Unreasonable Creatures | in dialogue with an activated ground

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Unreasonable Creatures
Declaration
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Urs Bette, August 2014

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This research examines the dialogue between architecture and site. It investigates the role of ‘the unreasonable’ in the design process and reveals the strategies deployed to facilitate the poetics of architecture within a discourse whose evaluative parameters predominantly involve reason. The examination of my design practice unveils a cumulative process that starts with intuitive moves, which are further developed through an iterative process charting the project from different perspectives. This is achieved by immersing myself in the architectural object, the site and the observer. My background in communication design comes into play when I empathise with ‘the other’ - the object, the site, the observer - and translate the experience into a display that can be shared. Themes discussed include, the production of space from the staged opposition between the architectural object and the site, as well as the relationship between the intuitive and analytic synthesis within the design act. In both of these there is necessary engagement with forms of ‘unreasonable’ thought, action and behaviour. The work seeks to promote acceptance of the usefulness and validity of ‘the unreasonable’ in architecture and contributes to discourse on the relationship between landscape and the generation of architectural form and space.
process diagram | a mediated conflict between the object and the ground - photo: Peter Whyte
Through this research I seek to investigate the role of the unreasonable in my design process and understand the strategies I deploy to facilitate the poetic aspects of architecture and the emergence of space. I will lay out the conditioning of my spatial intelligence in regard to my personal and professional background, and relate it to the influences of my peers and mentors. Unfolding the characteristics of my practice the work will undergo three steps of reflection: understanding the aims and concerns of the past work I have done, testing the gained insights against more recent designs, and, finally, speculating about subsequent ramifications for future work, both for myself and others. Working between Austria and Australia added another duality to the alternating roles within practice-based research of being both the observer and the observed.

It was expected that the overlay of three different dualities – practice / research, observer / observed, Austria / Australia - would allow me to discern blind spots in the everyday practice of my work. A key aspect of my practice is the continuous reworking of the same topics under changed circumstances. Themes to be discussed include the emergence of space from a staged opposition between the architectural object and the site, and the relationship between intuitive and analytic synthesis in the design act. In both of these there is a necessary engagement with forms of ‘unreasonable’ thought, action or behaviours. Although this design research develops around my own specific approaches and handlings, I believe that the insights gained through this PhD will be of value to the wider community of designers as they address issues, values and questions inherent to contemporary design and the production of architecture.

The main focus of my reflections will be the architectural work I produced since graduating from the masterclass of Wolf D. Prix at the University for Applied Arts Vienna in 2000. The working title of my PhD Little Creatures - or architecture as chemistry related to the morphological quality of architectural bodies that utilise the site as a stage in order to negotiate space. Two different dialogues have informed the interrogation documented here. One is a series of interviews conducted by my colleague Nell Anglae. Some fragments of the interviews have remained in this document. The other are my presentations at the RMIT Practice Research Seminars, where my work and preliminary findings were critiqued by colleagues. Transcripts of both have formed the point of departure for this catalogue, which itself became a third layer of analysis.

Prologue covers the non-architectural backdrop from which my spatial intelligence developed. It concerns aspects of my family background as well as my studies in Visual Communication Design which both influence the manner in which I work today. Coinage looks at my architectural upbringing, working at Coop Himmelb(l)au, studying in the masterclass of Wolf D. Prix, and the wider Austrian design-community. The following two chapters defoliate the choreography of my design process. Modes interrogates the two antagonistic strategies of assessment – intuitive and analytic – that accompany the conception of my work. Agents examines this process from the perspective of its main protagonist – character, ground, void – and follows their different stages of their development. Cases reflects on three different projects that were done within this PhD, exemplifying the discussions and insights from the previous chapters. Conclusion subsumes ‘what’, ‘how’ and ‘why’ I design the way I do, and highlights the implications that arise from this research.

\[1\] with reference to the work of Leon van Schaik, see: van Schaik, Spatial Intelligence: New Futures for Architecture.
construction workers - gelatin silver print, 1990 | exploring documentary photography

14 prologue
Drawing on Leon van Schaik’s proposition of spatial intelligence, I reflect on the design values that were present growing up in a family of designers and makers, my early studies in photography and film that have shaped the way that I look at the world, and how this translates into the manner in which I pursue my architectural designs.

I grew up in a designer’s household, surrounded by objects, materials and questions concerning ideas and their physical implementation. My mother was trained as a silversmith, she worked as a designer and later became a painter. My father shifts roles between metal-smith, product designer and teacher. He trained with Friedrich Becker, who is renowned for his kinetic jewellery and public art. My father saw deconstruction as the key to develop his own oeuvre which is dynamic, playful and poetic. His work is like wearable concrete art, interrogating qualities of gravity, space and movement, and constantly changes its state in the hand of the wearer. Sabine Runde, Deputy Director and Curator at the Museum of Applied Art Frankfurt notes:

“Bette experiments with confining motion – motion characterised by an implicitly mechanical back and forth movement incidentally enhanced by the effect of changing perspectives. In this way, he attains an organism which moves with apparent naturalness. From within his creative fantasy, he develops invisible joints in openly exposed construction of self-evident simplicity. The construction, basically technical, mutates into an organism in his hands.”

An object that epitomised my understanding of contemporary design was my father’s knife, a Puukko sheath knife designed by Tapio Wirkkala. It followed the typology of a traditional Finnish hunting knife, but was reduced to its formal core, almost the diagram of a knife. Yet - and I be-

Franz Bette - Poetic space series, 2006
photo: Ben Newton
believing this is important - it had a soul and character. It was rational and poetic at the same time. Rational in terms of its usability, poetic in term of the connotations it evokes. My parents conveyed to me that design was not about an interchangeable look, but the consequential implementation of a conceptual idea that manifests itself in form. Wirkkala was a designer as much as a maker, whose work was grounded in an intimate knowledge of materials and the haptic qualities of form. His studio was both the place for conception and production. Similarly my parents had their studios at home, and I was surrounded by the process of making. What I took from there is the attitude that handling the material is an integral part of the thought and design process. I believe this is still manifest in the way I work with physical models today; how I play with things in order to generate an idea. Some form is produced intuitively before, its interpretation kick-starts the conception of an idea, then both, form and idea, are shaped through intellectual and empirical reflection.

Working creatively started in 1986 at the International Summer Academy for Fine Arts in Salzburg, Austria. The Summer Academy has a very long tradition. It was founded as the School of Seeing by Oskar Kokoschka in 1953. The Summer Academy is still active today, offering a broad range of courses in fine and applied arts. In architecture courses have, amongst many others, been taught by Peter Cook, Coop Himmelb(l)au, Günther Domenig, John Hejduk, Hans Hollein, Arata Isozaki, and more recently Ryue Nishizawa and Kazuyo Sejima. At the time I was looking for creative exploration in a field that was different from what I grew up with. I enrolled in the photography class of Verena von Gagern, where I produced a series of photographs that investigated the Untersberg, the backyard mountain of Salzburg that has a somewhat mythical connotation, and its relation to myself. The photographs were all

Untersberg - gelatin silver print, 1986 | first time discussions around what I bring to the site and what I take from it.
staged portraits of hands, holding and caressing stones that I had brought back from my excursions to the mountain and its quarry. These photographs were my first site-related work, and a discussion around what I bring to the site and what I take away from it. I recognised that the mountain had a character, a personality that interfered with my work. One could also see the start of an ongoing interest in the monolith; the isolated object extracted from its origin and placed into a different context.

Next I enrolled at the University of Applied Sciences in Düsseldorf to study Visual Communication Design. The school had a main focus on graphic design and advertisement, yet I focused on photography and later film. Close by to Düsseldorf lies Moenchengladbach with its Museum Abteiberg, designed by Hans Hollein. This was the place where I first became aware that architecture is not a backdrop, but an actor in its own right. I realised how space makes a difference to the display and perception of art, as well as being a tool to organise, steer and initiate the visitors’ experiences. It was different to what I had seen until then. Hollein designed an anti-hierarchical building, where not the institution ruled the way that art was perceived, but the user would stitch together their own spatial sequences, by choosing alternative routes. I recall being able to see diagonally through multiple spaces, not just horizontally but also vertically, connecting various floor levels. The building was commissioned by Johannes Cladders, who had given Joseph Beuys his first major retrospective at Mönchengladbach, with which he put the Museum Abteiberg onto the map. In an interview with Hans Ulrich Obrist, Cladders explains that the commission emerged from curating an exhibition of Hans Hollein’s work. In the lead up to it, they hypothetically discussed the ideal museum, which years later lead Cladders to commission Hans Hollein directly. Hollein does not distinguish between art and architecture, life and profession. He claims “Everything is architecture”. Cladders said “I wanted a building with a little bit of a jungle, where I could lose myself, and so be forced to find landmarks. I wanted a democratic museum… that has no predetermined route, [where] I have to decide for myself...”

In photography I was not interested in an objectified portrait of reality, but aimed at producing images of things that did not exist in the physical world. Further I wanted to include the author into the work. My work was about staged situations and using photography to condense multiply layers of content and time into an image, which became an object as such; the fallout of a site related event, rather than the image as a documentation of reality. For example I did a series called Lichtzeichen / pharos (see page 20), for which I selected architectural landmarks and re-drew them from memory. This became a means of selection as well as the inclusion of the author. From photography I then turned to film.

The West German Broadcasting Corporation screened an influential production called Freistil: Mitteilungen aus der Wirklichkeit [freestyle: messages from reality], directed and produced by Thomas Schmitt. He introduced Jean Baudrillard, Paul Virilio, Friedrich Kittler and Thomas Pynchon to me. His films uncover coherencies between seemingly unrelated topics, as much as they articulated the many different realities that existed in parallel. Each broadcast covered different aspects of an overarching, often existentialist, theme. It was screened in a rather serious context during prime time, which left the viewer unsure about whether the film depicts reality, fiction, art or is just nonsense. The program would have titles like War and Flying – Bones, Gardens or the Virgin Mary and juxtapose vintage documentaries, art history, interviews with philosophers and scientists and art performances. Remarkably Schmitt
did not try to explain the world, but let the audience establish the connections and interpretations themselves. It is similar to the way that Hollein did not determine the direction of passage at the Museum Abteiberg, giving the recipient alternatives to choose from. It is an ideal which I try to implement in my architectural work, visibly for instance at Uralla Court, however not always achieved.

Another important work was the movie Suspicious Minds. Die Ordnung des Chaos by Peter Krieg. It introduced me to constructivism and second-order cybernetics by juxtaposing Heinz von Foerster (as a magician) and Humberto Maturana in a series of interviews, alongside different Elvis impersonators. The film informed two works of mine, Hamburg März 1991, a video we produced for the Hamburg No Budget Film Festival, and my thesis project: 50 ways to leave your TV. Both question the general assumption that our perception apprehends reality in the way a camera throws a picture onto film, therefore implying that reality exists outside and independent from the observer. No doubt the universe exists independent from us, yet its depiction is not a mirror but a construction; an individually and actively formed scenario that tells us more about the ‘observer’ than about the ‘observed’. 50 ways to leave your TV undermines the media’s role model of superior access to reality through a series of experiments, metaphors and deceptions. Hamburg März 1991 plays with the viewers’ perception, by gradually overwhelming their capability to take in and process information. It successively introduces additional layers of information until the overload forces the viewer to make a selection and individually stitch together a unique understanding of the plot, producing n realities, all equally true.

In general journalists, filmmakers (and politicians) favour the concept of an absolute and independent reality,
insisting on having an objective access to the world, which
they present ‘as is’. This implies that if someone sees the
world differently, he or she must be wrong, thus film or any
other kind of media design, becomes a political tool for cor-
recting the audience’s view, either through education or en-
tertainment. I enjoyed the production processes, the
conceptual work, the travels, dealing with technical gear,
etc., but I could not be consoled with the final purpose, the
screening. I came to question whether it was okay to pre-
tend to have access to ‘the truth’, and essentially lecture the
audience. Those doubts were further fanned by readings of
Paul Virilio whose media critique caught me off balance. In
the end every program, no matter how brilliantly produced,
is screened to an audience that passively consumed a version
of the world. I demanded that everybody had to go out and
see for themselves. Thoughts on perception still inform my
design process today, when I iteratively switch between de-
veloping an empathy for my design protagonists and assum-
ing the role of an external observer, who aims at putting
things into a shared context. In doing so I recognise the ex-
istence of multiple realities within a single project, as well as
acknowledge my own projections onto them. I will come to
this later in the chapters on my different modes of opera-
tion.

Parallel to the filming business I made excursions into
product design, designing and making for example: a coffee
pot, a collapsible Tea Set and a table lamp. It appears that
excursions into different fields are a part of my work modes.
I am currently working on a project in Graz, while living in
Australia. Before I was living in Vienna, yet designing a resi-
dence in the Adelaide Hills. Being somewhere else has al-
ways had an attraction for me. There is a benefit of being in-between and not allowing oneself to be entirely settled in
a location or discipline. Moving between places and topics
facilitates making connections across the borders, linking

Hamburg März 1991 - Umatic video
Düsseldorf 1991, with Friel, Iserloh and Novak
seemingly unrelated items, in order to form an idea or approach. For example borrowing elements from a different context, such as the air-conditioning units that informed the EAF extension, or transferring the ‘suspension of disbelief’ from the context of film into my design process.

Another aspect I transferred from visual communication design to the architectural design process is the conscious differentiation between the signifier and the signified, which I make use of in the way that I steer connotations in my design booklets. This goes hand in hand with an awareness for the workings of perception. All attempts at developing empathy for a person or thing are tainted by projections, as the observer is always part of the observed. Even if it is just a personal mythology, the immersion into the site, the architectural object and the audience of the project has become a fruitful tool in my design process, and as the above mentioned areas of research show, all perceptions are constructed and thus equally true. However, what I try to achieve by introducing an external observer to the reflective part of my design process is to level the ground for the reading of the conceptual idea of a project on the base of a shared cultural context.

From my non-architectural background I adopted the understanding that design is the implementation of a conceptual idea that manifests itself through form. Further, that the physical handling of the material is an integral part of the thought process. This is evident in the way that I integrate physical models and the manual handling of materials into my design process. My studies in visual communication design, particularly photography and film, introduced me to constructivism and second-order cybernetics. They conveyed the understanding that there
There is a benefit of being in-between and not allowing oneself to be entirely settled in a location or discipline.
The leaping whale epitomizing man’s “irrational battle against gravity”²⁰ - © J. McDonald / Corbis
Reflecting on the way that Coop Himmelb(l)au have influenced my mode of conduct. I identify similarities and differences in my architectural values and corresponding design tools, in relation to the wider context of sculptural Austrian architecture.

Work for Coop Himmelb(l)au started in the role of a graphic designer. After finishing my degree in Visual Communication Design I investigated architecture, which appeared attractive to me because it serves not just the basic human need for shelter, but also allows for experimentation, artistic expression and invention at the same time. An internship in an architect’s office in Cologne gave me a first impression of architectural work that nearly turned me off. However, there I discovered Architecture is Now, the first monograph by Coop Himmelb(l)au that showed their early works up until the mid eighties, including their manifestos, such as The Poetry of Desolation and Architecture must burn. The work made my jaw drop, I had never heard or seen anyone talk about architecture in this fashion. I was impressed by the direct and open expression of emotions and personal motifs, steering a design process that was not solely derived from functional parameters. Further, the projects had an underlining agenda of making utopia home. Architecture made sense to me again.

Himmelblau appeared to be honest and truthful about themselves and the way they perceived the discipline. I was intrigued by the sense of authorship they assigned to their work. They appeared to be ‘in control’, which made me aware of the difference between the ‘service practice’ I was working for, and a ‘free’ architectural office that pursued its own agenda. My architectural horizon was very limited at that time, still I realised that nothing like it existed in Germany at the time. Finding out about Himmelblau was like discovering an oasis in the desert - there was no way around it - so I decided to apply for an interview. I was invited for an interview, and Wolf D. Prix quizzed me about my intentions. He got upset when I told him that I wanted to study at the Cooper Union, he proposed that instead I should study in his masterclass at the University for Applied Arts in Vienna, where he had just been appointed professor. He then told me about their graphic designer, who allegedly just had a nervous breakdown, and that I could take over the job if I was able to start immediately. The next week I moved to Vienna.

Vienna in the early nineties felt very ‘east’ in comparison to Germany. The newly erected Kunsthalle, a big blue shed on Karlsplatz designed by Adolf Krischanitz, was one of the very few contemporary buildings. The Coop Himmelb(l)au office was then at the Seilerstaette 16, just opposite the Ronacher Theater, which Coop Himmelb(l)au had won the competition for, however, never got to build it due to a political backflip. Everyone in the office was working on Construire le Ciel, the Coop Himmelb(l)au solo exhibition at the Centre Pompidou in Paris. The office was humming and running at a pace that I had never experienced in any other workplace before, everyone expending themselves. My impression was I had fallen into the engine room of a steam ocean liner, running at full speed, and everybody was shovelling coal into the furnaces. Somehow I managed to hit the ground running and make myself useful.

I started working on a bandwidth of different graphic design jobs, booklets for project presentations, competition entry boards, model photography and any visual aspects of model building, such as simulating media screens through collages and projections. The only computer in the office was the one I did graphics on, all architectural design work was done through physical models and hand drawing. The model workshop was huge, probably half of the entire floor area,
and equipped with large woodworking machinery that ran day and night. I was successively drawn deeper into model building, doing visualisations for the SEG Apartment Tower and the Chorherr housing development, building detailed physical models and interior layouts that were populated with tiny furniture that we made. Even today, with the full advent and possibilities of computer graphics, Coop Himmelb(l)au still rely on physical models during all stages of their design projects. In 2001, I participated in building a massive 1:33 model of the BMW Welt competition entry, in order to produce a film for the BMW board of directors. The film was shot indoors on 35mm film, and overlayed with comuter graphics in post production. The shoot required enormous amounts of artificial lighting, dissipating heat and gradually melted the model, so that we were continuously overhauling and replacing parts. It was one of the few presentation models that were done in the office. Probably 90% of Himmelb(l)au models are working models, produced to experiment with and assess the designs. Nearly all of them are done from white foam-core or polystyrene, taped and pinned together, bearing the traces of earlier design stages.

During my second year at Himmelb(l)au I started studying in the masterclass of Wolf D. Prix’s at the University for Applied Arts (Universität für angewandte Kunst) in Vienna, also called die Angewandte. I was still working in the office, but gradually reduced the workload and only came in for competitions, for example; Federation Square, Kansai Kahn, Cloud#9. The workflow for those was always similar, we would get a concept drawing from Wolf, which we then translated into different sketch models, mass models made from polystyrene foam. Wolf would pick one or two, and have us alter them according to his comments. Once the volumetric sketch models captured his intent, we would shift scale and switch to producing hollow foam-core models, still roughly held together by pins and scotch tape, then gradually

shifting from sketch- to working models through each round of alterations. As can be seen in the picture of the Federation Square proposal (page 223), it still has a working model character, with pins and tape everywhere. The volume is made from individual polystyrene blocks that relate to the program, and are covered with thin overhead foil to give it a Gestalt. Only the small scale projects, like the Opera Stage Set Der Weltenbaumeister, we would immediately work on as hollow objects. In this instance piano wires were pierced through a number of vertical planes that all carried the same initial sketch. Scotch tape was wrapped around them to interpret the drawing and describe various different volumes. The model was then documented by photographs, which formed the basis for the hard-line drawings that went to the metal workshop for production.

Moving within the office from graphic design to architectural design was more incisive than it appears. Not because of the complexity of the different tasks, but in the way it changed my relationship to Prix. When working on graphics I was in the field of my own expertise. Prix would respect this in the way that he critiqued my work, but most importantly I had the confidence to defend my position when my moves were questioned. This changed when moving to architecture. Here I felt I knew nothing, which left me insecure and influenced the way in which I communicated with Prix. I was now in his turf. Instead of confidently presenting an argument I was overwhelmed by his self-assertiveness, which made me doubt my own intentions and thus changed our relationship. Prix is a tough character who expects you to argue for your position.

Himmelb(l)au endured a long struggle for success, in which Prix and Swiczinsky demonstrated their ability to persevere and stay true to their beliefs, no matter how unpopular they may have been at the time. The current project was
always at the centre, no matter what. In their office I learnt to put personal hurdles aside and face the demands of the project. Once we were working on a competition for weeks. Helmut Swiczinsky walked into the model workshop a day before the final hand-in. He looked at the model, started questioning the design and eventually demanded that we change it entirely overnight. One person just walked straight out of the office. Somehow we managed to accommodate the changes and submit in time. Pushing through is one of the key aspects I learnt. I got toughened up, which gives me the confidence to perform in similar situations today. I do not want to glorify pressure, but what keeps me calm in a tight situation nowadays, is the embodied knowledge of having been able to plough through in the past. Admittedly I have had enough of doing this for others, and have tried to bring up my own practice.

Through working in their office I adopted the reliance on physical models, as well as the unpretentious blending of digital and analogue design tools, which are both used in whichever capacity they serve the job best. The digital workflow facilitates a precise and repeatable process that effectively leads towards implementation. Yet, in terms of evaluating the formal and spatial aspects of a design, it can not compete with a physical model. On the screen you can make any geometry look good, and it is very hard to not betray yourself by wishful thinking, and adapt the view parameters in order to achieve a pleasant image. In comparison, a model does not lie. What you see is what you get. In one of Coop Himmelb(l)au’s pamphlets they write:

“While drawing, architecture is captured in words; the drawing is narrated into the three dimensional material of the model. We cannot prove it, but we strongly surmise that the more intensely the design is experienced by the designer, the better the experience of the built space.”2
Models are not just about the evaluation of a finished step in the design process. Handling physical models at all stages of the design process creates an embodied knowledge of the project, which helps the designer to make immediate decisions that “arise ‘biologically’ from unconceptualised and lived existential knowledge rather than from mere analysis and intellect.” The way I extract an idea or form from the material at hand is both similar and different from the Himmelb(l)au mode. I also use highly abstracted material at the beginning of the design process, which I then translate and interpret in order to extract form. The difference is that Prix immediately releases sketches out of his subconscious, which he then passes on to others for interpretation (while still keeping control). I start with an external input, in which I try to identify myself and extract my form. Prix unfolds a project’s point of departure directly from out of himself, while I go an indirect route and use a mediator to access my spatial intelligence.

Both approaches search for a truth that rests within the author and expresses itself in the coherence of the work. While Himmelb(l)au projects balance on the edge between tension and a seeming instability, my work is more calm and less agitated, while still displaying an inherent tension. The animate quality derives from the bodily creaturely character of my work. This is visible for example at Thalia Graz, where the body rests in a stable position, yet its posture and the gap towards the existing buildings suggest potential movement. The same applies to the EAF extension, which perch on an existing rooftop, ready to take off. The bodies are compact and intact, allowing the attribution of a distinct character or personality, which often coincides with giving them names. The figures do not determine a particular reading, however, once a reading has been made it stays recognisable from different points of view. The leeway in interpreting the form is much smaller than in Himmelb(l)au.
work, where the architectural bodies are disassembled, thus allowing the user to attribute multiple readings at the same time. The balance between giving choices to the user and identity to the architectural characters will discussed later.

Looking at the wider Austrian context from which Coop Himmelb(l)au have emerged and still operate. Jeffrey Kipnis writes:

“The extraordinary Gunther Feuerstein rekindles and fans the flames of experimental architecture in Austria with his club seminars, reintroducing historical discourse and the discredited modern internationalists with the same vigor as he approaches the then-current speculations of Superstudio and Archigram. Under his influence, students Wolf D. Prix and Helmut Swiczinsky travel to the Architectural Association in London.”

Feuerstein, who is both a long time observer of the Austrian conditions as well as a contributor, starts his genealogy of Austrian architecture with Frederick Kiessler’s *Endless House*, in which he examines the transient relationship between inside and outside, as well as the transformation of both form and space through continuous surfaces. The work visibly resonated with Hans Hollein, as can be seen in his Berkeley Master’s thesis *space within space within space* from 1960, as well as in his monolithic urban proposals between 1959 and 1963, for instance the *Superstructure above Vienna*. Kiessler’s multiple versions of the endless house remain at the stage of hypothetical designs, while the sculptor Fritz Wotruba later advances sculpture into built architecture with the design for the *Church of the Most Holy Trinity* in Vienna, later known as the *Wotruba Church*. Feuerstein concludes that Kiessler and Wotruba are both “exemplifying a new synthesis of sculpture and architecture.”

Hans Hollein has always supported the fusion of art and architecture. In his 1962 lecture *back to architecture* at Galerie St.Stephan he condemns the 1960’s interpretation of modernism that “sees architecture as the contouring of material functions, instead of being the transformation of an idea through building.” For Hollein the essence of architecture lies in a spiritual and sensual event that exists within the surplus of form.

“Architecture is both a spiritual as well as a functional matter, it has psychological as well as physical concerns. Architecture is on one side a ritual phenomenon and on the other a means of preservation of body-temperature. Between these poles architecture in all periods and all civilisation and cultures ranges. Man has always striven for – and built for – survival; survival during life but, equally important, survival after life. In human activity there is duality and my architecture reflects this in a dialectic between the natural and the artificial, the anthropomorphous (and amorphous) and the geometric. The non-quantifiable is as valid a concern as the quantifiable. Years ago I made this statement: ‘Everything is architecture’. My work consciously covers a wide range. There is no difference between outside and inside, between exterior and the interior. I see urban design, architectural design, product and object design as one integrated whole. I utter myself as an architect and as a free artist. Sometimes by metaphors and metamorphosis, sometimes by abstraction, by sculpting space. Architecture is a work of art.”

In the later sixties Hollein’s monolithic forms devolve in favour of light, flexible and ephemeral installations, exemplified in his conceptually ingenious work *Non-Physical Environment*, a pill, which is later inflated to become the mobile office, one of the many pneumatic structures that pop up in London, Milano and Vienna at this time. On May 8 1968 Coop Himmelb(l)au inflated the *Villa Rosa*, a pneumatic installation that propagated an architecture that was as light and changeable as clouds. The same year that Haus-Rucker-Co’s bubbles extend from individual apartments into the public space. Both were examples of a widespread tendency to combine introverted cocooning, inspired by the first space travels and questions around the minimal habitat, with the appropriation of public space.
I will later pick up on the closedness of the characters in my own work, which over the years have curled up on themselves, before, within the frame of this research, they have been opened up again. Feuerstein points out that “Vienna’s young architectural avant-garde distinguished itself quite clearly from simultaneous international trends by continuously aiming for action and production, and not being content with the mere creation of drawings,” and suggests that the influence of Viennese Actionism inspired them to take more radical action. The Austrian architectural teams, like Coop Himmelb(l)au, Haus Rucker Co, Missing Link, Salz der Erde and others, adopted actionism’s key topics of pain, sickness, wounding and death for their pamphlets and architectural concepts, and translated its introspective exhibitionism from the level of the individual to that of the city. In 1976 Coop Himmelb(l)au demonstrate the potential of public space by organising the *Supersommer*, a series of events and exhibitions spread out through the city.

40 years later Wolf D. Prix dishes out at the Austrian “Toy Poodle Republic” whose architect’s “are the sardines in the shark tank of a rotten building culture. We are the end of the food chain and rather many. Unfortunately we don’t have any swarm intelligence.” He accuses the decision makers to obey the populist mainstream, by not standing in and defend the liberty of arts and architecture; “Foreignness, otherness, waywardness and uncertainty was and still gets ostracized. The unfamiliar, which should arouse curiosity in the other, is expelled.” Most people, viewing from the outside, would attest that Austria has a high level reputation in architecture and therefore assume that it is highly respected locally. Yet one of its mayor protagonists paints a bleak image of the situation in Austria. The outside perspective looks primarily at the final results, the published work, while the insider reflects upon the circumstances in which he pursues his work, the daily grind. If the conditions are so bad, and assuming, which I believe we can, that Austria still produces reasonably good architecture, does this mean that the conditions don’t need to be favourable for the production of architecture? That it is merely the will, despite the circumstances, that informs the outcome? Is facing an opposition a fruitful prerequisite for developing a position? Are Austrian architects particularly adept at defying the circumstances? Or have they been spoiled in the past? I do not think so.

The mainstream in Austria sees the cultural contribution of architecture being primarily fulfilled by heritage architecture, of which there is plenty. In particular Vienna’s first district, the city centre enclosed by the Ringstrasse, is formatted by magnificent historic buildings. Coming from Germany, where nearly all city centres had been levelled during the war, this was an impressive sight. On the downside, the city centre is a well-preserved and guarded museum, that did not leave much room for contemporary work. This was further hampered by Vienna’s geo-political location next to the iron curtain, at the edge of Europe and therefore at the margins of economic development. In his foreword to *Visionare Architektur Wien 1958/1988*, Peter Cook wrote:

“There was once a time when Vienna was the center of the civilized world, a world of ideas, refinement, and ingenuity, as well as delusions. And only such a world can produce great architects. Do not believe all the honorable people, who insist that architecture is necessarily the result of systematic thinking, correct political attitudes, objective reasoning and neatly framed sheets of drawing paper. … The architects and the architectural discussions in Vienna during the past 30 years have been spared from the boom we had to suffer in the busier cities of the West. It is fascinating to engage with the resulting thought-implosion. While the talks in London (whose viciousness is only inferior to Vienna and New York) were conducted in the light of the unspeakable banality in every street you looked at, so few new buildings were erected in Vienna, that the discussions could keep abstract from reality.”

Cook interprets the lack of development as a chance to concentrate on architecture as a cultural endeavor, rather
than having to deal with it as a commodity. I interpret this as an affirmation that unfavorable circumstances can be a prerequisite for a critical mind to develop and express a distinct position. It may sound sardonically in the ears of Wolf D. Prix and Helmut Swiczinsky of Coop Himmelb(l)au, but the hard times probably served as a foundation for their persistence, which they can now harness for the rigorous implementation of their ideas in built work. To say it in their own words: *The tougher the times, the tougher the architecture.*

In order to get anything built, Coop Himmelb(l)au had to revert to subversive measures. The Falkstrasse rooftop extension only got built by exploiting a loophole in the Council’s approval process. Instead of representing it as architecture in the documentation for building approval, it was declared as a piece of art. There is no regulation that forbids the placement of art onto a building, therefore, within the legal context of the planning submission, an addition that turned into a sculpture became invisible to the authorities.

Prix often referred to this as an example of how architects need to think strategically in order to overcome a system that would always act in favor of the establishment. Masking architecture as art is more than just a ploy, in fact it is Prix’s position that architecture and art sit alongside, that “architecture has always been art,” and that it therefore demands the same freedom of expression. Prix’s critique in the before-mentioned article in *archithese* aims at the cowardice within the political class, for which culture is a label conveniently synonymous with heritage, rather than an achievement that needs to be continuously negotiated in order to be kept alive. I tend to suspect that his blow at the institutions is the expression of an internalised conflict that is based in Himmelblau’s past history, particularly their long struggle for recognition and wait for large scale commissions.

I believe that the constantly displayed antagonism may have rubbed off on my practice, and found its way into my design process. There appears to be an urge to start each
project with a conflict, when I inject a foreign object into a local condition. Yet there is also an attempt to resolve the situation by instigating a dialogue in which the protagonists maintain, if not increase, their distinctiveness while pursuing a common goal: space.

Coming back to the conditions under which architecture is produced in Austria. The interests of architects as well as clients are well presented by various lobbying bodies that set the cultural background and conditions of procurement. All community projects above $150,000 have to be publicly advertised for tender, and from $10 million upwards be run as competitions. A couple of my peers have got their ‘leg in’ by successfully participating in housing competitions, of which some explicitly focus on younger architects or recent graduates. The Thalia Graz project, although done by a private investor, was run as a competition because of the delicate urban planning and cultural heritage conditions of the site. The competition had been instigated by a public outcry over the poor design of a directly commissioned proposal on the same site. This would not have happened without an architecturally educated audience.

It was in Graz where the first Haus der Architektur [House of Architecture] was established in 1988, which became the role model for similar institutions all over Austria. The Houses of Architecture are a combination of exhibition-, event and research facility. They assume the role of conveying the importance of architecture to the general public through exhibitions, workshops and publications, as well as being the centre of public debate for architects, planners, artists and students. In Dialogues in Time Peter Blundell-Jones describes the political and cultural environment, which during the 1980’s lead to the establishment of the Model Steiermark, which is one of the most successful examples of political patronage in the name of architecture. It lead to the New Graz Architecture, whose most prominent and internationally successful members are Volker Gienke, Günther Domenig, Eilfried Huth, Klaus Kada, Michael Szyszkowitz and Karla Kowalski. The Kunsthaus in Graz by Peter Cook and Colin Fournier (and in its wake also our Thalia project) would not have been possible without the history of persistent architectural education generated by the Model Steiermark.

Having been based within the avant-garde of Austrian architecture lets me see architecture and art as two closely related fields, whose role it is to constantly question and redefine aesthetic values and further their respective cultural agendas. Architects like Hans Hollein, Coop Himmelb(l)au, Günther Domenig have shown that projecting alternative realities (despite the headwind of popular opinion) is part of the architect’s role. They have demonstrated that something can be special because it is different, therefore promoting an architecture where the alien, the subjective and the unreasonable are positively connoted qualities because of their performative potential. Aspiring to this I have embraced their tools; for example, the reliance on physical models, unpretentious blending of digital and analogue modelling, or the interpretation of abstract material to kick-start the design process.

While Prix and Swiczinsky unfold their source of interpretation directly out of themselves, I use an external mediator (spatial material unrelated to myself), through which I try to recognise and extract the expression of my personal spatial intelligence. Both methods aim to establish coherence in the work through the inclusion of the author. In regards to morphology, my work employs a calmer formal language that nevertheless displays an inherent animate quality. Working at Coop Himmelb(l)au has established a skills base and conveyed the importance of resilience and persistence that allows me to plough through work and successfully finish it. Finally it gave me a first hand experience and acknowledgement of the unquantifiable and irrational aspects within the design process as well as within architecture itself.
Spacelab Cook Fournier - Kunsthaus Graz
Graz, Austria 1996 - © Zepp-Cam

Thalia Graz - Graz, Austria 2014
lower photo: Herta Hurnaus

6 Hollein, Hans Hollein, 35.
7 Ibid., 40.
9 Feuerstein, Visionary architecture in Austria in the sixties and seventies, inspirations – influences – parallels, 52.
10 Hollein, Hans Hollein, (translation U. Bette) 46.
11 Ibid., 111.
14 Prix, “Gluecklich ist wer vergisst was nicht mehr zu ändern ist,” 24-17. (transl. U. Bette)
15 Ibid.
16 Ibid.
20 Half of the Viennese housing market is either community funded or subsidised. see: Kohlmayer, “Gestalten,” 48-53.
21 upcoming architects benefited from a change in the Regional Building and Planning Department, initiated by Wolfdieter Dreiholz, that saw all public buildings and housing schemes bigger than 50 dwellings commis-

1 See also: Prix, “Homeland Utopia.”
4 Kipnis, A Question of Qualities: Essays in Architecture, 35.

4 Kipnis, A Question of Qualities: Essays in Architecture, 35.
The flat as answering-machine - Vienna, Austria 1997 | first time I produced a ‘ground’ as the antagonist to an architectural object
An examination of the specificity of the masterclass system, a model of architectural education where students affiliate with a single professor for five years, in pursuit of individual artistic development and maturation. Influences on my work and the way that I teach architecture myself.

Still working at Coop Himmelb(l)au I began studying architecture at the angewandte, the University of Applied Arts in Vienna, in Wolf D. Prix’s masterclass. The University’s a broad range of artistic disciplines1 are organised around a number of professors and their individual masterclasses, to which students assign themselves via an application and examination process. Once accepted into a class, the selected professor becomes the student’s master throughout his or her entire studies. Otherwise the architectural education is organised in a very traditional set-up, where the design studios are at the centre of the curriculum. They are supported by technical and humanistic subjects, still taking up a large percentage of the curriculum and presenting serious hurdles on the way to completing the two plus three year degree.

Each masterclass consists of approximately 40 students, one professor, three fulltime staff and six tutors, which, including the staff of the technical institutes and workshops, makes for a very favourable student to teacher ratio. Unlike other Architecture schools, where one would switch between different professors or tutors, we were committed to one person, who eventually came to know you very well. This meant it was not possible to evade certain topics. You were always confronted with yourselves and Prix, who, like a coach in competitive sports, would put the finger where it hurts, and make you do what was needed to overcome a specific hurdle. This was not always fun. But it worked out for me. It enabled me to find and keep my bearings, because the reference system did not constantly change.

The influence of Wolf D. Prix on those who went through his ‘school’ can not be denied. It is recognisable in shared ideas and beliefs, as well as a characteristic iconography. However, it did not produce replicas of the master. One needs heroes, someone to emulate in order to acquire their skills. Over time you understand that it is your own responsibility to establish an individual agenda, and at this stage the master becomes a gauge to test against. Work in the masterclass spins around the individual development of each student’s thoughts and actions, which requires a high level of reflection and self-guidance. Many students come in at an older age, of which some, like myself, had already pursued other studies. There was also involvement by affiliated architects, like for example Eric Owen Moss and Lebbeus Woods who came in for workshops, but also colleagues who were not closely associated with Prix’s community of practice, like for example Carl Chu (see outcome of the workshop at the bottom of page 36). The wide array of guests and critics offered different positions that lead to respectful and at times confrontational discussion, which were an invaluable experience to witness. Another way to introduce different voices were excursions. A workshop in Havana, Cuba, and my subsequent trip to Chile, were particularly important to me, as they showed that the experimental, the poetic, the subjective and the irrational are qualities, are not just valued within the architectural community around Coop Himmelb(l)au, but also relevant in other contexts. I point this out because it relates directly to the intent of this research, that is to validate those ‘unreasonable’ qualities.

An example for this in Cuba are the National Art Schools, which gave form to “the revolutionary passion and utopian optimism of a unique moment when the Cuban
Revolution appeared, as Ricardo Porro has described it, mas surrealista que socialista,”² when they were part of “a vision that accepted the subjective and irrational side of reality.”³ Establishing an independent cultural identity was one of the major goals of the Cuban Revolution. The “plastic forms emerging from the landscape in Cubanacan were a refutation of the rationalist principles upon which modern architecture rested.”⁴ Vittori Garatti’s School of Ballet, which is now partly overgrown by vegetation, consists of domed pavilions, a large amphitheatre and six smaller studios. They are connected by an array of loosely overlapping shells, which define the circulation areas, without sealing of the different programmes, nor separating the inside from the outside. This allows both the landscape and the space to flow continuously through the building. It also gives the user a maximum of choice, be it in the passage of way or the choice over different spatial sensations. This is a quality I have always cherished, however, have seemed to have lost in my most recent work. Another compelling aspect of Garatti’s building is how it is broken up into individual shells, with gaps between them, through which light and air is brought in. It reminds me of an intermediate stage of the Thalia Graz design, where I segmented the volume into a series of shells. These dissolved the compact body into plates of armour, with gaps between them that allowed space and movement to flow through.

Following this I visited the Open City, in Ritoque, Chile. The Open City⁵ is a design research laboratory, in which a community of professors and students, affiliated with the Institute of Architecture at the Catholic University of Valparaiso, explore the practice of architecture based on the idea of a consistent relationship between art, architecture and poetry, which is brought into play with everyday life. Since 1970 they have been designing and building transitory models on a 1:1 scale, which are both speculative and inhabitable. The school has established a specific manner that revolves around volver a no saber, “returning to not knowing”⁶, describing an attitude of “being here and now”⁷ during the observations that form the start of the design. As a result a poem is produced, which is then translated into architecture.

“In the words of Alberto Cruz: “...the work of the School of Architecture and of the Open City is... the passage between origin and generation”. The inaugural ritual is collective and solemn, and “no work is realised without a founding act”. The poet officiates as augur possessing “the gift of divining things, of clarifying... and of merging with the land.”⁸

This outspokenly subjective approach relates to my design method of assuming empathy with the creature and the ground and expressing their imagined dialogue in form. Interesting to me is their technique of observing (the ground), as well as the assertiveness with which the school has established their mode of operating within an otherwise rational world. The consistency of work and action, as well as the fact that a couple of Chilean architects have produced outstanding work and achieved wide recognition - for example Smiljan Radic, Cecilia Puga, Pezo von Ellrichshausen, whom I am inclined to relate to this approach - gives credit to it.

In Vienna the physical space of the masterclass acted as a creative hotbed. Due to the simplicity of its setup, cheap tabletops on trestle legs, the empty loft allowed for continuous organisational change. Throughout the semester the space would gradually move towards the edge of chaos, and then back again to an orderly presentation mode at the end of the semester. Except for the first two weeks of the semester, which were programmed as a workshop or excursions,
space and time in the studio were unstructured. Essentially we were given a task at the beginning of the semester and left alone with it. Everybody decided for themselves about their line of investigation, their interaction with the tutors or even attendance in the studio. There were only two fixed dates, the mid- and the end-review, and one needed to be very self-reliant and disciplined to progress in this very fluid set-up. All students would have their material, models, drawings, texts, etc. on the tables and walls at all times, which made the common topic and state of discourse visible and accessible.

The masterclass environment represents what Stuart Kaufmann\(^9\) calls the *Adjacent Possible*, a repository of existing solutions, which are accessible for recombination. For example, the primordial soup supplied the elements from which certain blocks of life (protein, amino acids, etc.) could be assembled. Once those were present, more complex configurations were possible. “Good ideas are not conjured out of thin air, they are built out of a collection of existing parts… some of those parts are conceptual ways of solving problems, or new definitions of what constitutes a problem in the first place. Some of them are, literally, mechanical parts.”\(^{10}\) The *Adjacent Possible* constantly changes under the influence of new discoveries. It is like an organic repository of things that are accessible for recombination. Having parts, ideas and visualisations physically around at all times speeds up the design process. This is one of the reasons why I still use physical working models. The fact that they clutter my studio means they constantly present themselves from different angles and circumstances, ready for re-interpretation.

The students of the masterclass comprised of all year levels, working in the same room and on the same semester topic. Yet the deliverables and expectations were adjusted
individually. This horizontal studio structure resulted in an informal mentoring scheme that allowed a fluid dispersal of knowledge between the different students and their varying levels of experience. “Learning a skill is not primarily founded on verbal teaching but rather on the transference of the skill from the muscles of the teacher directly to the muscles of the apprentice through the act of sensory perception and bodily mimesis.” This set-up culminated in the final project, whose endgame became a collaborative effort, as a final year student could count on younger students to help finalise the project. I was able to produce 11 plates, 900 x 1500, and three models, because I had five people working for me in the last week leading up to my presentation. This set-up emulates an office scenario, in which you plan the completion of a submission around the available workforce and steer their production.

Now, working on my own, and missing the natural exposure to bits and pieces of unfinished ideas, I deliberately enact the ‘edge of chaos’ in the beginning of my design process. Another way to do this is through teaching. Currently I run a 4th year design studio and the 5th year final design studio in the masters course at the School of Architecture and Built Environment at the University of Adelaide. At the University students had no experience of working in a studio. They are also concerned about others ‘stealing’ their ideas, and preferred to discuss their projects ‘one on one’ with their tutors, so that even casual pin-ups were a problem. This was very different from Vienna, where the set-up made it impossible to hide your work from the open market of ideas. As a response I introduced weekly pin-ups, in order to get the students accustomed to reciprocal critique and exchange. In my studio I introduce a performative approach to architectural design, in which experimental, intellectual and technical practices are developed in a series of perpetual transformations, and accidents are valued as a
key to the Adjacent Possible. Each week the studio focuses on a specific aspect in the production of architectural space, together forming an operational field from which the project unfurls. Serious play lures students beyond their comfort zone. The students find themselves in a nowhere land, where the only way out may be a piece of wild speculation, and where fiction serves as a vehicle to manage the situation. Then, in an attitude of informed ignorance, we claim: “Be realistic - demand the impossible.” 12 And make it work! The process aims to exceed preconceived solutions, allowing the project to arise as a critical reflection that condenses form, medium and concept in a coherent proposal. In 5th year we managed to give the students a dedicated space, which they can now permanently inhabit. Since then the quality of the projects has noticeably increased. Here I run the masterclass approach, giving the students just a site, a general topic that they can bend in any direction, and the presentation dates. My aim is to give the students the ability to establish and investigate their own field of interest, within which myself and the tutors coach them as well as possible.

My own final project, *The Dragon in the Sea*, came to be the thesis with which I emancipated myself from the master. The task was a real life scenario, a problem for which the Government of Japan was seeking a solution. The aim was to save the 17m² island Okinotorishima, situated in Japan’s southernmost territory in the Pacific Ocean, from being washed away. At high-tide two rocks, three and five meters wide, are all that remains of the island. With each typhoon these rocks were becoming more and more eroded. The Japanese government was willing to spend 250 million Dollars to protect 17m². The reasoning behind this seemingly absurd endeavour lies in the exclusive economic zone, which is solely guaranteed by the existence of this island. Without it the Japanese territory would lose 400 000 km² of territorial waters, and all rights to fishing and mining. There is a caveat connected to the protection of the islands. The supporting structure is not allowed to touch the island’s shoreline, as this would turn it into an artificial island and forfeit the right for an exclusive economic zone. The equation was: 400 000km² / 17 m² = $250Mio + NO building. The extreme situation and the surrounding topics, real and imaginary spaces, the boundary between artificial and natural, original and forgery, and the relationship between architecture and territory, all embedded in a cultural and a legalistic context, made the task interesting to me.

As a solution I developed the choreography of an annual ritual, which reinstates the volcanic origin of the island, through the transfusion of original island material, from the ‘inside’ of the islands to its ‘head’ above the sea level. Every year three Japanese, a scientist, a machinist and a registrar, travel to Okinotorishima. They measure the island, calculate last year’s material loss, excavate the equivalent quantity of rock material, smelter it and deposit it on the peak on the island. The symbolic act that followed constitutes the inhabitation of the island. The three take folding chairs, take their place on top of the cooled-down lava, fish, trade their catch among themselves and then dine together. Internally the island will be excavated so that all needed elements can be stored inside. Power was provided by the ship that brought them, anchoring beside the atoll. The island is entered through an airlock. Above sea level nothing indicates the existence of the installation. The project mediates different value systems in a poetic way, as well as technically solving the task. It reminds me of a project by Kengo Kuma, the Kirosan Observatory, where he wanted to design the choreography of movement, instead of building an object. Eventually the project was carved out of the ground, turning the peak of the mountain into a void, reversing the experience and expectations of the audience who ascended towards the lookout.
The dragon in the sea was different from previous projects, as form played only a marginal role in it. Instead I went on a three month research odyssey, during which I investigated every factual aspect of the task, from the United Nations Law of the Sea, the site’s geological characteristics, to the economic intentions behind the commission. This dry approach, as well as the small size of the project, was not Prix’s cup of tea. Final projects would normally be of much larger scale and preferably deal with an urban context. However, Prix saw that I was onto something and supported me, which demonstrates that the masterclass system is not about instilling a particular approach, but enabling students to establish their own agendas. Nonetheless it is possible to identify common characteristics within the pool of people who went through this school. My final project must have struck a chord. I finished summa cum laude, had it published in *Arch*° and exhibited at FRAC Centre Orleans, Rock over Barock° and Reserve der Form°. Although I never did a similar project, it informed a technique or mode of working; testing the validity of a conceptual idea through the production of presentation booklets.
The presence of a strong antagonist (master) forces the opposite (student) to establish a position. This happened on the basis of skills acquired by emulation and the freedom for individual artistic exploration and development. The physical space of the studio played an important role in giving access to the Adjacent Possible, the repository of existing solutions that allows creative innovation through the recombination of existing knowledge. This is a situation that I try to emulate in my design process as well as my own teaching. The two streams of my education - communication design and architecture - inform my design process. Communication design is involved with the public agenda of my projects, where I aim to validate a design through a shared frame of reference. My architectural training has promoted appreciation for the subjective and personal agendas embedded in architectural production, and the attendance to form as the path that leads to architecture’s core – space.

The interplay of these two aspects define the object-related ontology that exists within my work. Both educations and my family background have determined the manner in which I work; a hybrid process that values embodied knowledge as much as analytical understanding. This is also reflected in my teaching, where I encourage students to make use of ambiguity and indeterminacy to circumvent a biased mind and allow ‘unreasonable’ combinations that might be the key to innovative discoveries. They are asked to produce fictional narratives that hypothetically resolve the conflicting interests of personal and public agendas that coalesce in a valid project.

2 Marti, “A revolution of form is a revolution of essentials.” xxxii.
3 Castro, “History will absolve me,” 158.
4 Loomis, Cuba’s Forgotten Art Schools, 20.
5 Founded in 1970
6 Pendleton-Jullian, The Road That Is Not a Road and the Open City, Ritoque, Chile, 13.
7 Ibid.
8 Perez de Arce, Oyarzun and Rispa, Valparaiso School - Open City Group. 14.
9 Kaufmann, “The Adjacent Possible: A Talk with Stuart Kaufmann”
10 Johnson, Where Good Ideas Come from: The Natural History of Innovation. 35.
12 Ernesto Guevara
15 Exhibition at Künstlerhaus Vienna, curated by K. Stattmann and A. Fitz, Vienna 2004
16 I will talk about this in more detail in the chapter: Modes | analytic
the next ENTERprise-architects - *Open-air Pavilion 'Cloudtower'* - Grafenegg, Austria 2007
Interrogating the roles that my mentors have played in defining the manner in which I work. Outlining similarities and differences in the methods and values we pursue.

Marie Therese Harnoncourt and Ernst Fuchs of the next ENTERprise Architects, as well as Klaus Stattmann, had finished their studies when I had just started studying at the Angewandte. They became tutors in the masterclass shortly after, and later I shared an office with them. While still a student, Ernst Fuchs demonstrated that an expressive and daring design could be implemented under the conservative circumstances of a rural village in Tyrol, even without a large budget. It bolstered our confidence that the Zirl House was designed by a fellow student, whose wit and tenacity outsmarted the Council’s radar for non-conforming objects, making use of ambiguities in the documentation for building approval, and accepting the risks that come with it. For me the Zirl house was also relevant in terms of its design process, as well as the manner in which Fuchs tackled the implementation. The design derives from reading and interpreting a spatial data field. Andreas Ruby writes:

“The necessity of this reading in order to articulate space makes clear that Fuchs is not concerned with banishing the architect’s subject from architecture. He simply does not see the architect as creator of form, but similar to French film director, Jean Luc Godard, rather as the ‘organisateur conscient’ of the formation process. As a result of this, Fuchs introduces strategies which are known to modern art and literature, such as the ‘écriture automatique’ of the surrealists or the dadaists’ controlled use of chance. In relation to this he understands form as something which is not invented, but rather found: the form as ready made, that is a form ‘already made’. The main point of design
shifts from the pure production of form to its post-production – a development which can be observed in contemporary electronic music and which could gain importance in contemporary architecture as well.”¹

This is a technique that comes with Fuchs’ exposure to Coop Himmelb(l)au, which I have also adopted for various projects, however, with the difference that while Fuchs is after the objet trouvé, I use the material to inspire the general approach, or idea, for the project, which I invent by reading the material through different frames of reference. In parallel I extract form, but this is less truly found than clandestinely projected, as I deliberately search for ‘my form’. In that regard I am still a creator of form, but one who works with, through, or against, a staged handicap, while sensing and gradually understanding what I am actually looking for.

For the exhibition Rock over Baroque at Aedes Berlin, curator Reiner Zettel selected ARTEC Architekten, Urs Bette, Delugan Meissl Associated Architects, Sophie Grell, stiefel kramer, Klaus Stattmann, Tercer Piso Arquitectos, the next ENTERprise architects and Wolfgang Tschapeller, to represent, what Kristin Feireiss ² calls, “a cross-section of Austria’s architectural avant-garde”.³ In the accompanying publication Wolf Prix states: “These young architects show that for all of their diversity, it is nonetheless possible to discover a distinct quality in Austrian architecture: the architecture of the spatial sequence.” ⁴ Prix then continues to draw a lineage from the Baroque and Fisher von Erlach to Friedrich Kiessler, Rudolph Schindler, Hans Hollein, Walter Pichler, Raimund Abraham, Guenther Domenig and Coop Himmelb(l)au, down to the current younger generation. Despite the accolades, Prix commiserates that the current architectural scene is composed of lone warriors, who are
unable to unify their voices under an overarching theoretical body, which would “allow an interpretation and stylisation of the architects’ clearly evident qualities in such a way that a sharply contoured image appears of what might make Austrian architects distinguishable in the global scene: namely, the desire to redefine built space.”

I believe Prix was referring to the wider architectural scene, including Graz, Innsbruck and Vorarlberg, as well as the three different architecture schools in Vienna. Rock over Baroque focused on Vienna and the context of the Angewandte. The wider architectural scene in Austria includes many different positions, which is what makes it so valuable. Binding them together in one particular school of thought would make the work more recognisable, but may come as a loss in regards to vividness of the local discourse. Yes, there may be frictional losses, but do they not sharpen the mind of the actors involved? Not according to Prix, who sees them as “simply an unruly defiance of tradition, a reflection of Austria’s anti-intellectual stance.” This is a position I do not agree with, but understand where it comes from. As a consequence of a unified approach, we would miss exchanges like that between Wolf Prix and the Director of the Architecture Centre Vienna, Dietmar Steiner. Those quarrels prevent the profession from becoming self-referential and congratulatory, and act as a multiplier for the discourse around all aspects of architecture. I agree that internal discourse between individual schools of thought may weaken national representation and recognition, but only if the aim is for competition on that stage. Otherwise the disunity can be seen as a resource and breeding ground for outstanding positions. One could suggest that Austria’s mountainous rural terrain that separates the valleys supports the emergence of stubborn individualists who thrive in the urban contexts of Vienna or Graz, when there is no need to comply with an overarching agenda or protocol.

There is a certain irony in the fact that Prix, who emerged and worked in a team, alongside other architectural groups in the sixties, coined a group of lone warriors, whose lack of unity he deprecates. The relationship between the masterclasses at the Angewandte, Prix, Hollein, Holzbauer, was dominated by competition, which was also present in the classes themselves, where education was focused on the individual. Collaborative work was the exception, and it has only been recently that I have engaged in it. However, there is still a strong affiliation and solidarity amongst the alumni of the Prix masterclass, as well as beyond it. Ernst Fuchs and Klaus Stattmann are still amongst the people I contact for advice in regards to implementation. Bettina Goetz and Richard Manahl from Artec, who are originally from Vorarlberg and studied in Graz, have also been generous in sharing their expertise about detailing with me.

Artec’s work develops around existing typologies, mainly in housing. They enjoy spinning these further, digging deep into structural and organisational systems, and constantly improving an established concept from project to project. I am very fond of their project Zita Kern Space, which is one of the more sculptural of their works. It is a one-off solution, whose beauty lies in the relationship to the existing building and a precise implementation that renders technical aspects invisible. The program for this project is a space dedicated to writing, executed as an extension to an old farm house. The project appears to me as a progression of the Solar Pavilion by A. & P. Smithson. Both projects share an alien appearance in relation to the context, with which they collaboratively interact. This aspect comes up in my work as well. Further, there is the similarity of the raw aluminium cladding, which contrasts with the warm colour of the brick below. Both designs are compact minimal enclosures, yet the Zita Kern Space is a sculpturally faceted form, rather than a box.
I can relate to following an architectural idea with a distinct yet minimal formal approach. The project achieves maximum effect with the least amount of agitation, and nearly all of my projects try to realise this as well, visible for instance at Uralla Court II, AN house, and the EAF extension. In comparison, the work of the next ENTERprise architects (tnE) is overly saturated with surface agitation. We share a sometimes similar way to commence a project, however, while tnE try to carry the formal richness through to the architectural object, it is my intent to reduce formal richness towards its geometric essence.

Another colleague who is part of my community of practice is Wolfgang Tschapeller. He is a meticulous observer, who develops ideas from everyday scenarios that he transposes into a different context. For example, he interprets a photograph that his mobile accidentally took, lying in a plastic bag together with a book. This serendipitous finding became the spatial point of departure for the Bauhaus Europa project and the St. Joseph residence. Furthermore, since the book was a catalogue on the work of video artist Dan Graham, he developed a thematic around the segregation of the body and the built environment. A theme that he took up as curator of the Austrian Pavillion at the Venice Biennale in 2012 with Hands have no tears to flow. Similarities to my work exist in a couple of areas. One, is the observation of current conditions and taking notice of serendipitous accidents, allowing them to inform a project by analysing their value under the light of a specific frame of reference. For example, identifying existing air conditioning units as a potential driver for the EAF extension project. This leads me to a second feature, the building elevated from the ground.

In the project, Centre for the Promotion of Science, which is currently under planning, Tschapeller does not want the building to claim the land it sits on, which, as he says, he wants to make accessible to all. This relates back to Coop Himmelb(l)au’s 1968 statement “Our architecture has no physical ground plan, but a psychic one.” Jeffrey Kipnis explains that:

“disestablishing unwanted authority in a building has evolved into a far more complex issue, one that confronts not only the feudal regime of the ground, but the regulatory regime of the plan... Speculative architects today attempt to design buildings that detach not just the body, but the existential being of its subjects from the ground plan, transporting her or him elsewhere...” Coop Himmelb(l)au “attempts to accomplish the transport by using immediate experience.”

At the Centre for the Promotion of Science, or the private residence at St. Joseph, Tschapeller literally erases the ground plane and completely detaches the building from the ground. Elevating parts of a design from the ground is evident in my work as well. Two projects that deal specifically with an existing ground condition are Uralla Court I and II. But while the two Tschapeller’s projects do not relate to the ground at all, leaving it completely untouched, I activate the ground by expressing its revealed characteristics. Instead of allowing all to roam the ground freely, the ground itself establishes its authority.

A unique aspect in Tschapeller’s work is the way in which he handles models. He has a background in furniture making, which is evident in the meticulously crafted models and the value he gives to their material qualities. His physical models are like small sculptures, made from timber or cast in plaster. I never saw a working model of his, which makes me believe that his ideation process is steered by a purely intellectual analysis. Only once an idea has been
nailed does he go on to put it into form. Models are used to verify the idea, as well as to promote it. They are three-dimensional diagrams, whose aesthetic lies in their natural relationship between idea and form. The quality of the work is felt rather than known, it seems to embody the knowledge that went into its conception, and thus does not need to be explained to be understood. I envy the attention he puts into the production of these objects, but I see also the danger of losing focus of the architectural idea by falling in love with the material qualities of an object. For me models are a generative tool within the ideation process. An idea is co-produced by the handling of material processes, and observation of the phenomena that lie outside of my planning. Verification happens on a graphic level that runs parallel to the design and production of working models, which accumulate traces of trial and error along the way.

Klaus Stattmann was a classmate and tutor who guided me through my emancipatory thesis project. He started his design research around questions of disguise, deception and mimicry in the natural environment, which he transposes into the realm of architecture, where he plays with raising and fulfilling culturally denoted expectations. His work explores the ambiguity of form and its potential to incorporate multiple readings, depending on the observer and his cultural frame of reference. The architecture draws its interest by being ‘as well as’, and belonging to multiple reference systems at the same time. Experiencing them involves the investment of time, and ‘going through’ the different zones of recognition. The Kinsky House, a collaboration by Klaus Stattmann and Ernst Fuchs, is an example of this.

“The existing ensemble/system ‘old house + orchard’ is supplemented by a mimetic architectural sculpture in the form of an artificial tree sphere, which only discloses itself when one looks at it more closely. The proportions of the old house are retained; the orchard is extended by a habitable tree sphere. In terms of its structural elements, the building consists of three systems: the ‘old house’, with traditional spatial organization; the ‘tree sphere’, as a compli-
icated, yet-to-be-conquered landscape with unspecified uses; and the ‘hidden living room’ between the existing garden surface and the tree sphere. In the ‘house-landscape’ system, the artificial treetop, from afar, forms a supplement to the orchard system (tree in relation to tree) and is thus an expected component, being a constitutive element of the surrounding landscape. It is only when one comes closer and crosses the identificational (sic) boundary that the tree transforms itself into a house; nature becomes culture.”

Stattmann’s ideas are the outcome of abstract intellectual discussions. Once a conceptual approach is found, he rigorously implements it in a design process that appears to develop independent from formal prejudices. I find his work unsightly in the most positive way. It does not need to rely on a cult of beauty, or ugliness, since there is an idea inherent to the project. This reminds me of what Mauro Baracco said during my 5th PRS presentation about Melbourne’s architectural context: “In this town there is a culture of thinking that ugly is better. But this is exactly the same, as saying that pretty is better. Exactly the same.” There is an aspect of ‘unreasonableness’ in Stattmann’s work, because he does not conform to any aesthetic cults, even those that seem superficially to suit his formal outcomes.

Finally, teaching alongside Ian McDougall for the past six years has had an impact on my work. The literal conversions of a knot into a function centre, which I explored for the Wien Gas competition, would not have happened without his influence. One of his recurring goads is: “A bad idea - is a good idea” (if pursued radically). It encouraged me to not take myself too seriously, and therefore opened up new areas of exploration. The value of McDougall’s illogical provocation reveals itself by being both unreasonably serious about outrageous proposals and, at the same time, profoundly grounded in cultural references.
By sharing techniques and values my mentors have set the basis for my individual advancement. They allowed me to appropriate and further develop; the introduction of chance operations in order to challenge my spatial intelligence and extract ‘my’ form – valuing form as both a carrier of meaning and for its experiential qualities – the appreciation for the bodily experience of form as a means of assessment (in the design process as well as the final work) – the borrowing of formal and semantic clues from different contexts, and putting them to use for what they originally were not intended. Despite the common coinage, different modes of working and aesthetics have developed in each practice, while the shared background has forged a community that I belong to. Being part of a community entails that one takes up, or is ascribed, a particular role. Coming to Australia has enabled me to reposition myself because of the lack of prior expectations. In that sense it allowed me to explore alleys that beforehand were considered no-go areas, and which subsequently became the basis of further developments and exploration. The value of McDougall’s illogical provocation - a bad idea is a good idea - reveals itself by being unreasonably serious about outrageous proposals, while at the same time being profoundly grounded in cultural references.

2 Kristin Feireiss; cofounder of Aedes Berlin, former director of the Netherlands Architecture Institute.
3 Feireiss and Commerell, “When Is the Present, 8.
5 Ibid.
6 Ibid.
7 “It should be read against the contradictory relationship that Austria has to its greatest minds: “Vienna’s spirit oscillates between extremes of depth and shallowness, between profound humanity and base antipathy. On the one hand, it has nurtured some of Western civilization’s most humane talents, from Wolfgang Amadeus Mozart to Kurt Gödel, but on the other, it is notorious for the animosity it has shown towards the likes of Freud, Oskar Kokoschka, Gustav Mahler, Lise Meitner, Frederick Kiesler, Arnold Schönberg, Elfriede Jelinek, and others, all of whom it today claims with pride.” Kipnis, A Question of Qualities: Essays in Architecture, 40.
8 staying true with Coop Himmelb(l)au’s “vow to will the psychogram into building without simplification” Kipnis, A Question of Qualities: Essays in Architecture, 50.
9 Tschapeller, “Einige Projekte,”
10 Prix, Get Off of My Cloud, 25.
12 Stattmann, “Kinsky House”.
13 Practice Research Seminar
14 Ashton, Raggatt, McDougall
The blueprint of my design process is a threefold choreography. Its spine is made up of a sequence of events that are flanked by two different modes of interrogation, one is intuitive, the other analytic. This chapter examines how I utilise the unreasonable.

Looking at my work within the frame of this PhD has revealed the underlying skeleton of my design process. The central sequence of the diagram on the left defines ‘what’ happens, while the parallel strategies determine ‘how’ things develop. Most projects starts with the introduction of the unreasonable, either in the form of a field of information (from which I then extract a concise figure), or as a found object introduced from a different context. Hereafter the figure engages in a dialogue with the site, a move that differentiates the figure from the ground, turning it into a character, while also activating the ground as an entity in its own right. Character and ground then negotiate the essential quality of the project, which is space. Depending on each individual project, the two accompanying modes of operation have a unique impact. The intuitive synthesis tackles the project from the morphological side. It evaluates character, ground and space by developing an empathy for each of them. The analytic viewpoint deals with the project’s perception, the way in which it is assumed to be read by the audience and myself. This constitutes the semantic level of the project, relating back to my studies in visual communication design. Here I engage with an observer’s perspective in order to develop a coherent conceptual proposal, and validate the project beyond my subjective decisions. The format of this analytical stream is a presentation booklet that accompanies the project from the very beginning. It tests the conceptual feasibility of a project and acknowledges the public’s desire for reason.
K. Verbeek investigates the benefits of randomness in the design act. A project has to have an idea, it needs to make sense, but it only needs to make sense at the end of the process. Aiming for reason and determinacy in each step, particularly at the beginning of a design process, can be counterproductive, as it keeps the designer within the corridors of existing solutions and expectations. Thus diminishing the possibility to establish novel combinations.

Introducing the unreasonable is a technique that supports drawing connections between seemingly unrelated fields and materials. The unreasonable forms the fertile soil from which a conceptual idea can stem in the attempt of reading and analysing its potential. Careful observation and the direct handling of material sits at the core of my practice. They are the prerequisite for hunches to arise, to settle and form an idea. The unreasonable is introduced in different ways in each project, but in any case it is materialised in a graspable / hand-able form. Sometimes it materialises as a field of forms; Thalia Graz: voids from the surrounding developments, River Torrens footbridge: overlay of sketch models from previous projects, a found object; EAF extension: air-conditioning units, Uralla Court: sponge and jacked up boat hull, or via a collaborative process with another author.

For the exhibition To the Islands the unreasonable was introduced through the artist Margit Brünner, whose paper models stood at the beginning of the design process. The collaboration was laid out in such a way that we would pass artefacts between us, but would not work on them together. I received her models and then interpreted them, in order to produce the next generation of objects. The unreasonable was nevertheless site related, as Margit had produced them in response to her performative interactions with a particular site in Port Adelaide. Anything from the site can contribute to the project in a meaningful way, even when at the beginning it appears minor and its value can not be assessed. In contrast to a traditional site analysis, asking concrete questions and expecting concrete answers, the concept of the ‘unreasonable’ starts with an unfocused collection. I believe all material carries information specific to the site, which only emerges during the processes of interpretation and seeing things, when the designer’s own predispositions and the general intent of the project are projected onto them, and an idea or form is carved out.

Another way of introducing the unreasonable is through the manner in which I handle the material, allowing myself to be guided by intuitive moves instead of pure reason. Inevitably my previously described background influences the way in which I resolve a project, evident in the recurring morphologies within my work. But if things look similar at the end of the process, why would I need to introduce the unreasonable at the beginning? Because by observing and evaluating the unreasonable I give exterior ingredients the chance to break through my personal preferences and become part of a novel solution. My subconscious repertoire of forms is forced to deal with the otherness, which results in some attributes being passed on, while others are being eliminated. But it also allows for the emergence of new and unprecedented situations. Introducing a materialised ‘unreasonable’ forces me to cope with its otherness. In that sense it is similar to the technique of a surrealist painter, who forces himself out of the beaten track by drawing with the left hand instead of the right. A process which is able to change...
a project on both levels; phenotype (expression) and genotype (content).

The role of the unreasonable is twofold. Initially it is used to disassociate myself from my own predispositions and the premature imaginings that come with a given task. Then, as a side effect, it strengthens the role of the author. By inviting an alien component into the design process I temporarily relinquish power, with the benefit of new suggestions being displayed. In the process of working through the material, changing it over and over again, I assign and re-assign meaning. This brings the author back into the equation, who, in the presence of the foreign, has to make a stand for his own intents. I am blanketing my personal history with the formal noise of the unreasonable, then I send out visual pings, in order to reconstruct it from the reflected echo of the bodies within the spatial field. In that regard the unreasonable becomes a sparring partner that helps me to keep focus on what is essential to me.

I am interested in producing objects that have an aesthetic that contributes positively to the atmosphere of an object or place. Atmosphere and space are essentially the same. Their value could be described as beauty, which has nothing to do with looking pretty, or ugly.

Bettina Götz \(^3\) from Artec describes: “Beauty comes from the precision of the concept, the development of an idea, but it’s not sought as a value itself. We always say that design is unnecessary. And if we do a project, we do not design facades, or things like that, as in post-modernism, where people sat and were drawing windows or something
like this, because we develop our project from the inside and the sculptural form. Facades develop out of the inside; they just are what they are and are not designed."  

What Götz refers to is authenticity, expressed when underlying principles are present in the work and determine a particular aesthetic. Authenticity can stem from different value systems. In my work I try to achieve authenticity on two levels. a) Through my personal poetic agenda, which is expressed in the relationship between character and ground. b) The parallel analytic construction of meaning through a coherent narrative based on logic and reason.

Chance operations have a long history in the arts. I am thinking, for instance, of Hans Arp, who dropped sheets of paper onto the floor to achieve unplanned compositions, Kurt Schwitters or John Cage. The surrealists developed many techniques that would free the author from predispositions and reasoning. Interesting to me are those examples where the artist would not just select and frame the outcomes of a generative process, but also work through them, again and again, in order to enhance or suppress specific qualities. An unexpected example for this is shown in the findings of Pepe Karmel, on the works of Jackson Pollock. Through his analysis of photographs and films that Hans Namuth took while Pollock was working on Autumn Rhythm and Number 27. Karmel reveals that, what appears to be an unordered explosion of strokes and lines, is the result of a sequential layering process that accentuates and masks figurative elements. In fact Pollock starts with abstract figurative gestures, which are subsequently submerged and hidden in a graphic field of information which he creates by applying secondary layers of thrown and dripped paint. In the next step he would then frame and enhance particular motives, while further camouflaging others. Looking at the finished state of Number 27 or Autumn
Rhythm one would not be able to spot those figures without the help of film and photographic footage that documented its genesis. Interesting for me is that, unlike other artists who borrow their inspiration from external fields, Pollock creates the material for interpretation himself. The problem is to conceive a system that is loose enough, or far enough from control, so that its outcomes give enough room for interpretation.

At times I create the unreasonable material myself. For Thalia Graz I materialised the voids between the neighbouring building fabric, and superimposed them onto the site. For the competition WIFI St. Pölten I traced the outlines of earlier projects and used them as cutting tools, which subdivided a volumetric block into multiple elements. This created a fine grain of three dimensional information, in which I would push and pull the faces of individual elements in order to achieve a desired spatial organisation and overall volume. For the River Torrens footbridge (see page 101) I compiled a dense overlay of various earlier models that intersect and create a fine-grained spatial field. I would then go on a search for the creature within, and like a sculptor chiselling away on an imaginative volume that encapsulates the spatial field of information. In this instance it was not successful, and I continued working with a found object, a slitted and curled-up piece of bark, which I interpreted.

Sensing the atmosphere, which is equivalent to assessing the form, happens in the moment of making, when I am fully immersed in the material, when I am in my model. Jackson Pollock says:

“When I am in my painting, I’m not aware of what I’m doing. It is only after a sort of ‘get acquainted period’ that I see what I have been about.”

Jasper Morrison adds: “Objects must make good atmosphere… As a child I managed to feel completely unhappy in a place that seemed to me to have a bad atmosphere. My sensibility was excessively fine-tuned in relation to situations: when I was in the wrong place, I could feel my personality disintegrating. And that there was no way I could protect myself or pretend to adapt to the environment in which I found myself… this weakness allowed me to de-
velop a better than average sensibility for the atmospheric effects of things on their surroundings. That’s why I became a designer.” ⁹

A similar sensing of atmosphere happens when serendipitously coming across a found object. Importantly, in order to permit the findings, I need to act below the radar of the reasonable and rational. Naturally there is also logic and reason included in my work. These are introduced in an analytic reflection mode that alternates with the unreasonable. Many innovations emerge when a particular virtue is transferred from one area of expertise into another, where it is then put to use for something it was not originally designed for. This is a process for which evolutionary biologists Stephen Gould and Elisabeth Vrba coined the term ‘exaptation’. ¹⁰ In this regard an intuitive hunch is extremely helpful, as it draws immediate connections between seemingly unrelated categories. This happened for example with Uralla Court ¹¹, where the initial positioning of the incoming vessel stems from the way that yachts are jacked up for service, giving access to the area below the waterline. I found this configuration very intriguing, the boat remains as a vessel, but also becomes a roof that shelters the convex void underneath, without restricting view or movement for those taking shelter below.

The use of vessels for architectural purposes started with the design of an extension to the Suzuki house by Peter Wilson. It was proposed in response to the need for more room caused by a growing family. The addition provides independence for the teenage daughter, whose old room will be taken over by her younger brother. Conceptually the design draws on an analogy to the Space Shuttle. It is a self-contained unit that does not deny its origins and dependence on the main house below, yet is ready for take-off. Access is available either through the main house or directly through a rear entrance that allows for greater autonomy and freedom. Existing services at the back of the main construction are extended upwards to connect the module to the main power and water supplies. Another example of exaptation, in the use of a found object, is the EAF extension, where a design is legitimised by its formal relationship to an existing typology. The prevailing air conditioning units serve as an argument to validate the design through contextualisation. Discovering a situation like this gives me joy. Creating an object that a) solves a problem, while b) having an aesthetic value that contributes positively to the atmosphere of the place, makes me happy.

A main technique I use in my design process is to develop an empathy for the objects I deal with. I alternate between immersing myself into the figure and the ground, imagining how each would react towards the other. The basis for this is the assumption of aliveness for all participating agents, the author, the object and the ground. I switch roles between the three, iteratively immersing myself into the object and the ground, and thus initiate the dialogue between the two. There is always the question whether my empathy reveals an existing condition, excavating the genius loci, or if I am merely projecting my own agenda. Essentially, I don’t care, because at this point I do not distinguish between myself and the object or the ground.

The morphology of object and ground changes in response to the dialogue that revolves around negotiating the void between them. The void becomes a central focus in each project. Through the differentiation of object and ground the void between becomes charged and emanates its own atmosphere. This is what I call the activation of the void, or the emergence of space. It is one of the most important outcomes of a project. The emergence of space is indicated by a lift in atmosphere, the void starts to feel right, which tells me to halt the design process. Likewise,
the ground and the character emanate an ambience, they radiate space. There are no quantifiable parameters for this, it is a (unreasonable) feeling that I respond to. It develops through handling the form in conjunction with careful observation. Eduardo Chillida said: “I know the work before I make it, but I do not know what it will be like… I know its aroma.” 12

Picking up on the earlier claim that the unreasonable is also introduced by the manner in which I work, allowing design decisions to be influenced by intuitive moves. These decisions are made ad-hoc, similar to those of a chess player who engages in the blitz variant of the game13. Without the time to consciously analyse the situation, the player relies on putting entire chunks of knowledge into action, which instantaneously leap into the moment. The resource for this immediate action lies in the personal history and experience in dealing with form and space. One might argue that it will only give access to previously stored solutions, and thus be inappropriate for creative tasks. Neuroscientists suggest differently. Their research shows that besides our conscious processing of archived experiences, our brain also arbitrarily recombines existing material. This happens on a subconscious level, and is then presented to us as preformatted knowledge or instantaneous experiences.14

According to current research, neurons alternate between two states. One is phase lock, during which clusters of neurons pulse in synchrony, and the other is phase shift, when neurons are firing electrical impulses in an unstructured and improvised way. The synchronous phase lock mode gives access to verified patterns, memories as well as complicated movements. While new combinations of existing knowledge are made during the random access of phase shift. The majority of these combinations are worthless, yet, every now and then, one of them produces a hunch, which,
There is a romantic misunderstanding, that intuition is some sort of mystical gift, which would allow us to receive an insight ex nihilo.

Thalia Graz - materialised voids aggregate to a coherent form

Thalia Graz - a gym and offices above the existing buildings on Girardigasse, Graz

if picked up, is developed further to become an insight. Robert Thatcher from the University of South Florida could prove that the duration of phase shift correlates directly to a person’s IQ. In his experiments, subjects with a longer phase shift (noise / chaos) showed an increased ability to solve creative tasks, and performed better in IQ test. 15

There is a romantic misunderstanding, that intuition is some sort of mystical gift, allowing us to receive an insight ex nihilo. As described above, the mind works with an existing pool of information, consisting of its history and the perceptions of the moment. However, it can also construct instant experiences that abruptly become present as intuitions, to which we thereafter consciously assign meaning. In creative work insights announce themselves as hunches or premonitions. They tentatively bridge the gap between the unconscious sensing of the world and the creative recombination of existing experiences. Picking up on a hunch is a conscious and active decision that a designer makes, and it needs an attentive mind that gives it space to develop. A hunch is not a solution or idea yet, rather the feeling for a possible lead towards an idea. Following an intuition is dependent on the individual’s value system, which will either allow or inhibit it. While designing I notice a possible lead as a bodily feeling. It is not an articulated thread that I could name, rather the registration of joy, which builds up when handling the material that could potentially lead to an idea. The sensation is similar to those moments when you have the name of a person on the tip of your tongue, but you are not able to articulate it, although you know that the answer is within you.

Intuition is a tool. It increases the range of options from which a solution can be crafted. A prerequisite for its application is attentiveness, both for the material one works with, as well as for oneself. I reach a state of awareness when
engaging in physical experimentation and model building. Work then becomes serious play. I need to be immersed in the material, and not distinguish between myself and the world, in order to sense a hunch. Physical models are the format my subconscious needs to access inherent spatial qualities and assess architectural ideas. The reliance on physical models is connected to my upbringing with Coop Himmelb(l)au, where models have been the predominant tools of assessment throughout all stages of the design process. For me they have become a prerequisite for architectural design, since I believe that a three dimensional problem can never be adequately represented and solved in only two dimensions. At times I have delayed the production of models, thinking I could solely rely on my digital modelling skills, however, the screen has often fooled me. Or, I have fooled myself, by making things look better on screen than they actually were.16

At the start of a project I do a couple of sketch models, which can be either digital or physical. Then I maintain at least one physical working model that is constantly worked over throughout the entire course of the project. For Thalia Graz the first sketch models were digital, but they were immediately mirrored as physical volumetric models, in order to fully assess their formal and ideational qualities. They were made from polystyrene foam, visibly pinned and taped together, meaning you can always dismantle them. The following working model was made from white foam-core, so that the model does not just describe the architectural body, but can also be used to test the proposal’s functional performance and the spaces that it creates. This model would get worked over again and again, so that the traces of previous stages are visible, presenting the history of the project as if it was a three dimensional diary. This is helpful when a particular direction has not panned out the way it was anticipated.
A digital model runs parallel. The numerical control it gives allows for greater precision and efficiency, and is used to incorporate functional and site specific parameters. The formal consequences are subsequently assessed in an updated physical model. I iteratively switch between physical and digital models until a satisfactory outcome is achieved. Both can be the start of the project, however, it is mainly the physical models on which I base my design decisions.

The value of physical models lies in their lack of exactitude. It promotes the motif of the ‘unreasonable’ as a source of serendipitous insights that are fanned by incidents of error and imperfection. Those deviants animate the work through the energy and improvisations they demand from the designer in dealing with them. The unique history of the physical model, evidenced in quirks, marks and scars, creates a subplot that contributes to transforming the work from an object to an individual creature or character.

The design process develops around the relationship between object and ground. A central sequence of choreographed events is subject to two different modes of assessment. One is based on intuitive and emotive cognition, giving voice to the author. The other engages in an intellectual synthesis of the observed morphological genesis, aiming at conceptualising the project by applying a frame of reference that can be shared with others. The unreasonable is present in two different ways. The first is as a catalyst for the design process, introduced for example as a three dimensional field of information, a found object, or through the collaboration with another person. Its purpose is to disassociate myself from superficial predispositions, while at the same time strengthening the position of the author, who, in the process of
working through the foreign material, has to make a
stand for his own interests. While following the choreo-
graphed events between object and ground I develop an
empathy for the objects I handle. Iteratively I immerse
myself into the material, eventually reaching a state of
self-forgetfulness and work becomes serious play. Sens-
ing a lead for a possible solution affects me as a bodily
feeling, a registration of joy. Being driven by emotive
cognition and intuitive synthesis represents the second
instance of unreasonableness in my design process.

1 an imagined outside observer, whose inquisi-
tiveness depends of the particular frame of
reference for each project.
2 Verbeek, “Randomness as a generative prin-
ciple in art and architecture.”
3 Co-director of the Viennese architecture
practice Artec, Götz is Professor for Architec-
ture at the Berlin University of the Arts.
4 Götz, Manahl and Hanzlova, ARTEC Architek-
ten, 26.
5 Karmel, “Pollock at Work – The Films and
Photographs of Hans Namuth.” 87-137.
6 Van Schaik, Spatial Intelligence: New Fu-
tures for Architecture, 8.
8 Varneho, Karmel and Pollock, Jackson Pol-
lock, 92.
9 Morrison, “New Masters,” 86.
10 Gould, “Exaptation - a missing term in the
science of form.” 4-15. As an example, feather-
ers originally evolved for temperature control,
but in evolution’s trial and error process
turned out to be useful for flight as well. Gut-
tenberg borrowed the mechanism of a wine-
press for his invention of the printing machine.
Coop Himmelb(l)au’s Falkestrasse rooftop ex-
tension uses exaptation by borrowing a frame
of reference from the art world and applying it
to the legal context of building approvals.
11 Design for a residence and studio in the
Adelaide Hills, Blackwood, SA.
12 Chillida, Eduardo Chillida: Writings. 15.
13 A fast version of chess; 3-15min per move.
14 Johnson, Where Good Ideas Come from: The
Natural History of Innovation, 99-106.
15 Thatcher, North and Biver. “Intelligence and
EEG phase reset: A two compartmental model
of phase shift and lock.”
16 At one stage during the planning for Uralla
Court I, I thought I could do without a physical
model, simply because I felt so confident in
digital modelling and wanted to save time.
When I eventually did build a 1:50 model, I re-
alised that my ceiling heights were all to low,
which I had let happen because I have always
been viewing the interior spaces through wide
angle lenses.
AN-house - booklet | interrogating the problem through graphic representation and reflection
Interrogating the way in which I use a second mode of assessment - the analytic – in order to view the project through the eyes of an observer, aiming to determine purpose and meaning that are valid beyond my own personal interests.

“Design is about ideas that are so simple that one should be able to explain them to someone else over the phone.” ¹

Parallel to the subjective complex of the relationship between character and the ground, and the emergence of space, runs the booklet reflection. It puts me in a position in which I aim to see the project from an outside perspective, through the eyes of an observer. During my studies in visual communication design I started to consciously differentiate between my own perspective and that of an external audience. I continue this practice, when I test and validate the conceptual feasibility of a project, through the production of a presentation booklet that runs parallel to the design from the start. Producing a graphic representation, even though a conclusive solution has not yet been found, helps me to sieve through the material and select the pieces from which a coherent proposal can be formed. I do so by applying different frames of reference, which explore where the project’s contribution might lie. Conceptual feasibility is achieved when the project’s argument can be condensed in an abstract form and successfully communicated. Insights from this process continuously feed back into the design process, where I try to coalesce personal and external agendas. The booklet production facilitates the iterative break between doing and assessing, between making choices and weeding out excess, in order to arrive at an idea that can be shared with others. Ideally I am then able to coalesce personal and external agendas within a single project.

A current example is the booklet for the AN-house ². It accompanied the project from the beginning onwards and was also used to discuss the design with the client. Each booklet starts with defining the format and setting up a graphical design grid, depending on whether it will be used for print, or as a digital presentation as well. The durable record you are holding in your hands, for instance, was conceived as both booklet and screen presentation, and I have used it in this format since my first PRS presentation. In the case of the AN-house it was just for print purposes. It started with visualising the design’s legal context, followed by an array of massing models that explore what is legally possible and which different approaches could be taken. It is important to me that I enjoy working on the booklet. It is not just a dry record of facts and actions, it also includes references to my own background, in this case my travels in Chile, or topics relating to the client. The client here is a food stylist, who had introduced me to Meatpaper,³ a print magazine of art and ideas about meat. I picked this up in the way I illustrated the client’s brief scenarios, in the form of a meat chart, which explains where the different cuts come from. In the end the booklet builds up a visual narrative that follows and illustrates the design ideas. Through it I keep track of the various lines of thought, critically reflect on my ideas, communicate them with the client, as well as, in an amended version, with the local Council.

In the seminal exhibition Architecture⁴ at Galerie St. Stephan, Hans Hollein argues that architecture is not the materialisation of its function, but the transformation of an idea through the act of building.

“Architecture is without purpose. What we build will find its usefulness. Form does not follow function. Form does not originate by itself. It is the great decision of man to make a building into a cube, a pyramid or a sphere.
...we are building what we want, making an architecture that is not determined by technique, but that uses technique – pure, absolute architecture.”

Hollein’s critique on the simplified reading of modernity during the 1960’s is an articulate acknowledgement and endorsement of the poetic and spiritual qualities within architecture. In his pamphlets he argues that it is an easy way out if architects base their design expressions on a majority vote or quantifiable equations of functional performance. For him a building becomes architecture when it expresses the human need to create objects that transcend their applicability.

His commentary is still valid today, as it is much easier to gain acceptance for a design, if it can deliver a genealogy that exists within the realm of reason, than it is to argue for the unquantifiable qualities of space. Sensing the qualities of space happens in an intimate dialogue between the individual and the physical object. It is determined by our present awareness as much as our past experiences. Thus assessing space is a subjective matter, and ‘recorded’ through our bodily reactions. These ‘feelings’ are then translated to more objective yet still unquantifiable terms like pleasant, animated, elevating, gloomy, stale, harsh, etc., in order to communicate our experiences. However, neither words nor drawings can properly project spatial experiences in advance. They can evoke connotations in the learned, but the spatial experience itself can not be predictably proven. Within a discourse, whose predominant evaluation parameters revolve around logic and reason, or expectations of quantifiable performance, diagram architecture has become very successful. It reduces a complex relationship to a few aspects that are either quantifiable or function through visual resemblance. The result (building) is measured only against its simplified projection (diagram), and thus appears coherent. However, this happens on the expense of a multi-layered interpretational reading of the project. Minor subplots, enriching the experience, are edited out.

Aspects of my booklet production could put my practice in relation to a diagram practice. The difference is that I do not rely on the strength of reason, but define a project also through my subjective private agenda, which is concerned with the experience of space, caused by the sculpted form and ongoing dialogue between the lifted object and the activated ground. Without them there would be no project. Parallel to the physical design process, reflecting my personal agenda, I construct a narrative which serves the observer’s agenda, and facilitates the understanding of the project from this perspective. Both points of view are closely linked, but do not necessarily reflect each other. The booklet production helps me to switch between perspectives, and thus understand the project, and then to lay out a trail in which I want the project to be read and understood. The booklet acts like the storyboard of a movie, laying out the events, using transitions, cross-fades, inserts and cuts, filmic tools that relate back to my first degree.

During my 5th PRS Paul Minifie commented on the booklet reflection:

“But it seems that this is sort of part of an internal process as well, that is not dissimilar to the way you discuss your internal process, where you say you do stuff, but then there is a moment at which it becomes a thing. You know, at which point you identify that the project has some particular satisfying set of characteristics. But more than that, they seem to acquire names, right? And the names give an account of the qualities that those projects attain for you at a particular moment, when you go, right. So that is how it is going to take its form, the air conditioning duct or piece
of ground, or you know, the hovering thing. That to me is a really interesting moment, in what you do. It's almost like you are discovering the creatures of your subconscious, and you’re bringing them into the world. At a certain point they achieve a kind of critical set of relations that enable them to become something.”

The first time I consciously applied the method was for my final project at the Angewandte, *The Dragon in the Sea,* for which I spent most time gathering the little information there was, about two tiny Japanese rocks that only poked a metre out of the Pacific Ocean. The booklet started out as a record keeping device for my research, it then gradually evolved into illustrating the evolving solutions and then validated the final proposal. Curator Roland Schoeny said about the design: “With its dramaturgical concept Bette discusses ironically and imaginatively the arbitrariness of the demarcation lines that are set in the wake of global trade agreements. He also raises the question of real and imaginary geographies. In his attempt to leave the usual perspectives of architecture, he leads his work over into concise spatial representation of spaces formulated by the specific situation and its economic background, knowledgeably transferring parameters from graphics, film and photography into his architectural display.”

*The Dragon in the Sea* defines the framework for a poetic campaign. Three people set out on a voyage whose culmination it is to share lunch on a rock in the middle of the ocean. The poetic act of the annual ritual is at the centre of my interest, however, I validate it through arguments that span from art to cultural history and economics. The technique of validating a poetic proposal, by arguing it through a different agenda, is a core aspect of my practice. It relates to the concept of exaptation, the transfer of a specific virtue from one context into another, applying an external frame of reference that defines the project’s conceptual idea. My design process is differentiated into a personal agenda, on one side, and the observer’s agenda, on the other. On one side there is the hovering object, the activated ground and
the emergence of space, on the other the development of an argument that lies beyond form. This is essentially what I tested with *The Dragon in the Sea* and why it had become the emancipatory project that it was. I used it to see how independent I was from Prix's judgement. Once this was established I could revert to a form driven approach, now that I had found a way to argue a project that (seemingly) lay outside of form.

Present through the booklet production is the question of form as a signifier. Semiotics has been a topic since my studies in visual communication design. In their introduction for *Reserve der Form* Angelika Fitz and Klaus Stattmann explain:

“Form is far more than the formal. Form originates from a complex and often contradictory combination of conventions and assumptions, and thus stirs established positions. The surplus of form causes parallel actions in aesthetic, social, economic and legal coherencies. Standardised relationships and operational boundaries are playfully extended. Non system-specific transversal movements, which should not happen in a functionally differentiated society, become possible. Spatial experiments appear in places they were not envisioned for, either for cultural or legal reasons. Artistic practices transgress the symbolic level and bring forth political effects.”

In most cases there is a difference between my interests in a project and the outside expectations. For the EAF extension the client proposed an internal fit-out, while my immediate interest was to put something on top of the roof. In order to do so I searched for an argument that would make sense from an outside perspective. I identified existing air-conditioning units on top of neighbouring buildings, as possible mentors. In the rather conservative Adelaide context, I decided to make a point for visual contextualisation, by portraying those air-conditioning units as a local typology, which I would pick up on in my proposal. In the presentation booklet I spun the story of an air-conditioning unit that searched for an architect to give it some plastic surgery and a new life. Producing narratives like this is fun. I ask the audience to suspend their disbelief and follow me on a fictitious yet coherent narrative, which, on one side, satisfies the public’s desire for reason, while on the other, it acts as a Trojan Horse. The proposal blurs the boundary between signage, sculpture and dwelling, and, through its line of argument, stirs questions about the values represented in design approval processes.

Assuming an observer’s perspective has become a method to interrogate my actions. At the same time it enables me to steer the reading of my projects, and thus protect the personal interests / aspects within my work. How to talk about feeling into an object or the sensing of space? Not everything can be described as a diagram or a linear script of events. In an interview with Markus Breitschmid Valerio Olgiati said: “I suggest that it is important that you, as the architect, understand clearly with your mental faculties, that as you design a project, this project is not fully understandable by the visitor’s intellect. The visitor’s mental faculties are unable to completely conceptualize what they experience. If we assume that you were capable of designing a building that can be fully conceptualized by a visitor, your building would - in my opinion - not be worth anything (...) you must understand that your architecture is not fully understandable”

Nell Anglae:
Olgiati talks about the finished work as a whole. What you do with the booklet, is condensing the conceptual idea into a narrative in order to successfully communicate the project. The aspects you don’t address in the booklet are still part of your design, they are not lost. You said you spin a yarn in order to sell the project. However, this is just one aspect of the project. The unexplained is still present, and probably experienced on a subconscious level.

Urs Bette:
True, but if I’m not talking about the personal aspects of my
work, it is as if they were not important enough to be talked about, instead I simplify the project into a diagram.

NA:
The way I understand it, you are using these diagrams to understand and visualise what’s already there, inscribed in your work. They do not produce the work - that’s what Bjarke Ingels does - they capture what has already happened. You are working from the wealth of the project, extracting the aspects that give others access to your work. I think it is perfectly fine to distinguish between ideas that you pursue on your own, and others that you share.

The second mode of assessment in my design process is concerned with testing the conceptual feasibility of a project by viewing it through the eyes of an external observer and producing a graphic proposal with reflective commentary in the form of a booklet. Validating a poetic proposal, by arguing it through a different agenda, is a core aspect of my practice. In doing so I consciously differentiate between my own interest in the project and those of other audiences, setting up a frame of reference and subsequent narrative along which I hope the project to be read. Alternating between two modes of assessment assists in understanding the whole bandwidth of the project and coalesces personal and external agendas within a single project. In doing so I transfer parameters from graphic design, film and photography into the architectural context and address from as a significer of meaning.

2 An addition to an existing workshop in Brunswick, Victoria.
3 http://www.meatpaper.com/
4 1963, together with Walter Pichler.

Thalia Graz - project booklet | facilitating the exchange between Adelaide, Vienna and Graz

5 Hollein, Hans Hollein, 56.
6 Transcription from audio recording, Melbourne: June 2013
7 see full project description in chapter Coinage | Angewandte, page 37
8 Schoeny, “Der Drache im Meer.” 290.
9 An exhibition at the Künstlerhaus Vienna, where I presented The Dragon in The Sea.
10 Fitz and Stattmann, Reserve der Form, 9.
11 Breitschmid, The significance of the idea in the architecture of Valerio Olgiati, 13.
Thalia Graz – under construction | bones of the creature | photo: Hermann Petz

66 agents
The object-orientated ontology of my work is put in relation to the modes of operation (emotive cognition and intellectual synthesis), the aims I pursue and the architectural background I come from. Addressing the morphological evolution of past work and the tendencies that have become obvious in present work, foreshadowing coming developments.

It appears as if I’m chasing a very particular whale, as similar forms occur in different projects, yet I believe not to have a preconceived idea of the ideal form or shape at the beginning of a project. It is only on reflection that shapes can be associated with a particular family of objects, relating to the way I work or the architectural habitat I come from. All of my objects have mass and weight, are clear-cut and often appear hermetically closed. Their features are cut from straight or single curved lines that join at obtuse angles, resulting in compact and heavy figures that nevertheless express a sense of mobility. Their surfaces are flat and not articulated or ornamented, except for openings that are created by peeling or cutting away on an all-encompassing skin. Construction is either integrated in the skin or substituted by internal sub-volumes. There are no structural grids. The continuous skin and the integrated structure are probably the most obvious features that support the motif of an architectural body or creature.

I use the term creature to express the liveliness of my architectural objects. I’m unsure if creature is in fact the right term, because of its possible zoomorphic connotation. Referring to the object as a creature does not aim at giving it validity through a morphological relationship with either flora or fauna. Its genetic code lies within me, the author’s personal history and experience, and the field of information from which it is extracted. During the course of the project the creature itself gathers experiences and thus gradually turns into a character that establishes its place within the project. Different names – field, figure, creature, character – hint at different stages of the design process. In the end the characters radiate confidence and calmness, as if being at ease with themselves. Yet there is also a tension within them, which suggest the potential of movement, of leaving or taking off, a notion that is amplified by the distance that they keep to the ground.

I’m seeking to create a sense of personality within the characters that populate my work, which has become a purpose in its own right. It links back to how I was brought up in architecture. Coop Himmelb(l)au established the author as being at the centre of the design. Through their intuitive scribbles, an emotion was captured that was then translated and attempted to be carried through into the built work. The author is as much present in the work as the client and the brief, which eventually leads to an authentic, independent, building. Yet it is not the icon of the object that is at the centre of my interest, it is the spatial experience. I fabricate the character as an agent that prompts a reaction from the site, kick starting a dialogue from which the space, between object and ground, unfurls. This can be identified in many projects, yet, depending on the circumstances, it is not equally obvious. At Uralla Court an array of different spatial situations unfold between the ground and the character, becoming spatial sequences along different trajectories; a quality that Wolf D. Prix said to be a particular attribute of Austrian architecture. For this reason the project was selected to be part of the Austrian contribution to the 10. Architecture Biennale Venice, 2006.

Designing a sense of personality is interesting because it supports the idea of an active relationship between the building and the user. I think of it as a contribution to
Sustainability is about creating environments that we generally want to keep; that we care about.

Sustainability, as, in my terms, sustainability is about creating environments that we generally want to keep; that we care about. In much built environment discourse sustainability has been reduced to its functional aspects. One of the challenges I face is the question of how to talk about non-quantifiable qualities, as it is so much easier to argue for things you can apply a number to. A building that just feels right, might be sustainable because it is loved - in the way it feels, smells, looks, behaves - and therefore will be taken care of and given an extended lifespan. How to communicate and prove these experiential qualities in advance, when they only reveal themselves in the final built work?

My personal way of assessing the quality of a project beforehand, is through the sculptural and haptic qualities of the characters and situations I design and handle, during all stages of the design process. They must feel right. I believe that a carefully treated model, that in itself has a presence and an aura, is my best tool in maintaining the quality of the project, right through to the built work.

Parallel to the sculptural qualities of a project, I am committed to all functional aspects - program, structure, circulation, services, etc. - but I am not interested in signifying those. What I am interested in are the poetic elements that transcend the prosaic. I like a building to be an inhabitable sculpture, with the embedded surplus of program. Mathias Boeckl explains that in Günther Domenig’s work the “mechanic functionality of the design… is permanently brought into accordance with the semantic level.”1 I try doing the same, continuously revising both form and technical requirements until they coalesce. But, different to Domenig, I do not want the care for those technical aspects to be readable. I avoid exposing mechanic and structural components by including them into the space defining elements, like internal walls or the skin of the building. The attention to those aspects is only expressed in the long and tedious process of tweaking the form until all the functional aspects have been successfully accommodated. This process of refinement is part of turning the initial figure into a complex creature or character. The careful thought about structure, and its integration into the space defining elements, is evident in the structural models and diagrams I produce, as well as the detailed drawings that describe the integration of services into the building’s skin.

Some of the formal similarities shared by my projects may evolve from the fact that I start with solids, which I work on in a subtractive manner. When I cut away material from a block, be it either physical or digital, with a Stanley knife or a single curve line, I tend to cut at shallow angles, which results in stocky convex shapes. Whereas sharp and pointy forms are predominantly the outcome of an additive process. After the body of the solid is defined, it is shelled, penetrated for openings, and inserted with sub-volumes. I intend to realise a character’s formal appearance and spatial sensation with the smallest possible effort, and “concentrate forces in a minimum number of points.” 2 In the process of developing form, the overload of information is being boiled down, distilled and concentrated to its essence, until no further simplification is possible without compromising the spatial experience or sculptural quality of the work. At Thalia Graz and Uralla Court I & II, the already satisfactory form was elaborately fine tuned and geometrically simplified throughout the course of the whole design development. I do this by continuously stepping back to a solid mass model, and then going through the process of shelling and fenestration, etc., again and again. In doing so I also have the implementation process in mind, which I do not want to overcomplicate with unnecessary complexity.

Eduardo Chillida said “Almost everything can be resolved by taking away” 3. In stone the subtractive mode of
working is prescribed by the nature of the material, while steel is generally handled additively. Chillida still achieves the notion of subtraction, and with it the emergence of space, in many of his steel sculptures. I assume that the above statement relates to the conception of his work, the way in which he perceives it as a solid, as most of his steel works have to be composed of single parts. This is of interest to me, as building in itself is always an additive process. Similar to Chillida I want the object (and the ground) to appear as a single entity, and not be composed of multiple parts; façade, roof, internal walls, etc. In my case the solid is often preceded by an overload of spatial information. In order to turn this into a subtractive process I encompass the field of information with a virtual solid, at which I chisel away, while the unreasonable (and sometimes factual) information sits in the background and guides my moves. The virtual solid acts as a three-dimensional yellow trace on which I consolidate the form.

While carving out the single object my own predispositions kick in, steering / counter-steering towards the emergence of yet another creature that belongs to the family. The creature itself is a limit value that indicates when the work is done, a point that is reached when the object becomes familiar to me and displays enough character to exist by itself and radiate space. Because of the care and attention I put into the creature, it appears as if I am object focused. Yet the object is only a means to an end. My main interest is the “space that is implicated in the work and the space that surrounds it.” But in order to accomplish space I need to focus on the object first. Space is ungraspable, it can not be achieved instantaneously, nor without some solid matter that either frames or incorporates it. I target my energy on the object, from where it radiates back onto the actual aim, which is space.
A question for me is: how simple can a form be and still carry enough relevant spatial information? Looking at the next ENTERprise's bath in Kaltern (see page 42), I find it too complicated for what it spatially accomplishes. I love this project, but if it was my work I would have tried to achieve the same spatial affect with less topographical articulation, fewer folds and incisions. The next ENTERprise and myself both value the serendipitous finds within our unreasonable beginnings. But while they try to maintain as much formal complexity as possible, and bring it safely through the design development and into the final product, I try to condense a spatial situation through formal reduction. In this regard they are closer to Coop Himmelb(l)au, who also try to stay true to their first sketch or model, maintaining all its aspects, even flaws and presumed errors. For me, excessive opulence hinders the sensing of space, therefore formal reduction is necessary. However, this needs to be balanced, as the inversion of the argument, space through simplicity, is not valid either. Once a form has been found that carries both space and a cultural surplus, I try to balance and maintain its qualities with the smallest possible effort for implementation, entailing greater care in conception and planning.

The continuous and all-encompassing skin at Thalia Graz and the EAF extension, reminds me of the more organic work by Günther Domenig, for example the refectory he designed with Eilfried Huth in Graz Eggenberg (1972-77). The morphology of the building shell gives it a creaturely aspect, reminiscent of a caterpillar or stingray. During the design of Thalia Graz I once portrayed it as a lizard, when we were testing different façade treatments, including scales. Identifying the creature within the design is a way to acknowledge it as part of the family, and is the beginning of it becoming a character. The naming is an interpretation of the object, a reading that intends to affirm and amplify its latent qualities. Being able to give it a name marks a limit in the design process, when either chaotic mass is turned into a higher order of complexity, or meaning is being assigned to a found object. The design's qualities become recognisable
and distinguishable, thus the object becomes a character. One could say that the naming indicates the Frankenstein moment of a design, when the creature opens its eyes and becomes alive. This is not to be mistaken for life-like, as I do not want to allude to biological analogies or genetic codes that steer the design process. As interesting and useful this is from the technical viewpoint of building sciences, I can not avoid thinking that it is unsatisfactory in regard to a project’s cultural agenda, if it remains at the level of emulating natural processes. R&Sie are one of the few practices who successfully transcend explorative construction science, and produce architecture by coupling algorithmic form generative processes with speculative cultural scenarios. Their utopian project I’ve heard about not only projects the technical possibilities of an automated urban growth process, but also discusses its socio-economic consequences and the responsibility of the individual (architect) in a society that questions the prevailing production of wealth through control over the ground and building construction.

The emergence of the creature/character happens in a hybrid environment that oscillates between physical and digital. Working with both physical and digital models, gives me the most direct access to the project’s qualities, and enables me to witness the moment when the object starts to turn from mass to character. Depending on the project this moment can happen in either medium, however, I am more confident in assessing a physical outcome. While I’m cutting away on the form, there comes a moment when the object starts to radiate energy, which is what turns it into a character. This is the moment I work for. It is impossible to predict this moment, and it is even hard to pin down in hindsight. The longer the moment has passed the more it gets blurred by post rationalization. For the EAF extension this moment happened while I was carving away on a block of styrofoam. I was taking away chunks of material, which left me with two connected volumes and a downward pointing outrigger. The form in my hand started to develop a presence. It conveys a physical feeling, joy. Maybe it is the physical expression of a hunch that is lurking in the background, telling me that there is something good about this form and that I am on the right track. Then came the insight that linked the form to the air-conditioning units, something that had come to my attention earlier. I made the connection and realised a way to argue for the form. I was then both excited and satisfied.

Another affirmative step is reached when the envisioned scenario can be successfully communicated, and thus becomes part of a comprehensive concept. A frame of reference develops that exists independently of my own personal agenda and also fulfills the factual requirements of the brief. Chillida has called this the synthesis of a double discourse between intuition and reason, “where both work together, playing out tensions – one against the other – in order to reach an equilibrium.” At the EAF extension the creature became an accomplice that draws attention from the quantifiable aspects to the poetic. Its balanced personality makes everything look easy, as if the project had always existed, appearing natural in its habitat. The character does not speak of functional parameters or requirements, it just solves them. The same happens at Thalia Graz, where the relationship of object and ground was developed in a process of iteratively tuning the formal and the functional parameters, and simultaneously being alert and responsive to evolving phenomenological experiences.

As with the characters’ outside appearance, there are recurring spatial configurations within them. For instance the internal sub-volumes that hover inside similar to the way that the character itself hovers above the ground. At Uralla Court (see pages 166-179) you can see them as inserted
cubes that fuse to the internal fabric (circulation) and the outside skin (skylights). They are organs within the body, objects within the object. At Uralla Court they are a reference to the hanging box, the daughter’s bedroom in Peter Wilson’s Suzuki house. I am intrigued with the way that Wilson managed to create a continuously flowing space, similar to a ‘Loosian’ Raumplan, within an extremely confined envelope. At Uralla Court the motif of bodies within the body benefited from the clients’ aim to allow for a maximum of choices of movement. This resulted in an internally defined spatial sculpture that offers a range of different spatial situations. The project was designed for a couple, as a mix of both residence and workplace. It sets out a way of living and working together in which the opportunity to choose and personal freedom play an important role. The occupants can decide between different atmospheres, paths and spatial situations which determine the degree of interaction with the other or the intensity of thought over work. There are areas where the space flows and moves and others that are stable, interweaving various purposes and creating different sensations. Distance and openness interact with narrow ravine-like gaps, extroverted zones with sheltered niches and closed units. The whole house is a dance around open shelter.

The design unfolded from the client’s current life situation - living in Germany and wanting to settle in Australia - and reflects their immediate needs as a point of departure. Stage one, the main residence, resulted from translating the image of a boat, in which they would leave Europe and land in Australia, into an imaginary vehicle to convey and preserve their European history. Here it is jacked up, hovering above the ground, on one side ready to develop a relationship with the ground, on the other, ready to take off again. The second stage, the reaction of the site, was then anticipated and recorded. Out of this came the development of all further areas. The existing landscape remains present throughout the whole project, the terrain being echoed in the different levels which flow through the interior of the house. The form of the second building, a workshop, stems from its relationship to the residence and the patterns of daily use. Work, leisure, public and private interactions are superimposed rhythms that shifted things into position. The buildings create a space between them that gives an unexpectedly urbane quality to the setting, dividing the block into sheltered terraces and open spaces. The two structures form a pair whose deliberate independence, in both topological and cultural contexts, is the result of the intense consideration of the brief and the qualities inherent to the location itself.
Looking back at my work reveals a choreographed genesis, in which the architectural object gradually materialises from field to figure and character. In its course the overload of information is being boiled down to its essence, until no further simplification is possible without compromising the spatial experience or sculptural quality of the work. At the same time I am committed to incorporate all technical aspects, however, without making this explicitly visible.

My aim is to endow the object with a sense of character and personality, enabling an active relationship between the building and the user. It is my belief that an object that is loved and taken care of is a contribution to sustainability. Uralla Court is the foundation project for the character-ground topic that is present in most of my work. Different to later projects, the character is less closed and more open to spatial flow from underneath. The interlocking surfaces of object and ground offer a higher diversity of spatial situations and experiences, which has been lost in recent projects. I wish to address this in the future, by adding another operation at the end of the proven moves, one that opens the volume up again, and facilitates the flow of space between and into object and ground. The proposed strategy: *Dissecting the whale.*
EAF extension - artist in residence studio - Adelaide, South Australia 2009 - image: Daniel Kerbler
Uralla Court - sketch model, Blackwood, SA 2004
Interrogating the way in which different forms of space materialize in response to separating the architectural object from the ground. This is discussed in relation to my coinage and the processes I employ to sense and cultivate the mysterious nature of space.

Lifting the object differentiates it from the ground and establishes the character as an independent entity. The move creates a void that bears the potential to become space. Leaving the object hovering and not touching the ground follows a choreography that is only slightly altered from project to project. Over the years this has resulted in a formal language that discusses the placement of objects in relation to each other and the ground. Lifting the mass has a clear relationship to Coop Himmelb(l)au. The picture of the leaping whale is a brand-mark that many of Wolf D. Prix's students carry. The image, in conjunction with Prix's quotations from Moby Dick⁴, epitomizes the essence of man's struggle with the elements, which transcends into the “irrational battle against gravity.”⁵ This battle is continuous in the lineage of Austrian Expressionism as the “expression of the human struggle against the powers of fate.”⁶ The photograph of a whale lifting himself up, out of the water and into the air, proves that gravity can be overcome, even if just for a moment and with great effort. Effort is actually the point, as it is about overcoming one's own weight, one's self. The mantra of the leaping whale has been repeated again and again, so that one should not lose faith that it is possible. If the whale can do it, then we can do it, if we are prepared to overcome ourselves and invest into the effort. Wolf D. Prix set this up as a goal, and we are all trying to prove ourselves.

However, lifting the mass is not an invention of Coop Himmelb(l)au. “Like all architects everywhere, Coop Himmelb(l)au loves to wrestle with Newton's gravity, architecture’s best friend.”⁷ Friedrich Kiesler's city in space (1925)⁸ is a visionary model for a city hovering above the ground, (relating to El Lissitzky's sky hooks from 1924) which could be described as the Austrian founding moment for the desire to counteract gravity. Dieter Bogner points out that the motif of hovering is also present in Kiesler's Nucleus house (1931), the Space house (1933) and early versions of the Endless house, which is lifted up from the ground by columns.⁹ Constant Nieuwenhuys lifts up an entire city for the New Babylon project (1950-1960), Hans Hollein proposes Superstructures above Vienna (1960) and a Communication-interchange City (1963), both hovering above existing cities. And while Günther Zamp Kelp (Architecture School, 1965), Laurids Ortner (47. Stadt, 1966) and Wolf D. Prix (Wohnhausanlage,1966) propose the detachment from the ground in their student work, Lina Bo Bardi already realises the lift with her Sao Paulo Art museum (1968), hovering above a public plaza and being suspended from two massive concrete frames.

Lifting the mass responds to my coinage and the expectations that come with it. Opposing the gravitational pull, while being equipped with the morphological attributes of an object-oriented ontology, establishes the object as an independent body with a life of its own. The object has become an actor, for whom the city or landscape (established as a subject in their own right - activated ground) becomes a partner in an ongoing dialogue. A negotiation process of lifting, pushing and pulling unfurls, one that carves out both actors’ specific attributes and establishes space in and between them. ‘In-between’ is where I extend upon the coinage of my mentors, and establish my own line of inquiry. I make a pact with the sea (ground) and turn it from a backdrop into a character in its own right. The whale then not just leaps but is also being lifted, evidencing a dynamic negotiation of forces amid the object and the ground that turns the void between them into space.
In the foreword to *Get off of my Cloud*, Jeffrey Kipnis points out that lifting the mass is not an end in itself, instead it stands for liberation from the repressive machinery of power, associated with ownership and control over the ground-plane. Kipnis links Himmelb(l)au’s desire for independence from the ground plane to Corbusier’s dictum *Architecture or Revolution*, stating that Corb’s and Mies’ lifted platforms are an “assault against the primacy of the ground” and a first step towards the democratisation of the ground plane. Coop Himmelb(l)au’s work extends a lineage that “does not just deal with feudal control but also with the regulatory systems of architectural planning.” This is masterfully demonstrated with their Falkenstrasse rooftop extension, where Coop Himmelb(l)au declare the architecture a piece of art, exploiting a loophole within the council’s legal provisions and allowing the building to proceed where Council’s rules would otherwise have inhibited it. But the conceptual circumnavigation is not enough. Himmelb(l)au is not a theoretical practice that is satisfied with the representation of an idea, instead they need to physically build in order to give phenomenological evidence.

The phenomenological evidence I am looking for lies in the space that can be experienced flowing in and between the sub-volumes of the built form and the ground, where the continuity of the space meets the continuity of the landscape. In an ideal setup I imagine the space between object and ground to be a spatial knot, whose loose ends branch out in all directions, horizontally and vertically. I am looking for a fusion of different instances of space: the space implicated by the overall form and its sub-volumes, the space between those volumes and the ground, and the space that both character and ground radiate through their presence. Chillida describes three different forms of space: a) space as an energy that a place or object radiates, b) the space between objects, c) the space within an object. The space within is indicated by the object’s outside appearance, its shell, and thus feeds the aura of the object. In my process radiant space happens when the object has been developed in such a way that it becomes a character. It then emanates space in form of an ambience. Through dialogue with the character, the ground expresses its own qualities, becoming activated and emanating space. The void between is being charged by the presence of both object and ground. It now radiates space in the form of an atmosphere, as well as describing the physical extents of the space they frame. This is the archetypical script for my projects. The plans and sections for *Uralla Court I* illustrate this dynamic. All the individual pockets of space are interconnected, which allows the space to flow freely between them. This entity of multiple spatial situations can never be physically overlooked, it is only graspable as a whole through imagination or as a sequence of events in time.

For me space is dead – a mere void - when its configuration can be grasped or imagined by a single look. It is alive, when the spatial configuration can not be understood from a single vantage point. When time and movement need to be invested, and even then the space still remains ungraspable, keeping a certain mystery. Walking through a building and never actually reaching the point where everything is understood, that is the ideal. This is the condition when the complexity of the building reaches that of natural environments, yet without mimicking their formal appearances. I try to offer as many choices as possible, as many variations of spatial situations as the program allows. That is, I believe, my role as an architect. I have to organise space and program, but within that I offer various perceptions, like what might be encountered when wandering through a forest or the bush. Today, when cities are growing at the expense of natural environments, therefore limiting our experiential bandwidth, architecture will have to give back and increase

The phenomenological evidence I am looking for lies in the space that can be experienced flowing in and between the sub-volumes of the built form and the ground, where the continuity of the space meets the continuity of the landscape.
its complexity and richness in sensory stimulation. If you walk through a canyon and up a ridge, you have very many things happening. To experience this rudimentarily in the built environment architecture can not be a quite backdrop, but needs to be disquieting in a positive sense. Chillida wrote:

“There is a problem throughout the majority of my work: interior space,... the... consequence and origin of positive exterior volumes. To define these interior spaces it is necessary to contain them, thus making them inaccessible to the spectator who is situated on the outside. Interior spaces, which have always been problematic for and interesting to architects, tend to be three-dimensional spaces defined by two-dimensional surfaces. I aspire to define the three-dimensional (hole) through the three-dimensional (plane), simultaneously establishing a type of correlation and dialogue between them.”

The balance of different forms of space (radiant – between – sequential) has been carefully weighed out at AN-house, Thalia Graz and the EAF extension. In these projects different forms of space happen parallel to each other, while Uralla Court I & II have achieved an overlap and flow between these different forces. Here the ground not just radiates space, but also captures space within. For example, the bathroom and the storage spaces are integrated into the activated ground condition. This also happens at AN-house, where the existing building produces an isolated bedroom-pod, which it pushes through the roof towards the newly landed character. At WIFI St. Pölten the ground bulges and creates room for workshops. However, in those two projects different forms of space do not overlap.

In some cases a project revolves solely around the space within or the radiant space of the character. This happens
when there is no information available about the ground, or if the ground can not be altered. The competition entry for the Austrian Expo Pavilion 2010 was conceived as one large resonating body, which was intended to be moved to different locations. It contained sixty-three sub-volumes, bodies within the body, between which the visitor could go on a derive and play the relating sixty-three instruments, collected from all over Austria. This way the visitor would release visual and sonic information into the larger space. Although the large object did not build up a relationship with the generic ground it sat on, at least inside, between the individual sub-bodies space was negotiated.

A different example is the installation piece for the exhibition to the islands. Here the object’s genesis started in one context (Port Adelaide), before it was transferred to another, the exhibition space (SASA Gallery), where it was developed further in response to the location. Space develops from the argument between the incoming object and the ground, and is expressed through the radiance of the character into the void. Due to the fact that no alterations to the ground were possible, yet the ground had an effect on the development of the character, I refer to it as a ‘silent activation’.11

In my practice, implementing an idea means to physically construct alterations until I am satisfied with the outcome on two levels. The first is the observer’s agenda; conceptualising a project in such a way that its values are communicable and shared with others. The second is my own aspirational desire to promote the emergence of space. The first is subject to logical reasoning and relatively easy to evaluate, while the emergence of space is more ambiguous and not easily quantifiable. The question arises; what are the indicators of space? I use the term ‘space’ to describe the ambience that a particular Euclidean geometry [quantifiable space] emanates. The source of space can be an object or the void that is described by one ore multiple objects. For me,
carefully modelling and sculpting form introduces an energy that takes possession of the object itself. The object starts to glow, it radiates a presence and emanates space. When two objects emanate space they charge the void between them. Then the void itself starts to radiate space (while at the same time also describing space in an Euclidean sense). In the absence of commissions for multiple buildings (between which space could be negotiated) activating the ground has become my strategy to substitute for the missing volumes and establish the ground as an antagonist to the architectural object.

I use the term space not in an euclidean sense, but to describe the atmosphere that is produced by the radiance of objects and the voids between them. For me space and atmosphere are nearly the same. But while atmospheres can also be produced by social interaction, space is determined by the ambience of objects in relation to an observer. Space revolves around the subjective experiences that unfold between object and subject. In order to arrive at an architecture that evokes feelings and sensations, emotional affects should not only play part in the consumption of space but be also part of its creation. How, if not through the subjective, can one insert an impulse into an architectural discourse, whose predominant evaluation parameters revolve around logic and reason, or expectations of efficiency and quantifiable performance? Why should architecture be reasonable? Have baroque churches ever been reasonable? I believe that the experience of joy has to be brought back into architecture, not least for issues of sustainability. Acknowledging the subjective and unreasonable supports the idea of an active relationship between building and user. A building needs a personality in order to be loved, be unique in the way it feels, smells, looks and behaves. That way it allows for identification and becomes an item that we care about and sustain.

I believe that the moment I perceive space comes from a standoff between the radiant energy of the object, the ground and the accumulated tension in the void. Honing the object and the ground gradually brings me towards a balance between those three forces, transforming the void into space, something I sense while handling the objects. I assume that ‘sensing’ the emergence of space is a form of intuition, perhaps an evocation of past experiences that represent my spatial intelligence. Is the perception of space based on a common conditioning and can therefore be shared with others? Leon van Schaik suggests that the shared valuation of space is determined by evolutionary and cultural conditioning, giving evidence of our prehistoric past as hunters and gatherers and predisposing the types of landscapes we feel comfortable in. The same applies to culturally defined spatial preferences that are formed by the society we grew up in and the sub-communities (professions) we choose to associate with. I believe there is also an aspect that can be communicated across cultural boundaries; the space, or presence, that a place or object emanates as a result of the investment of energy and care in the making and maintenance of its defining elements.

In this case space would be a projection rather than the quality of object relations themselves. I believe that space only exists when it is perceived, and otherwise remains an Euclidean geometry. Through constructivism and second order cybernetics we understand that the senses with which we assure ourselves of the geometries around us are an inseparable part of the observed. Therefore ‘space’ is the individual construction of an observer. The process of manufacturing geometries that facilitate the emergence of space is dependent on the modeller’s embodied spatial intelligence. When I am handling form my spatial intelligence expresses itself as a bodily feeling, steering the design process. This is what I refer to as emotive cognition or intuition.
Lifting the mass is a principal strategy within the design process that I have adopted from my architectural mentors and developed further. One of the lift’s main purposes is to facilitate the experience of space. But instead of focusing on the production of space (or the geometries that evoke the experience of space) directly, I introduce an alien object to the site and keep it hovering above the ground. The move provokes a reaction from the ground that leads over to a dialogue or conflict that is staged in the void between object and ground. This is mediated by the designer, whose own projections and interpretations become part of the negotiation. Through empathy with both protagonists their inherent characteristics are voiced and translated into form. The care and attention payed to adequately expressing the final agreement reached between the object, the ground and the designer is present as an energy that is emanated by the forms and charges the voids between them. At this stage the design process is halted. It is from within the void that different forms of space emerge as a consequence of the staged antagonism between object and ground.
"...would now the wind but had a body; but all the things that most exasperate and outrage mortal man, all these things are bodiless, but only bodiless as objects, not as agents.”


Kipnis, “*Against Two Gravities*”, 14-19.

Shown at the Exposition Internationale des Arts Decoratifs et Industriels, Paris 1925

Kiessler himself emphasises that he put buildings on thin columns (pilotis) before Le Corbusier, see: Bogner, “*Von der Raumstadt zum Endless House*,” 233.


A detailed discussion about this follows in the next chapter ‘activated ground’.
Uralla Court II | redesign of Urall Court with changed parameters: the reduction of usable area by 2/3 - Blackwood, South Australia 2006 - image: Daniel Kerbler
Uralla Court - ground’s reaction | the sod extending upwards and encapsulating program - image: Daniel Kerbler
A discussion about the significance of the location for the production of architectural characters and space. The purpose of activating the ground and its mechanics in relation to natural and artificial grounds.

Nell Anglae: What is the role of the ground?

Urs Bette: The ground is the authority of the place that I interrogate when engaging in a project. I have only become aware of the fact that I systematically ‘listen to the site’ through working on the design for the River Torrens footbridge. In retrospect Uralla Court was the first project in which I consciously consulted the site. I was interested in mapping its reaction to the intruder, the object, which in this case had been shipped from the other side of the world. The question was: How do you get a site to react? The only thing you can do is to observe it, which, due to the limited responsiveness of the site, means you have to observe yourself. You are tracing the site’s subtle moves by observing the way in which you respond to it. The architect as seismograph. It’s a question of empathy and trying to embark on the site’s perspective, a lengthy process that I undertook while surveying the land, drawing the contours, translating them into a model, and then simulating the arrival of the object and studying the topography underneath. I asked myself, what would I do in place of the site? I anticipated that the site was not going to simply accept the object, but that there would be an initial repulsion and then a process of negotiation. A give and take. This is what I refer to as ‘activating the ground’. Admittedly there is a level of projection involved.

At Uralla Court activating the ground has lead to a seamless continuation of the existing topography, which flexes its muscles and reaches upwards towards the object, lifting it up partially and keeping it in an elevated position. The ground does not continue inside the building, but the space does. There is a strict separation between object and ground, established by their individual morphology and the choice of different materials. The ground consists of multiple terraces, folds, and protrusions, which could be read as objects in their own right, but are in fact exaggerations of aspects inherent to the existing landscape.

Some people get a shiver when you talk about place-related or site-specific work. They associate this with a project that does not have its own agenda, one that is solely derived from site conditions, as if architecture could be generated from the mechanical implementation of a set of given parameters, such as solar angles, rainfall, wind direction, etc. In the worst case people associate site relatedness with the formal emulation of the existing built context. My work is always site-related, but this does not mean it is subordinate to existing conditions, nor that it excludes me, the author, from the equation. A project has to have an idea, a cultural agenda that transcends local parameters even as it acknowledges and includes them. In my case, reading the site acts as a catalyst to make the idea come forward. I have been asked, how throwing an alien object onto a site could possibly be a means of acknowledging the site’s specific character, proposing that, to the contrary, it would signify my disrespect for the context. I reply with the analogy of a melon that you might have with some prosciutto, which brings out the sweetness of the melon and enhances the flavours of both. It works with contrasts. I try to amplify existing qualities by adding something totally different.
The Graz City Council understands that emulating the historic fabric of a city is not a guarantee for a sensible intervention. As Peter Cook’s Kunsthaus Graz demonstrates, even the most unfamiliar sights are allowed if the project presents an intelligent contribution to the city. Meaning it discusses a problem that is relevant, rather than literally representing the façade of a long-gone discourse. Similarly ‘touching the ground lightly’ is not a guarantee for respecting the land either. It is merely a slogan, a simplification, that one can revert to in absence of a deeper understanding for the site. Unless we are talking about true nomadic housing, tents that come and go, I believe that those buildings have the same impact as any other that firmly sits in the ground. In fact, I believe they suppress the ground by pinning it down with their steel stilts, keeping it still and inactive. I rather emancipate the ground and give it a voice, by putting it on concrete steroids and allowing it to express itself with its full repertoire. However, if you don’t have the time to read and understand the site, then touching lightly is probably the best thing to do. The method of throwing in the alien may appear harsh at first sight. The aim is for a performative relationship between the new and the existing context, mutually produced space as the result of acknowledging and expressing the local conditions through the site’s (ground’s) reaction. Any building work is a disruption. So why try to sweet talk it? Instead my projects openly discuss the conflict by handing out the tools to both protagonists, object and ground, who make it out between themselves and emerge strengthened from the dispute.

In an interview with Alvin Boyarsky Wolf D. Prix states: “We have, as a general principle, empathy for the surroundings, the genius loci. However, it is not important to respond understandingly to what is already there, but rather, to create something strong, with an emotional quality.” Two years later Prix dismisses the genius loci altogether: “Always when we design for ‘foreign cities’, we stumble upon the question of context... But since we long ago lost sight of the genius loci – or better said, we never had it in our baggage – we answer with a question. Context in what sense? Of material? Of colour? Of construction? Actually, we aren’t interested in any of this.” Prix concludes: “we love to discover the (invisible) real and potential force lines of a city.”

For me empathy with a location has two sides. On one side, it is a practice I use in order to immerse myself, forget myself, in the project. It facilitates a state of flow, which lets me be in the moment and keep focus on the task at hand. On the other side it acknowledges the character of the place, which I need to perceive and read in the first instance, before I then go on and work with the existing qualities. Perception is a response to stimuli from the ‘outside’ world, which is actively constructed within our bodies, therefore I do not distinguish between myself and the ‘outside’ world in this moment. They coalesce. Therefore the question of whether my readings of the ground are true or projected is superfluous. The mere demand for being ‘real’, as opposed to being ‘subjective’, shows a confusion between the means and the aim. A project only needs to make sense at the end of the process. Eliminating seeming ambiguity or irrationality will foreclose whole areas where innovation may start. The immersion and responsiveness of this approach and sensitivity takes great care to remain open to site reading and interpretation, while also leaving room for the integration of the author and an overarching cultural agenda. Creative discoveries are made by interpreting and
connecting different sources, which looked at individually may not make any sense. Juhani Pallasmaa explains:

“Architectural problems are, indeed, far too complex and deeply existential to be dealt with in a solely conceptualised and rational manner. Profound ideas or responses in architecture are not individual invention *ex nihilio* either; they are embedded in the lived reality of the task itself and the age-old traditions of the craft. The role of this fundamental, unconscious, situational and tacit understanding of the body in the making of architecture is grossly undervalued in today’s culture of quasi-rationality... Even masterful architects do not invent architectural realities; they rather reveal what exists and what are the natural potentials of the given condition, or what the given situation calls for.” ³

A strong site can negotiate an equally powerful architecture. To achieve the right balance I try to empathise with both the genius loci and the interdependent character. The beauty of the dual approach – creature plus activated ground – is that I can immerse myself into different roles, and thus incorporate different positions within a single project. The projects become a hybrid between object-orientated architecture and landscape. The object, which only initially appears dominant, is countered by an activated ground, which is not a plain canvas any more but a character in its own right, one that literally lifts the object. In order to become a partner, the ground needs to develop its own individual presence, which is achieved through the architect who acts as its interpreter or seismograph. The provocation of the character aims at enervating the ground to become active and express its own interests.

At Uralla Court the initial reaction of the ground shows a deflection that keeps the object at a distance. The sod transforms and bulges upwards, it hardens and becomes a
concrete structures that define the lower floor by enclosing and marking out different spaces. This process is reminiscent of the ritualised scars that emblazon the skin of certain native tribes in Africa, expressing its sculptural potential, its plasticity, which is realised by sliding shells under the skin. At Uralla Court, program has been slid under the sod. The topographical continuity of the surface, the existing landscape, is maintained in the project. The concrete humps at Uralla Court are developed from existing ‘force lines’, and thus establish an activated ground that is both part of the new and the existing condition of the site. The project then blurs the boundary between landscape and architecture.

The preceding examples of activated ground have been with projects that started on natural terrain, which raises the question of whether the motif of the activated ground can also be raised with artificial topographies. Projects like Thalia Graz or the EAF extension are situated in an urban context, on top of existing buildings. What does activating the ground mean under those circumstances? It is a decision to see a roof as part of an existing building only, or as a topography that becomes the ground for a new development. The angle of observation changes. Above becomes below. Although the ground can not literally move, I still activate it through the same process of developing an empathy for its specific condition. The local legalities surrounding the existing buildings (now turned ground) largely do not allow physical alterations, however, the negotiations and dialogues are still happening. It is just that the introduced character is more obviously reacting to the ground, than the other way around. Already the fact that the ground is been listened to, activates it. It is taken seriously as an individual player. Looking at the generative processes at Uralla Court, one can see that the object does not just land, but morphs over time in reaction to the ground. The same happens with the EAF extension and Thalia Graz, where the changes are a reaction to the continuously improved understanding of the ground’s character.

The relationship between object and ground is nearly identical in projects that depart from a natural ground and in those that develop from an existing structure. All three elements - object, ground and void - are present, yet their intensity and formal expression shifts as a result of the particular circumstances. Bernard Tschumi’s Studio for Contemporary Arts in Fresnoy exemplifies the possibilities of an artificial roof-scape as an occupiable space. This was possible because he had been asked to redesign the entire setting, including the already existing buildings. Unfortunately I have not had this opportunity yet. At Thalia Graz the void between object and ground is rather a signifier of space than an experience, since it is not actually inhabitable. It is an example of a void that radiates space. It would have been an improvement if the requirement for a program for sheltered outdoor activities had allowed the void to be larger and further differentiated, which is what makes the Fresnoy Centre so special. Tschumi adds a large roof that hovers above existing buildings and thus unites them. Thalia Graz binds together four disparate buildings by occupying all existing gaps and developing a strong presence that bleeds into the existing context, creating an overall identity.

Tschumi takes information from the site (replicating the existing roofs), which is not dissimilar to the next Enterprise’s hovering Lakeside Pool in Caldaro, Italy, where they took a cast from the seabed and placed it over the land. In both cases the morphological information is already present and mirrored. In my operational set-up I introduce an alien object in order to highlight a local condition.

The question has been raised as to, whether object and ground being appreciated equally, as it may appear as if the
ground is being prepared in order to receive the object, similar to a painter priming a canvas. This view is challenged when looking at the chronology of events. Although the incoming object appears to be the most obvious change to the situation, the ground, and its inherent qualities, are already there, untouched. It is only after the object’s arrival that the ground uses and expresses them, in reaction to the object. The object arrives at an unprepared site, where it hovers in anticipation of a reaction. The arrival of the object functions as a wakeup call for the site to express its inherent qualities and subsequently form a symbiotic relationship that allows the object to land. Here the designer’s interest come into play. Listening to the site is an expedient that gives the object something to interact with. In an urban context, the material or information to work with exists in a readily comprehensible format. In a natural context, the information is present as well, but in a far more subtle way. It first needs to be interpreted and translated, before the object can make sense of it and a dialogue can unfurl.

My work continues the Coop Himmelb(l)au lineage of self-confident forms and buildings, however, there is a difference. While Coop Himmelb(l)au see the ground plane as a territory that they want to liberate from “feudal power mechanisms of land and land ownership as in homeland, our land, my land,” by giving it back to the public (exemplified for example at the Ufa Cinema Dresden or the BMW Welt in Munich), I intend to emancipate the ground as an entity in its own right, and give it control over itself. While Coop Himmelb(l)au lift their buildings above a plain canvas (the leaping whale above the horizontal waterline), my ground plane claims its own ‘ground’ by defining its appearance. In those Himmelb(l)au projects where the ground is present as a differentiated physical entity, it is brought to the site, rather than being from it. The bodies of the BMW Welt or the Musée des Confluences, are being held up by fig-
ures which themselves have been brought to the site, and which form part of an existing Himmelb(l)au repertoire. They are not an expression of the site. The concept sketch for the Musée des Confluences confirms this. It shows an even ground on which independent vertical figures are placed, which hold up an independent horizontal body. The whale leaps out of a calm sea, in order to keep it in the air a couple of friends need to join in and support it. In my work the ground itself reacts, either by extending its supports towards the arrival (Thalia Graz), or by keeping it at a distance (Uralla Court).

How to integrate a local context into a design is a core question. I do not consider the location as a background or environment, but as a counterpart. I start a project with the seemingly brutal move of confronting the site with an unrelated alien object. It is meant to provoke a reaction from the site that, through my reading and interpretation, reveals and acknowledges the character of the location. Expressing the ground’s intent is facilitated by immersing myself into the ground and becoming a seismograph for its intents. In doing so I recognize the location as an entity in its own right. Mediating the subsequent dialogue between object and ground marks the activation of the ground. The ground takes control over itself, expressing its interests either through topographical moves or by influencing the evolution of the architectural object / character. Activating the ground also serves my own interest. The dialogue between the two antagonists strengthens their presence and translates directly to the energy emanated into the void between them. This turns the void into space.
I am now at a point where I understand the ingredients of my design process. At the beginning of my research I knew about the characters (little creatures), who were the actors within the play of each project, however, I was not sure what their function was. Now I understand that they are *agents provocateurs*, whose role it is to incite a reaction from the ground, a move that activates the ground and is the prerequisite to develop spatial sequences that are both authentic to the location and myself.

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1 Prix, “We Were Young and Very Bored,” 240.
Uralla Court - interior | inserted volumes hover above the upper floor level - image: Daniel Körbler
Torrens footbridge | an unreasonable point of departure

100 case study
The design developed from an Expression of Interest which I had put in together with landscape architects James Mather Delaney from Sydney and engineers Bollinger + Grohmann,1 Germany. Although we did not get shortlisted I decided to work on a proposal nevertheless, because it would put me in a position to constructively critique the other projects. I also thought I should do an explicit landscape project once, since the ground, as a topic, is already present in my work. In the end the project was more than an exercise. It enabled me to realise and understand the different stages of my design process, and produced a ‘PhD moment’ for me. Since this was my first landscape project, it felt like a totally new type of problem, without any reference to my earlier works. The project developed along a horizontal rather than a vertical axis, thus it did not allow me to revert to existing formal stereotypes, which were simply not applicable here. This meant that the evaluation of the design, in regards to process and the sequence of events, could not be made on the level of visual appreciation and resemblance. As a consequence the project gave me the opportunity to look at the performative aspects of my design agents - the unreasonable play of the object and the ground around a void - rather than their expressive qualities. Doing a landscape project became a chance to distinguish between the formal expressions in my projects (heavy mass, compact figures, single surfaces, obtuse angles) and their relational strategies (detaching the object from the ground, lifting it, initiating a dialogue). Through undertaking a landscape project I recognised the recurring strategies present in the majority of my past work.

The bridge project started with producing a materialised field of information, which I then intended to read and interpret. I recycled fragments of an earlier project, digitised versions of models that originated from my collaboration with Margit Brünner, and heaped them onto the site. These bits and pieces had no relation whatsoever to the site, and thus depicted the first instance of the unreasonable. As with other projects, I placed a virtual solid around the spatial field, and used it as an oblique and heterogeneous grid that

Case study | River Torrens footbridge

The intention of the following chapters is to test and validate the described revelations through projects from different work scenarios, all undertaken during the course of this PhD. They comprise: a speculative competition, a completed project, and a series of experimental installations.
guided my sculptural cutting and carving of the block, in search of the form within. In a second attempt I peeled away the material until I found objects, which, after being digitally distorted, could possibly function as a bridge, however none of them were satisfactory. They all extended over the edge of the river, creating an undesired underpass situation that separated the various users and directional flows.

In another attempt I worked with a found object, a flat but frayed piece of tree bark, whose form I interpreted and spanned over both sides of the riverbank. The situation, although devoid of the underpass, was still not satisfactory, I could not tell why, it just did not feel right. I then kept experimenting with different sizes, and kept shrinking the object until it fell short of actually connecting the river banks at all. The object was now placed in the middle of the River, contradicting its basic functionality. Then I found the answer to my problem. I did what I always do in my design process (although I was not yet aware of it) and activated the ‘ground’ (in this case: the riverbank), which started to differentiate and extended towards the object, bridging the gap between them. It then dawned on me that this was a similar situation to earlier projects, where I lifted the object above the ground, waiting for the ground to extend upwards. What normally happened along a vertical axis appeared now in a horizontal relationship.

Torrens footbridge - genesis | the ground reacts and bridges the gap.
As a result the bridge became an extension of the existing landscape, while still differentiating between object and ground. It unifies all traffic, north-south from the festival plaza to the Oval, and east-west along the river, on one continuous plane that gently rolls up and down and ties all adjoining surfaces together. Instead of being a pure transit route, it becomes a topography and place in itself, which can be programmed in different ways. The various open air functions that are currently held at Elder Park are able to extend onto the bridge, where they could be supported by build in infrastructure. A width of 60m and a length of 120m, allows for many different kinds of program, while still being wide enough for transit. Wheel chair access has been considered in the modulation of the topography, so that smooth transitions and inclinations below the threshold of 1 in 20 could be achieved for dedicated corridors.

The frayed design offers multiple choices of movement, as well as creating different spatial situations for rest or play, either along the steps and terraces of the riversides, or the holes and slits in the object. Different forms of interaction with the water are provided by the defined spaces between the object and the ground. Further, the voids and slits within the object will create a spectacle of dappled light underneath the bridge, which will be experienced by those who cruise the Torrens in paddleboats.

1 Klaus Bollinger teaches structural engineering at the Angewandte. Is structural solutions always further the architects design intent, offering possibilities instead of constraints. He conceived the structural solutions for the UFA Cinema in Dresden by Coop Himmelb(l)au, Zaha Hadí’s funicular in Innsbruck or Sana’s Rolex Learning Centre in Lousanne. Through his teaching I gained an understanding of structural design, that assists me when iteratively adjusting both form and technical parameters until they successfully overlap, yet do not want this discussion to be visible in the final outcome.

The design for the River Torrens footbridge shows that I apply the same strategic moves in a landscape project as in previous architectural work. In both scenarios, vertical or horizontal alignment, I brought the object into an unstable position, where it was approaching the ground without actually touching it. As in previous projects, I had manufactured a situation, or problem, that demanded a reaction from the ground, in order to be resolved. Upon identifying this as a strategy I referred to it as activating the ground. Until then I had thought that I was mainly interested in lifting the object, in the phenomenological aspects of hovering and creating a space underneath. Now that something similar has happened in a horizontal project, it suggested that I was not pursuing a visual appearance, but a performative relationship between the object and the ground. Instead of it being a visual reference to my architectural Austrian heritage (the leaping whale and lifted mass), the detachment of the object acts as a strategic stimulus, which triggers the reaction of the site and unfurls a mutual dialogue around form and space. I was now not just aware of the phenotype of my work, its formal expressions, but also its genotype, the operational strategies that lay behind the expression. This insight gives me greater confidence in pursuing this personal route.
Torrens footbridge | a performative relationship between object and ground

106 case study
Torrens footbridge - view towards the oval | gradual transformation of the ground in order to meet the object - image: Daniel Kerbler
Thalia Graz - Girardigasse | opening up the space of the street towards the sky - photo: Herta Hurnaus

110 case study
Thalia Graz | subtle void and ground reaction - photo: Herta Hurnaus

112 case study
This case study examines the conditions that surrounded the successful implementation of a won competition. It gives evidence of the process of panning for gold in a spatial field of artefacts, and exemplifies the activation of the ground on the basis of existing buildings.

Thalia Graz is the result of an architectural design competition that asked for four thousand square metres of fitness studios and offices above a heritage listed building on the western side of a complex of four buildings, opposite the State Opera House in Graz. The aim was to restructure the entire complex, which, after partial completion of previous projects, had been left in an inhomogeneous state. The design is based on the premise that all existing roofs and facades are regarded as the site. Instead of keeping within the boundaries of the given perimeter, we decided to distribute the building mass along and above all four existing buildings, and nestles into all available niches. This allowed the perceived volume to be kept low, and relevant lines of sight to be maintained. The existing agglomeration is now ingrained and bracketed by the new volume, and fused into one comprehensible spatial development.

Through the inclination of the façade the urban space of the adjoining street maintains its vertical openness. Despite functioning as an infill, the building presents itself as an independent body, with a character distinct from its surroundings. The articulated spatial distance to the existing buildings emphasizes the corporeality and creaturely aspect of the new volume, which is further emphasized by an all encompassing outer skin that does not differentiating between facade, roof and soffit. The form and its relationship to the context were continuously reworked until all technical and functional aspects could be integrated in such a way that they became invisible, supporting the reading of one homogenous body.

This was developed through digital and physical models, whose accumulated scars became the three dimensional diary of the project. The structural solution is based on storey-high steel trusses that transfer their loads downwards through existing and new shear walls within the existing buildings. The building envelope is conceived as a foil-roof on a trapezoidal sheet metal substrate that is covered by a vented skin of perforated aluminium sheets.
For this project I collaborated with Irene Ott-Reinisch and Franz Sam, for whom I had previously worked as a design architect. Franz was the project architect for the Falkestrasse rooftop extension by Coop Himmelb(l)au. He has a great passion for solving details as well as engineering problems. Irene's strength lies in project management. Both were the local architect for two Steven Holl projects in Austria, the Loisum Hotel and the associated Cellar Door. Together we formed a well balanced team, whose individual strength covered all the challenges a complicated project like this presents. Working between Austria and Australia worked out much better than anticipated. The time difference became an advantage for the swift progression of the work. When we ended our shift in Adelaide, Vienna would take over and continue, and the next morning we would continue with updated material. My project booklet facilitated the information exchange and discussions between Adelaide and Vienna.

The genesis of the design follows the previously described steps. In default of an immediate idea or object that could be borrowed, I again produced the unreasonable sea of information, assuming that the creature (or whale) is already there, submerged and still invisible. I then observed the ripples in the water, waiting for the moment to spear and extract the whale. In this case the abstract spatial information came from an inverted imprint (materialised voids) of the surrounding densely built-up area, which were overlaid with the site in both digital and analogue models. On screen the multiple fragments of existing spaces were viewed in wireframe, which turned them from objects into a field condition. I would then turn individual parts to solids and

Thalia Graz - different stages of design development

114 case study
site photographs: Katharina Egger / Franz Sam
stitch them together in one large object. This process was guided by immediate gut feeling, as well as the overarching image of a ship camouflaged by dazzle painting. After defining a range of different superstructures, three or four figures were built as physical models and evaluated for their spatial and sculptural qualities.

An early abstract render of the site fused the four existing buildings into one homogenous mass that reminded me of an ocean liner. This lead to two different lines of research: one into vessels, boats, spaceships, planes and submarines, while the other looked into methods of concealing, including dazzle paintings, camouflage and trompe l’oeil. The aim was to blend the building into the background as a means to homogenise the heterogeneous context. The idea of camouflage was dropped. Instead we pursued the opposite and made the new superstructure stand out as much as possible. The subsequent successful merging of the conglomerate is based on the strong presence of the addition, which radiates into the heterogeneous context and gives the place a new identity. A less distinct building would have merely contributed to the existing visual noise. The new arrival acts like a magnetic pole that re-orientates the bearings of matter in its vicinity. Further, it gels the context by filling the gaps between the existing buildings with even the smallest amount of program. The addition is both a solitaire and a binder of aggregate.

Giving the location a new character is the result of careful negotiations between the new object and the existing fabric. A dialogue, sometimes conflict, establishes the terms of cohabitation and results in mutual differentiation and the emergence space, between the objects as well as implicated in them. Although the building is clearly ‘not from here’, one can read that it has adapted itself to the local conditions, as much as the existing ground condition - the four buildings - have adapted themselves in order to accommodate the arrival. It is a process of give and take, out of which the whole arises as a strengthened unit. This only works if the character is strong enough to initiate and steer the de-

Thalia Graz - competition stage elevations
velopments, as the ground itself has the tendency to cultivate its inertia and remain inactive. The addition binds the disparate buildings together by occupying all gaps between them. It develops a presence that bleeds into the existing context and creates a new overall identity.

Due to the fact that the ground is made up of existing buildings with continuous programming (theatre, café, workshop, retail and offices), its activation had to remain relatively ‘silent’. This means that the ground was acknowledged by being listened to, rather than being proactive itself. The ground still reacted, just not to that extend as we would see with a project on natural soil. Parts of the existing offices on the south eastern side of the complex caved in to create room for vertical access to the new development, while walls within thickened to bear the load of the addition. Some walls extended towards the character, for example on the north eastern side, where they elevate the two cantilevering volumes.

Due to the circumstances of this project the activation of the ground had to be very subtle. Treading carefully and finding ways to incorporate constraints, on the background of an overarching personal agenda, reflects the specificity of the architectural profession in contrast to sculpture. Because the addition sits on top of inhabited buildings the ground’s reaction is less explicit than in other projects. Moves were limited to what could be argue for within the realm of ‘reasonable’ structural or functional necessities. The motive of the lifted mass had to be carefully modulated. Height restrictions and the lack of program for outdoor spaces meant that the lift could only be realized in an understated way. The resulting void rather implies space than physically providing it. Yet it is big enough to emphasize the character’s independence from the context. Cutting up the building’s skin into individual segments, reminiscent of the interlocking shells of crustaceans, resulted in gaps that were used as fenestration. The move could be interpreted as a first attempt at dissecting the whale.
Thalia Graz balances all aspects of my previously discussed design process. It follows the central chain of events (field – figure – character / site – ground – activation) and uses both methods of assessment (emotive cognition & intellectual synthesis) for form finding and conceptualisation. Its morphological features (compact yet animated) identify it as representative of my formal language. Technical topologies like structure, roof, façade, etc. are integrated into an all-encompassing skin, supporting the motif of one bodily character. The activation of the ground is both ‘silent’ and ‘proactive’. It is expressed in the way that the ground retreats and advances in reaction to the new arrival, while at the same time affecting its transition from field to object to character. Focusing on the object (via the empathy developed for the ground) responds to my belief that the care and attention I put into the design will radiate back as an energy that fuels the emergence of space in form of an emitted ambience or atmosphere. This energy fuels the most important occurrence of space in this project: the character’s presence, emanating into the context and giving it identity.

1 the topic of vessels is present in other projects as well: Uralla Court, Suzuki house, EAF
Thalia Graz | northern cantilevers - photo: Herta Hurnaus
Thalia Graz | view from Opernring - photo: Herta Hurnaus
tracings of the whale - Spinoza’s cabinet - Adelaide, South Australia 2012
dock 2 - to the islands | Margit Brünner’s site reading, a sketch model supplied for interpretation
Case study | Dissecting the whale

Dissecting the whale is the most recent step in an ongoing series of installations. Their aim is to explore and test the topics of my research in a medium that is free from program or functional constraints, revealing aspirations and contradictions that are present in my work.

For the exhibition To the Islands - The Architecture of Isolated Solutions the curators Jennifer Harvey and Sean Pickergill asked architects and artists to collaborate and interrogate the architectural qualities within the concept of islands. We were asked to respond to a chapter from True Stories, a fictitious piece of travel literature by Lucian of Samosata. The text borders on the absurd and reads as a parody of Homer’s Odyssey. In this project the ‘unreasonable’ was introduced in form of the text we were asked to respond to, as well as the suggested collaboration with the artist Margit Brünner. Hélène Frichot writes:

“Margit’s work is ostensibly located between the spatial arts and performance art, but she is an architect. Her explorations endeavour to discover the best means of producing joyful affects, with an emphasis on the milieu, or relationship between the environment-world and ever-transforming subject (or processes of subjectification): this is what she names atmosphere. Hers is a practice of immanence, ever located, situated, inspired by embodied learning.”

We agreed to select two different thematic strands within Samosta’s text. While I looked at The Isle within the Whale – Oceanic Monstrosities, Margit focused on The Isle of the Blessed – Production without Effort. We then set up a mode of operating in which we would iteratively interpret each other’s moves. One person would start with an artefact, a model or drawing, then pass it on to the other, who would develop it further and then return it for the next step of transformation.

Margit started by engaging into a conversation with a site in Port Adelaide, tracing its atmospheric moves by ‘drawing’ paper models with a Stanley Knife, and passing them on. After transcribing them from physical to digital, in order to familiarise myself with their spatial qualities, I produced a series of renders, hypothetical spatial scenarios that anticipated different scales and points of reference. This formed the point of departure for reading and interpreting the three dimensional information in regards to traces of the whale, which I assumed was hiding within.
138 case study
After some probing and trial and error I narrowed the search down to one particular model. Similar to previously described scenarios (Torrens footbridge, WIFI St. Pölten) I encaged the material in a translucent volume, and then cut and subtracted material along the lines of the existing surfaces. This process was not just aimed at finding a form but also to define its complexity. The use of projected curves as a cutting tool ensured that the surfaces of the whale could be unfolded onto a flat surface, therefore allowing for a controlled and easy assembly of the installation. I used this part of the process to test which amount of formal complexity could be achieved with a composite of single curved surfaces. This was important to me as I was considering using this method for architectural work as well.

Once the digital corpus was extracted, it was broken down to skin and bones, then CNC cut from different thicknesses of cardboard and finally stitched together in the gallery space. The initial stitches were replaced by paper tape, so that the whale’s monolithic appearance was reinforced by a seamless and all-encompassing skin. Due to the fact that the exhibition space could not be altered, the dialogue between object and ground, which had begun at Port Adelaide and was now continued at the SASA Gallery,
could only express itself through object. The geometry of the Gallery became part of the whale’s digital habitat and thus influenced the development of its character. Although no physical connection to the ground could be established, there seemed to be a balance achieved between the installation and the location. The gallery became a temporary home for the whale who seemed at ease with the situation and floated in space like a fish in an aquarium. After the exhibition we decided to relocated the whale to its point of origin in Port Adelaide, where Margit Brünner was supposed to take over control again and engage in the next transformation. But before she could rework the object,
someone had laid hands on the installation and vented his / her anger by dishing out a couple of blows. As a result the skin was cracked and partly peeled. Initially we considered this intervention as part of the transitional processes, however, after security guards threatened to have the object removed, on the basis that we were supposedly dumping rubbish, we dismantled it. A few months later Margit Brünner, now in the role of curator, invited me to participate in another exhibition project: Spinoza’s Cabinet.

“The title refers to the Dutch Jewish philosopher Baruch Spinoza (1632-1677)… whose universe implies the
interconnectedness of all living systems, building on a temporal dynamism of reality. His masterpiece ‘Ethics’ about the origin and nature of emotions offers a way to rethink relations in an increasingly challenging global context. The project is an attempt to install ‘paradise’ into the local atmospheres of a shopfront in the Adelaide CBD by means of art. Based upon Spinoza’s concepts it puts into prominence art-practice as a site of knowledge. It inquires an autonomous art-piece that is not attached to a specific artist but rather emerges from a series of situations and interactions, exploring the notion of paradise. The artists are invited to explore their practices as a ‘skill’ of communication and of achieving accordance not by intellectual discourse but through open-ended experimentation. Immediate practice or improvisation might be defined as presence in the making and as a precise concentration of a mind towards artistic processes – the attempt to witness ‘what is’, and to understand how ‘what is’, and how it is ‘constructed’ in the moment. This practice seems to be best suited to unveil ‘paradise’.”

images above: grasshopper used to create the structural grid inside the whale | based on a script provided by Victor Leung
This appeared to be the perfect set-up to resurrect the whale and follow up on its dissection, which I had hinted at earlier. Since I now understood that my main interest lies in the merging of “the space that is implicated in the work” and “the space, which subsists as the emptiness between volumes,” I realised that dissecting the creature bears the potential to reinstate what I had achieved at *Uralla Court*; the flow of space between and through object and ground. In the course of later projects the characters had become more and more enclosed. Maybe this was the result of honing the characters in order to give them an increased presence, for example in situations where the ground could not be touched, or where the local conditions were simply not worth amplifying, and thus needed a strong character to give the location an identity, as it happened with *Thalia Graz*. At *Uralla Court* the characters are less defined and less strong as a form. Yet the space between character and ground is more vivid than in later projects. It flows horizontally between terrain and the hovering volume, but also breaches out vertically into the character itself, where it mingles with the internal spaces. Dissecting the character could be a method to bring this quality back into my projects. The installation for *Spinoza’s Cabinet* allowed me to ex-
plore this without constraints.

I started with transferring the object into the new location, by projecting its digital origin onto a wall and tracing over it. This step produced a chart on the wall, an information field, which I would interpret by immediate and intuitive moves. The mapping of the whale became the reference point for the dissection, defined the parts that were to be kept intact and where the body was supposed to be separated. Structural considerations played a role as well, as the separated pieces needed to be rigid enough for handling. To achieve this the size of the cuts, ranging from four to seven single surfaces, and their relative geometry had to
be considered to make them sufficiently stiff.

Parallel I ran a digital set-up, from where I took measures, such as the centre of gravity, which where then transferred to the physical artefact. In conjunction with the precisely mapped ceiling joists, this allowed the shells to describe the defined volume without sagging onto themselves. The pieces were tested in relation to each other and the ground by physically building and arranging them on location.

The great aspect of this arrangement was to be able to design and implement simultaneously. The model I worked on was already the final product, which resulted in an instantaneity that is rarely possible in architectural projects, and can only be emulated by working models, which for me is the norm for assessing the spatial qualities of an architectural project. To be ‘in’ the model facilitated the focus of body and mind on one thing, and enabled me to be fully present in the moment. The result of the operation was a dissected object that still managed to maintain a presence, allowing a spatial flow that origins in the void and bridges into the dissected body. Heidegger identifies three instances of space: “The space, within which the sculptured structure can be met as an object present-at-hand [the gallery]; the space, which encloses the volume of the figure [the body of the character]; the space, which subsists as the emptiness between volumes [the void between object and ground, and the voids between the individual elements of the dissected body]”6 “The installation at Spinoza’s Cabinet constitutes a charged situation, where different instances of space overlay each other and amplify the spatial quality of the project as a whole. Working on installations has substantiated my design process and revealed how its expression has changed over the past years. My architectural figures have become more and more monolithic and hermetically closed. Closing the object has confined space to the void underneath the object, denying it the possibility to bridge the gap and branch out into the architectural character and along the ground. This quality was last noticeable at Uralla Court I & II. While the characters have developed and gained ‘radiant space’ through their increased presence, they have lost the ‘sequential space’ that develops along a timeline of events. In my forthcoming work I intend to re-initiate ‘spatial flow’ by dissecting the object. The installation at Spinoza’s Cabinet had been a first attempt in this direction. There, space began to flow between segments of the character and the void beneath. The ground contributed to the development of the object and thus was silently activated. My aim is to achieve a balance between breaking up the body to further the flow of space and protecting the identity of the character. The installation at RMIT will be the next instance in which I can test and develop this strategy, hoping that it might function as a synthesis of my past practise and give an outlook into future research.

1 Assyrian novelist / rhetorician,125 –180 BC.
3 Brünner, Spinoza’s Cabinet, 5.
4 Chillida, Eduardo Chillida: Writings, 11.
6 Heidegger, “Art and Space”, 5.
the whale - Spinoza’s cabinet | second dissection

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the whale - Spinoza’s cabinet | second dissection

152 case study
Dissecting the whale - Installation at RMIT Design Hub

158 case study
family of characters
Conclusion

Through the interrogation of my practice I realised that I am handling three subjects: the character, the ground, and the energy that develops in the void between them. This energised void produces space – the core offering of architectural production. There are three different instances of space present in my work that I seek to overlap within a single design (radiant – between – sequential). I have come to understand that activating the ground is a means to make it contribute to the production of space. Until recently I thought that this entailed the modification of the ground. Now, working in situations where the ground could not possibly be altered, I have come to realise that the ground can also be activated without being physically altered. The ground is empowered, when its characteristics are acknowledged in the dialogue (or controversy) that unfolds between object and ground, directly affecting the development of the object, even when itself remains physically unaltered.

The object-orientated ontology of my design process also serves the emergence of space. The care and attention I pay to the handling and shaping of form depicts my belief that the energy invested relates proportionally to the radiance of the object, subsequently charging the void between object and ground. To aid this process I have transformed strategies from my mentors into a personal choreography of morphogenetic moves. How to integrate a local context into a design is a core question for me. There are many ways to ‘respect’ local conditions. Some believe in touching the ground lightly, others in emulating local appearances. My method starts with the seemingly brutal move of confronting the site with an unrelated alien object. It is meant to provoke a reaction from the site that, through my reading and interpretation, reveals and acknowledges the character of the location. The subsequent dialogue between object and ground marks the activation of the ground and the transition of the alien into a character; one that has been raised under the influence of the location. I believe that the empathy I develop for the ground and the object, through moderating their confrontation, eventually also serves my own interests; the emergence of a more rich spatial experience.

Interrogating my practice has unveiled the tactics I deploy to facilitate the emergence of space and the poetic aspects of architecture. It has revealed an iterative process that employs unreasonable moves and intuitive synthesis, alongside a formalised method of intellectual analysis that charts the project from different perspectives. This happens by assuming the liveliness of all agents involved, and by immersing myself in the object and the ground, even while also being an outside observer. My background in visual communication design comes into play, when I empathise with the other and translate the experience into a visual display that can be shared with others. It is at this point that the intuitive mind meets the rational, when I reverse-engineer the argumentation for my projects and lay out a trail for the recipient to follow. Editing a story-book of the design becomes a form of analysis. I engage in it after the initial design moves have been made, but before they are established as an idea or concept. The booklet production runs parallel to the design development and assists in
substantiating the design and testing its credibility. In the course of operating, initial ambiguities are gradually honed into meaning and form.

I have never decided in which way it is best to talk about my work; through its phenotype (the expressed features of form), or its genotype (the strategic choreography that determine its genesis). This undecidedness led me to understand a key condition of my practice; that is, to be ‘in-between’. Being in-between is a position that can be considered ‘unreasonable’ if viewed from the vantage-point of a defined body of knowledge. For me unreasonableness has a positive connotation. It implies openness and a leverage for interpretation that is missed if the operational realm is confined by logic and reason. Being reasonable only gets us to where we already are. Unreasonableness can be found in the way that I allow intuitive synthesis and emotive cognition to guide the direction of my projects, how I misuse or co-opt features from fields unrelated to architecture, clash unrelated spatial information onto the site, or empathise with objects and the ground. Being unreasonable could also mean to position oneself ‘between’ established areas of expertise or familiarity such as the place I occupy when harnessing the two streams of education I received, or when working between two continents and different architectural cultures. Being ‘between’ helps in making connections across the borders of disciplines and connect seemingly unrelated items in order to form an idea. Finally, it is ‘between’ object and ground, where a dialogue unfolds that determines the emergence of space.

In an architectural environment where expectations of efficiency, quantifiable performance and control dominate, operating between emotive cognition on one side, and intellectual synthesis on the other, serves to acknowledge the full bandwidth of architectural ontology, from experiential and subjective values to the limits of materials, techniques and meaning. The iterative switch between the two poles promotes a state of deliberate unassuredness that allows the designer to draw connections across different areas of expertise and circumvent the mandatory restrictions set up by professionalization. It puts the designer in the position of a ‘libero’, a free agent, who reaches his goals by fluidly assuming different roles and positions. A prerequisite for this multivalence is the acceptance of momentary unreasonableness and illogic.

In the past I have concealed the emotive cognition that takes place in my work behind the representation of a parallel intellectual synthesis and conceptualisation. Now that I am more aware of the importance of how I ‘feel’ myself through and into a project, these two aspects of processing can engage more productively and become a hybrid (amphibious) creature that is able to simultaneously deal with different circumstances and demands. With acknowledgement of the importance of ‘feeling’, space comes into focus again. As I have demonstrated, spatial sequences have decreased in my work in favour of the auratic quality of objects. A charged object is a character that emanates an ambience that I see as responsible for the creation of space out of mere void. The space between objects is as important as the ob-
jects, particularly because it is here that the contention between the antagonists, object and ground, leaves its mark. The intensity of the dialogue translates directly to the energy emanated by the resulting space. This is how a void turns into space.

Staging and mediating a confrontation is my method of generating space. It assumes the aliveness and subjectivity of all agents involved – the ground, the architectural object and the architect – thus giving them equal power and validity. Dissecting the whale emphasises the potentially violent nature of the discussion. Its result may strike a balance between spatial sequences that weave across object and ground and the radiance of both characters, turning the whole system into one symbiotic entity; an entity which the architect has both found and figured.

1 Italian for 'free'. In football a fluid midfielder position that switches between roles in the defence and the attack.
Projects | Uralla Court

Uralla Court - north east | lifted mass and ground reaction - image: Daniel Kerbler
Uralla Court - model and axonometry | landscape flowing between and through the buildings
Uralla Court - model and concept sketch | lifted mass

170 appendix
Project: Uralla Court, Residence and Studio, 2004
Client: Auburn / Bette
Ground: 1511 m², Blackwood, South Australia
Floor Area: 330 m²
Structural Consultant: Prof. K. Bollinger

The project was developed from the individual ‘users’ own needs which can be found in the atmospheric and spatial qualities of the structure. The central question was ‘How would you like to live?’ and not ‘How should your house look?’ The essential element of the project was the ‘reading’ of the clients as individuals and ‘feeling into’ the way they see their lives. The result is an internally defined ‘spatial sculpture’ with a wide range of possibilities for interaction.
Uralla Court - section CC 1:100 | overlay of initial and final drawing
Urralia Court - between building shell and hovering volume - image: Daniel Kerbler
Projects | Uralla Court II

Uralla Court II - north east, working model

180 appendix
Uralla Court II
Project: Uralla Court, Residence, 2004
Client: Auburn / Bette
Ground: Blackwood, South Australia
Floor Area: 120 m²
Structural Engineering: Dr. Oliver Englhardt

Residential building in Adelaide, Australia.
Uralla Court II is the redesign of the original Uralla Court with changed parameters; the reduction of program and usable space by two thirds. The spatial concept remains the same, previously enclosed spaces at the lower level are now used as sheltered outdoor spaces.
Uralla Court II - south east & south west - image: Daniel Kerbler

Uralla Court II - cross section and structural diagram
AN-house - void between incoming object and existing structure

Project: AN-house, Residence and Studio, 2009
Client: Gallagher & Hargreaves
Ground: Brunswick, Victoria
Floor area: 330m²

The transformation of an existing metal-workshop into a residence and studio.
AN-house - ground reaction

AN-house - sections and floor plans
AN-house - void

194 appendix
Projects | HTMTI Hotel

HTMTI Hotel | building site - photo: Irene OttReinisch

196 appendix
Project: HTMTI Hotel, 2007 -
Firm: Irene OttReinich
Client: Royal Government of Bhutan / Austrian Development Agency
Ground: Upper Motithang Thimpuh, Bhutan
floor area: 1300m2
role: design architect

This project for a Hotel in Bhutan serves to transfer knowledge about the planning and construction of a sustainable building through the implementation of a prototype building. The intention is that the knowledge and understanding of sustainable design principles, that the local architects and builders have acquired through this project, can be applied to different kinds of future buildings. There are three different typological entities present in this project: a volumetric roof, three hovering characters and the ground reaction.
HTMTI Hotel | rooms with inserted volumes - photo: Irene OttReinsch

HTMTI Hotel - axonometries of eastern body
Projects | Austrian Expo Pavilion
The competition entry for the Austrian Expo Pavilion 2010 was conceived as one large resonating body, working as a soundbox for sixty-three instruments [collected from all over Austria] which the visitors could play and interact with in order to release information about the regions they came from. The instruments were housed in sixty-three sub-volumes, bodies within the body, that were created by multiple divisions of the original volume. Together they formed a labyrinth, inviting the visitors to embark on a ‘Situationist’s derive’. When the instruments were played they would release visual and sonic information into the immediate and larger spaces. The outer shell refers to Flight Cases used to securely transport instruments, emphasising the connotation of travel & journey. The proposal was eliminated in an early round of the competition. The client doubted that enough visitors could be channelled through the pavilion.
Expo Pavilion | floating volumes inside the sound box
Expo Pavilion | sound box and floating volumes - image: Daniel Kerbler

Expo Pavilion - floor plans & x-ray view of internal volumes
Projects | EAF extension

EAF extension | view from Register Street - image: Daniel Kerbler

210 appendix
“This proposal for an combined visiting artist studio and residence upon the rooftop of an existing facility takes as its starting point the often overlooked but extremely pervasive air-conditioning unit installed on top of rooftops throughout the city. Exploiting the schism between content and form, the proposal is both familiar - by taking on the formal appearance of an air-conditioning unit - yet uncanny, through its parasitic relationship to its primary host the EAF. This formal and visual ambiguity, at once familiar yet strangely alternative, parallels through its appearance the visiting artist(s) residential relationship to the city - being at once of the city yet at the same time entirely distinct from it.

In addition the proposal aims to be catalytic, transforming the existing facilities both programmatically and formally, whilst having a dynamic relationship with the context. Swerving away from both representational and formal models endemic within the discipline, the proposal takes on a performative role within the city as it aims to multiply meanings as each artists’ shifting relationship to the residency alters between blind indifference to fully appropriating the architectural object.

Through both extending and enlarging the scope and ambitions of the EAF Artist Studio + Residence brief, the proposal aims to provide something at once surprising through its subversion of given expectations (i.e. a residency) and supplementary to both institution and observer.” James Curry
intuitive synthesis | addressing morphological aspect, evaluating character, ground and space through empathy

analytical synthesis | conceptualising and steering the way in which the work is supposed to be read
EAF - floor plan and longitudinal section
EAF - two model modes

EAF - eastern elevation
EAF - internal views
Appendix | overview selected projects

**Dissection**
firm: own architectural practice
project: exhibition piece
venue: RMIT Design Hub
School of Arch. & Design
area: 30m² - Melbourne 2014

**Netzkulinarium**
firm: own architectural practice
collab. with Irene OttReinisch
project: canteen & function venue
client: Wien Energie
area: 1700m² - Vienna 2013

**River Torrens footbridge**
firm: own architectural practice
project: pedestrian bridge
client: DPTI
area: 3500m² - Adelaide 2012
image: Daniel Kerbler

**to the islands**
firm: own architectural practice
collab. with Margit Bruenner
project: exhibition piece
client: to the islands, SASA Gallery
area: 4m² - Adelaide 2012

**WIFI St. Pölten**
firm: own architectural practice
collab. with Irene OttReinisch
project: trade school competition
floor area: 8000m² - St. Polten 2011
Thalia NEU
firm: own architectural practice
collab. with Sam/OttReinisch
project: fitness centre + offices,
client: acoton
floor area: 3200m² - Graz 2009-2014
photo: Herta Hurnaus

EAF extension
firm: own architectural practice
project: rooftop addition
client: Experimental Art Foundation
floor area: 50m² - Adelaide 2009
image: Daniel Kerbler

AN house
firm: own architectural practice
project: residence and studio
client: Gallagher & Hargreaves
floor area: 330m² - Brunswick, 2009

Expo Shanghai
firm: own architectural practice
collab. with Irene OttReinisch
project: Austrian Expo pavilion comp.
client: Wirtschaftskammer Österreich
floor area: 2000m² - Shanghai 2008

Uralla Court II
firm: own architectural practice
project: residence,
client: Auburn & Bette
floor area: 130m² - Blackwood 2007
image: Daniel Kerbler
HTMTI Hotel
firm: Sam/OttReinisch
project: Hotel
client: Royal Gov. of Bhutan & ADA
floor area: 1300 m² - Bhutan 2007
role: design architect
photo: Irene OttReinisch

Uralla Court
firm: own architectural practice
project: residence,
client: Auburn & Bette
floor area: 330m² - South Australia 2004
image: Daniel Kerbler

Eissporthalle St. Pölten
firm: Sam/OttReinisch
project: ice rink,
client: Treisma GmbH
floor area: 4500m² - St. Pölten 2007
role: 3d modelling
photo: Herta Hurnaus

Unit Birkensee
firm: Eichinger oder Knechtl
project: residence & guest house
client: Heindl & Wakolbinger
floor area: 340m² - Münchendorf 2003
role: design architect
photo: Eduard Hueber

Meinl Uhren
firm: Eichinger oder Knechtl
project: watchmakers shop
client: Johann Meindl & Co
floor area: 52m² - Vienna 2002
role: design architect
photo: Rupert Steiner
bignet
firm: Designbureau René Chavanne
project: internet cafe fitout
client: big@net
floor area: 800m² - Vienna 2001
role: design architect
photo: René Chavanne

dragon in the sea
firm: own architectural practice
project: thesis / saving Okinotori-shima and related exclusive economic zone
client: Government of Japan
floor area: 17m² - Japan 2000

Federation Square
firm: COOP HIMMELB(L)AU
project: Federation Square Competition
client: VIC State Government & MCC
floor area: 38,000m² - Melbourne 1997
role: part of design team
photo: Markus Pillhofer

Kansai-Kan
firm: COOP HIMMELB(L)AU
project: National Library of Japan Comp.
client: Government of Japan
floor area: 59,000m² - Kansai 1996
role: part of design team
photo: Markus Pillhofer

Cloud #9
firm: COOP HIMMELB(L)AU
project: UNO Genf
client: United Nations
floor area: 60,000m² - Geneva 1995
role: part of design team
photo: Markus Pillhofer


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Unreasonable Creatures | in dialogue with an activated ground

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