SIGNS

In a visual essay that combines text and drawings, Simone Ferracina interrogates liquidity as a technological and metaphorical paradigm for design and the choreography of space.
Liquid Notations:
A Common Language of Transitions

Parallel stories begin to unfold. In and between them, across notations and trajectories, our characters (the point, the droplet, the trace, weather, matter, spacetime, etc.) roam an ecology of differences, tensions, jumps, contradictions, experimentation, and hope. Arguments develop transversally, defying the fifth postulate.

*  

Our effluents are inextricably blended. We can no longer enclose a piece of land. This could be done only in the old space that was easily mapped. We no longer live there. We haunt a topological space without distances, rather than the old Euclidean or Cartesian expanse that could be located metrically by a network of coordinates. Our global techniques, world objects, and communications that reach even beyond the solar system have created a totally different space of proximities and continuities that is difficult to cut up. The Rousseauian plots of land disappear in this typology without distances and measures. (Serres 2010, 67)

Objects melt and disperse, yet they remain intact and interconnected. They are real yet paradoxical, structured yet ungraspable, immanent yet withdrawn. Their boundaries shift out of focus as soon as we attempt to control and define them. Signs no longer guide us towards increased semiotic resolution and transparency, but into dampness, uncertainty, and abjection. Signifiers float on the surface of oceans and pile up in malodorous heaps of garbage. Pollution translates an animal technology of appropriation (the marking of one’s territory) into a pervasive planetary language, a geological cry that is as insidious and destructive as it is slippery, muted, and patient. We re-
gress into analphabetic ignorance, and sink in the quicksand of our own footprints—in the toxic sludge that periodically resurfaces; oozing and bubbling across uncannily autonomous and hypercomplex bodies; between golden teeth, microplastics, and plutonium.

Drawing—a form of pollution—remains strangely unfazed by the emergent liquidity and unpredictability of the anthropogenic trace, clinging to mathematics and its presumed ability to order, cleanse, scale, measure, compute, and name. The modern illusion of a linear, unmodulated translation between intentions and outputs, strengthened by increasingly precise modes of digital and robotic manufacturing, dismisses (forgets) the hybrid ecologies and monstrous depths gurgling beneath and beyond.

* 

... Behold me—I am a Line. The longest in Lineland, over six inches of Space—’ ‘Of Length,’ I ventured to suggest. ‘Fool,’ said he, ‘Space is Length. Interrupt me again, and I have done.’ (Abbott 1992, 71)

Points and lines are linked and combined, overlapped, extended, plotted, interlaced, programmed, stretched, and interrupted. They generate all manner of paths and incisions: shapes, figures, fields, surfaces, maps, spot elevations, meshes, vertices, vectors, edges, and blobs. Whatever the output, the method, or the drawing apparatus, they assert and declare an identity, a distance, a set of coordinates; they identify beings and fix them into precise hierarchies and spatial relations; they articulate potentialities extruded through sets of localised desires, ambitions, and intentions.

* 

The point is motionless and inert. As soon as it appears, it sprouts invisible roots that anchor it to the sheet of paper, hindering movement. It is static, forbearing, and silent—like a seed sealed
in a moisture-proof container and stored in the cool darkness of a fridge. It ends sentences and inhibits further development. It stands still. No growth, no individuation, no becoming. The point simply exists. In a sense, it has always existed.

The line is, instead, animate and dynamic. It emerges progressively and develops alongside currents. It is vector and trail, arrow and gust of wind. It travels across durations and is woven within the material fabrics of the world, carried by the turbulent waters of life itself.

Or so we are told.

*  

Not all lines are generated dynamically. A line can be an ocular/pointillist affair: a sequence of points standing adjacent to one another, in orderly files. Connecting the dots—melting them into lines—is the human being, sole agency in a realm of fixed and pixelated geometries.

A line is also the representation of an extension in space, between A and B; a distance and measure; the edge of the table, the height of the Great Wall of China, the path between me and you. A descriptive mark, it tames environments through the simplifying violence of abstraction (from the Latin abstrahere, to drag away, to detach).

Out walk the mountain’s vibrations—its forests, geological tremors, flourishing soils, bacteria, foxes, and mycelial tapestries—replaced by contours and property lines, fences and walls, Euclid, Descartes, and Viollet-le-Duc.

*  

A line translates by subtraction and reduction, but also claims, captures, annexes. It operates through chains of exclusion and re-inclusion; embracing and rejecting, sampling, and archiving. A line is finite; it is a segment (from secare, to cut): a choice, a tear. It strips matter of contextual agency while culturalising it by transcription, rendering it into discrete graphic units to which straightforward meanings and associations of use can be
assigned. A line has a beginning and an end, a thickness, a colour, a length. It folds into perimeters and eats its own tail, like the *ouroboros* — not to symbolise introspection and circularity, but to enclose land. To draw a line is to invent a parallel world; but also to appropriate, to endow with purpose, to command.

God, when he gave the world in common to all mankind, commanded man also to labour, and the penury of his condition required it of him. God and his reason commanded him to subdue the Earth, i.e. improve it for the benefit of Life, and therein lay out something upon it that was his own, his labour. (Locke 1976, 14)

The benefit of Life (capitalised L). But whose life?

* 

Property is marked, just as the step leaves its imprint … In short, either proper means appropriated and consequently dirty or proper implies really neat and therefore without an owner. Come over here, to this clean spot; you may, because it obviously welcomes you. When you leave, it will be yours because you will have made it dirty. (Serres 2010, 3–4)

Drawing begins with a blank sheet of paper or wax tablet — with a *tabula rasa*. The first appropriation is not the intentional mark traced on the sand with a stick, but the invention of the beach-as-canvas; the reductive force that flattens a volumetric environment into mere writing surface, or plot. A *rasura* prepares (pre-processes) nature for human appropriation and intervention. It chews it into submission, grinding and blending it until difference gives way to an amorphous and obedient soup. Prehistoric eyes, noses, ears, and mouths fuse into a faceless, solid lump: a background; a white-walled room within which collections can be archived, stored, and exhibited. Words are scraped off so that other words may be written and read. But whose words?
Without a master, one cannot be cleaned. Purification, whether by fire or by the word, by baptism or by death, requires submission to the law. (Laporte 2002, 1)

Purity is coextensive with culture and cannot be naturalised. It is endowed, assigned, granted — never given, found, or discovered. (Scanlan 2005, 66) Appropriation (territorial, cultural) begins precisely with the ability to make identifiable, lasting marks; with a clearing in the forest; with the invention of purity; with blankness as a figure of potentiality. Yet the blank page does not channel the possibility to write without indexing, with at least equal intensity, a proclivity for clarity. A demand for legibility is built into the urge to write. Writing is, after all, a plea to be read; a social enterprise; a technology for making shareable traces (archives, discourses, laws, and so forth).

A drawing or text discloses reality in its essential forms and purest features — as it appears in the eyes of a god, or of a king. Not filthy vision (the forest and its competing sensual stimuli, or the animal Umwelt), but pure vision: seeing through the gaze of the social other.

Now, could liquidity help us decouple reading from writing, ma(r)king from the normative violence/glory it invokes and imposes? Could it confuse and dissolve the cosmetic make-up of our societies, precipitating fluid value systems and stranger (less stable) political and ecological assemblages?

As a metaphor and project, liquidity is on the move — plastic and protean, tentative and fearless. Liquid scores drift and drip across medium and message, actor and stage, pond and pebble. Their interpretation remains partial, negotiable, and contingent. Could the ‘principle of legibility’ (purification precedes history) be overturned? Could contrast and lucidity be surrendered in exchange for a common language of transitions?
The author, like Narcissus, admires his own reflection on the surface of the drawing. Yet, the pool resists legibility: a passing boat leaves no lasting ripples, and a fallen leaf will keep moving, cradled by the currents. To draw with liquids one has to forget the complicity of canvases and pencils, figure and ground; to forgo the control (and feedback) implicit in their dance. Agents and patients touch and embrace like oil and alkali in a liquid medium, giving rise to dynamic chemical behaviours, self-assembling agglomerations and co-evolutionary designs. The drawing becomes a vibrant and moving agency; an authorial force in its own right. Within it, there are no fixed recipes or standard scripts. Characters continually swap roles, blend, mix, and metamorphose.

*

If there is no background — no neutral, peripheral stage set of weather, but rather a very visible, highly monitored, publicly debated climate — then there is no foreground. Foregrounds need backgrounds to exist. So the strange effect of dragging weather phenomena into the foreground as part of our awareness of global warming has been the gradual realization that there is no foreground! (Morton 2013, 104)

The contrasting black and white figures fail to reproduce reliable semiotic conditions, eluding clear-cut distinctions between background and foreground, canvas and ink. Rather, these fluid masses undergo soft modifications and exchanges in three dimensions, propelling themselves chemically until nothing is left but inert glycerine formations. Protocells partake in elaborate autonomous behaviours and temporal notations, of which we understand very little. Wet traces replace signs with semi-living interfaces, concentrations, intensities, gradients, and depositions.

*
The body is like a windscreen for the mind against the infinite: whereas in every parcel of matter, however minute it might be, we can envisage an infinity of information, the body conquers finitude through the power of refusal. (Meillassoux 2007, 74)

The drawing body is a sifting body, one that most matter traverses untouched. The square does not represent (re-present) the window, but rather conceals it, suppressing (most of) its reality. A figure stands in for glass, wood, and silicone, transparency, and thermal bridges, views, solar irradiance, condensation, operable surfaces, heat, dripping rainwater, airflow, handles, bird song, spider webs, and voyeurism. Only its measurable symptoms persist; only the emoji; only that which is instrumental, resolved, legible, and universal. Yet, the positive strokes that describe it are inversely proportional to the negation of reality they subtend.

How could such a narrow/impoverished set of tools — the blanked surface; the drawing of lines, digital or analogue, flat or solid as it may be — ground the way in which space is conceptualised and choreographed?

* 

The symbol nullifies the thing. Signs express and suppress the world. (Serres 2010, 52)

Making proceeds by reduction — a technology of blind spots. Designs generate abstract forms that can be thought, counted, sized, drawn, fabricated, and reproduced, while all else conveniently (and temporarily) disappears. Yet intentionality can only temper or delay our encounter with the world.

*
Abstraction is the order of the formal cruelty of thought. In its most trivial and unsophisticated form it involves pure mutilation: amputating form from the sensible matter. In its most complex — that is, most veritable — instances, it is the concurrent organization of matter by the force of thought, and the reorientation of thought by material forces. It is the mutual penetration and destabilization of thought and matter according to their respective regulative and controlling mechanisms. (Negarestani 2014, 5)

As a technology of finitude, abstraction operates through dismemberment and substitution: what it conceals, detaches, and carefully clips off always gets replaced by something else — a placeholder, a signifier, a paraphrase — recoated, repackaged, and renamed. Yet substitutions require stable forms and reliable meanings, phantom limbs and full-colour posters. That which is fluid and mutable, complex, unpredictable, cloudy, and diffused is traded in for inertia, simplicity, sharp edges, definite boundaries, visibility, and compliance. Durability is valued over accuracy, generality over specificity, readability over resolution. Rifts between the culturalised experience of environment and its reality progressively widen.

Certainly, language claims a degree of objectivity precisely by negating the hybridity and vibrancy of the sensible in the name of shared symbols and systems of signification. Yet our signs are not neutral but selective; they prefigure and choose an audience; they declare membership to a community. The social contract is, in this sense, an agreement of reciprocal legibility and communicability; an assurance of authorial relevance.

A liquid technology — a language of situated/territorialised transformations and time-based notational systems that resist standard modes of conveyance and capture — does not only violate and contradict the principle of legibility and its decontextualising drive or frustrate its appetite for reductive substitutions. It points to the ecological expansion of community; to inclusivity and our willingness to partake in conversations we only tangentially curate, control, and understand; to a partial
yet voluntary relinquishing of intentionality. It prefigures a precariously and mutually destabilising (ethical) order, beyond delusions of submission and improvement.

*A*

A line can also stroll, animated by the gestures that produce it: no longer an inert parade of points but a single living dot meandering across a sheet of paper. Paul Klee invites us to think of lines as movement (walks). Yet is something actually moving or is it rather being dragged across the page — docile, demure, on a leash? How much of our love for the processual is animated by our ability to process? How much of our appreciation for movement is predicated on moving (versus being moved)?

*B*

The representation of movement often funnels abstraction through the logic of the machine. A moving outline turns into a series of topologically extruded points, of which few are selected and finally printed (those deemed representative of the object’s defining features, those that highlight specific patterns, etc.). Lines develop along the fluttering of wings and stretching of legs, revolving around shoulders, elbows, and knees.

Étienne-Jules Marey’s chronophotographs exemplify an understanding of movement as the temporal plotting of the machine’s operational range; a spectrum of bodily alterations constrained by clear part-to-whole relationships, functional hinges and bending limbs. Variations remain strictly mechanical and rely on stable forms, uses, and relations. Internal gradients, biochemical fluctuations, and autonomic processes never seem to pierce the surface of the skin, or to call into question either the identity of parts (e.g., leg, arm, head) or their role towards coordinated pursuits (e.g., walking, running, jumping).

Marey’s illustrations describe a deterministic world in which organic machines are pre-programmed for action, and map the
normal/algorithmic agency of bodies based on predefined kits of interconnected (working) cogs that rely on given syntaxes and transparent preconfigurations of use. Furthermore, if his overlays of sequential transformations (the running of a man as a linear temporal projection, from left to right) revolutionised the way we visualise temporality, their machinic constitution suggests a non-durational and reversible conception of time: time as a synchronic and spatialised instruction manual; a cartography of pivoting gears; a mere container for action. As the agential range of the machine does not change (each component part is assumed to be stable), time is excluded as a plastic ingredient and relegated to the mere space within which variations occur. Cogs always turn in identical fashion — today, tomorrow, or in a hundred years. And when they break, they stop turning.

While the drawings in these pages are chronophotographic compositions of sorts, they elude the logic of the \textit{bête machine}, evoking transitions and revolutions that are loose, unscripted, open-ended, durational (non-reversible) and active.

\*

The drawing reduces objects and their spatio-temporal interactions to Platonic representations, drowning out all manner of contextual and site-specific entanglements.

Yet it also rematerialises them by assigning a new indivisible, atomic unit: the point. Merging Democritus and Euclid, geometry can be read as a naive illustration of materialism: a distortion of reality based on the ontological bias towards a specific, albeit universally valid, constituent brand or principle.

Superficially, the behaviour of liquids would seem to support materialist reduction, or at least to neatly exemplify it: the more you cut up a solid — the smaller the units — the more fluid its behaviour. Yet, liquidity has less to do with fluidity (or with the ability to con-form, to \textit{form with}) than with environmental receptivity, reactivity, and responsiveness. It cannot be blindly assigned to hydrogen or oxygen atoms, or even to water molecules, which can also exist in solid or gaseous states.
Rather, liquidity depends on context, as an emergent property of the encounter of molecules with specific temperatures and atmospheric conditions, chemical solutions, and vessels, at different scales and levels of interaction.

* 

Now our atom is inserted: it is part of a structure, in an architectural sense; it has become related and tied to five companions so identical with it that only the fiction of the story permits me to distinguish them. It is a beautiful ring-shaped structure, an almost regular hexagon, which however is subjected to complicated exchanges and balances with the water in which it is dissolved; because by now it is dissolved in water, indeed in the sap of the vine, and this, to remain dissolved, is both the obligation and the privilege of all substances that are destined (I was about to say ‘wish’) to change. (Levi 2000, 229)

Instead of matter (an imaginary lack of actualised form), we embrace liquidity as a figure of potency, opportunity, resilience, and life; not an abstract lump of atoms, but a smooth, localised, and shape-shifting object/field.

* 

Flux is inseparable from the substances it stirs and participates in. The Heraclitean river does not illustrate the ontological priority of process over things (everything flows), or of matter-as-process, but the unity, co-existence and mutual dependence of space and time, matter, and form. Objects shiver, heat, fuse, and rust, guided, and extruded by events and alliances, adjacencies, and collisions, synergies, and sympathies, events, and intrinsic structures. If agency and meaning cannot be understood as imposable from the outside, or from the top down, neither can they be told to privilege the isolated adventures of atoms or the socialised lives of objects. Somewhere in-between, a time lapse
plays at accelerated speeds, and all things, alive and inert, large and small, are allowed to evolve—deformed and upcycled, worn out and grown, hacked and extended, recycled, decomposed and composted.


We draw droplets as pinched spheres, with a pointy head and rounded belly. They are always falling and never land. There is no wind, no branch, no temperature, no surface tension, no transition.

We also draw them as rainfall, in parallel vertical lines. We picture them dropping, screaming with distorted mouths, as kids on the descending bent of a rollercoaster. Yet, they are silent and unafraid, not droplets as much as drop-dots—comfortably sliding across the page to please their masters.

Lines are sometimes illustrations of how points can be moved in space and time. Rain—it gets you wet.


Anyone can draw a dot, anywhere. Or a square centimetre, or a three-foot-long line. I pick up the phone and ask a contractor in Rome to cast a concrete cube. Each side should measure thirty centimetres exactly. She knows what I mean. I don’t need to inquire about material properties or environmental conditions, or to receive a report on today’s local temperature or how the cube will be poured. I don’t need to be present. I don’t even have to ask for it to be grey; I know what the output will be. I know what the cube looks like: I have a drawing of it. My only question is whether the supplier will be as precise as I require; whether the manufactured cube will adhere to the abstract template floating mid-air above my head.

Materials don’t surprise me. They are non-local collections of specifications and parameters. I can list their properties by heart, reciting spreadsheets and engineering manuals. They are divorced from experience and site, and reliably negate both.
They are generic compounds that only come into focus to translate drawings and ideas into buildings, forks, armchairs, paintings, and lamp shades. They have no previous identity or specificity; and when they do, when their ‘raw’ status is not enough to conceal form or actuality, they apologise profusely.

Anyone can draw a dot, anywhere. But how does one begin to draw a droplet?

* 

A droplet is not a point, a number, or a grapheme. It isn’t a punctuation mark, a quantifiable lump or a readable character. It isn’t a sign, a pixel, a code, a chemical recipe, a fixed definition, volume, or extension. It defies straightforward translation and representation, and yet it has form, which it performs contextually and responsively, fleeing equilibrium and adapting to changing conditions; mixing and wetting, spouting and freezing, dissolving and irrigating, spilling and rippling, swirling and oozing, evaporating and dripping, filling and diluting, entering and exiting, transporting and hydrating, drying and boiling. The droplet is queer: its identity transitional and situational, fluid, and transformative. It resists fixed definitions and eludes symbolic clarity, sending trembling messages across lifeworlds.

Liquidity tempers the bias of abstraction, meeting reality halfway.

*
I was asked to draw a droplet, but wasn’t told where or how, which is a bit like scheduling a date without setting a time and place, or forgetting who you are going to meet.

What would the temperature in the room be? What kind of paper would I be drawing on — what thickness, grain, texture, type of fibres? Or, would I be drawing on a different material — on a towel, on leather, fur, plastic? And what liquid would I be using: ink, acrylic paint, coffee, hot wax, plaster, molten aluminium, egg yolks, oil? Would I drip the liquid with a pipette, apply it with a paintbrush, or pour it with a bucket? You don’t have to be Pollock to understand the effect these parameters would have on the final product; to know that the distance between surface and dripping implement, or the most minute arm oscillation, will greatly affect the outcome — a constellation of rotund stains and splashing patterns.

The droplet channels a material recalcitrance, a fundamentally un-abstractable, analogue, territorialised, and relational vibrancy.

Anyone can draw a dot, anywhere. But how does one begin to draw a droplet?

* 

Liquidity embodies a novel, non-hylomorphic poietic paradigm, one that is inherently contextual. Here, ‘context’ does not denote the site designers are tasked with fixing or improving — its cartographic reproduction or other distilled, programmatically relevant parameters — but a generative and creative materiality, one that isn’t resolved as much as stirred, steered, modulated, gardened, and post-tuned. The indistinction of context, material, and finished object — the blurring of relative roles — is the modus operandi and strategic protocol of liquids.

* 

A notational system is not merely a lucid set of graphic signs, codes, and symbols; but a key for reading and inhabiting the
world, a prompt, a translation software and, sometimes, a design tool. Notations extend beyond the mere representation of or negotiation with reality: they are immersed in it. Are songs not notations for dancing? Are buildings not notations for moving through space? Are rings not notations for juggling? Is Gibson's very notion of 'affordance' not fundamentally notational? More languages lie within our material surroundings than we care to imagine or understand. Few of them speak to (or of) us.

These liquid scripts and space-time fossils, frozen in diachronic accretions and transitional constellations, begin to account for (to tell) their strange and unruly stories.

* 

In nature, it is once again water that sees and water that dreams: ‘The lake has created the garden. Everything is composed around this water which thinks.’ As soon as one surrenders himself entirely to the sway of the imagination with all the united powers of dream and contemplation, he understands the depth of Paul Claudel’s thought: ‘Thus, water is the gaze of the earth, its instrument for looking at time’ (Bachelard 1994, 31)