Drawing and Visualisation Research

INVOLUNTARY PRESENCE: COPYING, PRINTING, AND MULTIPLYING LINE

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Drawing, in particular sparse freehand line drawing, is often revered for its 'immediacy and directness bordering on rawness' (Craig-Martin 1995: 10). Against such original drawings, prints come in second place, as reproductions, substitutes, mindless copies. In opposition to these ideas, this article will argue instead for the primacy of print as a drawing medium, with a focus on the self-realising activities of more anonymous practitioners. I examine the re-working and transmutation of mark making at work within drawing for print, the 'sympathetic magic' of mimesis and re-invention (Taussig 1993: xiii) through copying and appropriation. Moreover when I celebrate the presence conjured through drawing for print, I also urge the creative force of apparently thoughtless doodling generated by webs of repetitive lines across the page. I will argue that printed multiplying marks, with their flourishes of ornamental space covering repetitions, create presence despite the artist who is merely their attendant. With reference to the informal drawing education practices of all aspiring visual practitioners in Britain in the period of industrialisation, we find that drawing and printing mediums ceaselessly inflected one another. In this paper I will focus specifically on photomechanical line processes such as line blocks, offset litho or Xerox, relatively crude mediums with little of the apparent presence associated with either original drawings or with carefully editioned artist prints.

Drawing is often revered for its 'immediacy and directness bordering on rawness' (Craig-Martin 1995: 10). Craig-Martin's statement here was advocating a sparse, linear, and often gestural approach to mark making, where the most rapid action with the pen can leave behind a trace filled with significance. What is valued in this formulation, as we re-trace marks on the page as viewers, is the sense of stepping into the presence of the artist and re-creating his act of authentic singular expression. Many recent exhibitions and revivals of 'drawing as practice' reinforce this cult of the original and the 'primacy of drawing' (Petherbridge 2010). Against such original drawings, pregnant with intentionality, prints come in second place, as reproductions, substitutes, or mindless copies.

In opposition to these ideas, this article will argue instead for the primacy of print as a drawing medium, with a focus on the self-realising activities of more anonymous practitioners. Doodling and copying in and around printed images has been the everyday cultural territory of numerous and diverse bodies of citizens in industrial society for at least two hundred years. Although Clement Greenberg (in 'Avant-garde and kitsch') famously bundled all these groups together into 'new urban masses' hungry for the diversions of ersatz culture, his over-generalised views are misleading; especially so when he and other 'kitsch commentators' suggest that mass culture is merely a kind of pap sucked in by passive consumers. Instead, this article will examine the re-working and transmutation of mark making at work within drawing for print, the 'sympathetic magic' of mimesis and re-invention (Taussig 1993: xiii) through copying and appropriation.

Moreover in celebrating the presence conjured through drawing for print, this article will also urge the creative force of apparently thoughtless doodling generated by webs of repetitive lines across the page—the type of 'regressive' actions denigrated by Ernst Gombrich as a simple-minded 'discharge of motor impulses' no more profound than jumping up and down in fury (Gombrich 1979: 11-13). Such marginal drawing activities, such as scribbling or doodling, have of course been more favourably investigated by other art theorists and historians with an interest in outsider art, surrealism or abstract impressionism, most notably in David Maclagan's closely nuanced examination of the changing shades of meaning attributed to such drawing styles across the twentieth century (2014). As Maclagan argues, scribbling and other apparently automatic drawing styles have often been seen as deeply authentic, because they carried the promise of giving access to an unconscious source of spontaneous creativity (Maclagan 2014: 141) generated by a three-way feedback process between the artist, the mark making process and the developing image on the page. This article will move further, however, in making a case for the creative remediation, appropriation, and further metamorphoses of such drawings through print. Against the notion of the artist's presence in the original drawing, where we seek an echo of his contemplative, iterative, sustained attention left by the physical traces on the page, this article will argue that printed multiplying marks, with their flourishes of ornamental space covering repetitions, offer a common source of energy, they have a proliferating tendency, creating presence despite the artist who is merely their attendant.

The ideas informing this article were developed after a sustained period of academic research into the history of informal drawing education practices in Britain in the period of industrialisation. Although there were official channels of drawing education such as the Government Schools of Design, military academies and local or regional art academies (Robertson 2011; 2016), conflicts within the developing state-funded art education establishment, combined with a certain resistance to education outside work from employers, often resulted in uncertainty and contradiction about the aims of methods of drawing education through such official channels. My research aimed to discover additional sources on the actions and practices of all aspiring visual practitioners, whether they were artists, artisans, soldiers, surveyors, or engineers, as they taught themselves to draw within the factory, workshop, schoolroom, and occasional official art establishment. Surviving notebooks and memoirs from adolescence and early adulthood of individuals, and correspondence in publications such as self-help magazines, show that anyone who wanted seriously to learn to draw studied as widely and as eclectically as possible, as a skill of aspiration or emulation. Such alternative sources offered constant evidence that artistic and non-artistic drawing influences were constantly interleaved during such self-education, and most importantly, that drawing and printing mediums ceaselessly inflected one another. More fundamentally, these researches developed my allegiance to the notion that evolving drawing languages come out of a common fund of active draughtsmanship, or as Michael Baxandall has it: 'social facts… lead to the development of distinctive visual skills and habits' (Baxandall 1972: 4). While the overall aim of this article is to make a broad, somewhat polemical argument about the status of print in relation to the research theme of 'drawing as presence' the argument will touch on various specific historical circumstances, fairly well known, such as the disputes about drawing education in Britain after the foundation of the Schools of Design in the nineteenth century, disputes that helped to discredit vocational and worker drawing practices and established more fine art oriented notions of the importance and presence of direct expressive styles of drawing that are still current. The first section of this article will present historical contextual examples to support the notion of the primacy of print as a drawing medium, followed by an examination of the politics of ornament, design values, and worker agency during the second half of the nineteenth century, as conducted through the medium of drawing for design and industry. The article then considers the expanded visual culture in print at the close of the nineteenth century, at a time when new methods of photomechanical image capture and industrial print technologies created an opportunity for many people such as aspiring commercial artists and office workers to make forays into new modes of drawing. To close, and while recognising there are many different print forms that could be evaluated as drawing mediums, this paper will focus on photomechanical line processes such as line blocks, offset litho or Xerox; simple, relatively crude mediums with little of the apparent presence associated with either original drawings or with carefully editioned runs of artist prints.

PRINT AS DRAWING

Cheap mass printing is usually in monochrome; in relief and planographic mediums (such as lithography and screen printing) this often favours inherently dramatic treatment using strong contrast and dazzle. Printed images have shaped our common perceptions of what drawing for art and design should be since the Renaissance. Artists, draughtsmen and artisans have taught themselves what drawing is through immersing themselves in and copying the distinctive and varied markings associated with different print mediums such as woodblock, copper or steel engraving, lithographic stone, wood engraving, or photomechanical line process amongst many others. It is no coincidence that printing and the artworlds generated in secular humanist society have developed in tandem.

FIGURE 1: DETAIL OF ENGRAVING OF THE ANTIQUE STATUE OF LAOCÖON AND HIS SONS BEING DESTROYED BY SNAKES USED TO ILLUSTRATE ARTICLE 'DRAWING' *EDINBURGH ENCYCLOPAEDIA*, VOLUME 8 (1830) PLATE CCXXXIV.

Artworks circulated as prints; examples of art and design as various as buildings, candlesticks, classical statues and paintings moved around the educated world via the printed page. If everyone with any claim to artistic knowledge knew the Laocoön, or the Parthenon, it was through printed images, and in particular line images such as copper intaglio plates that imposed, in William Ivins's view, their notorious 'tyranny' of hard engraved line across visual communication (Ivins 1992: 49). Students learning to draw, and artists preparing an image for print, all used print-derived marking such as cross-

hatching and line shading (Figure 1). Thus for example we see in the seventeenth century that the young Duke of Burgundy was praised by his drawing master for his copy of a Callot etching that was so faithful 'you could almost mistake it for a print' (MacGregor 1999). At a much lower social rank, in the new consumer societies of eighteenth century Britain and France, artisans set out to 'master design at a pace… to cut as many corners as possible… to enter the world of designing' (Craske 1999: 192). To do this, they scrambled together fragments of existing motifs and images gleaned from pattern books of reproductive engravings (made by commercial draughtsmen and engravers), creating new designs. For example to design new printed textiles, where fashions thrived only in the short term, artisans would frequently copy and recombine fragments of such pre-existing elements (Puetz 1999: 221). In the everyday worlds of art and design, these techniques of copying and adapting continued well into the nineteenth century and beyond (Boime 1972; Robertson 2016); indeed printing, copying and recycling in visual culture developed an independent and uncanny energy in industrial society.

ART, AGENCY, AND INDUSTRIAL REPEATS IN THE NINETEENTH CENTURY

Printed materials such as encyclopaedias of design and trade catalogues were staple design resources in the nineteenth century, driving design production and innovation. Eclectic resources such as Owen Jones's *Grammar of Ornament* (1856) were double edged; undermining authentic style and demonstrating that, as Brett has it, 'the cultural continuity of Europe was unravelling' (Brett 1992: 22). Eclecticism was not just manifested in output, but reflected a ceaseless download of influences. Colonial Britain was expanding in space, geographically gobbling up many places, and also digging down in to time, creating the so-called 'exhibitionary complex'—the museums of imperial conquest (Bennett 1994), in which oriental influences were dominant. On the one hand these compendiums of style promoted a reassuring belief in a universal 'grammar' of form, while on the other they encouraged a ceaseless manipulation of symbolism in design, a process of appropriation and recycling where meaning started to drift. Some of the heated arguments about the role of drawing education for design were 'cultural', centring around symbolism, visual form, and references to tradition, while other arguments, more 'political', emphasised labour, class, and agency, that is, whether ornament should be devised by a centralising designer or by many individual artisan craftsmen. This political conflict fills the writings of Ruskin on the Gothic, and William Morris on the Arts & Crafts movement, with their concerns about a de-skilled workforce losing the means of individual expression and creativity. While some commentators have described the worker struggle as a failure that ended by around 1880 with 'social obedience' (Kriegel 2007: 12-13), I would argue instead, and in the arena of draughtsmanship, that the struggle continued after this date, but the terms of engagement changed, with an increase in the numbers of anonymous graphic practitioners and designers who produced commercial designs and illustrations for decorative industrial commodities. On paper, designers learnt to draw and copy examples

from printed resources and to synthesise many different styles and motifs, something that is easy on paper, especially when working with simple graphic elements such as line. In standard cheap newspaper formats with letterpress and woodblock images, line marking was dominant so that other visual and material attributes were obscured. To manufacturers, designers and to workers aspiring to enter this world of work, abstract and linear oriental styles offered a creative method of generating endless new decorative motifs, embraced simply as an effective method in which any original cultural significance of the motif was destroyed by remediation. What mattered was the ceaseless generation of new permutations of ornament.
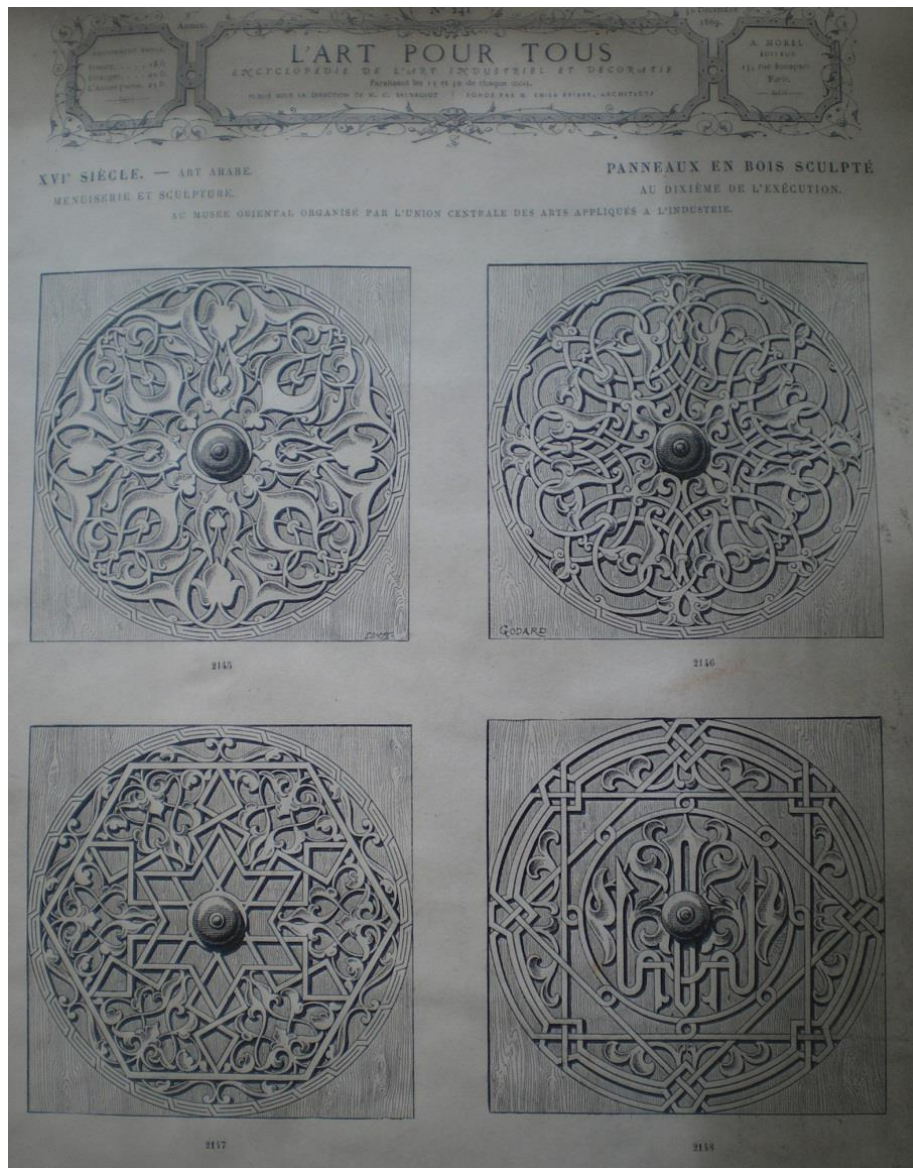

FIGURE 2: DETAILS OF MOSQUE DOOR DECORATIONS WOOD ENGRAVED LINE ILLUSTRATIONS FROM *L'ART POUR TOUS* AS PART OF 'ARABIC ART', A GLASGOW SCHOOL OF ART IN-HOUSE PORTFOLIO OF PAGES FROM THE JOURNAL FROM THE 1860S-1870S, DISASSEMBLED AND REBOUND INTO THEMED PORTFOLIOS BY THE LIBRARIANS AT GLASGOW SCHOOL OF ART, C.1913. THE DESIGN EXAMPLES IN THIS IMAGE OFFERED STUDENTS A POTENTIALLY ALL-PURPOSE SURFACE-FILLING METHOD OF DRAWING FOR DESIGN WITH MANY FINAL APPLICATIONS, UNCONNECTED WITH MOSQUES, OR DOORS, WITH ITS COMBINATION OF SIMPLE GEOMETRICAL CELLS HOLDING CURVILINEAR INTERLACED ARABESQUE.

From the 1880s onwards, ornament became more and more a function of lines on paper as the previously separate functions of shaping matter and drawing a line became synonymous actions. Thus we see Walter Crane, for example, describing 'design' as a 'linear pattern', a 'labyrinth' that evokes an 'enchanted and beautiful wood of human invention' (Crane 1897: 1). Although we are accustomed to think about a move toward modernism and an era of self-expressive ideals in art and drawing education in the final decades of the nineteenth century, we should recognise also the alternative, vocational, worker world of drawing practices; a two-dimensional universe of material invention on paper supporting manufacturing in non-standard 'transformed materials' (Edwards 1993: 9) such as gutta percha or papier mache that were used deliberately as an anonymous surface to take printed and stamped applied decoration. Busy, endlessly surging orientalist surface decoration would be worked and re-worked in this era of 'popular imperialist triumphalism' (Barringer 1998: 12). Part-time worker students at design schools such as Glasgow School of Art could consult references such as *The Portfolio of Saracenic Art* (1884), one of many 'style' portfolios produced by the Department of Science and Art for Schools of Design across the British Empire, or more commercially circulated publications. Library staff in Glasgow supported the hunt for appropriate ornamentation by compiling scrapbook source books—the in-house 'Arabic art' volume for example was a bound, custom-made compendium of articles culled from back numbers of the French design journal *L'art pour tous*, to be scanned by students for examples of all-purpose surface-filling methods of drawing for design (Figure 2). Such activities have either become invisible in histories of drawing practices, or have been dismissed (from a progress-driven art historical viewpoint) as derivative, mechanical, or essentially unsatisfying and mindless. But we should instead view such activities, and their visual residue, as the remnants of a hidden history of the 'social facts' that resulted in the 'distinctive visual skills and habits' (Baxandall 1972: 4) of an everyday drawing culture where drawing and printing mediums ceaselessly inflected one another. At the end of the nineteenth century, establishing working practices that continued on through the twentieth century, the numbers of people involved in drawing and executing surface design was enormous, and the work passed though many hands in many industries; for example designers on paper, engravers, illustrators and pattern tracers multiplied through all decorative industries such as textiles, ceramics, furniture production, composite floor coverings, or cast iron. All these sites of drawing production were organised hierarchically, with copiers, tracers, apprentices all teaching themselves how to compose new visual configurations on their way (as they hoped) to being designers or artists. The distinctive visual skills, habits and styles of this drawing world included: linearity, ornamental space filling iteration, pattern generation, and opportunistic combinations of existing motifs, in which drawings were taken from and returned to their print sources. When we consider the industrial scale of drawing and mark making within these artworlds at the threshold of the twentieth century, it is possible to posit an active, creative dimension to the prospect of Greenberg's 'new urban masses' assimilating many tasks of drawing and design in their working lives, albeit in a collective,

anonymous fashion. This visual labour was not just concentrated in mainstream printing and copying either, for outside the established printing and publishing industries, it is vital to remember the development of an almost equally extensive but hidden 'print culture' in the offices and workshops of the vast industrial-imperial enterprises in the late nineteenth century, using such arcane paraphernalia as Watt's copy press, the office lithographic plant, blueprints, dyeline, or hectographs to produce small-scale unconventional books or pamphlets for specialist and 'in-house' types of publication. Such informal methods were ideal for rapidly produced, short-run materials of low cultural status such as forms and standard letters, publicity shots or brochures for commercial ventures and industrial enterprises (Twyman 1976; Robertson 2013a and b).

Before the era of photomechanical image capture and the rapid expansion of illustrated publications after 1890, line drawing and printing had thus already functioned as a central exchange mechanism of invention for several centuries, leading out to separate trades and material productions, and churning back in to the printed page through commercial reproductive engraving of works of art and design. William Ivins, from his stance of viewing prints as visual communication, had famously loathed the proliferation of drawn linear networks spreading over visual culture before photography, he resented the intermediary role of the engraver and the 'noise' of an extra layer of decision-making usurping the artist (Ivins 1992). In effect, Ivins's position cast 'reproductive' modes of print into a secondary role, where remediation is distrusted as a veil between the presence of the original and the viewer. His attack on linear styles also implies that after the invention of photomechanical printing, photographic half-tone images made line styles obsolete. But even after the advent of half-tone photographic printing, line continued and indeed expanded in print, through line process image capture. In the final part of this article, we turn to the era of photomechanical printing, often taken as the enemy of presence, in order to consider the specific nature of photomechanical line processes as a drawing medium.
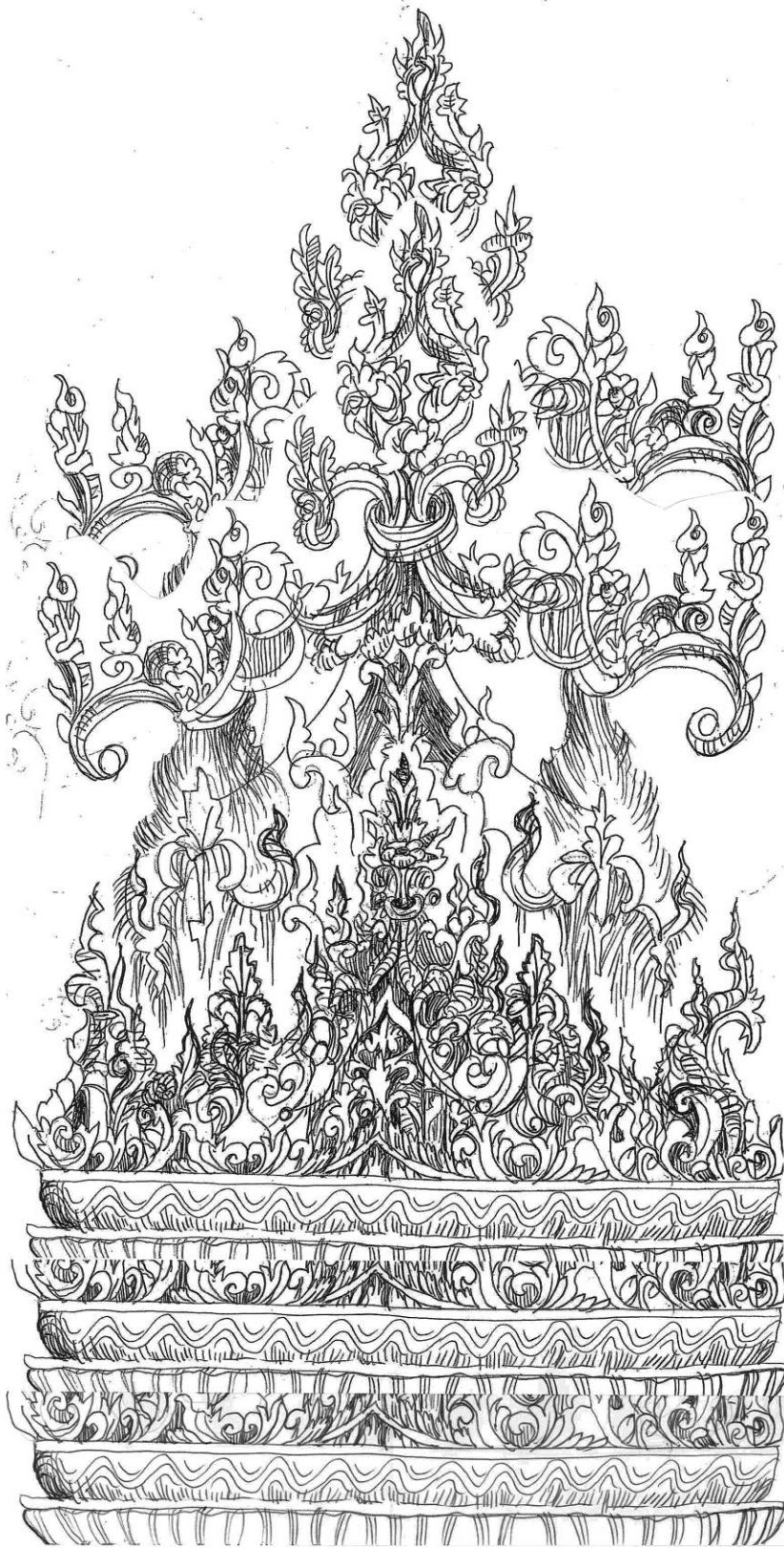
FIGURE 3: *INDIAN WHATNOT*: SCANNED IMAGE MADE FROM ASSEMBLED PHOTOCOPIED MULTIPLES OF BIRO FREEHAND COPY COMBINING VARIOUS MOTIFS USED AS CHAPTER HEADINGS IN *INDIAN ART AT DELHI 1903, BEING THE OFFICIAL CATALOGUE OF THE DELHI EXHIBITION 1902-1903* (WATT 1904), ROBERTSON 2015.

DRAWING BY OTHER MEANS: PHOTOMECHANICAL REPRODUCTION IN THE TWENTIETH CENTURY

In his examination of the artistic appeal of book illustration in the nineteenth century Gerard Curtis has written eloquently of the solidly based social and bodily practices underpinning the pleasures of viewing illustrated text. Curtis establishes the seamless continuum of hand marking, from drawing to writing, amongst the pen-wielding Victorians; when learning to write and to draw meant to master a common repertoire of conventional marks such as short vertical lines, serpentine curves, zig-zags, dots or dashes, with line acting as a 'point of meeting for visual and textual systems' (Curtis 2002: 9), in a 'hieroglyphic' unity of meaning-making that was abruptly terminated at the end of the nineteenth century by inventions for mechanical registration—of photographic vision and typewriter text (Curtis 2002: 35-40). In Curtis's view, this was a moment of complete disruption, and any later experimental attempts to re-unify drawn and written lines (for example in Dada or Surrealism) were simply nostalgic failures, harking back to an era of 'wholeness' that only made the new alienation from human-drawn lines more painful (Curtis 2002: 47).

But although Curtis presents a masterful analysis (and a good warning against the nostalgic tang of avant-garde typographic outrages), we can question his notion of alienation and disruption putting an end to shared visual activities due to the advent of the camera and the typewriter. First, I argue that Curtis, like many others, misunderstands or downplays the technical nature of 'traditional' tools like nib pens or pencils—these are also machines of representation, with images as a collaboration of person and pencil. Second, handwriting and drawing did not halt abruptly at the end of the nineteenth century. Many hybrid practices of writing, inscribing, drawing and printing continued in offices, workshops, schools and indeed in the productions of everyday life well into the twentieth century. In actuality, the photomechanical era offered new opportunities to assert the primacy of print and its presence as a drawing medium. In the 1890s, we see famously the graphic excitement generated by high contrast art nouveau imagery carried by new line photoprinting processes in the hands of John Lane's Bodley Head press or in the launch of *The Studio* magazine. Such publications employed striving lower middle class commercial designers such as Aubrey Beardsley who could dish up a deliberately scandalous 'anti-bourgeois' style. Bodley Head was effectively a low-budget mass market publisher with an aspirational lower middle class and provincial readership that projected a very successful mystique as if it were an avant-garde private press (Stetz 1991: 74-5). Meanwhile, the art journal *The Studio* actively encouraged the self-education and commercial practices of artists and art students in several ways; the publication was aimed at hopeful illustrators and designers whose work was also featured in every issue as the outcome of prize competitions whose briefs were set clearly within the constraints of new line process printing.

The publishers of *The Studio* deliberately chose to use new print technology to complement its aim of showing the most advanced examples of artistic practice, deliberately seeking out the work of younger artists as well as established practitioners (Beegan 2007; Ashwin 1978). We know that artists such as Beardsley worked towards his medium of photomechanical line block process, and that once the print was made had no interest in preserving his working drawing. Beardsley worked differently from most trained artists who at this time aimed for intuitive and spontaneous movements. Beardsley by contrast gripped his steel pen low down near the point, with a closed hand more akin to a draughtsman or calligrapher (Langenfeld 1989). And like his fans, Beardsley was largely self-taught. Fame through the medium of *The Studio* was appropriate, for the magazine addressed many readers like himself, young aspiring artists and designers who were aiming to work in the expanding business of commercial illustration or decorative design in the service of industrial manufacturing.

The graphic exuberance of this era of surface decoration in the 1890s can be seen again in the print explosion of the 1960s and 1970s, with further layers of self-reflexivity, appropriation and parody. In relation to the notion of print as an expressive line drawing medium one could argue there are many parallels between these two periods, for example in the exploitation of a strongly contrasting, aggressive linear technique, that emphasised iterative surface pattern and exaggerated ambiguities of figure and ground. And in tandem with various formal similarities (deliberately underscored by the retro sensibilities of the 1960s), there were many similar changes in print technologies affecting printing, publishing and media power relations, mostly generated by the move from traditional printing trades' control of letterpress and other relief mediums to photosetting and photocapture of images. The photo-print techniques of Pop, neo-art-nouveau and psychedelia that came to the fore in this period celebrated remediation, transfer of imagery from one surface to another. With the development of 'retro' sensibilities (marked for example by the Beardsley exhibition at the V&A in 1966) remediation became deliberately anachronistic, jarring in style and ambiguous in value (Guffey 2006; Robertson 2013: 98-99; Marshall 1983; Fountain 1988), a means of circulating cultural references to previous art worlds and their social distinction, but equally as a vehicle for its counterfeit. The move to photo-setting and photocapture of images offered the chance for small scale or alternative print activities that side stepped the control of traditional printing trades. Print was energised, both because it was alarming (disrupting established social relations) and also because artists and other designers associated with Pop were exploring the possibilities of print, it was used as a medium of cross-disciplinary transfer and experiment, in art, design and in popular media.

Offset litho in its cheapest form uses line process technology for simultaneous image/text capture. It is an on/off method favouring colour massing and strongly contrasting areas, either of black and white, or of complementary hot deep colours, the essence of psychedelic imagery. In addition, photo capture methods of screen preparation allowed an

assemblage of disparate visual scraps. Alternative print productions could be pasted up and assembled on the kitchen table. With this mindset, psychedelia appears as a self-reflexive print medium *par excellence*, where excess, overload, and anachronism are all captured and enclosed in a web of simple colour changes. The style delivered a sensory derangement generated by perceptual overload akin to the dazzle of op art, and it was loaded with moral or rather deliberately amoral utopian overtones, it was intended to overturn rationality and the clean universalism of modernist design, pushing instead a precognitive embodied experience of the world (Rycroft 2005; Grunenberg 2005). Pop, psychedelia and retro strategies of art and design were associated with low culture, the possible overturning of social hierarchies, and with the entry of mass media and advertising tropes into art (Whiteley 1985). This confluence of easy access to print and an obsessive preoccupation with decorative surface design is already a familiar element in narratives of counterculture, manifested in boutique storefronts or alternative publishing ventures such as *Time Out* (Grunenberg 2005; Nadel and Hathaway 2011). But against the now famous canonical named designers of the era, there are a myriad other unknown self-publishers and collaborations, as the high-contrast graphic linear styles of cheap photoprinting mediums allowed the emergence of grassroots publishing, fanzines and

FIGURE 4: COVER IMAGE ANGELA BARRETT, *BIG EARS* ISSUE NO. 1, 1972 ALTERNATIVE SELF-PUBLISHED MAGAZINE, LOCALLY ORGANISED, IN THE PUBLISHER'S OWN RECOLLECTION, BY HIMSELF AND A GROUP OF TEENAGE FRIENDS OFFSET LITHO PRINTED, STAPLED EDGE, HORNCHURCH, ESSEX, (COURTESY OF THE ORIGINAL PUBLISHER AND ANGELA BARRETT).

As noted, it is possible to recognise some visual analogies between this era and its decadent/aesthetic inspiration—the decadent presses of the 1890s—and it could be argued that it is not merely coincidence that these intensely captivating linear styles in both periods, easy to make with simple methods, are linked to the aspirational attack by new, often unconventional provincial or excluded graphic artists and designers entering a more privileged cultural milieu. The intensely activated graphic surfaces, the dazzle of lines do indeed work to open the 'doors of perception' in viewers, they offer a cheap and efficient frottage of the senses. The element of visual overload, of repetitive decorative flourishes can perhaps be seen as a form of displacement activity, but also as a statement of presence. If attention-grabbing, derivative and repetitive visual improvisation, mired in the second-hand of print, might be denigrated by powerful taste-setters, the 'intermediary demon' of ornament has equally always been the solace of people with little chance to raise their voice (Grabar 1992). In appropriating and repurposing printed images, the users I have described created new fictional forms in the two dimensional world of the page, often to mesmerising or unexpected effect. While preparing this article, I re-enacted some of the processes I have described by assembling the image at Figure 3, using as initial sources two decorative chapter headings from the official imperial British catalogue of the Delhi 1902-1903 exhibition of Indian Art (Watt 1904) captured in slightly distorted manner through freehand copying and then subjected to further photocopying and duplicating actions to create a motif with some of the fixating visual proliferations of orientalist or psychedelic designs. The aim was to re-enact some of the processes of pattern generation and invention, that as noted earlier in this article, were already in use by Rococo artisans at the end of the eighteenth century, or the industrial students of design serving local industries a century later, gleaning and assembling new visual languages from a variety of printed sources; methods that are still resorted to today by designers working in printed surface design, for wallpaper or textiles, calling on photocopied sheets or computer programmes to multiply motifs and recombine them, attempting to coax new hybrids from the flux of the visual. It was also an attempt to delegate some drawing processes to the machine, and to test out the effects of iterated lines and motifs arrived at in that manner. In his analysis of automatic drawing, David Maclagan describes a peculiar kind of 'dislocated intention: a deliberate invitation to something beyond the drawer's normal consciousness' (Maclagan 2014: 19). The use of combined and multiplied photocopied elements was a low-tech experiment in applying the 'print' aspect of line drawing in a circular manner to the task of developing an engaging and compelling complex visual field, and to consider whether presence comes from the decisions of the hand and the impulses of the body, and how small deviations within repetition can either heighten or deaden the sensations of the viewer.

In the examples I have invoked of photomechanical drawing, print has been the primary drawing medium, and the strong presence of such simple linear images was in part generated by involuntary visual perceptual effects that are held in common by all viewers

(and especially those viewers accustomed to consuming art and design mediated through printed black and white linear formats). For this discussion I have celebrated techniques of doodling and copying in and around printed images that formed the common everyday visual practices of their readers, invoking the bodily knowledges of viewers as part of their reading. To understand the presence of these printed drawing exchanges my thinking has been informed in part by J. Hillis Miller's notion of inaugural performatives: 'all performatives are to some degree out of the control of the person who speaks them. The nature and effects of the performative dimension cannot be predicted, analysed, understood or determined by the pre-existing race, gender or class position of the one who speaks it' (Miller 1992: 55). In the action of reappropriating and sending out again through print, images and actions change and gain new meanings and significance, mainly due to the processes of remediation rather than from any artistic decision. The mediums used came to hand pragmatically as a means of making cheap, accessible, and visually effective statements. The particular explorations of intense surface decoration were approved and sustained at the time of making by doctrines first in the late nineteenth century of the desirability of intense, often orientalist, webs of ornamentation, second in the 1960s by a preoccupation with the psychology of perception and involuntary responses to visual stimuli. Op art and Pop became famously entangled with commercial printed pirated versions of fine art originals in a two-way manner, for example in Bridget Riley's very unhappy brush with the commercial appropriation of her work (Rycroft 2005: 359), but behind the famous names was a much more generalised interest in the effects of dazzle and involuntary responses to optical illusions explored, as in McKay's seething moiré effects, through black and white printed images (for D.M. McKay's flickering rayed figure see Gregory's staple student reading, *Eye and brain* 1972: 133-4). So with cheap access to print by photomechanical means we see the coincidence of opportunity and motive to develop a form of presence in drawing that is collective, fragmentary and sociable. In the activities of artisans or designers I have described we see something akin to the actions of fans, taking prized or valuable fragments of visual culture that are then recombined into new images with new fictional life. Instead of separating art and its making into artists and viewers, where original drawings seem to promise the chance of stepping into the presence of the artist and re-creating his act of authentic singular expression, we gain the hope of collective creation. Because printing appears to be mechanical and removed in a way that the pencil is not, we can observe the informal recycling of a shared and developing image base in productions such as fanzines or in commercial art, understand also that drawing is a collaboration with that machinery of production, and start to read the presence not of the artist but of the materials.

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