drawn by Keith Blight

HARD PLASTIC

BEARING SEAT

CLAMP

DADO CUTTER

KNIFE

DOUBLE'B'

BEARINGS

12 SHAFT.

SHAFT SPEED

TWO 8" × 3/1" DADO CUTTER

BLOCK

KNIVES BOLTED

ANGLES

AT RIGHT

ABOUT 1200 RPM

SECTION PULLEYS

6"PULLEY

Adrian Cotter

inside a disc of wood split up the middle and bolted to the drum bottom with three bolts so that one half can pivot slightly to clamp down the bearing. A caterpillar clamp is adequate to pull both halves together.

Above the taper the shaft is turned down to about 25mm or 18mm (1" or 3/4") and threaded to enable two Dado cutter knives to be bolted on. These are woodworking tools, but seem to be ideal for chopping up clay.

A sizable pump for pumping the blunged slip to wherever it is going is a small Mono pump.

Plumber blocks must be in perfect alignment with each other and the shaft to avoid high friction loss. This can be more difficult than it sounds.



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More on Frank Sharpley's pugmill

This article and drawing are a follow up to the article on a home made pugmill in Vol. 19/1 NZ Potter. It would be advisable to work from both articles if you are considering making one up. Frank claims he cannot weld or even saw straight and I suspect I'm even less of an engineer than he. In fact, this drawing is just as much a "what to get and where to get it", and should save the 21/2 days I spent running from A to B (and some times back again). It would pay to get a copy or two to leave with your engineer and have with you on your journey.

Please note that the Auckland supplier has been listed first with a suggested source for other places. Prices are approximate and subject to horrible inflation.

There are minor variations in my set up from Frank's. The handle with its swinging pusher seems to work well. For a long while I didn't have the foot pusher but it helps with stiffish clay and would be essential for a lightweight person.

Perhaps the following points should be borne in mind. The starting point is to get a helix. Ring various engineering firms and if not successful perhaps a group might get together and get a length made and cut up. This must match your shaft which in turn must match your pulley. Frank kindly gave me some helix and Lane Abel Ltd happended to have one only pulley with a 7/8" hole (they normally put 3/4 holes in the pulleys they make for concrete mixers). So maybe the helix could be made to take a 34" shaft or alternatively, Lane Abel may make a pulley to fit a stock helix size. Other makes can cost \$45.

My engineer put in a brass bush in the end plug which did away with the cost of a second bearing (see photo in Frank's article). Get quotes from engineering firms. Mine cost \$76 but the bush plus extra welded support for the 'T' cost extra than normal

If you decide to do away with the brass bush and have two bearings (as in Frank's original design) you will need a large washer on the inside of the end plug and a small collar with grub screw to keep it in place. This is not necessary with a brass bush which is close fitting and prevents any clay seeping back through. It needs a drop of oil occasionally.

The motor was bought new from G.E.C., Newmarket, Auckland at a cost of \$100. Go upstairs and talk to the sales manager, tell him what its for, they're helpful. Or see your local G.E.C. office.

You may do well looking for a second hand one but get one with a speed of not more than 1400 R.P.M. Two last tips. You'll find various



by Keith Blight

would-be helpful suppliers may say this set up is inefficient and needs gearing down and would never work

or would never last or would never whatever. Maybe they think its going to be used all day, everyday so avoid this kind of conversation. Take the best of both articles written on this subject and adapt to fit your own workshop situation.

×1.34

Cooperative selling at ALBANY VILLAGE POTTERY



Albany Village Pottery has proved that a cooperative venture can work successfully given that most important of all ingredients - cooperation. Two years ago, Barbara Hockenhull and Margaret Symes were offered the lease on an old garage, on State Highway One, right in the centre of Albany and just a few kilometres north from Auckland's Harbour Bridge, Realising its position was ideal for a retail pottery outlet they decided to ask others to join them in a full scale cooperative. Now there are eleven members, all established potters, offering a high standard of craftsmanship and a wide range of work.

The group, carefully selected for personal compatibility, elected a chairman and a secretary/treasurer, and now meets once a month to discuss working policies and to receive their cheques on the month's sales. A quorum is 8 of the 11 and most major policies are discussed until near complete agreement is reached.

Initially the shop interior was planned, taking into consideration the types, colours and sizes of pots which would be displayed there, and then a series of working weekends held to fit it out. The exterior is in colonial style in black with white graphics, and interior white plastered walls, display shelves of oiled pine and matt black carpet, the whole designed to give an atmosphere sympathetic to the pots on show and to the concept of a village craft shop.

Opening day was celebrated with demonstrations on the road-front

lawn, under apple trees, of pottery making of various types and raku firing - as usual a great crowdstopper. An inaugural medallion was struck (press-moulded), raku fired and given away as souvenirs by the hundred. Since then many open days have been held with demonstrations and firings. The self-policing of the standard of craftsmanship offered has worked well; if the group has a reputation it is one of not selling the sort of pots all too often seen in small craft shops around the country. The customers regularly comment on this which shows that the hard work involved in maintaining a high standard is worth while.

Potters serve in the shop in rotation one day in eleven, giving them a regular break from the seclusion of individual workshops. This way gives personal contact with the buying public instead of passing products on through a dealer. The potter has to be able to justify his own work to an often critical audience as well as sell for the other ten, a very good discipline. Having no staff wages to pay is an advantage but it means that every member of the group has to maintain sales at least at that minimum which is financially viable, including a return for the day away from wheel or kiln. For the public, as well as being exposed we hope, to a better than average selection of pots, this system means that they meet the potters themselves instead of a middleman, always a more interesting experience, and they can get more informed answers to technical quesPage 12

tions. Numerous times people ask when a particular potter will next be on duty. Specific orders are referred directly to the potter most able to carry

In the shop layout, there are no par-

Pots are arranged to make the best overall display, and the potter on duty has full control and responsibility for

ticular shelves allocated to each

this. The following day, the next person serving can alter the display to his

own satisfaction. By this, the shop often has a fresh look and old custom-

ers keep returning to see what new pots have arrived. The duty potter is 'The Boss' for the day — a system that seems to work very well with this group. Every piece sold has an accom-

panying card signed by the potter who made it — another small touch that the

clients appreciate, especially if the

purchase is a gift. Each pot has a small

self-adhesive label bearing its price

and maker's initials. On being sold

these details are entered on the daily

sales sheet. This is a 12 column cash

analysis sheet, carbon copied for re-

cording purposes, and is a most impor-

tant part of the day's operation. To

keep money straight is imperative in

any business, but even more important

amongst friends in business together.

written a one-word description of the

pot being sold, in the second the

maker's name. The third and fourth

columns carry the pot's price under

'cash' or 'cheque', (according to what

the buyer is tendering). Following

columns are headed with all the pot-

ters' initials, and the price of the pot is

entered again in the appropriate

potter's column. At the end of each day

all columns are totalled and the books

the day-sheets means any potter can

quickly check his own pot sales

against his list of the work he has

brought in for sale. It also enables very

interesting graphs to be compiled

showing such things as the best, and

worst trading days, the types of pots

selling at particular periods - a gen-

eral market trend analysis. On pay day

each potter's total is paid to him less

10%, which goes to overheads such as

rent, electricity, insurance, stationery,

A layby system works in a similar

manner, with every detail recorded in

a precisely dictated way in order to

avoid any possible doubts as to what

business was conducted at any given

time. So far in two years the mistakes

or misunderstandings have been min-

imal, which naturally makes for better

business and a happier rapport be-

The comprehensive record kept on

balanced.

and advertising.

In the first column of the day-sheet is

them out.

member.

New Zealand Potter



photos: Howard Williams

tween members.

Prices are kept to a normal retail level, so the cooperative does not unfairly undercut other shops selling pottery, but each potter retains 90% of his retail price instead of losing a third or more to a dealer — this benefit he gains in return for his unpaid day in every eleven when he must work in the shop. Of the 10% deduction which the shop takes, about half seems to cover running expenses, the other half is put into a capital account which is used for the purchase of any group-owned items such as shop fittings, vacuum cleaner, adding machine, radio, kettle, heaters and so on. At the end of the financial year, this capital account is completely paid out in 11 shares — the shop as such then being totally non profit-making - thus gradually paying back in a direct manner the initial capital input from each of the group who first put the "show on the road." If any member wishes to withdraw, he is paid back his initial capital input plus a built-in escalation percentage; any new person joining must buy his way with a similar amount. To date two original members have withdrawn, for personal reasons, not through dissatisfaction with the group, and they were both immediately replaced with new members, so the incoming capital amounts automatically cancelled those being paid out.

New members are very carefully selected not only by looking at the type and standard of work they would add to the shop's stock, but also at the compatibility of personalities - the group believes that business success is heavily dependent on personal harmony between all members. The policy seems to be paying off; the whole venture is going so well that by the time this article is published, a full scale gallery should have been added to the existing shop. The one main criticism has been, that in such a small shop there are not the facilities to give a fair showing to the more individual, sculptural or decorative pots. They do tend to lose impact when displayed in a sea of coffee mugs and casseroles. This new gallery extension will give scope for these pieces to be properly lit and displayed, and also the group intend to give other potters outside their own membership the chance to exhibit their work in a professional gallery set-up without having to pay the overheads normally charged through a dealer gallery. As the shop is financially self-sufficient, the gallery will only have to cover its own costs, not be commercially profit-making. Exhibitions should be able to be held as exhibitions, not as concentrated pot selling and money-making specials.

All this should work, as the shop is now, given a well thought out system, a high standard of craftsmanship and above all, cooperation between members.

Postscript —

the gallery

The Albany Village Pottery has just been rebuilt on an adjoining property. In three weeks the group built new premises totalling 600 sq. ft. and including an enlarged shop, a gallery with specially designed modular display fittings and lighting, and a stockroom/kitchen. French doors lead out to a decked and brickpaved planter and patio pot area. The overall design retains the colonial cottage atmosphere, while the interior has a sophisticated potential for displaying the wide range of pottery made by the group's members. The gallery is given over to one-man exhibitions and is already being used by selected potters from outside of the eleven-person cooperative. As the shop has paid its way, there is no need for the gallery to make any profit. Thus the group can offer the chance for a relatively inexpensive exhibition, to outside potters. It takes only 15% of sales of pots, to cover running expenses, and charges no other fees. The exhibiting potter can spend as much as he wishes on such items as advertising, catalogue and invitation printing, wine for the opening and so on. He also can have a free hand as to how the display is set up, and for how long he wishes his exhibition to run. This gives greater scope for serious potters to have proper exhibitions of their craft, all at a cost which is financilly viable and the group gains by the added public interest in the exhibitions, the direct contact and involvement with other craftspeople's pots and ideas. The organisation, operating procedures, and book-keeping involved have been worked out in a fashion similar to those already described for the running of the shop, and all is working well.

Howard S. Williams

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sharing a showroom

Nelson's South Street Gallery is owned by Justin Gardner who sells his own pots and those of other potters from the district. At present they are Stephen and Zoe Carter, Ross Richards, Carl and Ellie Vindlebosch, Jane Gregory, Royce McGlashen and Stuart Rout.

Justin was prompted to buy the old cottage in historic South Street near the cathedral to provide a retail outlet for local potters because so much of their work leaves Nelson.

The potters bring in their pots to be sold on low commission, currently 20%, which is expected to cover wages, advertising, rent and insurance. The contributing potters set their own prices and receive cheques monthly or fortnightly with a detailed list of pots sold. The potters are encouraged to voice opinions on the display or marketing of their work.

The cottage, built in the 1880's as part of the army barracks, has been whitewashed inside and the pots are simply displayed on railway sleepers. There is a small garden planted with native plants, and the start of a collection of antique articles and farm implements from Nelson's pioneering days has begun. Garden pots and sculptural pieces will later be displayed here.

This venture is not intended as profit making for the owner, its more a case of a potter sharing his centrally situated showroom, thus providing variety to make it more attractive to buyers.

Lorraine Gardner



New Zealand Potter

We asked Crown Lynn to write for us a short history of their development and to provide some information on their potters supplies shop at New Lvnn.

When Englishman R.D. Clark arrived in New Zealand and settled in Hobsonville in 1854, he dug clay from a swampy field, wrapped it around logs, fired it with charcoal and used the pipes to drain the swamp. As other settlers arrived they drained their own land with Clark pipes.

From such modest beginnings perpetuating the same initiative and drive, Crown Lynn, New Zealand's only significant domestic ware manufacturer grew. The parent company Ceramco, now has sixty seven companies making ceramic products.

The recent story of Crown Lynn begins in World War II when an opportunity arose to make crockery - coffee mugs and soup bowls for American forces stationed here. While no masterpieces, these first crude vessels did the job for which they were intended and so the crockery industry in New Zealand was born. The post war potential for locally made crockery was realised in view of the vast untapped raw materials available and a range of items was developed including the voluminous tea mugs familiar to travellers on New Zealand railways until not so long ago.

Against odds, including production problems and strong competition from imported crockery the company perservered through the fifties, improving methods and advancing in knowledge and experience. A measure of protection by way of tariffs and import controls was allowing Crown Lynn to develop its potential and achieve the necessary volume of production to compete successfully. By 1960 a small excess was available for export. Today the company is producing 15,000,000 pieces annually, employs 500 people and exports half its production. It uses 853 indigenous raw materials - china clay from Matauri Bay in Northland, fire clay from Glen Afton in the Waikato, kaolinitic rock from Mount Somers in Canterbury, ball clay from Hyde in Central Otago and ten other clays from ten other sites each with their own special properties. The

company has a fifty percent interest in New Zealand Feldspar Limited, formed to investigate the potential of many New Zealand deposits of feldspar to save importing from Sweden

Design is the basis of sales appeal in the crockery business. It is a fashion product. When designing new products the aim is for distnctive appeal of original character — not a style trailing trends set elsewhere and designs are suited to different export requirements

A continuing programme to improve plant and machinery and develop technology keeps Crown Lynn to the fore. Among recent purchases is a high fired intermittent kiln which operates on the same priciple as a thermostat controlled household oven. The temperature is regulated so that it can be raised to its peak in a slow curve over a number of hours. Resist effects are among the new decorating techniques made possible with the kiln.

Ceramic technology is a continuing challenge and it is the commerical manufacturer with his greater scientific resources, who has pioneered many advances in earthenware production. Crown Lynn is pleased to be able to pass on to studio potters the results of research into local materials through its recently established potters supplies shop situated opposite its factory in New Lynn. Through the



Commercial potting

shop the company offers to schools and amateur and professional potters, a wide selection of supplies and technical information based on its own broad experience. The shop is also the base for a small group of designers and potters who conduct practical experiments with clay, stains and glazes developed by the company to assess their applications to craft potter.

The shop at 65 Clark Street, New Lynn telephone 876-099, is open daily from 8.30 a.m. to 4.30 p.m. weekdays and between 9 a.m. and 11 a.m. on Saturday mornings. Correspondence should be addressed to the Manager, Crown Lynn Potters Supply Shop, Private Bag, New Lynn, Auckland 7.



Earthstone range developed for the North American market

an inexpensive extruder

Once we screwed our wadbox to the pottery's darkest wall and threw a casual towel over our extruder, lest a good potter called in and did not approve. Yet we never hid our wheel, or our Aussie Harp for slab pots.

An extruder makes a stronger, more even coil, quicker than one can make with one's fingers. Unfortuanately it does not stop one making a dull pot, but this is also true of the wheel and the Aussie Harp.

The machine shown is made from 75mm (3 inch) pipe, but 100mm (4 inch) pipe works just as well. Plastic pipe, (PVC) is easier to clean, but, if you can weld, iron piping might be quicker.

The parts needed, and their approximate prices are:

1 foot of 80 mm PVC pipe, an end of pipe with a bulge in the top gives a convenient funnel for the clay,....1.30 1 Access cap to fit. (With screw-end section).... 4.20

1 foot 5 x 2 pine timber)

1 foot 3 x 2 pine timber) ..3.00 1 foot 28mm coving. (this is a moulding.).

6 feet of 1 inch x 1/8" iron strap...1.00 4 feet 12 mm (1/2 inch) water pipe 1.50. 1 shackle,.... ..1.20. Odd screws, nuts and bolts. Pieces of five-ply wood or 3mm (1/8 inch) aluminium to make dies.

Fig I. Ask your plumber to use his special glue to stick the screw-end of the access cap fittings to the PVC pipe. Fig 2-3. Screw the 5 x 2 and 3 x 2 solidly together as shown, and screw the coving between them. Bore a 25mm (1 inch) hole 150mm (6 inches)

down into the top of the 5 x 2, about 12mm (half an inch) in from the coving, and tap 18 inches of water-pipe down into it. Bore holes in the 5 x 2 to screw the machine to the wall later, 100mm (4 inch) screws and a solid wall stud will be needed.) Cut 200mm (8 inch) pieces of iron strap, bore a 6mm (3/16 inch) hole at either end and shape the straps to fit round the PVC pipe. A piece of rubber tube acts as a friction-packing, for there is a great deal of downward force applied to these parts later. Fig 4. Cut a circular piece of $3mm (\frac{1}{8})$ iron or strong five-ply wood 70mm (2 7/8 inches) in diameter as a plunger. It should be able to slide up and down inside the pipe. Cut 775mm (31 inches) of iron strap and bend it into a 25mm (1 inch) wide U which is 375mm (15 inches) long. Screw or weld this to the plunger. At the tops of the iron strap bore a 8mm (5/16 inch) hole, and a similar hole through a 825mm (21 inch) length of water-pipe, 75mm (3 inches) from one end. A 6mm (1/4 inch, nut and bolt, 50mm (2 inches) long, will hinge the pipe and strap together.

Fig 5. A 6mm x 2mm (3/16, 7/8 inside) shackle should slide smoothly round the piece of water-pipe fitted to the 5 x 2 timber. Have a piece of 6mm (3/16 inch) ie (3/4 inch) metal rod welded solidly across the shackle, so that the water-pipe slides freely through the hole when at right-angles to it but locks on the pipe when tilted slightly. This surprisingly efficient locking system works well when there is clay in the PVC pipe and downward pressure is put on the 525mm (21 inch) lever.

Fig 6. The access cap has a hole cut in its centre, 12mm (1/2 inch) in from its outside edge, which means 6mm (1/4 inch) in from a rim round the inside of the cap. The die fits inside this rim, and so does not foul the access cap screw when it is screwed up. Several dies are shown, made of metal, five-ply or bisqued clay.

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Fig 7. A simple die for making tubes. This uses a 75mm (3 inch) long 6mm ¹/₄ inch) diameter nut and bolt which is bolted tightly to the outside ring of the die and then bent in a semi-circle to be bolted to the inside of the die. (normally a washer with a 6mm (1/4 inch) centre hole). This is used with rather softer clay, which fills in below the curved bolt because of the large downward pressure exerted on the clay by the plunger lever.

Fig 8. The machine in place on the wall. A two-hole die has extruded two coils which will be about 1200mm (four feet) long by the time they reach the floor, and this is a comfortable length with which to work. To load the machine the shackle-and-plunger fitting is slid up; a foot-long roughly 75mm (3 inch) diameter column of clay is dropped into the PVC pipe, the plunger and shackle slid back on to the top of the vertical water-pipe and the horizontal 525mm (21 inch) lever gripped and downward force applied. When the lever is down, and the coils have come down some distance, the lever is simply raised slightly and the shackle slides down the vertical pipe. locks, and the lever is again pulled down. Do not go within an inch of the die, with the plunger. Do not crossthread the access-cap screw, keep it clean. Do not use clay so hard that you hang from the lever with both hands, or your eyes will fall out.

Frank Sharpley





From Oswold Stephens

Here are the other promised formulae thought highly of by the Chinese.

green celadon whiting potash felspar white clay flint (200 mesh) red iron oxide K20 0.24 Al203 0.54 Si02 3.57 Ca0 0.76

fire at least to cone 9 with reduction.

blue celadon potash felspar whiting white clay flint barium carbonate red iron oxide fire to cone 9 - 10 with reduction Note that the body has a marked effect on the celadon glazes. Try with different stoneware bodies.

chun glaze flint potash felspar whiting red clay

mint ash Glaze needs to be applied in a medium to heavy coat, with reduction. The blue colour is due to the emulsion of ash particles. Probably another ash would do, but I have enough mint ash and so have not found it necessary to try other ashes.

PUBLICATIONS Pottery in Australia always good on technical information \$A7 from 48 Burton St, Darlinghurst, NSW 2010. Ceramic Review magazine of the **Craftsman Potters Association of Great** Britain, £5.50 (6 issues), 17a Newburgh St, London W1. Number 47 has a kiln for woodburners.

105 60 75

60

123

15

10

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40

Pottery Quarterly edited and obtainable from Murray Fieldhouse, Tring, Hertfordshire England, provides detailed technical articles. The last issue (47) has articles on porcelain. £3. 75 subscription for 4 irregular numbers. Studio Potter with a practical approach aimed at the production potter working along traditonal lines. \$US8.50 to Box 172 Warner New Hampshire USA

Ceramics Monthly \$US9 (10 issues) mostly shows the work of American potters attempting to say something new. "Over the summer" issue June 1977 featured superb photos of Bernard Leach pots. From Box 12448 Colombus, Ohio USA

Craft Horizons published bimonthly by the American Crafts Council 44 West 53rd St New York, NY 10119 has brilliant coloured pictures of craft work including pottery. \$US 18 a year, \$3.75 a single copy. Dec '77 issue surveys the modern studio glass movement in Europe.

140 Potters in Australia an illustrated 130 directory of Australian potters, provid-85 ing information on 66 potters is avail-45 able from the Potters Society of Au-100 stralia 48 Burton St Darlinghurst NSW

> Guide to potters in Britain. The fourth edition of Potters a revised directory of full members of the CPA with over 100 photos is available from Ceramic Review Books, 17a Newburgh St London W1V1LE.





Fig 8



2010. \$A2.50 plus 50 cents postage.

New Zealand Potters watch for our own directory of NZSP members with useful information, in fact a potters guide to New Zealand, to be published shortly.

Clays by Frank and Janet Hamer and Kiln Building by Ian Gregory with Saltglaze by Peter Starkey are three titles in the Pitman's Ceramic Skillbook series. All have soundly based information.

Back issues of Potter volume 19, nos 1 and 2 available.

Warning

Take care when handling powdered materials such as all clays, feldspar, glazes, frit etc for some of the dust particles inhaled are potentially dangerous. Talc is under suspicion in the USA as the cause of deaths among workers in ceramics. The effects of silica accumulation in the lungs, leading to silicosis have been experienced by some British craftsmen.

Protect yourself when handling such dry materials by wearing a good fitting particle mask. Use it when spraying glaze whether indoors or outdoors. Use it when cleaning the floor with damp sawdust or vacumming. Never scrape or brush glaze from bottoms — use a wet sponge.

Pottery course in Italy

Potters interested in taking a pottery course abroad can apply to the International Centre of Ceramics directed by Nino Caruso and based in a monastery in the historical sector of Rome. Len Castle is the New Zealand representative on the steering committee of this organisation which could provide an enriching experience for an Antipodean potter. Details on application to the centre.

Firing with L P Gas

Many potters are thinking about kilns fired with LPG. but there is little local information to go on. We will be looking at it and publishing contributions from those with experience. We asked Shell Company about supplies. The price of fuel in cylinders makes the economics of the fuel marginal at present, but the position will improve as more supplies become available and distribution is more sophisticated.

Gaseous fuels provide better economy. Natural gases have the added advantage of containing virtually no impurities, in particular no sulphur.

Liquefied Petroleum gas is a specific fraction of what is known generally as natural gas. The natural gas sold by gas utilities is principally methane but it also contains some paraffins down to pentane and hexane. The Natural Gas Corporation's plant at Kapuni is now splitting off various fractions of the gas stream in order to increase their value. Pentanes and hexanes, which are liquid at ambient temperature, are sold to East Coast Gas Works for reforming into manufactured gas. Propane, and at some future time butane, is separated, and although gaseous at ambient temperature it becomes liquid under moderate pressure or refrigeration.

Natural gas, consisting mainly of lighter fractions is not liquefiable unless it is refrigerated to -161°C. Propane liquefies at -42°C and butane is liquid at 0°C. The relative ease with which propane and butane can be liquefied is, of course, why they are termed L.P. Gases. It means that they can reasonably be transported as liquids in relatively small quantities, but when the pressure is released they become gaseous at once.

L.P. Gas, because of the fact that a large quantity of gas can be stored in a small space in the liquid phase, offers advantages that even reticulated natural gas cannot match. A consumer

has an assured supply on his premises. He is not subject to occasional supply cuts, or to variations in supply pressure. In some applications, the portability of L.P. Gas is also advantageous as it is then possible to take the energy source to the job, rather than the other way around.

Gas is a particularly good fuel for pottery kilns in that temperatures can be finely controlled and the correct atmosphere in the kiln maintained. Kilns can be brought to the correct temperature quite quickly. The most significant advantage though, stems from the very pure nature of the fuel. With any other energy form, except electricity, combustion produces by products which will affect glazes. The potter must either accept an inferior finish caused by sulphur in the atmosphere, or muffle the ware. It may well require as much fuel to heat the muffle as to fire the ware, and firing cycles are correspondingly longer.

L.P. Gas is the newest element in the New Zealand energy mix. It has only been available in appreciable volumes since 1973 with the commissioning of the N.G.C.'s extraction facilities at Kapuni. The Gas is purchased from the N.G.C. by a consortium consisting of Shell Petroleum Mining Co. Ltd, B.P. (Oil Exploration) Company of New Zealand Ltd and Todd Petroleum Mining Ltd. It is then marketed by staff of Shell Oil New Zealand Ltd and B.P. New Zealand Limited, both on a direct basis and through the reselling networks of the two national distributors. Rockgas Limited and New Zealand Industrial Gases.

The L.P. Gas industry is growing rapidly and sales volumes are now at a rate in excess of 6,000 tonnes per annum. There have been difficulties both in production, in the procurement of specialised distribution equipment, and in the establishment of codes of practice and statutory regulations for the storage and handling of

S.J. Lawrence

a new product. These problems are gradually being overcome.

Supply is now virtually guaranteed and the range of geographic locations which can be serviced satisfactorily is increasing. Rockgas and N.Z.I.G. are improving their distribution of cylinders and can now make small bulk drops from road tankers.

The Consortium of Mining Companies is at present restricted to making deliveries of 8 tonnes of L.P. Gas (15,500 litres) at one time. As a fairly substantial potter could be expected to use less than half this amount in 12 months it is obviously not possible for supplies to be drawn direct. Most potters would be best served by supplies in cylinders as rentals on tankage can be expensive when volumes are small.

L.P. Gas in cylinders is a fairly expensive fuel due to high capital costs, large recent increases in rail freight. the Government's recently imposed energy resources levy and to the small scale of operations at present. The exact price would depend on location but it could be expected to cost between 30 and 40 cents per litre.

Burning equipment is quite simple and is readily available from most Rockgas or N.Z.I.G. Agents - Kilns are also not complicated. Plans for, and operating results from, an easily constructed two cubic foot kiln designed for L.P. Gas may be obtained from Shell Oil New Zealand Ltd.

P.O. Box 2091.

Wellington.

L.P. Gas marketing will remain a relatively small operation, with the resulting diseconomies of scale, while supplies are drawn from the Kapuni field. There are, however, potentially much larger volumes available from the offshore Maui field and these should be ashore by 1980. The distribution system will then become more comprehensive, and the price of small deliveries of gas can be expected to fall relative to other fuels.

For sale

Established potters property

House renovated 45yr old three bedroom cottage 1200sq ft.

Workshop recently built timber construction 900 sq ft, concrete floor, power and water supplied.

Kiln 100 cu ft beehive oil fired natural draught.

Price \$28,000.

Contact Greg Barron, ph 194 M Takaka or write R.D. 2 Takaka, Nelson.

For sale

Established pottery, studio-workshop, showroom, kiln in Queenstown Centre. 5yr lease. 5 yr right of renewal. Tourist sales. Tutoring available 4 nights a week. 10 established outlets. Price \$3,500 includes all equipment and stock. Excellent opportunity for a keen potter. Phone Irish 833D Queenstown evening or write C /O Post Office, Queenstown.

Wanted to buy

Pottery Quarterly to complete collection: Nos. 1, 2, 3, 4, 13, 14, 16, 17, 31 & 32. (No 17 is especially required) Write: B. Martin, Valentine Road, R.D. 5 Hastings.

Fletcher Brownbuilt Award entries by 19th Mary - forms available from Cain Rd, Auckland 6.

New Zealand Potter

SILICATE CONNECTION

George Kojis potter, of Eastbourne and Tony Keupfer glass maker of Inglewood had a joint exhibition of recent work in the new United States Chancery Gallery in Wellington. Both have had art school training in the United States, and their work is free in a frankly expressive and creative way that we don't normally see here where the emphasis is on function first. In his stemmed wine glasses Tony Keupfer shows that classic forms are also in his repertoire.

There is no such evidence that George Koiis produces the classic pot. indeed his effervescent style seems to defy traditional restraint. George is an innovator who keeps the forms of his vessels and containers moving. He is not satisfied with one concept. "My work represents an involvment with clay and my reflections on an environment closely aligned to change."

The full range of Tony Keupfer's work was on display at this exhibition, from coloured bottles decorated with sponteneous designs to classic spirally decorated stemmed goblets. He blows, rolls or presses molten glass and slab casts in moulds made from iron, brass or plaster. "Work to make it work, I like it all. You must not let prejudice interfere with what you see.'



Tony Keupfer

Craftsmanship

I am a great believer in having complete control in whichever medium you work. I am disappointed when the material takes over and you end up with somthing you had not intended. One of the sad things about what I shall call the new glass movement is how few people take the trouble even to begin to master the craft before they start selling so-called individually made works of art for rather high prices. Unfortuately glass lends itself to this and if somebody equally unskilled tried to do the same with clay they would never get away with it.

I can't really understand why so many young people today are just not prepared to spend the time and really master the basics of a craft before they try to do the most advanced and of course impossible things owing to their lack of skill. Perhaps it is the repetition which I believe is inevitable in the learning of a craft and perhaps I was lucky that when I started making pottery I trained in a workshop environment where you just took for granted that you had to spend the first years going through this sort of apprenticeship stage; just doing repetitive production work, before you started doing anything seriously on your own.

For me its certainly one of the most satisfying experiences coming through the stages, whether it is glass

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George Kojis

Simon Pearce

or pottery. Firstly the basic grasping of the skill, then being able to make two of the same, then getting the rhythm and speed better and always trying something a little harder, so you hardly feel you are improving until you go back to the very first simple things and this gives you a great feeling of control and satisfaction.

Simon Pearce's apprenticeship included time spent at Crewenna, Nelson with Harry and May Davis. He now makes glass in Co Kilkenny, Ireland. These comments are from an article about his work in Craft, magazine of the Crafts Advisory Council of Britain.

New Zealand Potter

magic for me.

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New Zealand Potter



sive material— as much as four times the cost of cullet, but you get a glass entirely suitable for handworking. It responds eagerly to the hand and does a good part of the work for you if you let it. Furthermore there is precise colour control, it is optically superior glass- a worthy material for the craftsman.

The ideal material is the combination of both batch and cullet which cuts the cost of straight batch without losing quality. I use up to 30% of recycled waste (my own) in my batches and this acts as a flux for the raw materials making for faster melting.

Because straight batch is perhaps an unjustifiable expense for the beginner there are ways of melting the cullet and introducing a small quantity of fluxes to soften it up. A mixture of 75 to 80% cullet and 20 to 25% sodium potassium or barium can give a satisfactory result.

Last year Fred Daden, English masterglass worker from the Royal College of Art, London, came and worked with me in my studio, providing a unique learning experience. The most significant lesson learnt was how versatile the material is when subjected to his skilled methods of manoevering it into any of its many possible forms. The instantaneous reaction to the slightest movement of the worker, develops an awareness of the need for keen precision. As there is not time to think when you are working with hot glass, you must be totally aware of what you intend doing before you do it. The result should express the fluid

nature of the material.

As with clay you must attain that delicate sense and feel of the material in order to direct it into the form you desire. Clay has the advantage of a slower making process and of direct touch, while glass is instant and needs a mediating tool.

The techniques of working hot glass can only be learnt by watching, then doing. There are few written texts which can give even a vague idea of how to do it. As with any craft the only way you learn is by doing.

Bibliography on Page 29

Tony Kuepfer lives and works in Inglewood, Taranaki. He studied art and glass at Portland State University. U.S.A. His wife is a potter.

Working with glass The satisfaction of creating something expressive out of one of the more exciting materials available to man is a total experience that makes glass It is not possible to give even a vague

idea of how-to-do-it in an introductory article. What I can do is suggest the different ways of starting to work with glass and what will be needed using the minimum of raw materials. Working backwards it looks like this. To end with a glass bowl you need a furnace capable of reaching temperatures not less than 1400 °C. Why so high? To get a longer life out of a furnace you over build it and never take it up to its full range. Most glass studios operate furnaces between 1050°C and 1300°C. I emphasise that the cheaper the fur-

Tony Kuepfer gives an introduction to

nace, the more it will cost in the long run in both time and money You need hand tools and blowing irons. When the bowl is made it must be cooled (annealed) slowly. This crit-

ical area of technique needs great consideration and care as a whole days work can be lost through error at this stage. At the end of the cooling cycle you have your glass bowl. Sounds easy? Well it is. What is not easy is to acquire and construct the basic equipment.

A glassmaker needs a larger working space than a potter- no less than 400 sq ft. A roof is desirable, the more height the better, I suggest not less than 13 to 14 feet and good ventilation is essential for this hot work. If you are lucky enough to find a disused church building or schoolhouse like me there's an ideal studio. I am also lucky enough to have natural gas on tap.

What size should the set-up be? I run a studio full-time with two furnaces running twenty-four hours a day. It takes as long as seven days to heat up a furnace, but once running it doesn't take much to maintain heat. One of my furnaces melts only clear (or crystal) glass and one melts only coloured glass. This arrangement is a bit more expensive to run obviously than one furnace, but it allows me more scope in my work. If I could, I would have two more going. I have two electric annealing ovens- one used only in special cases. I also run a "glory hole", a reheating chamber, operating only when I'm actually working the glass. At my disposal are several pieces of equipment which grind, polish or cut. These are optional depending on how the glass is worked.

The furnace materials cater for three areas. The tank liner, which

comes into direct contact with the glass is made from dense high refractory material such as fused cast or vacuum cast silica/alumina. The quality may vary according to the type of glass being melted. Recycled glass can be melted using a lower quality refractory than for straight batch glass.

The furnace walls contain the inside of the firing chamber which may be attacked by vapours given off by the melting glass and from the glass slag on the walls. A medium quality refractory such as H-60 or H-80 brick is acceptable. I have found a refractory castable made by Huntley Brick (Fyrcrete 80) to be an excellent material for this area. There is virtually no slagging of the inside of the furnace.

The external insulator is of prime importance for economy. Again I use a castable two layered insulation, the first about three inches of Kamo Green Kastolite (1200°C hot face) and second three inches of Kamo Green L.W. castable (1050° hot face). This gives approximately the same 6 inch thickness as a normal brick.

Hard bricks varying from H-35 or H-44 make up the lower part of the furnace and the base. It should be noted that NO extra insulation is used below the glass tank level to prevent possible rupturing of the tank.

Natural gas is the most desirable fuel, however propane or LPG or oil can be used. There are electro-melt methods of firing, but these involve much more initial outlay.

For those starting out I would recommend an alternative method to mine to begin with. Build a furnace and load it with scrap glass and heat it up like a pottery kiln. When temperature is reached and the glass has sufficienly melted, it can be worked over a period of several days until the furnace is empty. When empty the furnace can be cooled down and switched off. This method is a good way of starting experimentally without being hit with a heavy fuel bill.

For economic reasons many people start their experience with glass by using recycled pieces (cullet). I don't recommend using straight cullet because most glass is made for forming on a machine and is what I call hard glass. It is what the name implies-you have to muscle it into shape. So while it is ideal for mould work it does not respond well enough for hand formed objects. It is also limited to certain colours and optical quality is generally DOOL

Straight batch glass is a more expen-







New Zealand Potter

SALT GLAZERS



Chester Nealie

The salt glazing process produces a closer unity between clay, glaze and flame. It is a more direct, primitive and hazardous process, yet by its very unpredictability produces a spontaneity that continues to challenge me.

At present I fire in a 10 cubic foot oil fired salt kiln. All pieces are raw glazed with a variety of slips and glazes using both stoneware and porcelain clays. The inside of pots are glazed just as rims start to whiten. The outsides of smaller pieces are either poured, splashed or sponged while larger pots are usually spray glazed.

Initially I tended to overglaze and the pots became too "fruity". Minimal salting, helped with slips high in alumina, pro ce a soft matt surface especially when slipped with hinotype" glazes.

The preparation of shelves is important. All are covered completely with a kiln wash of alumina and kaolin (50/50), then dusted with alumina. (The pots sit on pats of grogged clay dusted with alumina). Lids are sepa-

rated from galleries with small pats of stiffened kiln-wash mix. The soft salting under pots and between lids and gallery produce a subtle fusion of moving vapours.

The kiln is usually tightly packed and reduction fired as normal till all cones are down. I fire till cone 10 is hard down, since salt vapours lower the maturing temperature of cones and glazes by about 20°C. The atmosphere of the kiln during salting has to be carefully controlled. Reduction produces green-grey tones, while oxidation affects the warm tans and golds.

The salt is introduced through ports around the kiln and is directly thrown over the pots by means of a bamboo ladle, about 1 kg at a time with 5 to 10 mins recovery between each salting, in all about 10 kg of salt over 11/2 hours and then a soak for a further 30 mins. The long time at high temperatures improves the result. Total time for firing is about 12-14 hours.

I intend building a new kiln with a long, low arch (to reduce need for kiln furniture). The kiln is to be wood fired. the ensuing cross-draught will produce a greater feeling of motion, making the outcome of the firing even more upredictable and exhilarating.

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New Zealand Potter

rock dust and calcite 50/50-[green]

MnO2 D seip-black breaking purple with glage runs.

lidseparated

In the series CERAMIC SKILL-BOOKS, editor Murray Fieldhouse.

Pitman.

from galleru with 5 pats - Kaolin - alumina 50/50 white and black iulay-overglazed slip of claybody and kaolin 50/50 - [matt brown"



iar to potters but rarely recorded, except in this memorable shot by Homer Sykes. Chapter seven deals without flinching with pollution and safety, eight is a conclusion, a short study of the quality of the process and of the responses and feelings of the salt glaze potter. Those



"Saltglaze" a book review.

'Write this book not as an expert, but as an enthusiast.' This is the first line of Peter Starkey's preface, but both titles may be allowed him. Here is one of the very few books on pottery techniques which not only provides information but also projects strongly the special appeal of a medium which, so to speak, is always being repioneered, one in which all the important things happen at the top end of the firing process when, as the author remarks, the potter can hardly see, let alone touch the ware.

There is a short historical section with illustrations, some showing the smooth salt glaze ware produced in the eighteenth and nineteenth centuries. Chapter two deals with the basic principles, except for the reaction equations which have strayed into the historical chapter. Chapter three is on kilns with plenty of simple diagrams and photos. Chapter four gives a full account of firing, and five deals with the clays, glazes and slips which may be used; much of this will be new to most potters. Chapter six covers packing the kiln, and contains a really evocative photograph of 'the interminable wait', that situation so familwho have suffered at the firemouth will find a strong empathy in these pages. There is a suppliers list, a short bibliography, and an index.

Some minor points. In chapter two it is not made quite clear that a glaze composed of just sodium and silica would be incomplete and that alumina is needed to assist in the formation of a durable glass. To the comments in chapter three on the use of high alumina bricks perhaps a warning should be added that some types will at first accept a glaze and then spall it off in sheets which can cause problems if they are in the arch.

Some problems arise in the discussion on instability caused by cristobalite formation, chapter four. The current state of knowledge is, that while free quartz or flint in the body will give rise to the quartz-reversal dimension change at about 570°C, these silica forms alter to cristobalite in significant amounts only after days of soaking at very high temperatures. It is the silica which is discharged from the clay mineral as firing proceeds which provides the chief source of cristobalite, which may therefore appear even if the body contained little free silica before firing. In the same section it would be more appropriate to call mullite an alumina phase than one of silica.

In his excellent little book. I have at last discovered a ceramic use for banana skins, and I am sure many potters would find in Peter Starkey a kindred spirit and a helpful friend.

Roy Cowan





'I saltglaze to simplify the proceedure, to depend more and more on the simplest materials; to make textures which are natural and do not demand, excessive preparations for special effects?

Mirek Smisek makes mainly domestic stoneware at his country pottery forty miles north of Wellington where his domed Byzantine-type Kilns are a local landmark.

In 1957 with five years polling behind him he established his first pollery in Nelson. He spent six months in Japan with John Chapell and Kakaichi Kawai in 1961. During 1963 an Arts Council Grant enabled him to work at the Leach Pottery in Cornwall.

Photos of exhibition pots by Stan Jenkins

Mirek Smisek







Night firing at Te Horo



"Have you ever had a red hot chunk of salt between your toes? It makes you do funny things, like dropping everything and performing a curious dance on the foot while your hands are frantically trying to liberate the particle of torture. After ten years of repeating this fire ballet I decided to wear shoes intend of sandals while saltglazing. Yes, saltglazing can be an exciting activity.

Two decades ago, I unloaded my first saltglaze kiln, a very momentous occasion. It took me about five minutes to load the kiln, all day to fire it, one minute to unload it. The kiln contained one pot. I fondled the hot jug, heavily textured and brown, with a strange and elated feeling. I knew what was in store, my future was clearly indicated to me.

The first kiln was a toy which had to be loaded virtually lying on the ground. Today my saltglaze beehive kiln has standing room for several people (150 cubic feet). Similar feelings of excitement still fill me when I unload, as they did with my first kiln. Saltglazing reveals dramatically this inner quality of the clay. The pot itself provides the ingredients for the glaze and thus truly reveals the soul of the clay and enhances the pot.

It is always important to me when I prepare my clays to project my thinking (mind) to the action which takes place during the firing. For the larger pots I use specially heavily textured clays.

The firing time in the beehive kiln is approximately 18 hours. I use cone 11 to measure 1300°C as the salt from previous firing tends to melt the cone earlier than it should."

Mirek Smisek

New Zealand Potter

Day of the salt fire

Pots with narrow necks and lids are glazed inside with ash glaze or cone 10 glaze as the salt fumes cannot enter inside the pot. Bowls, mugs and other open shapes do not need this as they are subject to the action of the salt fumes. Various pigments or oxides can be applied to pots for colour. All pots sit on fireclay pads (pan cakes), very large pots are placed on fireclay balls arranged in a circle to fit the size of the foot. 10% of alumina is added to the fireclay mix to increase refractoriness. Pots which do not need to be glazed inside need not be bisque fired. Shelves are painted with alumina and china clay mix (2 alumina 1 china clay) on the underside as well as on the top, especially on silicon carbide shelves as they tend to foam. Pots must not be packed too tightly otherwise formation of glaze may be inadequate.

After loading, the wicket is filled with bricks, plastered with very sandy clay (no need to use fireclay, and rubbish will do) to eliminate shrinkage between the bricks and thus stop cold air entering the kiln during the firing. Cones are placed as near the centre of the kiln as possible. Make sure not to block your view with a pot. I place six test rings behind the wicket to be drawn out during salting. Have one brick loose for entry.

During the firing I maintain mild to medium reduction until I reach the maximum temperature of 1300°C. (this takes about 18 hours).

Salting begins. I require about 59 kg of coarse grained agricultural salt. About 1/2 kg of salt is introduced gently into each fire box. This is accompanied by crackling noise and jumping of salt particles and allowed to vaporise. More salt, is introduced and repeated until after about 40 to 50 saltings. I withdraw a test ring to see how colours and glazes are forming. When I am satisfied with the glaze I allow the kiln to clear itself of the dense fumes (about ten minutes) and turn off the oil. I allow rapid cooling (dampers out) for the first two hours (this time depends on the size of the kiln and the speed with which the hot gases travel). I put the dampers back just before the colour in the kiln becomes dull red. Then I await impatiently next day to find out

Salt glaze TEXTURE

In some industrial salt glazed domestic ware and heavy clay products, the characteristic texture has been avoided by limitation of the degree of salting, and soaking under oxidising conditions has been employed to smooth out incipient texture. Potters usually want the texture. In the earliest stage of salting the glaze is smooth, and the initial texture is finegrained. With continued salting the texture increases in scale to become wave-like, but it is eliminated by glaze flowage.

In his book 'Saltglaze' Peter Starkey suggests that the texture is produced by variations in the distribution of alumina and silica in the body. The difficulty facing this theory is that patterning of silica and alumina in clay crystals occurs at molecular level and would have millions of repeats within the area of one salt glaze wave, so the mechanism remains unexplained.

A second theory has it the texture is a form of crawling resulting from incompatability between glaze and body. Incompatability is not uncommon, it is most commonly visible in deficiencies of glaze fit, but also observant potters will have found that some clays 'take' glaze more readily; in general, those clays that tend to form a lustros slightly fused surface on their own

Glazes with large amounts of ingre-

dients which contract strongly on drying or firing, such as clay or magnesium carbonate, are prone to crack on the ware and if the fused state is that of a stiff or viscous glaze the cracks open up instead of healing as they would with fluid glazes. However, salt glaze texture can be produced on a variety of clays which give the glaze a range of compositions and as the salt glaze surface is usually smooth and continuous in the early stages of formation, the usual causes of crawling do not seem to apply.

Any glassy glaze effectively stabilises conditions in the body beneath. It is exceedingly difficult, for example to change the colour of a fired body from oxidised to reduced once glaze has formed on the surface.

In salting, the sodium, and chloride forming salt are separated by heat energy, and in the separated condition they carry electrical charges which affect the formation of new compounds. The chloride combines with hydrogen to form a gas, and the sodium with clay to form a glaze. Once the initial glaze coat has formed however, the repeated showers of charged sodium particles alight on a surface which to some extent restricts contact with the sources of alumina, and silica in the clay beneath. So one might expect a steep compositional gradient within the glaze-body cross section, and also that

Mirek Smisek

what it was like — each firing is different from the previous one and therefore always exciting. If you do not have close neighbours, try it.

SALT IS SPRINKLED IN THE GAP THE GAP IS CLOSED DURING FIRING DURING FIRING DURING FIRING DRIP FEED BURNER INSIDE 4 # METAL PLATE 7"X9"

Roy Cowan

the outer glaze layer will have a large proportion of particles of similar electrical charge.

If this is so, the fluid surface could be expected to stream under electrical pressures, and the configuration in which a surface can "run away from itself" is that of a series of expansion centres and intervening mounds.

Careful study of specimens in which the body contains iron-rich particles shows that the local colouration of the glaze from the iron source streams radially from low to high in the glaze profile. Of course, conditions reigning while this process is continuing make experiments difficult! Part of the mystery and charm of salt glazing.

Roy Cowan studio potter and sculptor has contributed many technical articles to the Potter. He lives in Ngaio, Wellington.

Salt-glazed Ceramics by Jack Troy, Watson-Guptill Publications a new comprehensive text covering traditional methods to expanded techniques used today including the use of sodium-bearing compounds other than salt, as substitutes for salt or for combination with it. This text has been well reviewed in potting magazines — Studio Potter, 5/2. Page 28

Peter Gibbs

experience with salt glazing

Our initiation into salt firing was a gradual one. When we arrived in Onekaka in August 1975 it was in the back of our minds, but it took two years until we actually built the kiln. A friend nearby began making pots, had no kiln, and didn't feel sufficiently inspired to fire our two chamber, 2.8 cu.m. (100 cu.ft.) kiln, so we supplied bricks, plan, and a concrete slab and she provided us with a .45 cu.m. (16 cu.ft.) catenary kiln.

We chose catenary because of ease of building and the fact that no steel work was necessary. We fire this kiln with two vertical jet burners blown by vacuum cleaners, but have provision for two horizontal jets to be added at salting time. After three conventional glost firings, we decided that the time had come to start salting. As we'd never seen a salt firing, and very little reference material seemed to be available, we wrote to Chester Nealie for information and got a superb twelve page letter, which was to be our standard text for the first few firings.

The clay we had used since arrival here was Ian McPherson's XXX, so we began firing with that, using no slips, and only one ash glaze for the insides of pots. In the first few firings we got mostly brown pots with an average sized orange peel effect. We had some difficulties with this clay when we began salting, mainly with pats and lids sticking. These problems have not been so apparent with other clays, but the method we now use successfully is to make a mixture of alumina and china clav in a 4:1 ratio. This is applied fairly heavily by brush to lids only in the case of all clays except XXX, where we also apply it to the gallery of the pot. This also overcomes the problems of lids warping which we experienced when using pats between lid and pot. The same mixture is also used for pats beneath pots during the firing. We get it to a doughlike consistency, roll it out thin on a mixture of alumina and fine grog, then cut it into 15mm squares. When dry, these are easy to handle, and considerably speed up the stacking processes. They can also be reused for several firings. We use three on smaller pots, and up to seven or eight on larger ones.

More recently we've decided to change our main production to salt glaze, and have begun a systematic investigation of all locally processed clays, together with a variety of slips. As well as McPherson's XXX and No. 18, we've tried Westport clay, and all six products of Potters' Clay of Nelson.



Most of our favourite pots have been made with XXX, which gives excellent results with iron based slips, or even just iron oxide applied roughly with a sponge. One source of iron we're now using is locally dug limonite — about 15% silica and 65% iron oxide. This gives a better glaze buildup - probably due to the silica. It can be purchased through Lime and Marble Ltd.

All the stoneware clavs from Potters Clay give good results with slips, with raw clay giving a fine dark brown orange peel against a light background. When oxidised this becomes a warm toasted brown.

The three earthenware clays produced by the same firm also withstand cone 10 temperatures without bloating or warping. The E1 and Chamotte fire to a very sombre dark grey with very little contrast between clay and glaze but RKF is a much more pale grey colour. Some time could profitably be spent testing these clays at lower temperatures with considerable savings in fuel costs and kiln life.

McPherson's No. 18 has a very delicate, nearly porcelain-type appearance, but is best not used too close to pots with cobalt or copper, as these may migrate with surprising results, sometimes attractive, mostly not. The

small amount of Westport clay we've tried has been excellent to handle. It doesn't appear to salt well on its own, but we've achieved some good results with slips, particularly local papa rock.

Having tested all these clavs, we're more convinced than ever that the best policy is to choose one clay and stick to it. Most desired effects can be achieved with a variety of slips and oxides, and the daily work in the pottery is much simplified as a result.

Our kiln is fired with two vacuum cleaner-blown vertical jets up to cone 10, when we change over to horizontal jets for salting. The reason for this is that the vertical jets are much easier to start, and burn much more efficiently after red heat is reached, with some fuel saving. We've tried a variety of firing cycles, but so far have had the most success when using a similar cycle to that suggested by Peter Starkey in his book "Saltglaze". We've modified it slightly, firstly by taking a little longer over the early stages, as our pots are all fired raw. We fire faster from 1160° to 1260°, doing this in just over two hours, and then salting at cone 10, which is probably less than 1300°C due to the effect of residual salt in the kiln. When salting, we push the

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damper halfway in, adjust the fuel for a clean burning flame, and then salt, leaving the damper in for a further 10 minutes. After this the damper is removed and the temperature allowed to build up again. The longer this takes the better, although 10 minutes seems to be ample. This method means that the later parts of the firing can be quite protracted.

We introduce the salt with a small shovel through 5 salt holes — a total of just over 1 kg per salting. Generally 10 - 12 saltings are required. Our previous method was to leave the damper wide open and the kiln turned up full with a clean flame, and then add salt every 5 minutes. In this way, the salting process was much faster, but nearly twice as much salt was required. We've always found the most disappointing results occured when the temperature was not sufficiently high. Cone 10 needs to be absolutely down, with possibly a higher cone added. These won't give correct temperature readings because of the effect of the salt, but the important thing is to have a standard cone position as a reference point each time.

During January of this year, we built a small wood-fired kiln with a dutch oven firebox, and the experience of firing this has made us decide to scrap our two small kilns and build a larger, sprung arch kiln of about $1 - 1\frac{1}{2}$ cu.m. fired with wood and oil and

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The following is a list of books and papers which can readily answer in varying degrees of detail any questions which may arise concerning working with glass.

Studio Glassmaking by Ray Flavel and Claude Smale. Published by Van Nostrand Reinhold Company Inc. Eggington House. 25-28 Buckingham Gate, London S.W.E. 6LQ

(A good beginning book with understandable diagrams)

Glass Forming – glassmaking for the craftsman by Frederic and Lilli Schuler Published by Chilton Book Company, Philadelphia, Pennsylvania, U.S.A.

(A good general information book on various methonds of working both hot and cold glass).

Glassblowing — the Technique of Free-Blown Glass by Frank Kulasiewicz Published by Sir Isaac Pitman and Sons Limited, 39 Parker St., Kingsway, London WC2B 5PB.

(Another good beginning book with information on hardware construction

used for salting.

The type of pots we make at the moment tend to be our interpretation of pots that we admire. Domestic ware has been made for centuries, and it approaches arrogance on the part of a potter to assume he can make any pot which hasn't been made before. When made regularly, any pot, no matter who originally inspired it, takes on some of the character of the person who is making it.

Peter Starkey Firing Schedule Hours 0 - 3¹/₂ 0 - 960⁰) Oxiding 960º-1060º) atmosphere 31/2- 5 1060º-1100º Heavy reduc-5 - 6 tion 6 - 8 1100°-1160° Lighter reduction 8 - 81/2 1160º-1170º Oxidize 8½-11 1170º-1240º Medium reduction

11 -111/2 12400-12600 Oxidize 111/2-131/2 12600-

131/2-151/2 1260º-1300º Oxidize to

Peter and Jenny Gibbs' Oruru Pottery is at Onekaka near Takaka, Nelson, A one time science teacher Peter was introduced to potting by Chester Nealie. As he says, he is finding his way with salt firing and he would welcome correspondence from other salters.

and a valuable section of raw materials used in glass. I have seen this book in libraries and bookshops)

Modern Glass Practice by Samuel R. Scholes (seventh Edition, revised by Charles H. Green Published by Cahners Publishing Company 89 Franklin St., Boston, Massachusets USA 02110

(Strictly for the science buff; gives very precise technical information on glass and its making. It is also expensive)

" Working with Hot Glass " conference held August 1976 in London. A full set of notes can be obtained by writing to Crafts Advisory Committee, 12 Waterloo Place, London SwiY4AU (A good set of notes with different approaches to common problems- at \$2.00 plus postage it is a bargin)

I look forward to the increased interest and work in both hot and cold glass in New Zealand. We have the heads for it. We only need to train our hands.

Carry out

salting

cone 10

A little peril improves a good pot

Writing for the magazine 'Crafts', a psychiatrist reported that his studies indicated that craftsmen tend to become involved in difficulties which are self induced.

This seems rather perverse when we would rather believe that we try constantly to settle the difficulties and please let's have no more.

But he goes on to say that the really fascinating works are those in which a new insight is expressed, in spite of the difficulties. They may lack beauty within current convention but have it in the form of an expression of the life force of the arts.

Amongst the various pottery proceses, salt glazing contains in the highest degree the challenge of the self-imposed difficulty in the shifting balance between those things the potter can direct and those the energy forces will carry out.



Peter Guild, while working at the Govett-Brewster Art Gallery in New Plymouth decided to make a broad survey of Japan from the point of view of a non potter interested in ceramics.

Naha in the Ryuku Islands of Okinawa was the first stop. A few potteries survive the ravages of the Second World War, the Tsuboya kiln site being one of the least pretentious of any production kiln (as opposed to individual kiln) that I saw, in its layout and appearance. Its products too, following a three hundred year tradition in their form and technique, remain beautiful. The grotesque lion roof guardians to keep evil spirits at bay and the unglazed stoneware (awamori) jars are just lovely. The funerary urns found in the Shuri Museum with their exquisite forms and colourful glazes are an even greater delight. At the museum I found an historical collection of pots which surpassed nearly all that was to follow which made a fitting place to start my survey.

Satsuma and Arita kiln sites on the southern island of Kyushu came next and here the direct influence of the Chinese was clearly evident. The pottery here is mass produced along traditional patterns with finesse and skill. The Japanese consider imitation to be wholly acceptable, and this has some validity, but regretably it has left little room for individuality. Conscious copying of traditional pots or to the design of "artist" potters in their own workshops stifles the spontaneous spirit. Sadly this has happened in

the aid of a turning tool. The section

through the pot will be even and as a

result it will present no drying, firing

been badly thrown and has been

turned with the aid of a turning tool in

an attempt to remove most of the pot's

wheel can be quickly cut in half from

the base up. If the inside shape is the

same as the outside shape then clearly

a thrown shape has been produced. An

apprentice thrower is required during

each training session to throw a set of

pots all as near alike in size and shape

as possible. At the end of the session he

With a thin piece of wire a pot on the

A turned shape is a shape that has

Dear editor.

faults.

or glazing problems.

Japan. Fine quality ware such as Arita porcelain for me had only a superficial beauty, although to many who know their ceramics it is regarded as being in the best of taste.

The greater proportion of Japanese ware is functional but not inexpensive, so although there is a demand for domestic pots not everybody can afford them. This applies to the whole range of Japanese pottery. At the top, the work of the National Living Treasures finds buyers in collectors. In this atmosphere it was gratifying to meet in Arita, a man who is aware of the problems. Nick-named Gen-emon, he seemed a man of integrity with a keen sense of responsibility and purpose as well as being a superb craftsman carrying on the good name of fine quality Arita porcelain, but with a new wholesome interpretation.

Travelling on the main island of Honshu I visited what I considered to be the main pottery centres, starting with Hagi, Bizen then Kyoto and Mino, with Raku, Ko Kiyomizu and Shino, Seto and Oribe kilns respectively. Here I learnt a great deal and met many potters, among them Kato, Anakawa and Fujiwara and younger less distinguished but promising potters. The house of Kanjiro Kawai in Kyoto which is preserved and pervaded by his prescence, is a must for visiting potters. The address and other useful information can be obtained from the J.N.T.O. information centre.

Although Shigaraki (of tea bowl fame) and Iga are important areas producing work similar to Bizen, Hagi and Tamba in their earthy often unglazed pots which appeal to me, there

is not a great deal here that impressed

Mashiko, the home of Shoji Hamada.

His pots with incomparable vitality

did not disappoint. But is was disap-

pointing to see a small town full of pots

all trying to be exactly like Hamada's

It was back to Tokyo then to visit the

National Museum and here it was -

the prime and last pot, a Korean Yi

dynasty teabowl which has become

the only bowl out of thousands I saw in

Japan, and in Taiwan and Hong Kong,

which is a memorable pot surpassing

My last visit was to the Mingei

Folkcraft Museum in Tokyo and here,

curiously enough I was to rediscover.

on a conscious level, the purpose of my

journey. I found the book "The Un-

known Craftsman" by Soetsu Yanagi,

the founder of the museum and co-

founder of the Mingei movement. I had

once skimmed through this book and

forgotten about it. How could I have

forgotten it. I immediately bought a

copy and read it from cover to cover,

coming to the happy conclusion after

evaluating all I had seen, that Soetsu

Yanagi confirmed all that I had felt to

be true till then. This came as quite a

shock, to have to empty myself out,

cup before it can be refilled and that

seemed a fitting end to my Japanese

L. McCreadie

But it is necessary to drink from the

after hoping to be fullifled.

pilgrimage.

pots and inevitably failing.

everthing else I saw.

There was one more town to visit.

New Zealand Potter



Hawke's Bay Art Gallery Pottery

lished. Many have learnt the rudiments of potting through the club and twelve have gone on to qualify as members of the New Zealand Society of Potters. Joyce le Comte has written a booklet of its twenty-two years history. Milestones now make interesting reading.

1955 Mary Hardwick Smith an earthenware potter gave the first school using Te Mata clay from Havelock North.

1959 Mirek Smisek took a school 1965 Shoji Hamada made and decorated pots

1975 the new rooms opened

Group is one of our longest estab-

demonstration workshops. Information from the League, 8073 SW 129 St Miami Florida 33176 USA Awards

When considering sending work away for competitive awards be sure to read the conditions in fine print on the application. You want to know details such as who pays the freight there and back for accepted work that is not sold. You should see that there is insurance on work even while on display. The conditions of an award we studied this year (not a NZ award), appeared iniquitous.

must open up each pot to see if he has A thrown shape is a shape produced produced a set of evenly thrown forms. by hand on the potter's wheel without

In search of the art of the thrower

Today people know absolutely nothing about the art of the thrower. They walk away at the end of a demonstration. The writer would like every New Zealander interested in the art of the potter to know what is required of an honest thrower and require them to produce sets of pots of true shape and form; not the easily made accidental shapes.

The art of the thrower developed I believe when conditions for potters were very hard. A potter starting a day's work on a near empty stomach must have felt the need to reduce the amount of physical effort. Today the needs of the community are served by industry. Any well fed New Zealander with the urge to craft pots on the wheel

will not feel the need to push himself very hard in getting to know something about the art of throwing before he calls himself a potter. So the art of the thrower has sunk to a low level. Boy potters in India are still at work producing hand thrown work without the aid of a turning tool. Our potters fondly imagine they are producing genuine hand thrown pots using a turning tool. If an old time potter was to return to see us he would not know whether to laugh or cry.

At Hamilton Technical College the writer did for twelve years teach and practice the art of the thrower in the manner required by old-time master potters and served a full-time three years training at the Central School of Arts and Crafts, London.

Peter Guild

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Tribute to Shoji Hamada remembering his visit to Christchurch for the Arts Festival 1966

by Yvonne Rust

Hamada had such a full life, uniting in harmony with his friend Bernard Leach in a unique partnership to create modern studio pottery as we know it one cannot feel sorry at his death. But it is sad to realise that a period of pottery making is now history. New Zealand sends its sympathy to Bernard Leach and to Hamada's family especially to his son Atsuja who accompanied his father to Christchurch where we learned to respect the quiet dignity with which he organised us.

Hamada's death brings back memories — anecdotes and quotes from the fortnight we spent in his company in my studio. The New Zealand potters who shared this opportunity will never forget it.

Hamada was a small man physically, but his presence was so enormous you didn't think of him as little. He was humble towards his clay, dedicated to his work and to his own disciplines. His philosophical quotations took years to fathom. At times we enjoyed his quick wit and he investigated everything and everyone with the eye of a magpie. I recall the pindropping silence while he was throwing — it was not just the throwing of a craftsman, but it was like a religious experience. He never made an unnecessary movement, never had clay above the second knuckles of his hand. Of all the famous potters I have seen working, no one has reached his standards of complete ease of movement and control that held his audience captivated. His forte was turning and glazing. He sat on a specially constructed seat above the wheelhead while Mirek sitting on the normal seat kicked for him. Mirek was his right hand man while he was in Christchurch, and

South Florida invites lecturers

Ceramic League of Miami sponsors visiting craftsmen for lectures and

Flora, Patricia, Warren and Neil were his congenial slaves. Barbara was his secretary and Peter delivered meals on wheels and such and I was general rouse about. Christchurch potters acted as carriers.

Three months of preparation preceded the visit. Wyn Reed, Maisie Hill, Esme Stevens, Roie Thorpe and Marion Mauger prepared the studio. Mirek decided our wheel and clay and twenty test glazes were made up from which he selected five, wheat ash, Rimu ash, Tenmoku, limestone and one other. Forty bales of wheat were burned not once but twice, and all the material was stored away in the studio. The kiln was checked and rechecked. new shelves being lent by Marion Mauger.

At last H day arrived and we all took a deep breath and descended upon the airport. He alighted from the plane clutching in his hands his woven scarf that held his tools. These he never

arted from, and what a collection of tools they were, every one a piece of craftsmanship and when held in the hand, perfectly balanced.

After the welcoming reception he asked if he could soon see his equipment, clay and kiln. Next morning, I spent two nervous hours showing him around. The inspection was conducted in complete silence. Then the catologue marking the visit and exhibition arrived hot from the press. He looked in amazement at his signature on the cover and the silence was broken. He was impressed and said he would like to start work right away. So began an unexpected pleasure for all of us because he worked on steadily for ten days with the potters watching and engaging him in conversation and sharing moments of humour. It was a remarkable effort on the part of a man of seventy who made a journey to help a young country's emerging pottery movement along the road.

What to see in China

Some people interested in ceramics may be considering making a visit to China. Repeatedly we have been told that it is a great personal experience like going to another planet. For art lovers there is much to see particularly in archaeological discoveries, bronzes and stone carving of the Tung Dynasty and the incredible lifesize ceramic forms of soldiers and horses housed in the Peking Museum. But if you want to see Chinese porcelain you go to the collections in Taiwan (or the U.S.A.). There is nothing of note being made in China today.

Early days

From earliest memory my chief preoccupation has been with fire. I wanted to get to the bottom of its mysteries. I recall a strong sensuous reaction towards fire and a desire to experiment with it. Later I was persuaded to take up pottery, probably by an anxious parent desiring some return for dwindling coal and firewood supplies.

At first it was rewarding enough to melt lead, make steam in primitive boilers, distill wood and coal in crude home-made retorts, and watch the behaviour of various fuels in combustion and of the bricks and metal surrounding the fire. I also needed to experiment and experience at first hand, and I was as furtive in this quest for more knowledge as was the more conventional child for sexual knowledge. My father once caught me lighting a fire under his old wooden house and gave me a damm good hiding followed by the offer of a plot of garden.

Nearby was the local gasworks with a complete firebrick works attached; my paradise. It was an enchanting world of fires, furnaces, smells and architectural and engineering forms of great strength. It also had stern men and bosses who could deal with schoolboys probing into the mysteries of the works. But all this added fuel to my own fire and it was in fact the boss of the brickworks who gave me my first lump of prepared clay.

The kilns being coke-fired were completely irresistible when under way. Soon I was making miniature bricks, slabs and arches with which I made miniature kilns. Many a night and weekend bicycle trip to paradise secured not only ideas but also bricks and coke for my fast developing industrial empire. It was but a short step to pots from miniature bricks together with aforesaid parental persuasion. At no stage was "art" ever associated in my mind with pottery making. It was solid drill.

The first potter I recall meeting was Selwyn Hadfield at Urquharts Bay, Whangarei Heads. His one-man workshop turned out slip-cast domestic ware using an oil-fired kiln, and mostly local raw materials. A similar approach was being pursued by Cameron Brown then at Waitakere, and I often wonder how many other "studio" potters there were scattered throughout the country at this time. Then the Leach inspired wheelthrown stoneware approach was introduced by R.N. Field (see New Zealand Potter Vol 19/2), and adopted by Len Castle and Peter Stichbury. At this time "studio" pottery was exclusively earthenware, fired in muffle or electric kilns, as practiced by Patricia Perrin, Olive Jones and Mirek Smisek whose work was becoming familiar to me.

My introduction to studio pottery the artist's rather than the industrialist's approach was through Len Castle. Len, a recently graduated science teacher, had a big coal-fired downdraught saggar kiln and heavy kick wheel under his parents' Auckland house.

I remember he had done an impressive painted mural on the walls. As a sort of contract he was turning out dozens of thrown slip-trailed earthenware ash trav pots for export! For relaxation and pleasure he was also throwing large, bold, wine bottles with handsome strappy handles, together with bowls, jugs and vases of very pure thrown form. These were made from his local clay and were fired in Crum Brickworks coal-burning salt-glaze kiln. The workmen would kindly place Len's pots on the top of the drain pipes, straight under the crown arch where they were treated to the richest and choicest salting complete with molten drools and drops.

The pots of this period are archetypical to me. They represent the spirit of the birth of a fresh and new way of life and are thus collector's pieces. With Len's patient enthusiasm, my potting Barry Brickell

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slowly improved which necessitated much pioneering and inventive work with kilns.

I was by now old enough to get holiday work at the firebrick works - help with brick making, and firing the coke kiln. One of my first paid jobs was modelling the joints on drain pipe junctions at Harry McKays' old brick and tile works at Takapuna. At the firebrick works I helped to make the last fireclay D-shaped horizontal gas retorts in the country, and learned the gentle art of tile moulding. I have thus entered studio pottery through the back door rather than through the front channels of "art". To this day the architectural and engineering challenges remain every bit as important as the aesthetics.

Throughout the fifties in this country, the battle waged between earthenware and stoneware approaches to potting. Patricia Perrin and Olive Jones were exhibiting very accomplished earthenware which I found disappointing because it lacked fire animation and textured boldness. I therefore went to extremes in this dialectic as only one example of how the pendulum could swing. We were subject to overseas influences, ideas and trends via the pottery and art magazines, and I vividly recall the tireless theme of potters' conversations about the search for a New Zealand



Convivial discourse with Terry Barrow in the fifties



Getting into production at Driving Creek Pottery, Coromandel

tradition — a leg of our own to stand p

Mural and ceramic sculpture commissions for potters did not exist here as they did for example in Australia, so the New Zealand pottery movement which got rapidly under way at this time was tied down to form based on function. Today I feel that there is more honest concern and endeavour being put into the craft aspects of pottery than its social comment and personal statement, which seems to be



photo:Stan Jenkins

part of our "do it yourself" tradition. These days many young people are looking to pottery to provide them with an independent rural way of life and there is a desire to pot for "everyman".

In Auckland in the fifties we were fortunate to have two excellent retail outlets which made the potters way of life a reality rather than a dream. Dan Pierce (Art of the Potter) and Tina Hos (New Vision) had a deep understanding of the craft and were the first to provide an alternative to the exhibition system which had been the only way a potters work could be introduced to the public.

Thus were the rails laid down for the kiwi domestic stoneware approach, and the public began responding in a manner unknown in other parts of the Western World. From time to time the more artistically minded potters have felt restricted and there have been strong anti-reactions often based on the latest overseas happenings. Opinions have been absolute. I recall my own attitude of positive rejection against anything that was not born of New Zealand soil and ideas, although I was much more lenient when it came to painting. In those days we leaned heavily on the Japanese (eg Hamada)

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photo: Steve Rumsey

approach. To me the Japanese techniques, materials and methods made damm good sense for New Zealand, but I recall having strong reaction against their aesthetics and I intolerantly rejected outright any brushstrokes which resembled bamboo leaves.

Perhaps all this indicates how exciting it was to be associated with the pioneering of the present studio domestic stoneware movement. The social aspects of my craft began to replace my purely sensuous lust for fire and I found my boat being rocked by the force of divergent personalities and viewpoints.

In 1954 Charles Bond-Smith was working in Auckland making large thrown vase forms in stoneware in an electric kiln, he'd removed the dividing walls between two rooms in his house to expose the rugged brick chimney now standing firmly in the middle of the room. This was the first time I saw the "new world" approach to an old house now commonplace, showing some aesthetic awareness of the honesty of colonial building. The New Zealand renaissance had come.

A very different force was Theo Schoon. With a sophisticated taste for geometric and primitive art forms, he

New Zealand Potter

made my boat rock and issued me some strong pure art challenges. At times the water almost came over my gunwales. Terry Barrow with his quest for oriental standards of beauty and his great enthusiasm for the more tangible meanings of primitive Pacific art forms, was perhaps the most contemplative and enjoyable potter's company I had at the time. All these people were friends of Len Castle and were a source of stimulus kept alight by the stresses and strains of opinion differences between them.

Sharing a flat with sculptor John Kingston and then Hamish Keith during my year at Teachers College (1959) brought me into contact with other art media. The New Zealand painting revival was born under my very gaze with that powerful triumvirate, Peter Tomory, Hamish Keith and Colin McCahon setting formidable standards in painting and art appreciation at the Auckland City Art Gallery. I will remain permanently grateful to these people who opened my eyes to the powerful drama of the modern diverging world.

Keith Patterson had returned from Spain, painting in the "clavean" tradition and introduced me to coiled pottery technique. I took this up with exuberance for a new and vast horizon of indigenous forms was accessible to me, and remains a challenge. Over this period I had evolved a simple if crude drip-feed kiln design, burning old sump oil with alacrity. This was in the days when sump oil came from petrol-engine crankcases. It contained none of the detergent which prevented the oil from settling nice and clear as it does today, due to the pre-

valence of the diesel engine. It must be remembered that clean air, conservation and environmental talk was restricted to the intelligensia and was not a political issue or a tool for beurocracy as it can be today. We were more free to make black smoke and smuts; one only had to contend with the afflicted neighbours.

The drip feed system was the only method of burning oil that I ever used. It was pioneered in association with Neil Robertson a then local garage mechanic. He made up the metal trays for me.

With the advent of the silicon carbide kiln shelf all the major problems of economics of firing for the aspiring professional potter then disappeared. In Auckland there was a source of materials through Dennis McClure who had worked as a chemist for Crown Lynn and was the first professional technical adviser to studio potters.

The stage was now set for me to give it a go. I had to rid myself of a ghastly teaching job, find an old house in the wilds of the back country and get in behind.

Barry Brickell's first pottery established twenty years ago was not exactly in the wilds but near historic Coromandel, across the Hauraki Gulf from Auckland. Here he restored a colonial house of architectural merit and built his famous railway complete with tunnel and viaduct for transporting pots and materials from workshop to the road. Older potters recall the excitement of riding down to the gate on the late night "milk" special. The present Driving Creek pottery is on a



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photo: Steve Rumsey

New Zealand Potter

Recent Work



slipcast draughts set including board, Nancy and Bill Malcolm.



Cheese dish, stoneware, Liz Stucke



teapot, Stephen and Zoe Carter



Work from some of Nelson's twenty-nine potteries was on show at the Suter Art Gallery's annual exhibition and sale of local pottery. The gallery will build up a permanent collection of New Zealand pottery when the new extension is built.



stoneware cider jar and terra-cotta pot (21/2ft high). Jack Laird

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New Zealand Potter





Jenny Shearer at Spectrum



Deborah Ashford at Spectrum



Right: stoneware serving dish, tenmoku glaze by John Inge. Below: porcelain lid-ded dish by Royce McGlashen both from the Suter Exhibition







A major exhibition of John Parker's ceramic forms was held at New Vision



Roger Brittain, Scamper Award (\$250) for best container to hold water



Warwick Lidgard, Scamper Award for best cooking dish photos: Howard Williams



Ruth Court at Hastings



Interlacing rainbows over a land-scape is the theme of Shona McFarlane's stained glass window-mural on the east wall of the new Manukau City Centre. The design is by Shona McFarlane, the construction by Miller Studios from English and Euro-pean handmade glass. Forty 4ft square panels — over a ton of glass — were put together in Dunedin and trans-ported to Auckland in a specially fitted truck. The window is 40ft by 13ft. Shona McFarlane says "One of the ni-cest things about it is the way the col-ours reflect in windows and pillars right around the central court and in the late aftermoon the colours stretch the late afternoon the colours stretch over the white tiled floor and children jump about in the different colour patches."

The Waikato Society of Potters, and Waikato Art Museum hosts -

The 21st National Exhibition of the **New Zealand Society of Potters.**





porary Ceramics, Waikato Art Museum, 1970

Waikato Art Museum

21 October - 19 November 1978

The National Association reaches its majority as Hamilton City celebrates its centennial. The galleries of the Art Museum are well suited to ceramic exhibitions as has been evidenced by a number of local and international displays. The 1978 National will be no exception.



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PICTURES (FROM THE TOP) SPECTRUM looking to the back. (People L - R) Joan, Jan and Campbell. SPECTRUM looking across the front. Meredith exploring an Anneke Borren bird cube A superb Doris Dutch scenic plaque.







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From an exhibition of porcelain. Photo: Ans Westro



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