

## **Studio Description**

This studio engaged with the earth with the grounds beneath our feet, with the grounds that our architecture sits on, interfaces with, turns away from, is rooted in, shores itself up against, retains, rejects, cores and excavates. Sited in Johannesburg, South Africa, this studio takes the geological, elemental and mineralic (diamonds, gold, platinum) histories of Johannesburg's "Elusive Metropolis" as a provocation to thoughtfully and curiously explore - through mapping, technical and narrative representation - the spatial and social implications of an extractive terrain - through speculative drawing as a medium of conceptual and critical inquiry.

Studio themes will include questions about the ground, site, labor, of how we look (on - through plan and at - through section) at extractive landscapes. We will explore issues of representing and representation, of superfluity, of excess and paucity, of moving above, below, on and over the earth. We will investigate particles and sediments, spatial justice, extraction and resource capitalism - and of a re-claiming of the earth as a restitutive and reconciliatory act.

The studio is anchored in an ethic of research by design, and will include critical mapping, the development of a spatialized tool atlas, and will culminate in the production of a single drawing - a deep section - that situates a speculative, ethical future for future Johannesburg landscape. Projects, as a result, were situated in the geologic, as well as in the socio-cultural, and fraught, history of this post-apartheid city. The studio was structured as a studio/seminar, with regular reading and film discussions (including texts and films by South African writers and filmmakers) and each week included a series of critical readings and viewings that helped form the intellectual framework of the studio.

The studio (15 graduate students in the final studio before their thesis, and last year) encouraged hybrid drawing and modeling techniques, with students using digital and analogue tools (ranging from Rhino, Revit and Grasshopper, to watercolor and charcoal) and emphasized multiple scales of working and thinking. Although working with a landscape scale of territory, the requirement of the final assignment - the deep section - was to always situate ideas in the spatial contexts of architecture.

This is a studio about the ground and about our relationship to it, in architectural stories told about the minerals and elements we pull out of the ground, to the water table that rushes in to fill the voids we leave, through the equipment and infrastructure used to pump that water out. It is a studio about the tools we use to dig those tunnels deeper, to move us in and through our ever increasing hollow earth. It is also a studio about the particles of gold and acid in worker lungs; to the scars on the earth in tailings ponds and overburden piles and crushers, excavators, dynamite; to the hyper-flows of money and capital in and through banks and stock-markets and safety deposit boxes and offshore-bank accounts; through the architecture and spaces created by deep dust and the killing dark.

### **Project 1**

Starting with critical research about Johannesburg's histories - particularly its geological, founding and fraught racial and social histories, each student was asked to propose a triptych of maps (18 x 24"). Students were required to consider, study and be inspired by geological drawings, geo-languages, geo-imagery and geo-imaginings - but filtered through the conceptual framework (each individually determined) of their particular approach to the mapping exercise. They were required, in addition, to consider the earth, ground, mineral, environmental, labour and geologically based implications of this research, and could make an argument for any particular scale (physical or temporal) for their maps. Context and provocation for these maps was provided through texts by Jennifer Beningfield ("the frightened land"), William Kentridge ("disremembered land") or the architect Douglas Darden ("underbelly"), and helped students to generate maps of wind, dust, particles and sediment, apartheid urban planning protocols, mobilities and movements, infrastructures and time.

### **Project 2**

Using Theo Deutinger's Handbook of Tyranny as a prompt, Project 2 was the development of a co-produced, studio wide machine-atlas: a critical compilation of tools, systems and infrastructures deployed in service of mobilizing (and moving) the earth. Students were encouraged to critically interpret and challenge the term "Machine" and "Tool," for this exercise, and to consider the "associated ecologies" of these tools and what they do as well as what they mean and what other things (ideas, epistemologies, ontologies) that they might connect to: a board of directors, an ATM, a wallet, a commodities exchange, a wedding ring, a banking system, and so on. The Machine Atlas was an open-source collaborative project that aimed to equip students with material for their final project, each student exploring 15 tools for individual atlases - yielding 240 open-source tools that anyone might deploy as part of their final project in the studio.

### **Project 3**

For their final assignment (a synthesis of earlier projects), each student developed a critical conceptual and spatial program and narrative that inhabited the ground (in, on and above it) towards an architectural response to the studio themes and provocations. Using as inspiration Douglas Darden's architectural drawings from his "Condemned Building: An Architect's Pre- Text, and William Kentridge's artistic process of thinking through a changing landscape, each student developed a single mine/mining drawing (3 feet wide by 6 feet high) for an architectural intervention on a site of their choosing - located somewhere along Johannesburg's gold reef. Darden's drawings invert architectural canon with, and students were encouraged to do likewise with their deep sections. How might their architectural assertions encourage a critical, interpretive and speculative re- reading of architecture's role (both as constructions in physical space as well as in drawings) an an emancipatory tool in a contested landscape.