

Reconstructed origin of the Gothic arch and the parabolic vault, after Cousens

Perspective plan and the origin of the orders, after Milliet

The personification of architecture and the primitive hut, after Laugier



The building of the primitive hut, after Vitruvius' Treatise

The building of the primitive hut, after Vitruvius

The invention of fire, after Fra Giocondo

Vitruvius
Adam



2. REVISITING THE ORIGIN

The return to origins (the primitive hut) implies a rethinking of what you do customarily, an attempt to renew the validity of your everyday actions, or simply a recall of the natural and divine (IMG 010). Rykwert (1972: 192) suggested that the primitive hut will retain its validity as a reminder of the original and therefore essential meaning of all building for people: that is, of architecture. The primitive hut is no model for the architect to build from as assumed in linear times; it should only be viewed as attempts to unravel the mysteries of architecture. It remains the

underlying statement, the irreducible, intentional core. Man's desire for renewal is perennial and inescapable. Ideologies are rooted in ideas, they are constructs for shaping meanings, rather than templates for realities.

The search for architecture's origin intertwines with the search for the origin of community; to seek the essence of architecture in the provision of physical control would be to reduce architecture to mere building (Harries, 1998: 141).

2.1 ARCHITECTURAL ANTHROPOLOGY

Architectural anthropology entails the study of human origins (IMG 011), institutions, events and rituals, including age old constructive and dwelling behaviour. Architecture becomes a general human phenomenon which includes all cultures (Egenter, 1992: 85). The diversity of cultures turns out in part to be different ways of accomplishing similar ends (Beals & Hoijer, 1966). An anthropological outlook includes everything that has been built by man and possibly by his precursors (Egenter, 1992: 77). The term *architecture* is denied its aesthetic exclusivity and becomes a general term of a discipline with an objective and universal anthropological outlook. In an evolutionary sense this places architecture analogous to zoology (behavioural at least),

scientifically defined and inter intuitively certain; unmasking the merely evaluating character of aesthetically described architecture (Egenter, 1992: 79). Settlement research related to architecture should now consistently deal with accumulations of semantic and domestic architecture (IMG 014), which means that cults formerly consigned to religious research must be integrated into architectural research (Egenter, 1992: 159). Architectural composition and aesthetics might become a real value again. Doubtless it will also become obvious how barbarically the architect of today uses the social and spiritual complexity of architecture (Egenter, 1992: 163).

2.2 ANIMAL BEGINNINGS

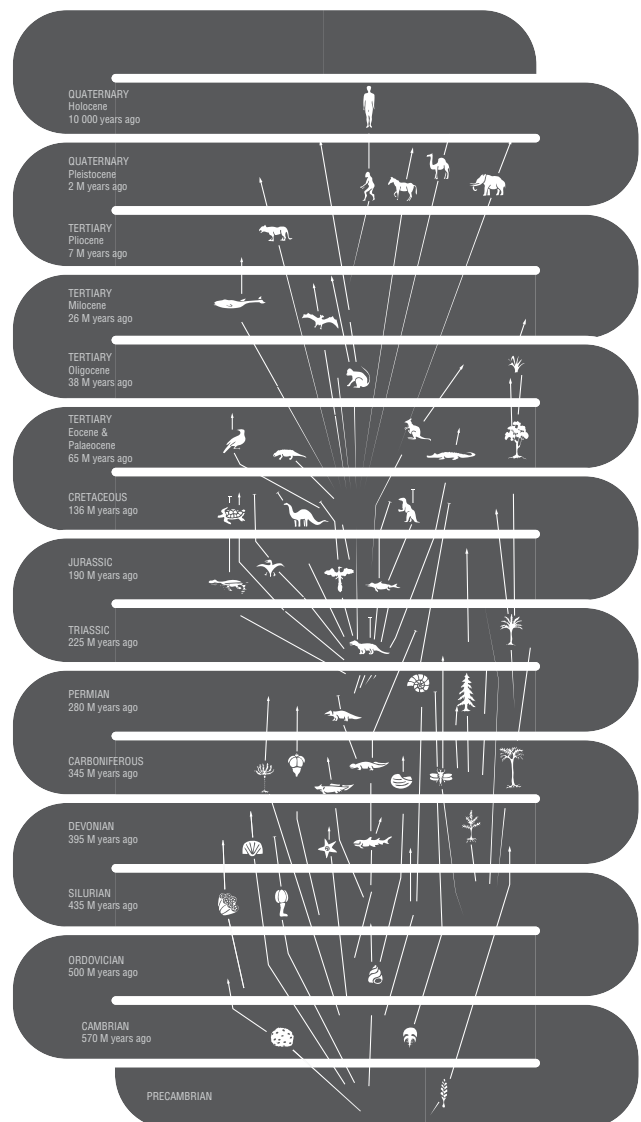
Domestic architecture theoretically loses its conventional autonomy in the context of architectural anthropology (IMG 011). Seen diachronically, domestic architecture is found at the end of a large field of constructive animal behaviour which in theory could have practically conditioned the whole phase of hominisation (Egenter, 1992: 157). Nest-building is a genuine subhuman tradition (Egenter, 1992: 139). Adult higher nomadic primates build personal resting places before nightfall on arriving in a new place. Within the extensive system of evolution that led to the human form, all species' forms of construction should be considered within architectural discourse.

"Only the animal is truly innocent." The primitives did not always feel themselves innocent, but they tried to return to the state of innocence by periodically confessing their faults. Can we see, in this tendency toward purification, nostalgia for the lost paradise of animality? Or, in the primitive's desire to have no "memory," not to record time, and to content himself with tolerating it simply as a dimension of his existence, but without "interiorizing" it, without transforming it into consciousness, should we rather see his thirst for the "ontic," his will to be, to be after the fashion of the archetypal beings whose gestures he constantly repeats? (Eliade, 1974: 91)

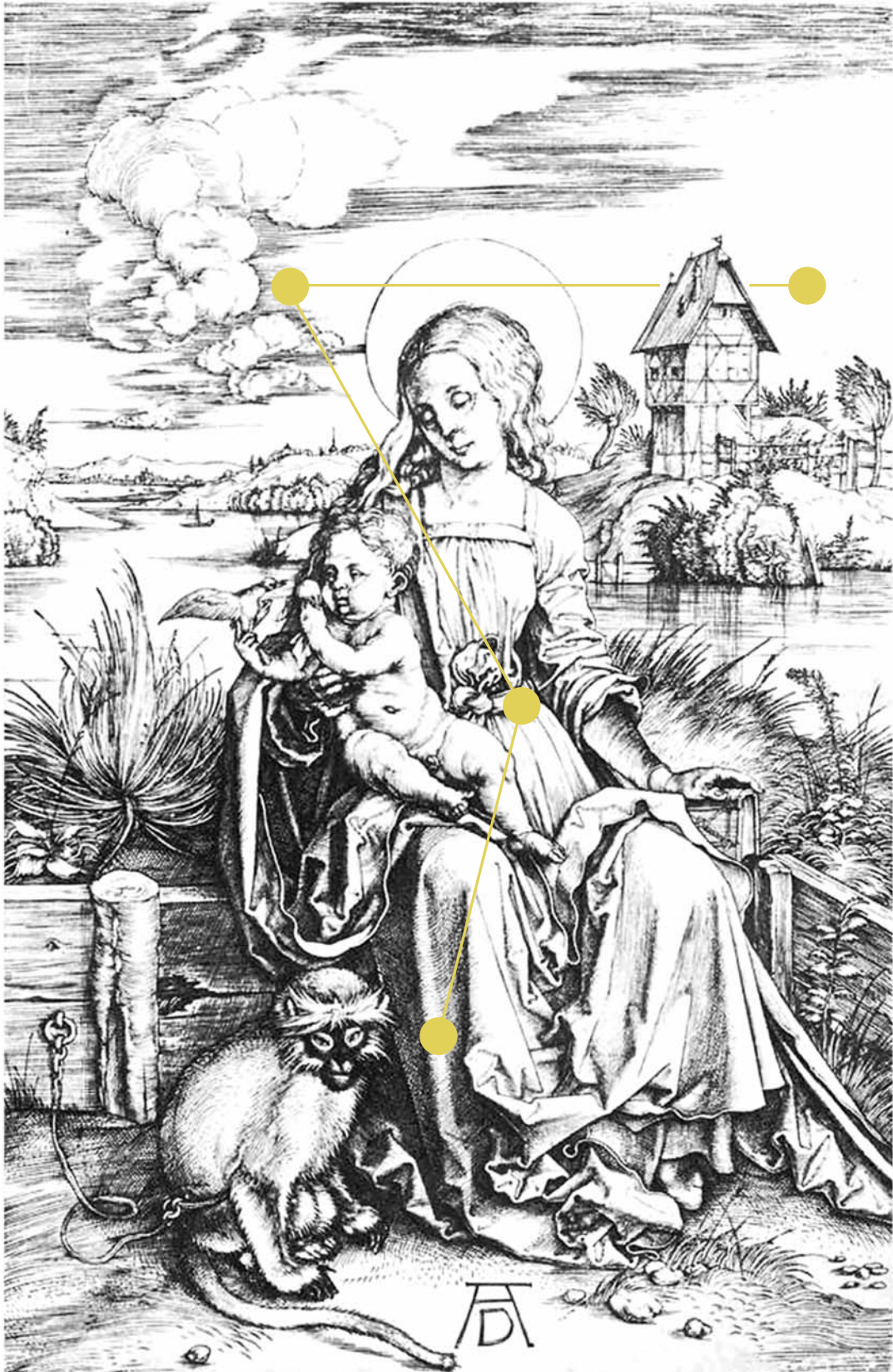
Rykwert (1972: 22) claims that man distinguished himself from beast by difference of conception in instinct; man attached meaning to his task. It implied a real 'taking charge' of space and time through the mediation of symbols (Rykwert, 1972: 21). The primitives, amazed at their own first spontaneous and creative free gestures, repeated their veneration *ad infinitum*. Man felt guilty on having hardly emerged from the paradise of animality (from nature), a feeling that urged him to re-identify with nature's eternal repetition the few primordial, creative, and spontaneous gestures that had signaled the appearance of freedom (Eliade, 1974: 155). Animals are genuinely at home in this world; before the universal destruction of habitats, they had a home.

To be genuinely at home in this world, we have to affirm our essential homelessness, a homelessness illuminated by shifting ideals of genuine dwelling, figures of home, and precarious conjectures about what it might mean to dwell near the centre. Something in human beings is fascinated by impermanence, demands change, and finds platonic order stifling and bloodless; we prefer the organic over the inorganic, for though the former lacks the permanence of geometric forms, it lives (Harries, 1998: 241).

Genuine dwelling welcomes ruins and escapism. The appeal of picturesque ruins hints at something in us that desires the death of architecture to rediscover in organic nature lost divinity and humanity's true home, to become part of it, not to master it (Harries, 1998: 244). Ruins are exceptional spaces of unusual complexity, which offer unique relations between access and barrier the open and the closed, the diagonal and the horizontal, ground plane and wall. But how can buildings simultaneously promise security and the precariousness of dwelling. Bachelard addresses this apparent paradox when he speaks of nests: The word "nest" connotes confidence in shelter but, at the same time, fragility. In its germinal form, therefore, all of life is well - being (Harries, 1998: 256).



IMG 011: The evolution of organisms through the ages to man



IMG 012: The mother and child, with animal and building in the background!Madonna with a monkey by Albrecht Durer



SEDENTARY ARCHITECTURE

SEMANTIC ARCHITECTURE

DOMESTIC ARCHITECTURE

SUBHUMAN ARCHITECTURE



IMG 014: Phaseological schema of architectural anthropology that could be used to reconstruct a constructive continuum in parallel with the evolution of man (Adapted from Egenter, 1992).

IMG 013: Gorilla enclosure night room at NZG

IMG 015: opposite: Soft to Hard: Ornamentation of the female figure



2.3 PLAY

All men respond to space, but adults have lost the sense of needing to experience and respond to a space; a loss Nicholson (2005: 45-62) ascribed to the anaesthetic qualities of the widespread unsightly adulterated (corporate) environments. In viewing objects and images, adults too transcend and load extra meanings on to the matter (over and above the intended surface meaning); but unlike children adults do not react uncensored to these impulses. Fortunately children's natural way of being includes investigation, experimentation, and trying out novel experiences. Laris (2005: 14-29) holds that abstracted objects, including diverse shapes and materials open a wide range of imaginative interpretations made by the children themselves. Abstracted elements allow children to project their own imaginative interpretation on to the setting immediately, taking temporary ownership, and giving objects multiple uses through play.



IMG 016: A linear progression of form

The context and character of the common passionate social children's game of building enclosures, or *adopting*, for taking possession of an enclosed volume under a chair or table as a *cosy place* for making a *borne* illustrates the double parentage of the original house: the *found* volume of the cave and the *made* volume of the tent in a radically reduced form. Psychologists associate this ambivalent play on exclusion and inclusion with the child's relation to its mother as it is focused in the fear and desire of the womb. The return to origins is a constant of human development and in this matter architecture conforms to all other human activities (Rykwert, 1972: 191).

2.3.1 TECHNOLOGY AT PLAY



IMG 017: Spatiality of the womb¹

Humanity cannot escape the biological, organic nature of existence, which is inextricably bound up in the technological realm mankind has created (Hall, 1996); more precisely the human lineage is evolving not only through its adjustments to the natural environment, but also to the dependence on indefinite technological advances it can conjure up. The degree of change experienced by the past three generations rivals that of a species in mutation (Dudek, 2005: 155-176).

The virtual world psychologised space through visual stimulation, but for players who negotiate their way through it, the virtual evolved into a real physical world with a strong architectural presence. Exceptional players learn to tactically read hidden designed spaces and objects which offer players certain 'affordances' (Dudek, 2005: 155-176). Computer games instantaneously afford players a space liberated from rules and boundaries that may create a

craving for more extreme virtual worlds. This denies children their potential to stand back and develop thinking skills and the power of their own imagination. Dudek (2005: 155-176) found that more traditional forms of play surfaced in the absence of the digital given. Electronic playgrounds cancel the need for children to invent their own fantasy within the real playground, and serve as a seductive narcotic for many children (Dudek, 2005: 155-176).

2.3.2 PLAY STRUCTURE

The distinction of internal structure and external cladding respectively, inescapably constructed a comparison with the skin and bone of invertebrates and the clad container (Aldersey-Williams, 2003: 15). The container may express and prance externally but internally it is the things contained that are of importance, and the person or persons manipulating those things, who may well desire additions (enlargement or of comfort) by dismantling and arranging parts (Martienssen, 1976: 153). The animation of structure does not have to function simply on surface level, it could become a multidirectional morphic ritual. Dudek (2005) stated that children do not perceive any difference between an exterior landscape and an interior landscape, and that they would relate to both in similar ways if allowed. A clear distinction should be made between surface representation and a tendency to move into the depth of architectural reality toward an order still understood in terms of a certain ethos; the shift toward ethos brings architecture into the realm of humanistic culture (Vesely, 2004: 363).

Environmental art often requires a considerable measure of audience participation, to set collaborative kinetic constructions to work. The term *play-sculpture* is borrowed from Martienssen (1976: 151) to describe such structures. The idea emanates from the growth-like invasion observed when children appropriate sculptural architectural arrangements; the building should provide its own visual fulfilment whether participants are present or not; and when people are present, they should explore and experience the building itself rather than to use it as a mere setting (Martienssen, 1976: 151). Physical interaction with the structure will prevent play from becoming a mere *fascination* (Leach, 2000: 78). If technological and skilful equipment is in balance it should facilitate fascination through learning, and enchantment through playing.

Building elements all have their individual developments from their origins in the semantic class (Egenter, 1992: 159). The semantic build-up of each separate element should provide a rich meaning to the whole (IMG 024).

2.3.3 PLAY EDUCATION

Place-based education focuses on the place where education occurs. *Reinhabitation* is a process of understanding this educational place of and taking action through putting things (physical and metaphysical) together (Jilk, 2005: 31-42). This could be done through the concept of a *montage of gaps*: A montage is a composite of juxtaposed elements which requires the creative engagement of the user to complete the setting; this theory builds on some late twentieth-century architectural theories including the *idea of uselessness* and the *architecture of disjunction* (Jilk, 2005: 31-42):

Concept of uselessness is the idea of rejecting determinism about the future use of space. The programme or use is established by the user, through appropriation of this interactive place after construction. The whole should be divided into equal parts *useful space* (intense infrastructure) and *useless space* (minimal support infrastructure) (Jilk, 2005: 31-42).

Architecture of disjunction concerns spaces, events, and movements and their separation. It is in the nature of the human mind to create order; the frag

mentation of building elements invites engagement. Hence the user displays constructional and conceptual creativity consistent with our purpose. The shift is from objects in space to place making space (Jilk, 2005: 31-42). Children need to continue discovering ways of using their environment, changing it, understanding it and even re-imagining it (Chiles, 2005: 102-112).

Friedrich Fröbel (developed the first kindergartens in the early nineteenth century), encouraged children to *read* and interpret their physical environment. Hence students would follow streams to their sources and reason where the water came from, or they would discover a pattern in time when a certain bird appeared in spring (Herrington, 2005: 216-242). Animals live in the landscape, it is rained upon, it floods, winds blow through it and the sun rises and sets (Herrington, 2005: 216-242). The structure could become a natural animated landscape. The material qualities of landscape offer a rich source for imaginative events. Introduction of plant material parts as play props to the play space, could also offer an opportunity for the development of the infant's fine motor skills (Herrington, 2005: 216-242). The use of biodegradable plant material as building material offers the structure a poetic say in the degradation of the monument (an anti sediment build-up, yet pro-sentiment build-up).

2.3.4 SPATIAL PLAY

Two types of conceptual space namely Footpaths and Nests are proposed (adapted from Laris, 2005):

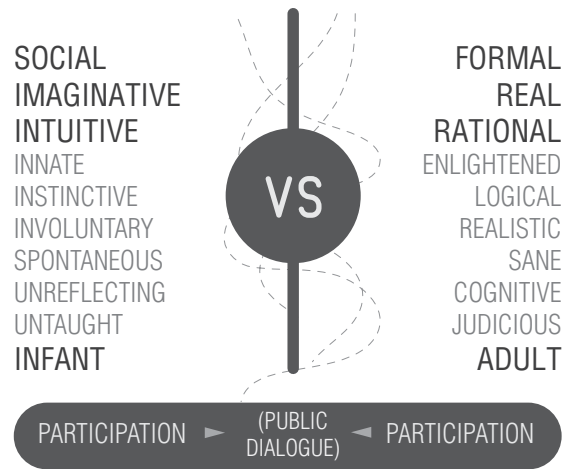
Footpath: A concept modelled on labyrinths - constituting of a single fixed predictable, stable, ordered, and introverted path - which throughout history and in many cultures, by promoting contemplative thought has symbolized the notion of rebirth, spiritual growth, renewal and transformation. The type of change is essentially part of organic processes and not manipulation, distortion, or mutation.

Nests: Are single social container spaces ideal for relaxed observation. In addition the whole as well as the parts are moveable and transformable which allows for multiple uses, spatial arrangements and groupings aligned with the view of Da Costa *et al* (2008) that territoriality occurs temporarily. Thus the space is in tune with the users and as a result promotes a sense of ownership of the space. The nest is unpredictable, constantly changing (to the extent of becoming fluid), chaotic and extroverted, welcoming temporal ownership through creative intervention.

By placing these concepts in equilibrium the arrangement can be transformed by the user, in return transforming the user; children do not consciously set out to train their sense of agility, flexibility, or proprioception. Like the visitor to the labyrinth, they are simply transformed by the space within which they find themselves (Laris, 2005: 14-29). Herrington (2005: 216-242) adds that paths could create both a physical experience and cognitive measurement or mnemonic markers of the space. By providing transformable nest spaces, paths could become iconic landscape elements that may structure the child's understanding of the environment through play and constantly changing social interaction (Figure 15).

Think of the community created by a successful outdoor music festival, or by a sports game. Here we have instant communities, often intense in their own way, yet of only short duration. Communities are increasingly of that type—not very long lasting, created by shared but inevitably changing interests, communities that we can join and leave with ease (Harries, 1998: 249-250). A woven architecture is one in which any constituent piece is inextricably bound up in the whole (Betsky, 2000: 90). The interweaving of individuals take place within the real and virtual, archaically a collective mind, in modern culture an all seeing eye of information.

ARCHITECTURE



IMG 018: Dualism within the synthesis of architecture



IMG 019: Nests of the african weaver (Adapted from J.G. Wood)

2.4 SPATIAL ORNAMENTATION THROUGH METAPHORS OF THE CENTRE

Primitive man made himself a tiny independent world in which the cosmic law acted in a miniature system—and within the system as a totality, and in such play man satisfied his cosmogonic instinct (Rykwert, 1972: 31). Every terrestrial phenomenon or reality is a function of the imitation of a celestial archetype (a transcendent invisible term), conferred through participation in the “symbolism of the Centre” (Eliade, 1974: 5). Architecture should bridge the gap between humanity and divinity, to provide both individual and community with an integrating centre. Pyramids and ziggurats were built as cosmic artificial mountains (Eliade, 1974: 15). The summit of the cosmic mountain was not only the highest point of the earth; it was also the earth’s navel, the point at which the Creation began (Eliade, 1974: 16). Works of architecture are primarily symbolic markers, pointing to the divine power dimly felt to preside over both nature and humanity (Harries, 1998: 140). The centre was the zone of the sacred, of absolute reality. Similarly, all the other symbols of absolute reality (trees of life and immortality, Fountain of youth, etc.) are also situated at the centre (Eliade, 1974: 17-18).

Because architecture is in essence a visual discipline, causal thinking can never fully grasp its true reality. We can better achieve such a grasp by accepting the role of similarities, analogies, and metaphors in understanding the visible world. It is mostly owing to the metaphorical structure of the visible world that we can identify and use the contributions from different levels of reality bringing them into the sphere of architecture (Vesely, 2004: 388).

Science and technology has brought us great mobility and freedom; yet such mobility has made us less willing to accept the place assigned to us by nature or history and has caused a loss for ground or measure in the infinite realms opened up. We are left with dreams of lost meaning, lost plenitude, of a communal existence strongly rooted in both space and time. It is no accident that ornament should have come to figure what is felt to be missing (Harries, 1998: 66-68).

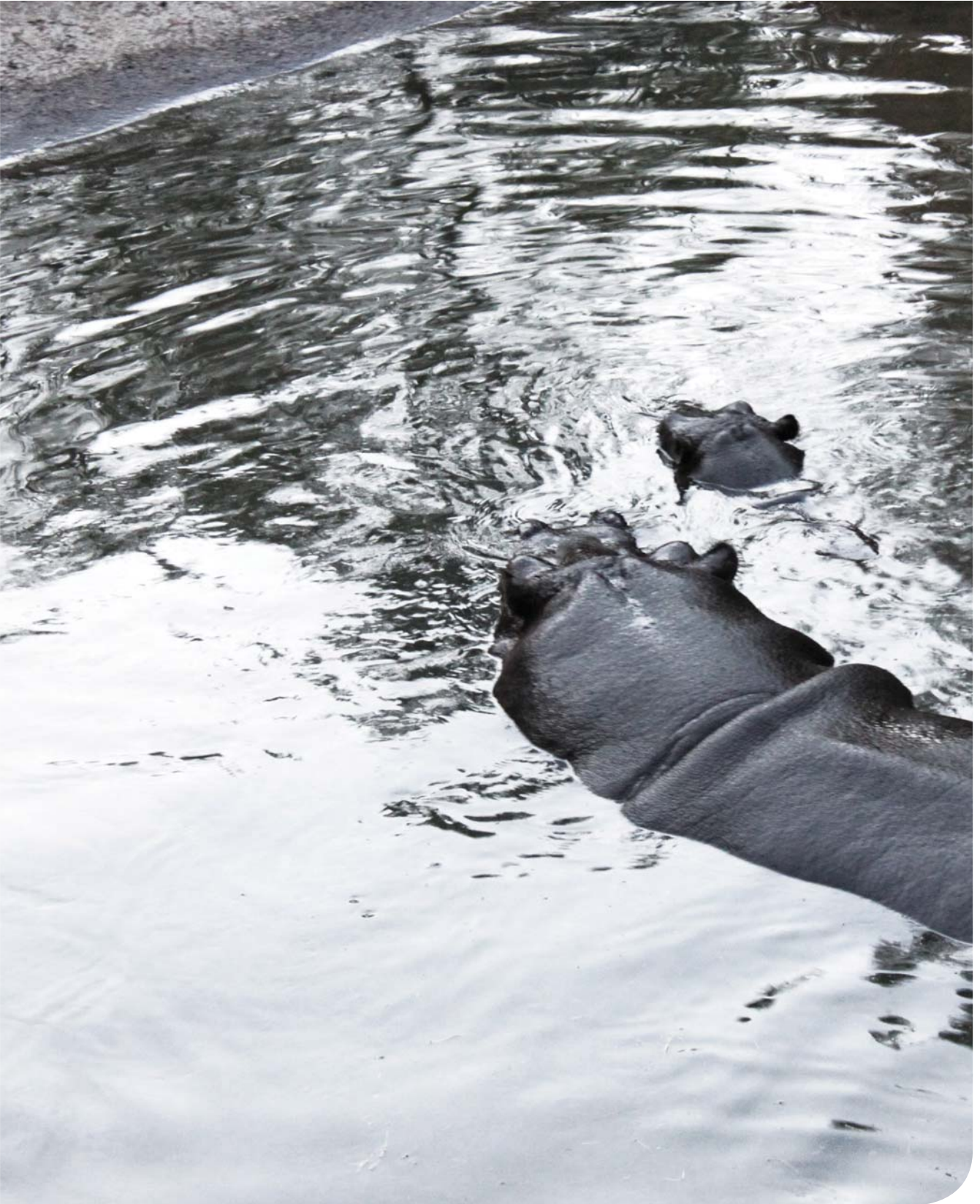
Architecture should mark places that are absolutely real with metaphors and personifications of the world, while opening us up to the infinite realities and possibilities of our sprawling universe. Architecture must be the poetry of revealing us to ourselves. Such architecture would inhabit the world of myth, a world reflecting on time and place, where reality is continually shaped. The

electrosphere is a floating world; it is no place, yet everywhere, imbedded with information (Betsky, 2000: 60). Architecture must reveal who and where we are in a reality that seems more and more confusing. The reference point in the transitory world of sprawl should somehow be the viewer, the user, the body itself, free from materiality (Betsky, 2000: 55).

Architecture must raise herself through the intellect, and derive her system of imitation from ideas about more universal things, things far removed from human sight (Rykwert, 1972: 63). The structure of space itself can generate its own purpose. When we visit a great work of architecture our attitude is shaped in part by a still almost religious reverence and respect, but also by a sense that what truly matters lies elsewhere (Harries, 1998: 357). Metaphors and dimensions contribute to the identity of a situation, while at the same time serving as a key to exploring its inexhaustible richness. The world of translucency in which all spaces and all times dissolve into a seductive blur can coalesce in three forms: icons, interfaces and narratives (Betsky, 2000: 71-72). Icons: the objects that manage to sit still in a world of continual motion. They work, respond to and reflect our bodies, condense technology and hint at much larger systems. The most important aspect is its ability to bring to our awareness what is in our experience but is not yet visible or known. The invisible is the mysteries that must become known – without losing its mystery. The cave is mysterious partly because of its darkness, but mainly because it is undefined externally; one cannot read from the outside either its shape or its extent (Martienssen, 1976: 54).

Interface: a moment on an object driven by technology that lets you activate its invisible power. An interface makes visible those aspects of the electronic reality animating that object so that we can understand it.

Narrative: bridges time and space, weaving together a world that is completely elastic in its boundaries. Its rules create connections between minute observations of small objects, the everyday scene, or the body, and the larger import of each phenomenon. What gives situations a very high degree of stability is their repetitive nature originating in the daily cycle of human life, which has its ultimate source in primary cosmic conditions and movements (Vesely, 2004: 376).



IMG 020: Mother hippopotamus and her young surfacing in the hippo enclosure at NZG: The body underneath the surface