LITHIUM DREAMS
WHAT LIES BENEATH
UNDREAMED REALITIES

WINTER EXPEDITION 14/15
UNKNOWN FIELDS
The Unknown Fields Division is a nomadic design studio that ventures out on expeditions to the ends of the earth to bear witness to alternative worlds, alien landscapes, industrial ecologies and precarious wilderness. These distant landscapes - the iconic and the ignored, the excavated, irradiated and the pristine – are embedded in global systems that connect them in surprising and complicated ways to our everyday lives. Unknown Fields re-maps and reimagines the city and the technologies it contains not as discrete, independent collections of buildings and devices, but as a relational object that conditions and is conditioned by a wide array of local and global supply chains, a network of vast but elusive tendrils that twist threadlike over everything around us, crisscrossing the planet, connecting the mundane to the extraordinary.

Previous expeditions have taken the studio out on the China seas aboard a mega container ship, through the Texaco oil fields of the Ecuadorian Amazon; the Galapagos Islands; Area 51 and other US military outposts, Madagascar’s Wild West’ sapphire pits, the frozen Arctic sea ice of far north Alaska, the irradiated wilderness of the Chernobyl Exclusion Zone and the vast gold fields of the Western Australian outback. In such landscapes of interwoven narratives, the studio deploys time-based media, film, animation and motion graphics to visualise this network of hidden stories and reimagine the complex and contradictory realities of the present as a site of strange and extraordinary futures.

This year we embark on an exploration of the unexploited, the potential and the latent as we investigate a slippery thing called energy. Energy is not a substance that can be held, seen, or felt. We cannot create new energy that is not already present in the universe. Energy lies held in the earth, embodied in the very crust of the world, waiting, vibrating; longing for escape. Cities, industries and infrastructure feed on these landscapes. The ground is charged matter, pregnant with billions dollar prospects and the world bears the scars of often ferocious attempts to free it. In Unknown Fields we chronicle these resource landscapes and investigate the infrastructures that serve as energy conduits; translating matter – like a luminous language - from a hole in the ground to the glow of our phones. We trace a wild journey of electrons from the radiant gizmos of our familiar city deep into landscapes far, far away.
For our Winter Expedition we map a landscape spectrum spanning rain soaked forests to parched flat earth as we blaze a trail from the Bolivian Amazon to the Atacama Desert. In the heart of Bolivia, we will bear witness to a site, which epitomizes a burgeoning new era of electric fuel. Buried here, beneath the mirror of the world’s largest salt flat, is a grey gold called Lithium, a substance in every one of our pockets, in every gleaming device, and every electric car. Where a gear-shift in human technological development has rendered this landscape one of the most sought after on earth. We chase the grey rush to Salar de Uyuni, where under ethereal inverted skies lies over half of the world’s reserves of Lithium. This is the feeding ground of the new green energy revolution. If the future is electric then the future is here, lying in wait for the world. Our journey will take us to celebrated landscapes, the future of which is dictated by worlds beyond their spectacular horizons. From the salt flats we will drift along the Amazon River, unearthing the lost cities of the forest, and tread the paths of El Dorado, another gold rush long consumed by the trees. We climb to the top of the world, the highest city on the planet, the Bolivian capital of La Paz. We head down to a dead sea, the Atacama desert. If the Bolivian salt flats are mirrors to the sky above then the Atacama is a mirror reflecting a possible future, for it is a site that has been scraped clean by hundreds of years of copper and nitrate mining. We will see this exhausted ground stripped bare and disappearing on the wind. From the dust clouds the Unknown Fields division of speculators, and prospectors will imagine the future of Bolivia’s charged ground. A ground of possibility, and potential, on the verge of change, a proving ground in a state of becoming…

### AUTUMN TERM

**THE CHARGED WORLD**

Everything around us is quantifiable in terms of energy; energy used to run things, light them, heat them, to propel them, to make them, to connect them; energy that is released when they are burned, when they react, when they collide. To begin our work we will continue the studios interest in time based media and filmic motion studies with an exploration of embodied energy. We will uncover the stored, locked, hidden and latent energy in the objects and environments around us, beginning our exploration of the other-worldly by conducting experiments on and with everyday things in everyday spaces. You will set in motion, document and film a series of energetic transformations from ordered states to disordered states and from these a series of equations will be drawn out, animated, enacted and rehearsed. Here in these spaces of the kinetic, in the potential; chemical, electrical, and gravitational, in the flux of the magnetic, elastic, and thermal. The studio will become an experimental test-lab for dissecting moments of energy exchange. Our work will be event not object, verb not noun; sculptures-in-time, kinetic and frantic, slow burning and suspended in anticipation, it will run down batteries and dissipate through friction. We will see the things around us in a new light; as transformed physical matter, an alchemy of elements in a charged world, awaiting release.

In parallel we will be running weekly intensive workshops in time-based media, from film making to motion graphics and animation. Through these media workshops, you will be asked to explore the ideas of reactions, strategies, tactics and scenarios. Revealing a network of reactions and equations that ripple outwards from the objects you study, making explicit patterns of connections that span all the way back to the resource fields scattered around the earth. We will be joined by luminaries from the fields of film, animation, storytelling, gaming and choreographic drawing who will help us to construct dynamic systems of motion and commotion, cycles and shifts, ebbs and flows. These collaborators will augment the studio with skills workshops and group discussions and through these personal explorations in time you will develop your own language to represent systems and scenarios and powerfully communicate a well researched polemical argument. They may be hopeful inventions or unexpected by-products, wondrous possibilities or dark cautionary tales.
SPRING + SUMMER TERM
POTENTIAL ENENERGIES

The landscapes we will visit are caught in a state of becoming. These are landscapes in which the more usual narrative of destruction has not yet begun in earnest. This is the future feeding ground of the green energy revolution - a necessary evil? A sacrificial ground? Our hopes for a greener, better future and our technological intentions touch the ground here. This is a landscape in which those dreams play out. How we choose to act in response to these sites, both on the ground, from the midst of the dust clouds and from in front of our flickering screens in the gleaming comfort of our electric city will shape the world to come. In these spaces of possibility, and potential, on the verge of change, your major projects will question the assumptions we hold about cultural and environmental responsibility. Between the documentary and the visionary you will animate and narrate the possible future of these places and objects. You will design within these planetary energy flows, imagining new stories and counter narratives for a series of existing, speculative or absurd energy exchanges. We will reveal the city as a networked landscape caught within the ever-shifting tangles of power lines - dynamic cultural and material exchanges orchestrated by the push and pull of needs and wants.

The polemics we develop through our time-based explorations will evolve into strategies and tactics, choreographies and dynamic interventions sited along the global supply lines of energy. Across these landscapes our architectural interventions will coalesce like clouds, condensing around engineered systems of flows and streams. We will reimagine how we interact with these networks, designing objects, architectures and scenarios with resonate effects that can change and redirect systems, tactical objects, choreographic objects, atomised, and distributed, reprogramming the world and generating new encounters and relationships with the complexities of a global context.

Students will define their own agendas, taking a critical position towards notions of cultural infrastructures and global resources. In the division we do not design 'architecture as object'; rather we design and illustrate architectural scenarios that become critical instruments for exploring the consequences of emerging technological and ecological conditions. Your work will acknowledge multiple possibilities and parallel futures. Projects may take the form of films, animations, illustrated novels, events, performative models and dynamic installations. We ask you to explore alternative forms for the architectural project. We ask you to question the format of a folio and to question the medium in which the project is produced, to question who the audience for the work is, and the way it is ultimately disseminated. Dextrous adaptability and contingency thinking alongside agile acts of speculation will serve to build a coherent and sophisticated body of work, exquisitely executed and powerfully argued. We will develop the role of the architect as agitator and the potential of the architectural project to instigate debate and discussion as opposed to describing discrete objects. You will position your project within a rich history of architectural provocations and develop your own individual polemic that will have a currency beyond the walls of this building and extend into your future practice. Embedded in any worthwhile speculation is the element of risk and we will look for dangerous and confronting projects.

TECHNICAL STUDIES
UNKNOWN FIELDS SKUNKWORKS DIVISION

Although wonderfully provocative our projects will be grounded in rigorous technical investigation, which will be embedded and tutored within the design studio in collaboration with key experts. Modelled after Lockheed Martins XPlanes division this is the Diploma 6 ‘Skunkworks’ experimental technologies division. Together we embrace and explore technologies from the military, mining, aeronautics, biology and material sciences and investigate how these processes inform architectural innovation. Within the studio we have developed a strong history of award winning technical projects where we emphasise a dialogue between physical material testing and digital experimentation and simulation. In this way your projects will become both a wildly imaginative design speculation and a rigorous technical investigation. It is in this rigor that your projects will find their critical edge. Joining us in the division will be fellow time-travellers from the worlds of technology, science and fiction and together we will examine the Unknown Fields between cultivation and nature and spin cautionary tales of a new kind of wilderness.