A Sahara in the Head

The Problem of Landing

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A Landscape Design student came to me once after class, with the feeling that his project wasn't going to work on technical grounds - sand dunes just don't move that way in the Sahara. We could both see the potential unraveling this might create for everything informing the design process - site analysis, sociopolitical context, tools and techniques, theoretical framework. Only weeks to go to final presentation and the "Crit-Sheet" could be heard flapping urgently with its reductive numerical evaluation.

Face-to-Face

A moment of shared concern, our Face-to-Face, for he was one of those rare students who really engages and integrates everything at a deep level. All the more difficult, and commendable, given that the design studio was by its very nature - abstract - in more ways than one. [1]

- A site we couldn't visit the desert of Western Sahara, except via Google Earth...
- A constantly changing landscape, with moving sand dunes and persistent dust storms...
- A complex social-political-military context calling for critical responses, yet fraught by distance to the situation at hand...



Fig. 1 Moroccan military fort with Berm wall partially obscured by sand dune movement. Western Sahara, near the Mauritanian border (Google Earth 2015) © CNES/Astrium.

Our tools and techniques included physical exercises in embodied praxis, drawn from psychophysical dance performance - offering occasions for questioning the agency of the body in relation to memory, intention, affect, and environment. These were drawn experientially within the event, then diagrammed and annotated, to be contrasted with studies on the kinds of physiological mechanisms that Phosphate regulates within the body - muscle contraction, motor intention, cell respiration.

Phosphate is central to the Western Sahara conflict through the exploitation of its natural resources, a primary material for the international fertilizer industry, which finds its way through farming and the supermarket into our own bodies. To design across these relations seems an impossible stretch, stumbling at the disjunction of illustration, criticism and experience. And yet, speaking to a strange distance in more ways than one - geographic, embodied, critical, theoretical - where the gaps within and between open to a different beyond.

If the challenges of practice-based research may offer opportunities for radical pedagogy, the potential for abstract thought and aesthetic sensibilities call for an immanent critique of the process. [2] Immanent critique may take into account the confluence of design process (materiality, site, case study, etc.), institutional context, trans-disciplinary considerations, and affective experience.

This paper passes through several shifts, where problems turn upon the emergence of concepts and sensibilities to argue for the importance of aesthetic abstraction at the limits of critical academia. It is here that *radical pedagogy* find its urgency in the immanence of the event, at a critical crisis point.

Inflection and Slippage

Geography is not the field next door, nor even the neighboring district, but a line that passes through our objects, from the city to the teaspoon, along which there exists an absolute outside. (Cache 1995: 70)

Bernard Cache considers relations of force and their *inflections* through a poetic approach to dynamic systems - following divergent vectors across geography, architecture, furniture, body and soul. He finds a "rupture of scale" where an abstract line expresses dynamic states of transformation beyond their fixity within readymade space-time coordinates. These abstractions comprise lines of curvature, where a curve is seen to describe boundary conditions as a function of potentiality and modulation, rather than the contour of a thing in itself, or its contact with other things. A point of inflection marks a change of curvature - from convex to concave - not as a single point of contact, but where this indicates a series of singularities distributed along an abstract line. The point of inflection suggests a slippage, where an absolute outside confounds the outline, cutting through a mutable interior of dynamic meta-stability.

timple roccoco

Fig. 2 Bernard Cache's inflection (simple).

Fig. 3 Slippage at the point of inflection as a feature of Baroque aesthetics. (Cache 1995)

Cache's theory of inflection finds its slippage across mathematics, philosophy and architecture, while offering a different contour for resituating Gilles Deleuze's concept of the diagram. Deleuze draws his own slippages - adopting the diagram from Foucault's critique of power, to find a field of forces where things are mutually affecting and affected by one another (Deleuze 1988). Inbetween, he identifies "the fact of force" - where any kind of interior is already held together by a quality of relation that always slips into the outside of what may define or delimit its inclusion in the first place. As he sees it in the painting of Francis Bacon:

This is what Bacon calls the Diagram; it is as if, all of a sudden, we introduced a Sahara, a Sahara region in the head... like a catastrophe happening suddenly to the canvas, inside figurative or probabilistic data. (Deleuze 2003: 71)

The Problem of Landing

And so this is where we have landed - at the coalface of the university where learning and teaching came Face-to-Face in a moment of shared concern. Landing in the middle of "A Sahara in the Head," where the name of a design studio encounters its own outside. Because sure, it's all very well to invoke the abstract in so many guises:

- A theoretical conundrum for getting our head around the physiological affects of phosphate...
- Our inability to access a strange conflict in which we are all bodily implicated...
- A kind of lived abstraction at the psychophysical disjunction of motor intention, affect, and environment...
- All rolled up in endless desert, Saharawi Intifada, nomad tea ceremonies of life, love and death...
- And the World's longest continuous landmine field.

But how do we land this thing?

Landscape design encounters its own outside through the very ground

condition of landing, where an insistence on built outcome frames the inherent fluidity of site. So, given an abstract premise - how can we land this outside? Or at least, how may we enter the frame of this encounter?

The landing problem was a specific concern for our Face-to-Face. The student had proposed an innovative method - a modular mesh system designed to solidify sand dunes, providing a new ground plane for land mine affected areas. All the more clever for considering the way in which sand dunes move - but only up to a point. On closer study the schema is under threat of collapse - where the isolation zones that move like torsional vacuoles at the minor cusp of a dune reveal the speculative nature of this endeavor. Notwithstanding several kinds of dune species, each with their own ways of moving, the isolation zone deforms and reforms the dune in a manner that even dynamic computational systems have difficulty modeling. Not without standing. Further testing is required, right? Beyond the scope of this studio, that's for sure.

This calls into question the very value of testing, where a collapse in scope serves to reframe focus. Or to *deframe* their orientation and the felt weight of this value as a different ground condition. For what else has collapsed around the isolation zone? A technical meshwork, yes - but also a theoretical framework; or at least, complicating its value for practice.

Towards Immanent Critique

The sand dune project used Cache's theory of inflection to reconsider Deleuze and Guattari's concept of smooth and striated space - two types of territorial relation, different in nature but always existing in mixture. For them, the desert is a nomadic smooth space par excellence, where an absolute outside constantly displaces a field of forces for any given interior (Deleuze & Guattari 1987). In some ways the technical collapse of the meshwork speaks anew to torsional shifts of the smooth and the striated, reminding us of the pitfalls in easy orientations of theory and practice (especially when it comes to actual conflicts, nomads, and desert terrains). To resolve the mix, or to move with its outside, requires a process of immanent critique. Which is to say, an encounter of thinking and feeling that may reframe the project - across its various modes of

inquiry - where the aims of the studio are considered in relation to the institutional context of the university, its disciplinary parameters, and the value of theory vis-à-vis practice.

Often by default, theory comes to assume a certain "use value" in practice - to illustrate or be the illustration of an example - to solve a problem or justify a solution - to serve as discursive jello for sweetening the passage across social, cultural, political, and aesthetic domains. Each with their merits, but nonetheless theory tends to enter practice by way of a critical function, without noting a slippage in terms - between the assigned value of critical judgment and the transformative weight of a critical crisis point.

It is often said that we learn by teaching, which may be to say that we also teach by learning. If this relation can be seen on either side - immanent to the process, it is where student and teacher may find a different way of landing. Not one of reciprocity exactly - a value exchanged and completed, but where a point of inflection deframes teaching and learning on either side. Not one of transference, but a shared outside that moves across and beyond our within and between. Beyond any given frame for being a student lies a passion for study. For Harney and Moten, study is an opening into collective thought - "allowing yourself to be possessed by others" (Harney & Moten 2013: 109) - a mode of existence that takes us into all kinds of world makings and life doings. I can't do the final work for my students, nor necessarily offer a solution for a problem that belongs to either of us, except for our partial subjectivities in its own unraveling. But we can think together and let ourselves be taken by this Sahara in the head.

Getting our heads around a shared outside, the problem of abstraction moves beyond nonsensical juggling across multiple modes of inquiry. Points of tension and slippage open more transversely, when the event is felt as something coextensive with life, for which the case study is already alive in its own sensations. Propositions begin to appear more speculatively - still open to the outside of this fragile interior. The impossibility of that which is not yet given in thought, may be felt as movement in a field of forces, before assigned values peg it down on a ground plane of possibility. Lets not complete them - instead,

let propositional lures for feeling move along an abstract line, returning to divergent specificities where singular transformations are always and already emerging.

Concept and Sensibility

We can never fully know what this emergence is capable of, even as it returns again and again. As a learner / teacher I had a moment of realization (propositional at best), for what may be at stake here in the orientation of theory and practice.

What is the potential of a problem as a movement of thought through the absolute outside? Coming Face-to-Face at the coalface is a rare opportunity, given the pressures of teaching load, contact hours and class sizes. Every student struggles in their own way with the weight of representation, shifting assigned values through a different concreteness, where things become abstract in their lived relation. Design thinking encounters the initial problem of coming up with a good idea, which is already a problem - coming up in our heads - without passing through an outside. As if it were simply a matter of devising a method for bringing the idea to built form. As if the design brief could even assure this condition of possibility in the first place.

For all its complexity this became the landing problem of the sand dune project, where a technical method collapses and then shifts towards a transverse technique for immanent critique. Or its *technicity* - in the way Erin Manning describes an ethological process of *worlding*, immanently *machinic* across multiple yet irreducible dimensions, where passive and active forces become indiscernible within a more complex field of agency (Manning 2006). At the slippage of this shift, where a problem appears to transform, the idea gives way to the singular emergence of what might appear as a concept - an entity dispersed more processually across diverse modes of inquiry, remaining irreducible to any of them, yet tentatively robust in the speculative character of their meta-stability.

I should qualify my earlier comments about theory and practice, for there is a

sense in which theory becomes a catch all term that institutes the very flattening of its application in practice. The appearance of a concept may be seen in the sense that Deleuze and Guattari describe it in philosophy - as a process of construction, immanent and emergent, where it "posits itself and its object at the same time as it is created" (Deleuze & Guattari 1996: 22). Just as D&G find an affinity for the construction of concepts in philosophy - with the creation of affects and percepts in art - we should also account for the ways design process intersects on its own terms. The philosophical concept retains its specificity, as lived construction and trans-disciplinary divergence, to which design finds its own points of singularity.

The sand dune slippage - if this may stand in as a trope - reminded me how many times students would repeat a similar pattern, each in their own manner, for collapsing the process of abstraction (or lets say, speculative potentiality) into built form, as a way of avoiding a problem. Over successive iterations however, this pattern of repeated blockages or blind spots may show signs of differentiation and self-organization, where their own manner of collapsing reveals elements of style, despite themselves. At a particular point, of inflection lets say, the weight of successive repetitions may find a rhythm, such that the problem turns upon itself to reveal the germ of a concept. The concept appears on the cusp of a problem, where it comes to test itself in the emergence of lived process. The affective dimension becomes critical in this transformation - as the felt aspect of lived sensations, giving rise to a particular sensibility in the wake of abstraction becoming non-sensible. If anything, it is the emergence of a particular sensibility via the problematic appearance of a concept – "beyond" the student - that is the gift of study in art and design.

Catastrophic Affects

Recalling the diagram - a field of forces is where things are mutually affecting and being affected, such that interiority opens to an absolute outside through the very fact of force. Affect reveals itself as key to prehending the force of the outside as a constituitive element of the event, moving on the cusp of what may be thought, indeed its very condition of possibility. As Francesco Varela shows us, the texture of experience inheres in the fact that we are always-already

affected: "auto-affection" (Varela 2000). Varela offers a dynamical systems approach to understanding affect - where an underlying mood has an affective tonality that passes through a "shift in phase" for the subject when a specific emotional tonality is identified. Emotional expression occurs when feeling carries sensation into the realm of the sensible; response to external stimuli is always-already primed by a tonal scale - between situational transparency (co-extension) and its collapse (anticipation). Cognition is already enactive and extensive across multiple modes of attention - embodied, environmental, a-perceptive, intersubjective - such that phase shifts may always spike in unexpected ways.

Moments of crisis may be seen as a Cusp Catastrophe diagram, where performance, arousal and anxiety pass through strange bifurcations, when a situation seems no longer capable of holding implicit tensions within the actuality of an event. Affective tonality shifts on the cusp - moving with the torsional slippage of multiple durations, different rhythms, and their compression across divergent speeds and slowness.

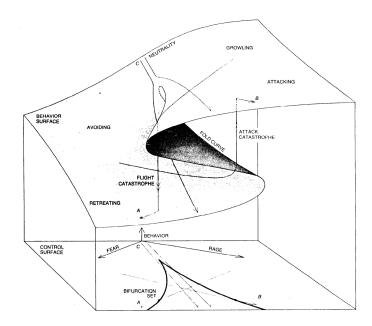


Fig. 4 Zeeman Cusp Catastrophe, modeling the aggression behavior of a dog under stress (Zeeman 1976: 66). The three axes of the diagram describe conditions of physiological arousal (horizontal), performance (vertical), and cognitive anxiety (depth). A behavior surface is drawn between minimal/maximal states (attacking/cowering), where their divergence along a fold line remains unstable and prone to recursive bifurcations. [3]

Affinities between the Catastrophe diagram and Cache's inflection should remain implicit, given his poetics. Nonetheless, inflection as slippage or rupture of a fold-curve offers an image for how the dynamical space of affect may be seen to transform. Where this may be seen to appear as an absolute outside delimiting every interior, auto-affection and affective tonality become the untimely strata that haunt the autonomous agency of the subject. As such, we may also see how affect becomes key for critiques of power, in the sense that the diagram reveals the "possibility for resistance" (Deleuze 1988: 89). Which is not to say, one already given as a form - as the contact of one thing against another - but rather, the tension that is always held within a field of forces and its capacity to shift phase. [4]

It is the aesthetic dimension that is able to dance this line, to slide with the slippage, to be taken by the outside in the passion of being possessed by others. The whole point (of inflection) is not to design for catastrophe to occur. The Whole is never given anyway. In fact the spectrum disappears as soon as it is actualized in the catastrophe. Of course, neoliberal assemblages like to "never waste a good disaster" - looking for slips in the fold-curve, already anticipating and modulating parameters to harness the infinite speed at which the spike lands. The 'point' of inflection is where forces remain deformable. Value finds a different weight here - a sensibility for affective resistance within the permanent catastrophe that is the modern institution under Capitalism.

How does an event reconfigure itself after the spike softens? We are left momentarily marooned - falling back out of the loop in the fold-line (flight), or up and forward from the S-bend (attack) (See Fig. 4). Both too late and too soon, the multiplicity of the event collapses into raw singularity. The outside suddenly enters the open as interiority distends for a moment. The mood in the room becomes non-sensible, almost sensate with heterogeneous potential. Gradually, points of inflection open new lines of slippage, curves undulating once more with a different weight. The field of forces gently cobbles the World together as we feel the Earth again, like some geological sedimentation of the event in which we - our together - is still and all ways to be invented.

Critical States of Criticality

In the process of writing and re-entering the Face-to-Face, I've come to realize something else (propositional at best), a blind spot for my own sensibility. If there are two sides or scales to immanent critique - lets say, experiential and structural - then the way I land upon our thinking together must also consider the ground condition of my complicity as a "critical academic," at the disjunction of theory and practice. Harney and Moten point to a complicit negligence within the university, where professionalization parcels out and sanctifies a critical distance for the knowledge economy vis-à-vis market forces, while instituting the insertion of undifferentiated labor. Capital infers its modus operandi - Debt - as a limit condition for pedagogical encounters, where knowledge is predetermined by values of exchange, use, and acquisition. Critique becomes complicit in "privatizing the social individual" (Harney & Moten 2013: 38), redoubling the guise of professionalization as it sits on the fence of a quandary:

to be a critical academic in the university is to be against the university, and to be against the university is always to recognize it and be recognized by it, and to institute the negligence of that internal outside. (Harney & Moten 2013: 31)

How does this call for a radical pedagogy, within the texture of this particular experience, Face-to-Face in the slippage of landing at a critical crisis point? To play the subversive academic is still to adopt the guise of being for and against, to recognize and be recognized by the university. From my perspective the design studio offered an opportunity to problematize the orientation of theory and practice, to mobilize differently the capacity for abstract thought. The value of this is recognized within a practice-based teaching context, and given a place - the part-time sessional teacher as thinker/practitioner from outside the discipline. But when we take this to a limit point we confront its disciplinary outside - the ground condition and the need for built outcomes. To some extent students take the studio because it seems different to other foundation courses offered by faculty staff. But when the aims of the course and the capacity for "study" in the student encounter this limit, it seems to put us both in an

untenable position. The student might then choose to critique the aims of the studio, while necessarily recognizing and being recognized by its intentions. For the student, I am still the teacher who stands in for the institution, even as I adopt this guise of being for and against it, to whatever extent. It then becomes my position to advocate for and against their potential, in going out on a limb for and against me (or this guise that I've become). This outside comes out in the open in the closure of "Final-Crit," and again in the moderation process where borderline cases are debated at whatever slippery points along the marking range.

Going Under and Overcome

Do we all come to institute the negligence of this internal outside - in the way oppositions slip through a *thirdness*, for adopting the institutional guise of criticality? The grinding machine becomes as nonsensical as a neoliberal debt mentality, but the implicit terror of this tonality is there nonetheless. So how do we find a phase shift that is anything other than catastrophic? How may this structural tonality be deframed in the felt experience of thinking together? If beyond the student there is study, and if teaching is to learn, then the aim of our study together may be to refigure this thirdness for instituting the guise.

What the beyond of teaching is really about is not finishing oneself, not passing, not completing; it's about allowing subjectivity to be unlawfully overcome by others, a radical passion and passivity such that one becomes unfit for subjection. (Harney & Moten 2013: 28)

What Harney and Moten call the Undercommons is an abstract area full of fugitives. What we have previously understood as the Commons is already overrun with privation, an *impower* for privatizing all vestiges of resistance. There is no refuge, only a fugitive undertaking. Not for going under the radar, but the kinds of "going under" that Nietzsche calls for - where active and passive forces are no longer clear cut in terms of what they do, or claim to be (see Deleuze 1983). Value needs to feel a different weight, where the outside shifts in strange ways - impersonal in nature as a pure field of forces, then assuming the character of a particular kind of outside within a given milieu (a

ground condition for Landscape, the body for Architecture, and so on). Across these two outsides the impersonal is impersonated by forms of power, such that persons feel a break in their relation to collective realms of possibility. Undercommon ways of landing confront that which passes across these two outsides. Calling it out into the open - it becomes an inherent auto-affection for the "brokenness of being" - a dynamic tonality that affects and is affected by everyone, regardless of position within system coordinates (status, affluence, etc.) The Undercommons is about finding common cause for this brokenness (Halberstam, in Harney & Moten 2013: 5).

Fugitive Guise of the Free Radical

The Fugitive is never fully under the radar. The institution recognizes their value - for recognizing their own *precarity* in becoming critical academia. The institution implicitly recognizes this outside for the way it fluctuates in relation to its own absolute condition - caught between the insertion of undifferentiated labor and the annulment of labor entirely through the managerial automatism of this insertion. The Fugitive is not a person that identifies as such - that takes refuge in refusal. It is a guise we occupy in the act of thinking together, the beyond of study, that moment of being possessed without refuge. It is not so much a person caught in an untenable situation, as a passion for landing upon what that capture affords when it is resisted. If the spirit of the university is to acknowledge academic freedom as the critic and conscience of society there is always an inherent tension throughout the organization as to how this freedom and its radicality may be defined within a neoliberal climate. [5]

The Fugitive may assume various guises - the Charlatan from a different discipline, landing by other means - the Doppleganger who mimics a practice, their own or others, so as to be overcome by a radical passion for not finishing themselves. Or the Free Radical - an abstract figure that moves with a different quality of that thirdness which haunts our institutional negligence. [6] Not a person *per se*, for it parses personing, and lets it pass. But persons may assume the guise of this figure in order to be taken by its force. The movement of the Free Radical always starts in the middle, and has already begun. From the

absolute survey of a situation - where immanent critique discovers a structural perimeter - to an absolute condition for locating its outside - the Free Radical finds the texture of experience where phase shifts pass back and forth.

Sometime around the middle of the studio, I had a conversation with a friend and mentor of mine - a professor and artist in the area of relational aesthetics. We were talking about the difficulties of putting our research forward as a site for pedagogy - as both creative practitioner and academic. She said, "If you don't risk something deeply of yourself, you're wasting your time, and theirs."

As Harney and Moten put it, the beyond of teaching is not the research post without teaching, or the sabbatical, or the directorship to come, and so on - but a fugitive area where study occurs in thinking together. Where practice-based research intersects with teaching, through the very problem of the institution, the emergence of an aesthetic sensibility demands that we risk the incompletion of being overcome. Where study becomes a lived endeavor, pedagogical encounters always affect and are affected by converging fields of practice, already diverging into the beyond where a field of forces feels the weight of the outside.

After Thought

Don't follow an abstract line that defers the mutual thirdness of the guise to catastrophic negligence

The free radical is never truly free - but finds its radicality in the 'maroon' of escaped slavery, through a torsional backflip across structural and experiential tonalities, and into the beyond

'Take the debt but not the credit' (ibid)

Make the debt count, differently - not deferred along the line
but marooned here in slippage

Don't even cite! (Unless parenthesis may open a new problem)

Just as their concepts no longer derive from your practice, the debt of citation delimits how they may land, and live through sensibility

Notes

- [1] This studio, A Sahara in the Head, was given at 2nd/3rd year and Masters level in the School of Architecture and Design at the Royal Melbourne Institute of Technology in Australia (2012). It's not my aim for this paper to present the work of the studio, or to discuss the case study in detail, but to chart a wider problematic for practice-based pedagogy. As further background I'd like to acknowledge the Australian Western Sahara Association and the people of the Saharawi refugee camps in Algeria who made this research possible through a residency there in 2007.
- [2] Immanent critique becomes a key principle for contemporary critical theory, where it seeks to problematize ideological norms and contextual contradictions, in the way cultural forms are generated within a particular social system and broader historical processes. From a Hegelian-Marxian perspective this contrasts with Kant's transcendental philosophy, where immanence is assured by a higher power, for which criticism assumes a position of judgment. Deleuze finds a different transcendental principle, where immanence becomes a lived relation within and across all entities and categories of experience. Critique then acquires a more eventful evaluation, where "everything that enters the interaction must do so actively, not by proxy, as represented, simply spoken for, or even transmitted" (Massumi, 2010: 338).
- [3] Zeeman posits several cases for visualizing catastrophe dynamics, including; stock market behavior (rising/falling), anorexia (gorging/fasting), self-esteem (anger/self pity), and phase transitions between liquid and gaseous states, or the buckling of an elastic beam. These suggest further

transverse movements across social, individual and material domains; for example where turnover cycles may be diagrammed in terms of personality characteristics and institutional functioning (van der Molen 1990).

[4] We may see this for example, in the way Tahrir Square became a site for occupying an untimely sphere during the Arab Spring, and how this blocked the auto-affective mode of Capital turnover in which Capitalism needs to function on a daily basis. If this may be seen as the invention of a people, always yet to come, it also evented a new mode of protest that was taken up in its own way by the Occupy Movement.

[5] See Harland, Tidswell, Everett, Hale & Pickering: "Neoliberalism and the academic as critic and conscience of society" (2010).

[6] The Free Radical is understood here as a kind of 'latter-day trickster figure', specifically in the way it has been performed by participants at SenseLab Research Creation events – "loosed upon the event to joyously scramble the emergent order." (See - Generating the Impossible, 2012 – http://senselab.ca/events/technologies-of-lived-abstraction/generating-the-impossible-2011/). The Free Radical assumes the power of an individual without fixed identity, often working covertly, collaboratively or anonymously; looking to destabilize collective processes in productive ways.

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