



*Deterministic Chaos Drawing*  
#036 (*Invisible Landscape*)  
2012 Ballpoint pen on paper  
710X500/500X710mm

Complexity by proxy. The unpredictable development of new creative insights into novel aesthetic configurations seems to be consistent with the immensely exciting self-organizing complexity of our co-existent reality. I generally situate my art practice within these ever increasing complex assemblages, networks and pathways that evolve and mutate over time. However, I have to take into account that our world, universe or reality is infinitely complex by proxy. Therefore attempts to work with complicated methods in order to introduce further complexity into an already complex world somehow seem redundant, especially in our visually oversaturated multimedia milieu. It is here that I would like to make the case for simplicity of action. It comes as no surprise to me that notions of ritual, repetition, practice, and pattern-making have proved to be very useful tools for cultural production over the ages. Furthermore, the contemporary practice of generative art-making strategies supplies me with a useful tool for aesthetic experimentation. In his paper, "What is Generative Art? Complexity Theory as a context for Art Theory", Philip Galanter suggests that "(g)enerative art refers to any art practice where the artist uses a system, such as a set of natural language rules, a computer program, a machine, or other procedural invention, which is set into motion with some degree of autonomy contributing to or resulting in a completed work of art" (2003:4). My aim is to conceptualise simple rule-based behaviours that, when acted out and maintained, produce emergent behaviour that is not always predictable. The broader patterns can sometimes be anticipated, but never the specific intricacies of details. There is subsequently a prominent aspect of relinquished control and thus minimal interference in how the artwork 'grows'. The accrual of this growth renders novel forms that are difficult for the maker to judge. I am not really interested in what these forms mean, or indeed in attributing any value judgement to them. Rather, to the contrary, I am interested in the process of practice. Sources: Galanter, P. 2003. "What is Generative Art? Complexity Theory as context for Art Theory", in International Conference on Generative Art. Milan: Generative Design Lab. Statement by Neil le Roux.



Eyemvelo kosbos,  
Google Earth image  
2011

## Neil le Roux Self-Organized Systems

### Introduction

A straight line can continue, theoretically, *ad infinitum*. Any interruption of a line constitutes a drawing that is contingent on time. Drawing is therefore, theoretically, always *non finito*. Line, as Alexander Rodchenko has it, is the carcass, the skeleton, the relationship between planes. Interruptions, on the other hand, constitute the kinetic movement of the line, curving, swerving, colliding, breaking, diverting, forking, repeating, telling us what has happened, 'writing time' through drawing. The moving lines of drawing contain the history of their own making as an internal structural narrative, which enable reconstructive readings by viewers, *drawing* them into a potential interrelationship with the affective process of making.

The process of drawing is cardinal in the work of Neil le Roux. The Google Earth photograph (opposite) of the plot in Jamestown, outside Stellenbosch, where he works, testifies to this notion. On a sliver of land, he interrupts the natural slope of the land by digging out earth dams, erecting hothouses and raising beds in curved contour-like lines for cultivation. The view from above shows up the difference between Le Roux's methods of working the land and those of his neighbours.

His drawings map land mass such as the contours and 'content' of South Africa, or Eurasia, and, recently, such diverse phenomena as the patterns of sunflower seeds. He calls these Deterministic Chaos Drawings. Any attempt to explain his drawings by ascribing oxymoronic features to it, is futile. Randomness is not a feature of his art. Rather, it can best be accounted for by invoking Chaos Theory. Small differences in initial conditions, the Chaos Theory holds, yield widely divergent outcomes for chaotic systems, rendering long-term predictions impossible in general. Drawing, in this regard, constitutes a chaotic system of lines, and interrupting these lines, a process of making art.

In common usage, 'chaos' means a state of disorder; but in Chaos Theory the term is defined in such a way as to eradicate any sense of randomness. As such, a chaotic system has three distinctive features: it is sensitive to initial conditions; it mixes topologically with other systems; and it has dense periodic orbits. Le Roux's drawings contain many such initial conditions, or 'interruptions' that determine the course of each line: it changes direction; it intersects with others; it repeats itself – or, as he has it – it is self-generative; and so on, the outcome of which is a seemingly random cartographic drawing. The topology, in turn, in Le Roux's art determines the eventual shape of the drawing. Topology in this regard can be likened to the ripple effect when a stone is thrown into water, and mixing topologies, to multiple stones thrown into water resulting in 'clashes' of numerous series of concentric circles. The clusters of repeated, curved lines – or chaotic iterations - that are the hallmark of Le Roux's drawings, provide ample evidence of the 'density of orbits', yet another characteristic of his system of drawing.

Drawing in Le Roux's case is a verb, an act, to use Richard Serra's maxim. It is a process, but it is as much an *artifact*, projective, not predictive, of its own aesthetic outcome, as it is of an act.

Wilhelm van Rensburg

## Slow circuits – Neil le Roux's self-organizing systems

Francis Burger, 2012

"I have had, you see, to resort more and more to the very small, almost invisible pleasures, little extras... You've no idea how great one becomes with these little details, it's incredible how one grows".<sup>1</sup>

Beginning sharply with a designated point, a line emerges from pen to paper as a moving image. Observed to scale, each line can be traced out as a sequence, its peaks and dips arriving and receding with each performance of the rule. As the line grows expansion softens singular cracks into oscillating curves, vibrations erode into creases, dongas, and folds.



Born of a patient submission to a process, the eventual drawings chart a short, speculative history of feedback, or at least the feeling of it.<sup>2</sup> Dedicated to the specific task as equipment, the eyes study and chart the results of the iterate rule while the hand enacts a response. This restrained procedure stimulates an indifferent concentration. Staged within the confines of a specific engagement, self-awareness channels a kind of myopic reflexivity.



Appearing rorschach-like as landscapes, tree trunks or seismographic plotting, the drawings themselves are settled within a larger practice of erosion and repair. Working from a small plot in Jamestown, just outside of Stellenbosch in the Western Cape, Le Roux's primary occupation for the last two years has been that of artist-farmer.<sup>3</sup>

"As vegetables and animals became differentiated, life split off into two kingdoms, thus separating from one another the two ... the one became more preoccupied with the fabrication of explosives, the other with their explosion".<sup>4</sup>

Subject to permaculture experiments, the plot appears as a scrubby patchwork of strategies.<sup>5</sup> A greenhouse and a low wall of glass bottles neighbour a mobile chicken hok that ploughs and

fertilizes a few square meters of soil with each move. Irrigation ditches encircle raised beds bordered with stumps, poles and logs. Fruit trees and vegetables are planted alongside one another in altruistically designed clusters, with each projected harvest staggered to fill an annual schedule.



Understood as an equivalent set of procedures to the drawing exercises, this repertoire of simulation intensifies from a further step back. Propelled by loops of performance, observation, reflection and adjustment, Le Roux's practice as a whole submits every day to the same 'rhythmanalysis' as each mark, outline, seedling or furrow.<sup>6</sup>



"Unemployed as a maker of weapons at the battle of Corinth the Cynic subjects his barrel to sixty-four 'torments': 'did he turn it, veer it, wheel it, whirl it, adorned it, trimmed it, garnished it, gaged it, furnished it, bored it, peered it, trapped it, rumbled it'. Diogenes, the vagrant architect, keeps busy!"<sup>7</sup> The perpetual promise of this overarching system is a sustained engagement – open, curious and critical. It is this same steady fixation that enables the occasional glimpse of complexity that exists, in Le Roux's own words, 'by proxy', and beyond that which is simply recognizable.<sup>8</sup> The lines and outlines are in a sense reproducing time and space, tracing a pedestrian path that delineates the proximity of the possible to the uncertain – while the eyes watch and the hand records, peaks and dips erupt on the page, energy emerges and dissipates, words are sounded out and banged around the brain, paths of thought are razed and replaced.

<sup>1</sup>Witold Gombrowicz in Michel de Certeau, 1984. *The Practice of Everyday Life*. Translated by Steven Rendall. California: University of California Press. p. 72

<sup>2</sup>In the context of emergence, feedback is well described by Sven Spieker, 2008. *The Big Archive: Art from Bureaucracy*. Massachusetts: MIT. p. xxi as "...a self-regulating system's ability to control its output through internal control mechanisms without interrupting its activity."

<sup>3</sup>Le Roux works on the project in collaboration with Neil Graham, biological farmer; Fanie Rossouw, ecologist and Cornel Cilliers, independent agent.

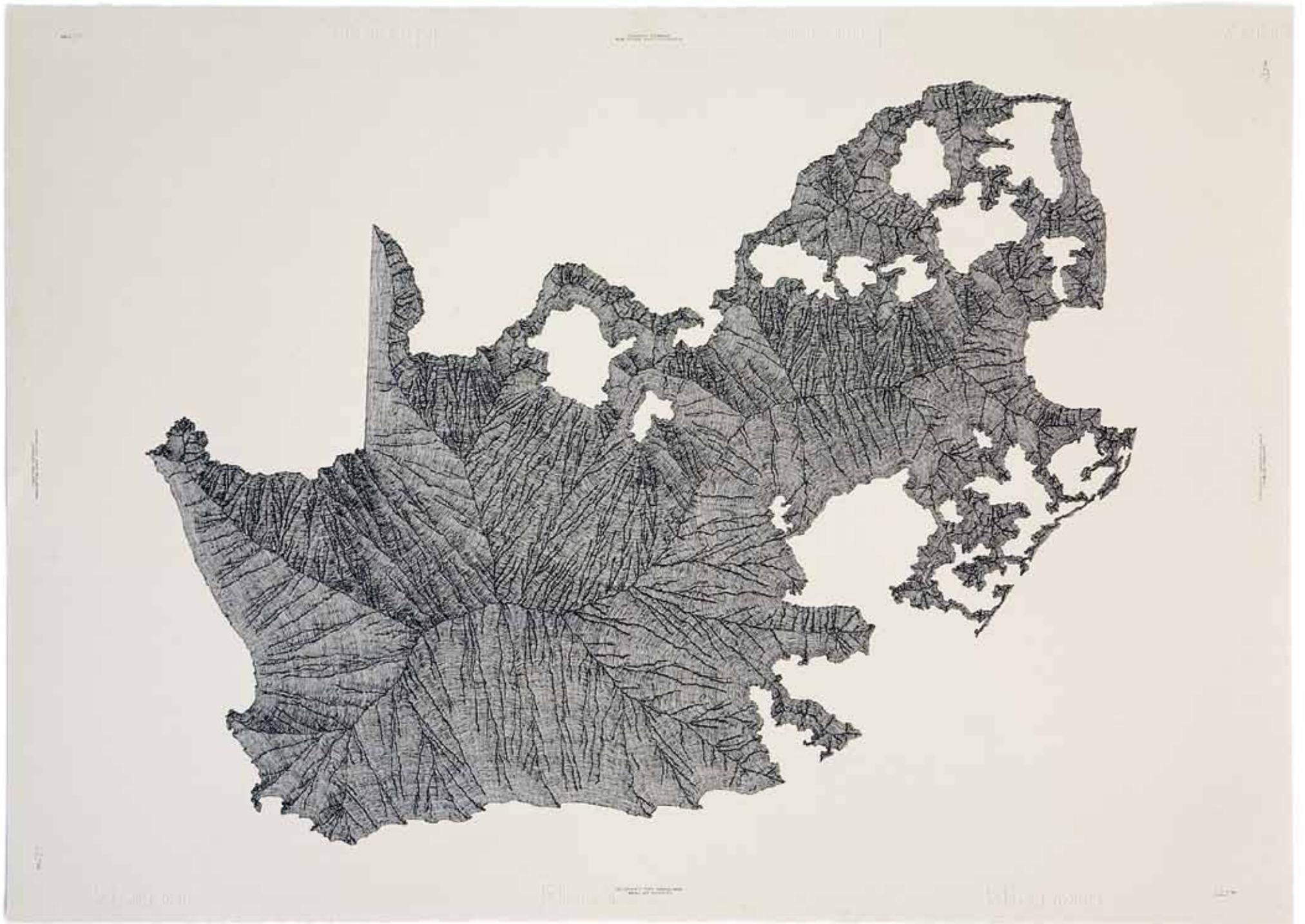
<sup>4</sup>Henri Bergson, 1975. *Mind-Energy*. Westport: Greenwood Press. p. 19

<sup>5</sup>Permaculture is a mode of agriculture or cultivation that aims at replicating traits of natural ecosystems and the integration of social practices to generate an indefinitely sustainable system.

<sup>6</sup>The term 'rhythmanalysis' is roughly appropriated from the more intricate theories of sociologist and philosopher Henri Lefebvre, 2004. *Rhythmanalysis: Space, Time and Everyday Life*. London: Continuum. It is used here as a tool to suggest the analysis of flows and circuits of thoughts, water, blood, movements, actions, nutrients etc.

<sup>7</sup>Rabelais in Robert Segrest, 1987. 'The Perimeter Projects: The Architecture of the Excluded Middle' in *Perspecta*, Vol. 23: pp. 54-65

<sup>8</sup>Artist's statement from 'Self-organising systems', 2012



Deterministic Chaos Drawing #034 (After RSA Homelands) 2012 Ballpoint pen on paper 710X1000mm

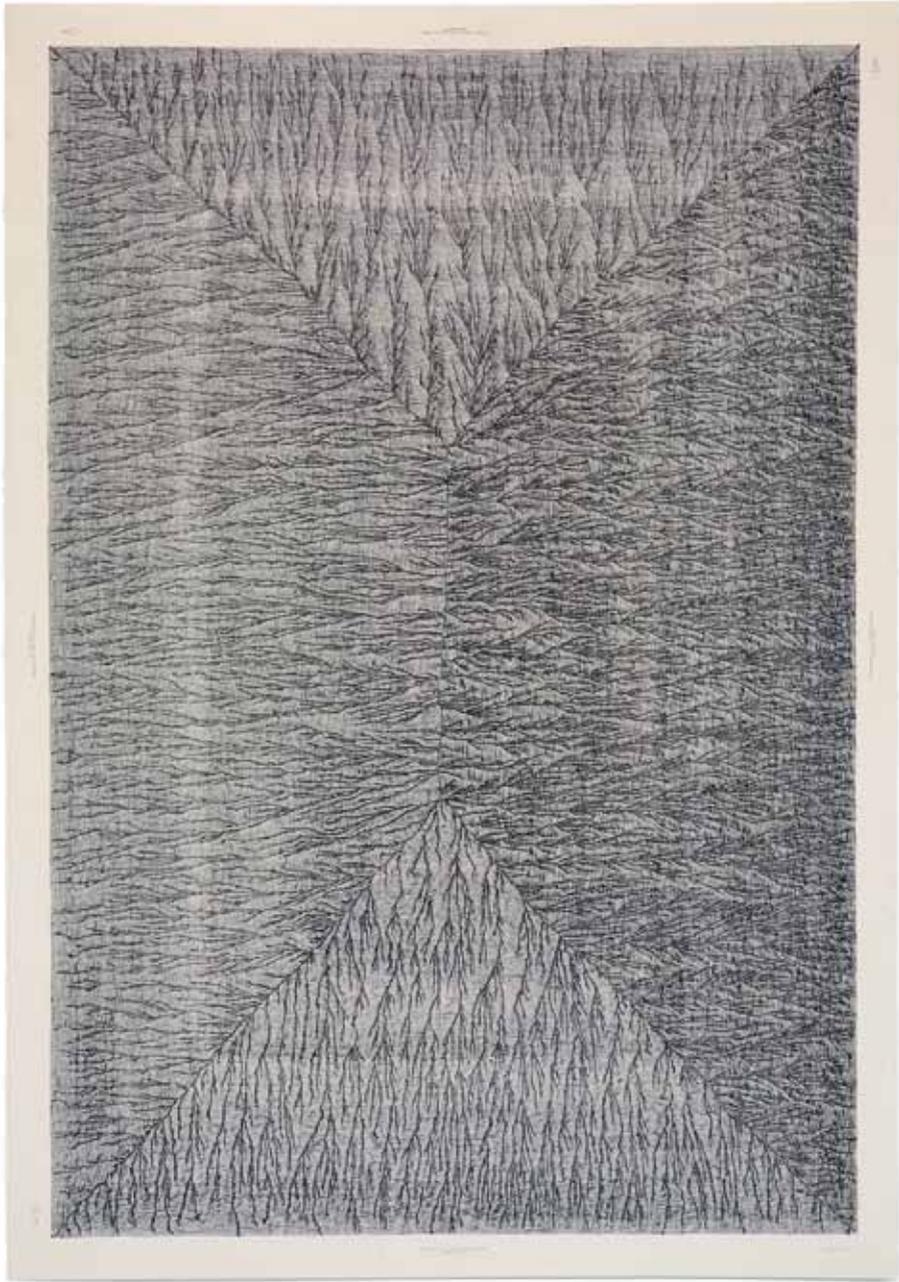


*Deterministic Chaos Drawing #031 (Eurasia)*  
2011 Ballpoint pen on paper 500X710mm  
*Deterministic Chaos Drawing #033*  
2012 Ballpoint pen on paper 500X710mm

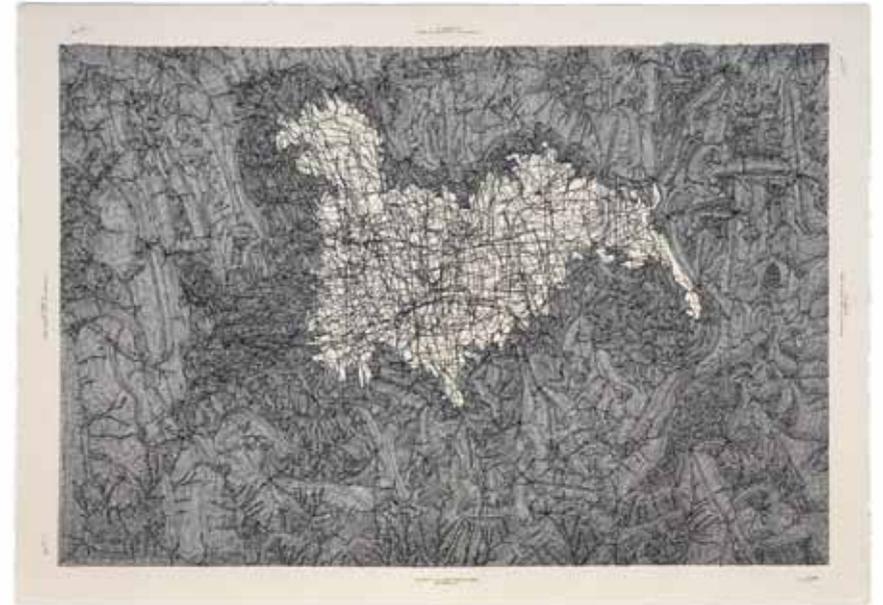


*Deterministic Chaos Drawing #035* 2012  
Ballpoint pen on paper 710X500mm



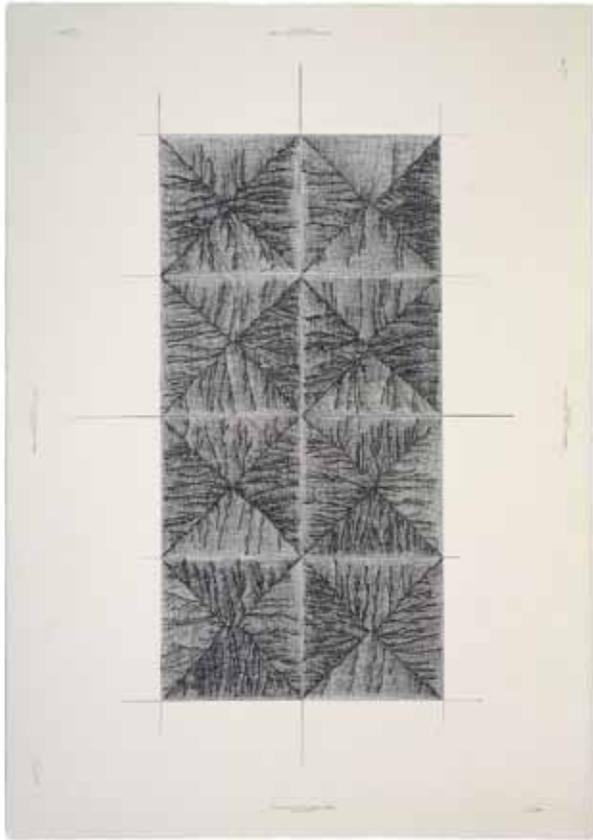


*Deterministic Chaos Drawing #044 (Amalachite)*  
2012 Ballpoint pen on paper 1000X710mm  
Previous page  
*Deterministic Chaos Drawing #032 (Aporue)*  
2012 Ballpoint pen on paper 705X1000mm



*Deterministic Chaos Drawing #030 (Di. Break-)*  
2011 Ballpoint pen on paper 500X710mm  
*Deterministic Chaos Drawing #029*  
2011 Ballpoint pen on paper 500X710mm





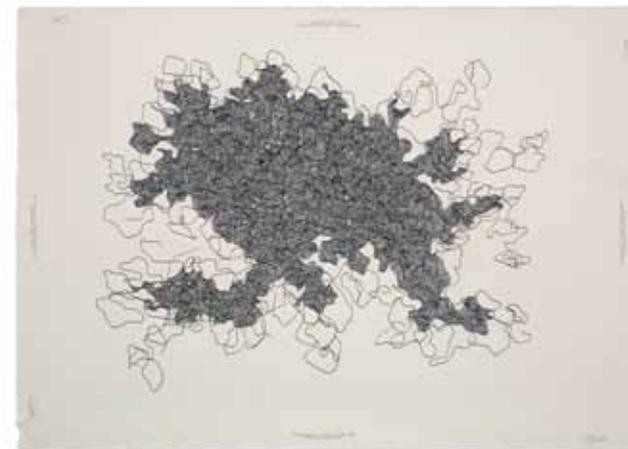
Deterministic Chaos Drawing #038 (*Hind's Sight*)  
2012 Ballpoint pen on paper 710X500mm



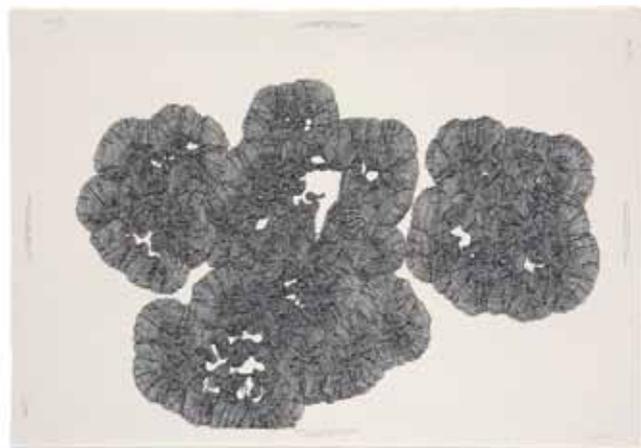
Deterministic Chaos Drawing #039 (*Recurring Ritual*)  
2012 Ballpoint pen on paper 710X500mm

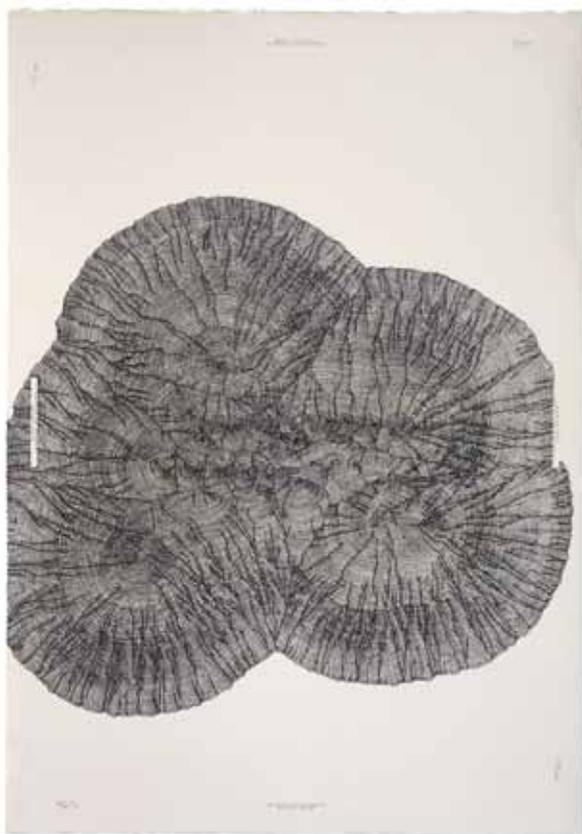


*Deterministic Chaos Drawing #042 (Sunflower Series 3/4)*  
2012 Ballpoint pen on paper 355X500mm  
*Deterministic Chaos Drawing #041 (Sunflower Series 2/4)*  
2012 Ballpoint pen on paper 355X500mm

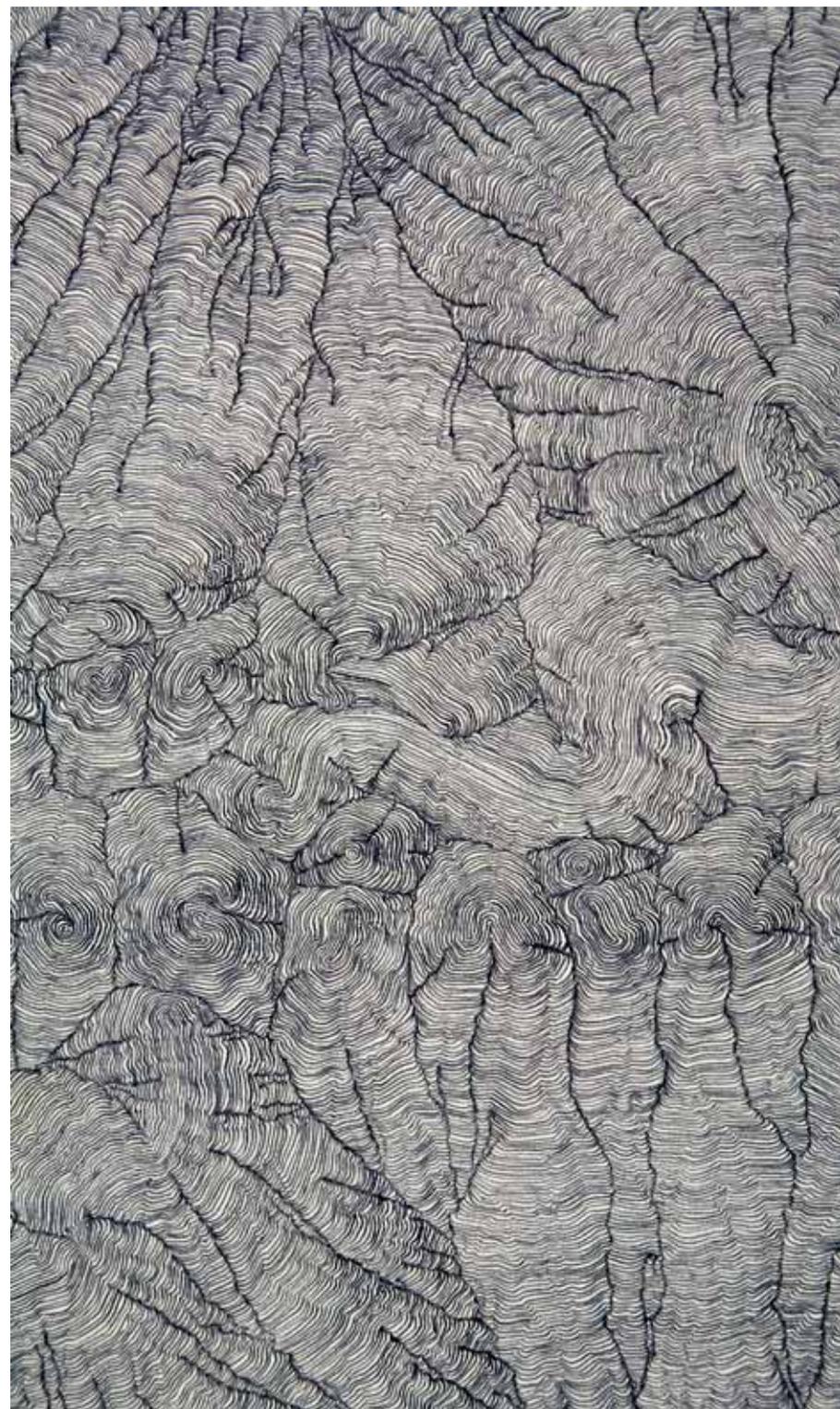


*Deterministic Chaos Drawing #043 (Sunflower Series 4/4)*  
2012 Ballpoint pen on paper 355X500mm  
*Deterministic Chaos Drawing #040 (Sunflower Series 1/4)*  
2012 Ballpoint pen on paper 355X500mm





*Deterministic Chaos Drawing #037 (Future Imagining)*  
2012 Ballpoint pen on paper 710X500mm  
Detail opposite



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