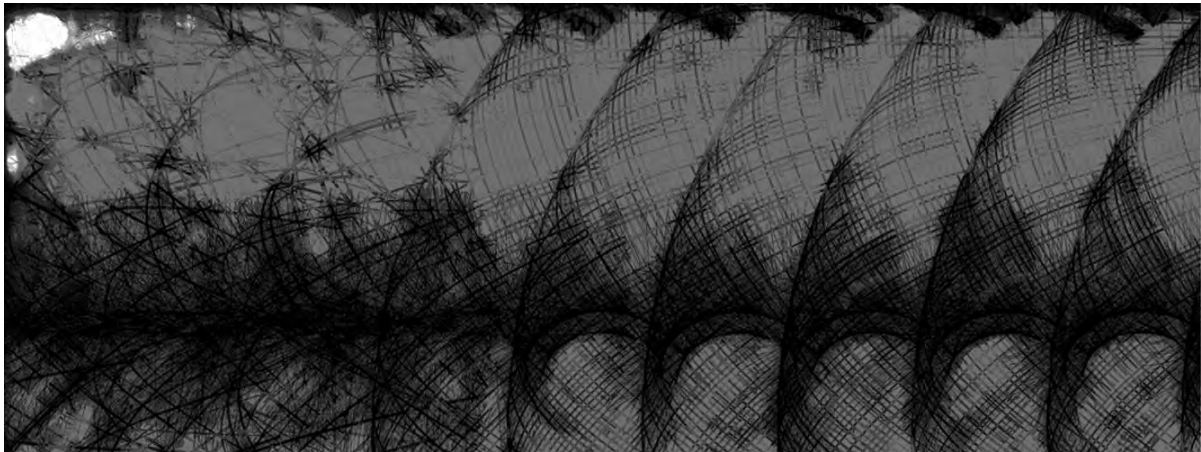


Same Difference: A Note on the Interplay of the Physical and the Virtual in the Creation of a Digital Image Series

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if-then-else. 2007/2008. Nigel Power

Overview

On one level, Same Difference is simply an exploration of algorithmic imaging. The project takes as its starting point a single simple graphic routine. This 'drawing engine' takes geometric picture primitives and transforms these repeatedly using a combination of regular and random variables, 'stamping' the resulting forms iteratively on screen to create more or less complex linear forms. The many hundreds of images that are quickly generated in this way are mined for thematic potential, and candidate 'drawings' then explored using a small set of simple image processing algorithms, or 'painting engines'.

On another level, however, the project asks questions about what it means to create images computationally in the first place. In practice the neat method described above is messy and ambivalent, the division of labour harder to fathom. The process moves unpredictably back and forth between the physical and the virtual, the desk and the screen, between sketch, program, run-time animation, annotated print and writing. In doing so, the work explores the complex, ambiguous and reflexive relationships between these spheres of activity and embodies the central aesthetic concern of the work; liminality.

The thematic potential alluded to above is more difficult to verbalise than either the idealised or actual creative processes. This is because, on the one hand, it is impossible to extract formal concerns from technological or processual ones without loosening the intellectual coherence of the work overall. Suffice to say that a process that lives in liminal regions results in outcomes that themselves are explorations of the liminal; the contested territories of figure and ground, presence and absence, persistence and change, abstraction and figuration, the virtual and the physical.

Discussion one: writing the picture

"When we successfully produce an intricate effect with simple program means, this creates in the observer — who of course is in the final analysis identical to the user himself — the impression that the achieved effect is out of proportion to the modest means, the impression of a hiatus between means and effect." Slavoj Žižek¹

Žižek's description of the ambivalent and seductive nature of the computer-generated image chimes strongly with my experience of producing imagery

algorithmically. Indeed, to a large extent, the series of images that are the subject of this paper are ways of confronting, exploring, questioning — bridging even — the lacuna between means and effect that Žižek brings to light.

In analogue image making — drawing, for example — the relationship between gesture, mark and meaning is immediate, unfolding over time through a series of what we might call — following Merleau-Ponty's characterization of our most fundamental ways of interacting with the world — perception-action cycles.² Whilst intentions frame and direct action, these themselves take the form of intricate feedback loops, modified reciprocally as marks are made and the image reveals itself. Scrivener has usefully described sketching as a form of conversation with oneself and this seems persuasive.³ Artists and designers engage in a dialogue with their medium, or perhaps better still, think through the medium, and it is this direct and dynamic interplay of thought, gesture, material and representation that appears fatally wounded in the algorithmic imaging process.

The act of drawing forth a picture by visceral, uncertain and immediate mark making is displaced by the premonition of an image, the pre-packaging of an image in the most 'abstract' of representations (code), and even the ceding of control of image making from artist to machine. To this extent, algorithmic imaging as it is usually understood involves '*writing the picture*' and for this reason more than any other perhaps, it is dismissed — outside the electronic arts community at least — as somehow lacking the authenticity and aesthetic credibility of that which is 'embodied' in or essential to the analogue picture. The hiatus between mean and effect identified by Žižek then, repeats itself in other equally troubled oppositions; lacunae between subject and object, between the physical and virtual, and, importantly between the quintessentially human and the quintessentially technological.

Discussion two: 'hysterical programming'

"It is of particular interest how on the level of the program itself, this opposition repeats the male/female difference in the form of the difference between "hard" (obsessional) and "soft" (hysterical) programming — the first aims at complete control and mastery, transparency, analytical dismemberment of the whole into parts; the second proceeds intuitively: it improvises, it works by trail and thus uncovers the new, it leaves the result itself to "amaze", its relation to the object are those of a "dialog.""
Slavoj Žižek⁴

In this sense, my own work proceeds 'hysterically'. By so doing I attempt to make sense of the liminal territories that appear in the halo of the algorithmic image. In the early 1990's, an inability to grasp C++ — or at least to make it generate aesthetic objects quickly — led me to scripted languages and ultimately to the now almost obsolete yet incredibly messy and forgiving, quasi OOPs language — Lingo.

Nevertheless, platform and tools aside, all algorithmic imaging shares by definition a common core, the algorithm. It is the way that the algorithm is 'nurtured' that defines particular aesthetic approaches, values and meanings. In my own work, very simple algorithms — the drawing engines mentioned above — serve to stake out a design world. They define a set of formal possibilities, limiting and constraining what is possible. All of the print pieces in the Same Difference series (currently thirty one 'finished' pieces and many hundreds of partially worked 'candidates') grow out of the same algorithm; a banal set of instructions that draws, moves and transforms a graphic primitive (and, interestingly perhaps, was written in the early 1990's as a modular teaching tool for design students fearful of entering the mathematical aura of computer science).

The combination of predictable and aleatoric variables sets up a creative tension between the foreseen and unforeseen. The strict limits imposed by the algorithm are transcended and the “new” uncovered or at least suggested. Like the feedback loops that characterize analogue drawing, novelties draw attention to themselves as they unfold, appear pregnant with possibilities, urge further exploration. And here too the process transcends the self-imposed constraints of the algorithm and introduces dialectical possibilities into the work. The medium affords rapid image generation and an infinite series of different candidate images is possible. Yet to appreciate the differences and evaluate the possibilities for development within and between the series’ — requires bridging the all too often discrete worlds of the physical and the virtual. Images are printed, worked upon directly and suggestively with pencil and pen; they

become diagrams — physical instantiations — of their own future development.

More or less, this process lies at the heart of each of the images in this series. Of course, the approach as outlined only partially completes the image by generating what I, for want of better word, call ‘drawings’. The more complex — but no more important — algorithms that power the ‘painting engines’ then transform these wireframes. Here the relationship between image and code becomes loosened for artist and viewer alike. Because it is here that formal and aesthetic variety emerges and the qualities redolent of analogue mark-making techniques emerge. It is here that spirographic patterns and structures seem to dissolve and become *picture-like* in the everyday meaning of the term. But that is another story for another day.

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