

1993-2000

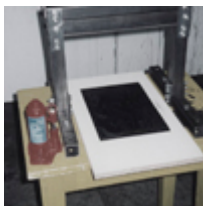
Indigenous printmaking - a survey of adaptable technology for printmakers

AWARDING BODY: AHRB

PRINCIPLE INVESTIGATOR: Stephen Hoskins

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PROJECT DETAILS:

A comparative investigation of indigenous printmaking processes and materials in developing countries (Africa and India). This project produced and compiled evidence of differing practices, experiments and tests of different materials in different environments and promoted the use of locally sourced materials suitable for local conditions. The materials identified allowed artists, without the necessity of importing prohibitively expensive specialist art materials and lack of access to print workshops, to produce professional quality prints.

The need for this investigation was highlighted during the 1st South African Printmaking Conference, Rhodes University, South Africa September 1998, Hoskins was a panel chair of A Global Perspective, and the organisation of a series of printmaking workshops for the British Council in Nairobi during 1992-96. These workshops comprised etching, relief printing and papermaking. Problems were highlighted relating to the cost of the imported tools and materials, which were too expensive for the artists to buy. As a result a series of workshops were run utilising many locally available materials and adapting old machinery, investigation of practices in a series of settings and comparative analysis between the varying requirements of artist printmakers in an indigenous context.

Methodology

Problems associated with materials imported from 'outside' countries, for example, the change in climatic conditions can have an effect on pre-prepared inks. In this case an investigation was undertaken into locally produced oils and pigments for mixing ink, including drying time of oils, grinding of ink pigments, compatibility and construction of pigment when mixed with oil, suitability of ink for print processes, visual quality of the ink when dried on paper.

Investigation into indigenous or easily sourced materials that could be used to make, for example, cutting tools, palette knives, or tarlatan for wiping plates.

Adaption of existing machinery or equipment for the production of printing presses

Test results

Press Costs

Bottle Jack 79.90 Rand

Screw Jack 83.83 Rand

Bolts M8 x 60 30 50.10 Rand

Nuts and washers

30 M8x25 38.10 Rand

Welding Rods 19.95 Rand

3 mtrs 1.6x40 Section box 72.39 Rand

3 mtrs 40x5 strip 25.89 Rand

2x600x400x6mm plate 78.35 Rand

2x600x400x8mm plate 207.94 Rand

Labour to cut plate 74.10 Rand

Press design

Frame inverted U with two horizontal legs, 2 metal plates (8mm), needs to be cut or sawn with a plasma cutter.

Metal plates must be flat without dents or curls.

Tools needed: hacksaw, spanner to tighten bolts and hand drill and drill bits.

Ink Tests

Ink: Hostman and Steinberg

Paper: 150 gms Cartridge

Normal roll on glass

Print 1: not printed in centre, edges print well. Problem caused by base plate moving due to jack pressure therefore more pressure on edges and less in middle.

Print 2: Turned around 90 degrees to see if more even pressure can be obtained. Results better but still not good.

Print 3: Same as above with the addition of 2 light felt blankets. This was a considerable improvement.

Print 4: Same as above turned 90 degrees back, pass needs strengthening.

Print 5: As above but scissor jack used. This gives a better result.

At this point it was decided to strengthen the press as there was too much movement in all areas.

Strengthened press taken to Dakawa Workshops to test under local conditions. Prints taken using extremely hard roller and 50-50 ink

A large lino wax used almost the maximum size of the bed – works extremely efficiently

Ink Tests at Dakawa Workshops

Print 1: Lino on back ground, 1 board on top, 1 sheet of mounting card

Print 2: Same as above turned 90 degrees – print more even than print 1

Print 3: Same as above with 2 light felt blankets

Print 4: Same as above turned back 90 degrees to horizontal

Print 5: Printed using scissor jack as above

Print 6: print with strengthened press, 2 thin blankets, 1 extra sheet of paper, 1 board, no metal – results good needed sanding

Print 7: Same as above with different block

Print 8: Same as above but block sanded with scissor jack

Print 9: Same as above but block sanded with hydraulic jack

Print 10: New large block, rolled with very hard roller, bottle jack used, 2 thin blankets, no card, 19mm chipboard, no plate – results good in centre, not enough pressure on edges

Print 11: conditions as print 10. Pressure applied in 3 places across the press. Very good even black achieved across the whole print.

Print 12: 4 layers of felt and 1 sheet of paper added.