THE SENSING, KNOWING HAND: A PHENOMENOLOGICAL DRAWING TOOL

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Endorsing the proposition that drawing is phenomenological, this article presents an argument for hand drawing as a creative, communicative activity which contributes significantly to our awareness of being human. I also argue that, far from being mechanical, fine art printmaking is a highly creative graphic and sculptural activity undertaken not to reproduce an image but to create one. The specialised, trained human hand participates in an intense hand-eye-brain relationship, intentionally drawing signifying graphic marks to communicate information visually. When drawing for intaglio printing, artists learn to handle new tools to draw and craft lines and tonal shapes on a rigid plate surface. They engage in labour-intensive technical processes and conscious reflection of the emergent image in order to create meaningful, aesthetic content developed from printing processes that deliver a limited edition of handprinted drawings.

My examples are drawn from work that is little known in the West, namely intaglio printed drawings made at and published by The Caversham Press in KwaZulu-Natal, South Africa. I discuss the drawing processes of two etchings and a drypoint to explain drawing and printing processes and I consider the mind’s eye imaging that intersects with information from the physical eye, both of which contribute to decisions made by the brain informing the hand of motor actions required to create printed drawings.
The flesh and blood hands characterising *Homo sapiens* define not only our biological distinctness as a practical, problem-solving hominid species, but our human capacity for empathy and creativity. Hands transmit loving contact with other living bodies and respectful interaction with the phenomena they encounter and handle in myriad functional and imaginative ways. A highly evolved, very complex structure, the human hand is fragile; only a thin layer of skin, muscles and fat protect the joints, tendons, nerves, blood vessels and fine bones constituting our hands and enabling us to gesture, touch, hold, and execute power or precision grips. Four digits with three-jointed fingers and an opposable two-jointed thumb differentiate *Homo sapiens* from other hominids. This significant adaptation facilitates the hand-eye-brain interactions and sensory-cerebral, haptic-optical relationships defining hand drawing. The hand itself is a drawing tool – a finger dipped in liquid, grease or powder makes organic lines but the hand’s structure enables it to shape and manipulate drawing tools, and to create a range of drawn lines which add aesthetic and intellectual sophistication to signifying marks and provide evidence of phenomenological experience.

Our two hands are capable of independent movements and the preferential hand, using a precision grip, usually executes the actions required to handle drawing tools skillfully. Reaching out into space, the hand moves away from the eyes while sustaining the intimate hand-eye relationship intrinsic to drawing. The act of ‘motor intentionality’ (Merleau-Ponty 1962:112) directing hand action is driven by the body responding to signals from the brain. Fingers, hand, articulated wrist, forearm¹, elbow, and shoulder connections adapt motor actions when training hands to draw with a range of different drawing tools, or to experiment with graphic conventions.

‘For me’, Bridget Riley comments, ‘drawing is an inquiry, a way of finding out’ and she elaborates, ‘It is as though there is an eye at the end of my pencil, which tries, independently of my personal general-purpose eye, to penetrate a kind of obscuring veil…’ (Riley 2009, n.p). Here we might think of M.C Escher’s paradoxical image, *Drawing Hands* (1948) with its close observation of one hand actively drawing the other hand as a passive, volumetric form and conflating ‘drawing’ as noun and verb in one representational statement.² Riley’s reflection on drawing was generated by observation; she watched her trained hand holding a pencil and drawing on a flat sheet of paper. However, when two tools are required to impose penetrative marks on a resistant mass the preferential hand exerts force with a hammer and the weaker hand functions creatively, guiding a sharp chisel. Barbara Hepworth explains,

> My left hand is my thinking hand. The right is only a motor hand. This holds the hammer. The left hand, the thinking hand, must be relaxed, sensitive. The rhythms of thought pass through the fingers and grip of this hand into the stone (Hepworth 1970: 79).

Hepworth’s reflection on her carving process equates ‘thinking’ with the sensory receptivity of her hand and, uniting ‘rhythm’ with ‘thought’, she alludes to embodied, tacit knowledge generated by tactility and sight.

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¹ Long tendons pass through a flexible wrist to connect forearm muscles to finger bones.
² M.C. Escher, *Drawing Hands* (1948), lithograph, 28.2 cm × 33.2 cm. Available online.
This article focuses on the roles played by hands and the sense of touch in designing and crafting hand-drawn, printed drawings, my preferred term for describing drawings created as multiple, original handmade prints produced in limited editions by printmaking technology and collaboration between a drawer and master printer. The term ‘multiple originals’, used to describe handprinted drawings, seems to be a contradiction. It is not. In modern and contemporary print practice the drawing is the artist’s original work. The drawing, specifically drawn to print multiples rather than to exist as a single, autonomous statement, is not a printed reproduction of an existing drawing or painting. My discussion focuses on the intaglio processes of etching and drypoint to raise the issue of what hands, which are anatomically capable of innumerable intricate movements, learn to do in order to make a drawing which will be translated through the mediation of technological processes into a limited edition of drawings printed on paper. But first, a mention of the drawing-print relationship is necessary.

Most major art museums have departments and collections of Prints and Drawings. This terminology identifies two different genres which, traditionally, are works on paper, but in fact the vast majority of prints are characterised by drawing which precedes and determines the process known as printmaking. The print content is drawn intentionally to be handprinted and editioned but, interestingly, if one consults the indexes of printmaking publications few have an entry for ‘Drawing’. Their texts are devoted to technical instruction and the crafting of prints. Informative though these manuals are they overlook the significance of drawing as the origin of and reason for printmaking, and as the purveyor of meaning. However, in A Theory of Craft: Function and Aesthetic Expression Howard Risatti (2007:17) comments,

*By arguing that drawing is an essential and formative component of most printmaking, the intellectual and provocative nature of images escapes the confines of being merely ‘crafted’ by sophisticated technology. Rather technology serves the will; the intention is to express ideas graphically and to ensure that they are expertly crafted to deliver the drawer’s intentions.*

By serving the will in drawn image/printmaking, technology empowers the intention to create expressive, informative drawing capable of communicating graphic content in multiple, original drawings. Printmaking requires commitment to a prolonged process of image realisation and time-consuming, labour-intensive analytical and technically complex procedures. Responsive to the evocative and signifying capacity of the lines, tones and shapes intrinsic to drawings, artist-printmakers face the challenge of translating a drawing (the source language) into a final graphic state with aesthetic resonance and evocative meaning, delivered by ink imprinted into paper. In printmaking hand-drawn images literally work hand-in-hand with mechanical printing and both activities demand recognition and respect.

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Hand Drawing and Printing

Hands perpetually engage in multi-tasking when drawing. Using fingertips as sensory haptic agents, artists experience the tactile aesthetics of drawing – the feel of smooth cartridge paper or tooth of a rough paper receiving the imprint of crumbly charcoal, the silkeness of powdered graphite, surface of a waxy linoleum block, and viscosity of hard ground resin on a resilient metal surface. Material judgements are made by the skin and fat pads of fingertips which possess extremely high concentrations of nerves. They transmit sensory information about pressure, vibration, temperature, pain and, for artists, pleasurable corporeal sensations produced by touching and handling material objects.

What do we ask the hand to do when drawing on paper, wood, metal or stone? Many artists know instinctively how hold charcoal to sketch or graphite pencils to evoke tonally modulated forms on paper, but different skills are required to make intaglio prints by engraving or etching. When engraving a copper plate the preferential hand holds a burin with the handle resting in the palm. The thumb and index finger guide the tool, pushing a sharp blade into the metal while the other hand manipulates the plate. The hand extracts a metal ribbon leaving a surface plane incised with lines of varying depth or stippled dots. Operating on the cutting edge of uncertainty, only a highly trained hand renders sinuously rhythmic, curved hatching lines that signify halftones on rounded forms; there is no margin for error in images characterised by precision and clarity.¹

The technique of drawing an etching is entirely different to that of making an engraving. Here no hand pressure is required to draw on a bevel-edged plate covered with hard or soft ground. The hand, holding a small needle (stylus) tool, makes delicate movements with fingers and wrist as it scratches through a dark, resinous ground substance which has been rolled onto the plate. Fine needle marks expose the metal and, when placed in an acid bath, chemical action ‘bites’ or etches lines to produce grooves of varying depth which will retain sticky printing ink after the surface is wiped clean. Etched half-tones may be created by linear hatching or by using aquatint. Rosin (finely powdered, purified pine tree sap) is shaken over the plate from a rosin bag or in a rosin box, and the plate is warmed to fuse the granules to the metal surface. Aquatint tone resembles stippling because the acid corrodes the gaps between the protective rosin dots, producing mid-tones ranging from delicate pale grey to intense black. The erosion of exposed metal lines and shapes must be watched when a plate is in the acid bath. Bubbles form as the bite becomes discernible and the hand, holding a feather, brushes it gently over the plate to release acid gas. Both touch and vision determine how long plates should be subjected to the chemical action controlling light or dark tonality in the printed drawing.

Paper character and quality influence the appearance of inked images. The fibres must be sufficiently flexible when damp to yield to and penetrate a rigid intaglio plate to absorb ink. In so doing, flat paper sheets acquire subtly three-dimensional moulded forms because the plate formats are indented while ridged intaglio lines protrude and can be felt by sensitive fingertips. Completed editions of printed intaglio drawings demonstrate the actions of sensing, knowing hands, those of the drawer and the printer working in tandem. The final mark on engraved and etched paper is made by the printer; it is the publisher’s ‘chop mark’, a blind stamp impressed into the bottom edge of the paper below the artist’s image.

Two etchings (Figures 2 and 3) printed by Malcolm Christian, master printer and publisher at The Caversham Press in KwaZulu-Natal, South Africa, explain the appearance and processes of producing drawn and etched lines and tonal marks. Lytton (1987), by Robert Hodgins (1920-2010), and Where to go? (1991) by Mmakgabo Helen Sebidi were created by experienced South African artists. Their art education and career trajectories were very different. Hodgins (1920-2010), born in England, emigrated to South Africa in 1938, served in World War 2, studied art and education at Goldsmiths’, University of London, and returned to South Africa to begin academic teaching at the Pretoria Technical College in 1954. He lectured at the University of the Witwatersrand from 1966-83, retiring in 1983 to work as a full-time artist. Sebidi, born in 1943 in Marapyane in what is now Mpumalanga Province, gained a comprehensive knowledge of traditional Tswana mural painting on domestic buildings from her grandmother, completed her elementary education and entered domestic service in Johannesburg. She studied painting informally, being mentored by John Koenakeefe Mohl (1903-1985), and took art classes at the Johannesburg Art Foundation where she learnt drawing skills and collage techniques. Hodgins and Sebidi had different experiences of learning to draw and, as a white man and a black woman they lived different lives in late and post-apartheid South Africa. However, when working in a print studio to produce etchings, both artists had to learn how to draw for printed outcomes. Their hands adjusted to new phenomenological experiences as they handled new tools to make marks on resistant metal, not soft paper.

**Figure 1. Robert Hodgins, Lytton, 1987, etching, 20 x 12.5 cm**

**Figure 2. Mmakgabo Helen Sebidi, Where to go? 1991, etching, 24.5 x 20.5 cm**
Hodgins’ intention in *Lytton* was to draw and interpret the personality and appearance of Lytton Strachey (1880-1932; essayist, biographer and member of the Bloomsbury Group). This etched drawing is characterized by a range of lines scratched by a needle. Straight lines, ruled mechanically, constitute a half-tone background and jacket. Rhythmic freehand lines depict Lytton’s head, facial features, and tie. Needle, multiple-line engraver, burnisher and roulette tool add different tiny marks and smudges to convey significant details on the face and represent the eye glasses. Dark tone on the right, the result of deep-etched aquatint, forms a dense plane on the right and depicts the black hat brim, face planes and beard. This portrait of Lytton is an early print made by a painter exploring the capacity of etching tools and processes to deliver pictorial ideas about the distinctive appearance of a named man.

Helen Sebidi employs a less complex mark-making vocabulary – a fragile, wandering line travels over the entire picture plane moving circuitously back and forth. By stopping out lines and continuing to work into other areas of the plate requiring tonal depth and density, the full tonal range from black to white contributes to an oppressively restless image, replete with fragmented and reconstituted forms originating in the artist’s practice of tearing her independent drawings and collaging them into new drawings. Sebidi’s etched drawing conveys her personal experiences of the discriminatory apartheid policy of social dislocation and restricted movement of the black population controlled by pass laws. This is implicit in her title: *Where to go?*

**Experience**

Matisse, speaking after decades of drawing experience, commends the actions of his hand, commenting,

*If I have confidence in my hand that draws, it is because as I was training it to serve me, I never allowed it to dominate my feelings. I very quickly sense, when it is paraphrasing something, if there is any discord between us: between my hand and the ‘je ne sais quoi’ in myself which seems submissive to it.*

*The hand is only an extension of sensibility and intelligence. The more supple it is, the more obedient. The servant must not become the mistress’,* (Matisse, *Jazz*, 1947 in Flam 1973:112; Flam’s translation).

Explicit in this comment is Matisse’s desire to ensure that his trained hand serves his intellectual and expressive, sensory needs with regard to rendering his subject. This is the antithesis of formulaic hand drawing and it is an inherent danger in digital drawing controlled by a hand-held mouse and algorithms, where a click produced by light pressure from an index or middle finger on the mouse selects the means to simulate pen and ink lines. Matisse asserts that his hand is ‘an extension of sensibility and intelligence’. In French *sensibilité* translates into English as ‘sensitivity and feeling’. *Sensibilité* was a concept much debated in the 18th century and it could convey a range of meanings. It was favoured by Diderot when arguing for the expression of emotion though sensations within *’le corps vivant’* (the living body) and he also aligned it with consciousness, or the ability to receive sense impressions. It is clear that Matisse, in attributing *sensibilité* to his drawing regards his hand as the tool to transmit his sensitive awareness of his hand in action responding to the impulses of the moment, and not as his agent executing learnt techniques.
Well versed in French art history and fluent in French, Roger Fry investigates ‘Sensibility’ in the second chapter of *Last Lectures* (1939), where he asks what we mean by sensibility. He offers a description of drawing:

*The simplest case we can take is the comparison between a straight line made with a ruler and one drawn by hand. The ruled line is completely mechanical and as we say insensitive. Any line drawn by hand must exhibit some characteristics peculiar to the nervous mechanism which executed it. It is the graph of a gesture carried out by a human hand and directed by a brain, and this graph might theoretically reveal to us first, something about the artist’s nervous control, and secondly, something of his habitual nervous condition, and finally something about his state of mind at the moment the gesture was made. The ruled line expresses nothing but the mathematical idea of the shortest distance between two points and this it does almost perfectly.\'*

Fry is not talking about the aesthetic qualities of hand-drawn and ruled lines; he is commenting on the nature of straight lines, and he concludes that the drawn line ‘will tell us something of what we call the artist’s sensibility’, (Fry 1939: 22-23) and he adds, ‘we might say that an artist’s line is sensitive when it registers very subtle changes of form, when it has great power of variation’ (Fry 1939:24). In short Fry discerns corporeal responses by the hand, which results in a quality of drawn line that can be described as ‘sensitive’.

Sensibility, or feeling, is closely related to consciousness of what a drawer is doing and seeing (drawing as a verb and as a noun). As Bridget Riley noted above, when drawing by hand the artist watches and is conscious of the hand in action making marks on a surface. The drawing process is invariably punctuated by reflection in which the eye-brain sees and appraises the emergent image until drawing activity ends and a unique or single artefact – a drawing – exists. Consciousness of something (a drawing) generates reflection in the form of a silent, critical, internal monologue which may subsequently become spoken dialogue or written notes.

The consciousness required to make printed drawings is generated initially by the technical requirements of a chosen print method (etching, drypoint, lithography, wood and linocuts, and screen printing). Next, an extraordinary feat of imagination is required to make planographic and intaglio prints and it goes against the grain of all accumulated experiences of drawing graphic imagery. Drawing on a plate, a drawer observes the hand in action knowing that the final outcome will look radically different because the image will be reversed when the final state is pulled off the plate after being rolled through the printing press under pressure. To cope with image reversal, the inner eye generates an imagined graphic configuration that contradicts evidence generated by the physical eye and which is interpreted by the brain. One can of course gain insight into image appearance by viewing it in a mirror but there is another problem: the quality and nature of the marks, and the tone and colour of stones and metal plates covered in ground, are wholly different to the white paper and tones of printing ink desired in a final image. In short, conceptualizing drawing in the mind’s eye for a printed drawing is different to making an independent drawing begun and completed on one surface and continuously evaluated by the eye. However, a print process provides a solution to the problem of accommodating image reversal when drawing on a plate. An analytical, reflective evaluation of a drawing in progress can be undertaken by printing a proof of the incomplete image on white paper.
Reflection

*Lamp of Knowledge* (2010) by David Koloane (1938-2019) is a small drypoint etching on a zinc plate. There are 10 proof prints (Figure 3, Proofs I, III, VI, X). Used on its own as a graphic technique of drawing, or employed with etching and aquatint, drypoint is an intaglio print method where the hand engraves the plate with a sharp stylus, and pushes up a ridge of metal known as a burr, which remains attached to the plate. This imparts an irregular, organic quality to printed ink lines and ensures subtle linear differences in the individual prints in what is, of necessity, a small edition of drypoint etchings because the burr collapses under pressure in the press.

John Ross offers clear and precise information on the subtleties achievable when executing drypoint drawing:

*Hold your needle in a manner that feels comfortable. … If you hold the needle almost vertically, you will get a burr on both sides and get a line with a dark centre and soft edges. When you angle the needle, the burr rises on the opposite side and will print softly on the burr side. As the angle increases, the burr increases and the line thickens. Too great an angle, however, produces a weak burr that will not withstand many printings*’ (Ross 1990:84).
The artist who draws to make prints develops a particular form of consciousness when observing an emergent image in the form of a proof state. Reflective consciousness has a complicated function. In assessing etching proofs the drawer determines, for example, if fragile lines need to be stopped out to retain their fine quality, or if areas of a plate require erasure by burnishing. Aquatint might be considered as the means of providing subtle tone, or additional drypoint line might be added for crisp detail. In short, the artist evaluates the existing image and postulates linear additions and further physical transformation by acid to achieve image finality on paper. The final proof, the bon à tirer print, functions as the quality control print against which the editioned prints are judged.

In Koloane’s drypoint the subject is a solitary figure in a room engrossed in reading a book. There is a framed image on a wall, and table with a paraffin lamp, a source of light frequently used in South African township homes. The title suggests that the lamp is both object and metaphor for enlightenment so its prominence is significant. There are 10 states and, as is immediately apparent when examining Proofs, I and X, the initial linear thinking in the first proof is radically different to the resolved image in the final proof. A study of proofs supports John Berger’s observation (2005: 5) that ‘drawing records the unfolding of an event, not the fixed reality of an object’ and it is obvious that drawing for print is about the related events of image generation, loss, retrieval and development. Drawing, as an event, is continuously provisional and performative. From the first to final state, Koloane draws freely, cutting the metal plate with his drypoint stylus. The needle point moves, leaving the traces of its action in time. When printed, stand-alone dots, dots spreading into blots, and blots stretched into shaped marks mingle with gestural and rhythmic lines travelling randomly over the landscape format. This information, derived from the close, intimate viewing we accord to small prints, delivers to viewers an experience of formal visual language and emergent content in Proof III and Koloane’s drawing declares itself spatially and temporally through his purposeful or meandering lines and through scrapings that reduce lines to the ghostly traces evidenced in Proof VI.

Koloane commenced his drawing with a cursory visualisation of a figure seated in an interior (Proof I) but by Proof III the initial provisional statement has become a more emphatic representation of space and forms. A vertical plane on the left pushes the figure back into space and the picture on this wall seemingly depicting two figures carries more detail, books are indicated on the table and a lamp is clearly recognizable, as are the man’s features. In Proof VI lines on the open book and lamp base have been burnished out and the head contour strengthened with dark tone. Proof X offers a resolution of tones, lines and shapes which reassert the two-dimensional picture plane and allude to spatial recession. Black lines and shapes now represent a triadic interaction between a man’s head, a lit lamp and an open book, signifying physical and conceptual relationships between a verbal text, a representation of the phenomenal spatial world, and the geopolitical content of an image named as Lamp of Knowledge.

Although the way in which Koloane draws has similarities to his style of creating unique drawings on paper, his drawing for print acquires its distinctive quality through his hand directing a sharp tool in an encounter with a resistant metal plate. The depth, roughness, or precision of Koloane’s linear incisions are dependent on his hand and his tool as prosthesis. We see how the artist’s hand moved delicately or with decisive pressure to establish slight or deep cuts, or to erase indentations by scraping - a physical activity different to erasing graphite lines on paper. In establishing the drawn content of a drypoint, drawing is visual and tactile, graphic and sculptural. The hard, rigid surface and the drypoint stylus contribute to linear aesthetics, while hand and eye transform depictions of man, interior space and lamp into a socio-political comment on black South African citizens’ intellectual aspirations and the realities of...
township lives. The image is also autobiographical: Koloane was a man distinguished by his personal search for knowledge and his respect for learning across cultural boundaries.

Conclusion

Far from being mechanical, fine art printmaking is a highly creative graphic, sculptural, and phenomenological activity. It is undertaken not to reproduce an image but to create one, and this explains why the final print is ‘original’ while also being ‘multiple’, possessing evidence of the artist’s sensibility transmitted by hand. William Kentridge, always articulate and insightful when discussing drawing and printmaking, comments on ‘the way in which an idea gets tested’ and observes:

There’s a difference between simply making a drawing and having to put it through another process; having to ink it up, send it through a press, and at the other side find a version that’s very different – it’s as if done by another hand. There’s a separation from the gestural mark of your hand and what you get on the sheet of paper. It’s more or less a logical syllogism. You’ve got a proposition, which is your inked plate. And then it goes through the pressure of the press, and you get out at the end what you call a proof. And the hope is that you are convinced by the proof of the rightness of the first proposition (Kentridge in Hecker 2010:66).

The subtle differences discernible in a limited edition of printed drawing are attributable to the hand of the artist working on a drawing and the hand of the printer inking a plate. Kentridge again offers some useful observations about master printers with whom he has worked, saying of Malcolm Christian, ‘He has a particular style of inking and wiping the plate which is quite clean’ (Kentridge in Hecker 2010:66).

He also observes, ‘The relation between the artist and the printer may be like a singer and the accompanist. ...it’s not simply a technical skill; it changes the nature of the print. Different studios make different things possible’ (Kentridge in Hecker 2010:67).

Printed drawings require the sensing, knowing hands of drawer and master printer. The latter, facilitating the translation of drawing into printed drawing, draws on a deep well of tacit knowledge to forge a productive collaboration with the drawer to deliver the artist’s intentions. Malcolm Christian, working with professional and informally trained artists understands the importance of drawing to the printing process and comments on drawing,

Well it’s the most direct expression of thought on paper without the intrusion of technical knowledge or expertise. It’s almost a form of thinking visually in a tactile sense ... everything we did was autographic – in other words was drawn, or mark-making was part of that process... I think that drawing at Caversham was a way of distilling and formulating the images that would finally find their life or existence in print form (Conversation Marion Arnold and Malcolm Christian 23 August 2016).

Printed drawings are drawings transformed and re-formed. They are rendered first by sensing, knowing hands engaging with tools that require knowledgeable handling, and by visualisation in both the mind’s eye and physical eye to take drawings to completion. The plate is then handed to a printer, who may be the drawer or a master printer, to translate lines on a metal plane into graphic lines and marks imprinted on paper by ink. The print studio is a generative space and the printing process is characterised by consciousness of multi-sensual experience, tacit knowledge and being-in-the-world. Malcolm Christian describes his consciousness and experience eloquently:
I think it is that wonderful thing ... going into that studio which is filled not only with memories and with things on the walls which remind you of past activities, but the smell – the linseed oil that is a component in the inks, the kind of ring of the press when it starts to be engaged it is almost like a bell and it reminds me very much of Tibetan meditation symbols – this wonderful kind of ring in the quietness. And then there is also just engaging with a plate in a creative dialogue that is based in activity where I found I would have to print a plate upward of five times before I actually understood not only where to start, how much ink to carry for the pressure of that on the soaked nature of the paper. One forgets about the conscious activity of your hand wiping and squeaking across that plate or the kind of roughness of the scrim removing the ink from that surface and leaving more in another area. And then there is the picking up of the paper and putting it onto a press and the laying down – it’s almost like making a bed with beautiful linen (Conversation Marion Arnold and Malcolm Christian 24 August 2016).

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References