Workshop Floating Pool

Rietveld Academy 9 February – 13 February

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Speakers and Organization

Remco Daalder

Remco Daalder worked as biologist and head of the department of development Amsterdamse Bos (Amsterdam Forest (park)), now he works as a city ecologist for the Physical Planning Department (DRO) Amsterdam.

He wrote two books on city nature, Baltsen tussen baksteen (Courtship display in the middle of bricks, collected columns, 2003) and Stadse Beesten (Urban animals, 2005), he also is the author of a book about Amsterdam underground music in the eighties: Grafherrie (Grave noise, 2008).

Thomas A. P. van Leeuwen

Thomas A.P. van Leeuwen (1941) was professor of architectural history, cultural history and art criticism at Leiden University for many years. In 1971 he went to America, where he made documentary films, taught, and did research at Columbia, UCLA, and at the National Gallery of Art in Washington D.C. Presently he teaches at The Berlage Institute, Post-Graduate School of Architecture and Urban Planning, Rotterdam.

His books include The Skyward Trend of Thought; Metaphysics of the American Skyscraper (MIT Press 1988) and The Springboard in the Pond ; An Intimate History of the Swimming Pool (MIT Press 1998). These studies are part of a tetralogy with each volume centered on the relationship of architecture to one of the classical elements. In preparation are: Columns of Fire: The Un-doing of Architecture, and The Thinking Foot: A Pedestrian View of Architecture.

Ties Rijcken

Ties Rijcken has entered the world of floating buildings many years ago. He worked for a houseboat company, traveled three continents for photographic studies of floating villages and teaches at the Technical University Delft.

His ideas appeared in ARCAM's book Ligplaats Amsterdam (Amsterdam, a mooring place, 2007), his impressions of floating villages around the world were published in his book Waterwijken wereldwijd (Water neighborhoods worldwide, 2007).

Maarten Kuijper

Maarten Kuijper is co-owner of Deltasync, a multi disciplinary engineering and architecture firm specialized in floating urbanization. DeltaSync is continuously working on new developments to improve floating structure technology.

In the past they have investigated the sustainable development of a floating pool.
John Lonsdale

Workshop guidance - info@johnlonsdale.org

The work of the Northumbrian born architect John Lonsdale is split between Amsterdam and Northumberland, between architecture and landscape, between practicing as an architect and sculpting and drawing as an artist.

In 1991 he lived for a year on a nature reserve before graduating from the Architectural Association in London. He is currently teaching at the Rietveld Academy and the Academy of Architecture in Amsterdam.

In 2001 he was awarded the Prix de Rome for Landscape Architecture and Urbanism for his work called 'Shifting Horizons'.

His work is supported by the Netherlands Architecture Foundation, the Department of Landscape Architecture of the Technical University of Delft, the Dutch Water Authority and Natuurmonumenten.

Zwemschip Amsterdam

Jasper van Ewijk, Steven Jongejan, Daan van Seventer en Martijn van Seventer are the members of the initiative group Zwemschip Amsterdam (Swimship Amsterdam). Their goal is to bring about the realization of a floating pool, and beyond. Zwemschip Amsterdam will become a cultural-creative freehaven, on the water and at the quay, for all of Amsterdam. Sustainable, hospitable, innovative, multifunctional and of high quality. Contact: info@zwemschip.nl.

Paulien Bremmer

Contact Rietveld - p.bremmer@chello.nl
Requirements Zwemschip Amsterdam

Zwemschip Amsterdam - A floating pool and beyond
Main features of the project

The project Zwemschip Amsterdam has the following elements:
- Swimming and relaxing
- Bar & small scale restaurant
- Space for small scale cultural events (lectures, film, expositions)
- A large movie screen (inside/outside) is part of the project

General description
- Sustainability is an important feature, it has to be expressed in the materials used and the application of environmentally friendly techniques for cleaning and heating the water
- Zwemschip Amsterdam aims to become a visual landmark in Amsterdam
- Zwemschip Amsterdam is aimed at local residents and visitors of the location, but also explicitly at guests arriving by water
- The pool floats, other elements can be situated on land
- It is possible the project will be realized on several consecutive temporary locations, moveability is to be taken into consideration
- Elements realized on land should be moveable or easily taken apart

Pool
- Floating
- Strong relation with the open water
- Size: approx 250 m²
- 50 swimmers at one time
- Heated
- Covered in winter, open air in summer
- Several changing booths

Recreation
- Terrace / partly covered relaxing area
- Usable as a stage

Bar
- Café
  - Bar
  - Buffet
  - Approx. 40 seats

Multifunctional space
- Approx. 75 m²
- Multipurpose
Locations

Development plans, aerial photographs, depth of the water, interactive:
http://www.bestemmingsplannen.amsterdam.nl/default.aspx

Bend in the Amstel river - Overamstel - Zuidoostlob

http://www.overamstel.amsterdam.nl/main.asp?display_framework=startpagina
http://maps.google.nl/maps?ie=UTF8&ll=52.340669,4.917744&spn=0.002851,0.011598&t=h&z=17
Available as pdf.
Bestemmingsplan Overamstel Buitendijks gebied
Plankaart bestemmingsplan Buitendijks gebied
http://www.overamstel.amsterdam.nl/bijlagen/downloads/amstelkwartier/bpbuitendkaart%202024-08-06.pdf
Stenen hoofd (Head of stone) - Zuidelijke IJoever

http://www.ijoevers.nl/main.asp?wpl_id=216
http://maps.google.nl/maps?ie=UTF8&ll=52.389771,4.894087&spn=0.005696,0.023196&t=h&z=16
Kompas eiland (Compass island)

http://maps.google.nl/maps?ie=UTF8&ll=52.378795,4.941487&spn=0.005698,0.023196&t=h&z=16
Swimming

Waterlog

From: *Waterlog, a swimmer's journey through Britain*, Roger Deakin, page 209 - 21
curiosity. He described a clear tufa pool hidden in a cleft somewhere up a beck, guarded by a limestone canyon on the walk between Arncliffe and Malham. This was too interesting not to pursue, and in any case I couldn’t get the place-names he mentioned out of my head: Cowside Beck and Yew Cogar Scar.

At the Falcon Hotel on the village green in Arncliffe, I was awoken early by the screaming of swifts, and a swallow singing in the eves over my open sash-window. It reminded me of home. The little hotel is a haunt of trout anglers on the River Skirfare, a tributary of the Wharfe, and nothing much seemed to have changed since 1950. It was just the sort of place I could imagine T. H. White holing up in for the weekend.

I set out across country towards Malham, climbing up along the top of the steep-sided gorge that contained the beck. The tiny figure of a cyclist laboured up the road on the other side towards Settle – “a cruel road”, they called it in the pub. Everything here carried the signs of use: the path, the sheep-holes worn brown into the hillside, the polished pine handholds of the stile ladders. Massive stone walls plunged almost vertically down the steep sides of the dale to the beck in perfectly straight lines, and the limestone strata showed through the grass like fock in a threadbare sofa.

The sun had come out, and glinted in the Cowside Beck, dearly audible three or four hundred feet below. About two miles further on up the high ridge path I came to a declivity diving towards the increasingly distant bottom of the gorge. There was no path, and the descent was so precipitous that it was impossible to see more than a few yards ahead at a time, but I decided to take the plunge, more or less literally, towards the beck. It was hard to know, even with the help of the map, whether I was heading down towards Yew Cogar Scar, the spectacular cliffs that walled parts of the gorge. They live up to their name with a perpendicular forest of gnarled yews that somehow clings to the rock face. The escarpment I hoped I was going down was Cowside. The descent was so dizzy it was hardly even grazed, so there were tussocks full of ankle-sized potholes. A stiff breeze funnelled up the gorge threatening to shake off the gaudy yellow-and-black-striped hummingbirds that clung to hardlocks and yellow bedstraw. I felt for them, hanging on for dear life too, and creeping blindly down. The really amazing thing was that there were trees. Bent old oaks, ash and hawthorn grew from the most daring rocky outcrops, probably the only places where a sapling would have escaped being grazed. Fortunately, I had brought a climbing rope which I looped round a trunk wherever I could, and so slithered my way in stages to the bottom.

I was feeling the thrill of the chase, glancing eagerly about in search of hidden pools. I had landed in the canyon bottom just upstream from the cliffs of yew. The first thing I saw was a black rabbit disappearing into a stone wall, then another. Was there a whole colony of them marcoored in here? Looking up at the imposing rocks, I could have been in California. I had no idea how I was going to climb out again. I followed the beck upstream, rounding each bend and contour with the warm glow of anticipated pleasure.

At length I came upon a small spinney of ash by the banks, and the promising sound of a waterfall. And there, just below, was the elusive tufa pool and the sparkle of animated water chiseling its tail around it. It was very nearly circular, and rimmed with moss. At one side, natural steps led into its perfectly clear depths, which ran to eight or ten feet by the fall. I stripped and dived in. It was so cold, I might have flung myself into a bed of nettles. Then came the heady rush of the endorphins, or “endorphins” as a friend once called them, the natural opiates with which the body anaesthetises itself against the cold, and the adrenaline. As the Oxford Textbook of Medicine cautiously says, the mood changes they induce “are difficult to validate scientifically, although feelings of well-being seem to occur.” For swimmers, my friend’s inspired malapropism goes straight to the point: you come up feeling like a dolphin. The Cowside Beck dashed towards me like a wind under the trees, and spouted smoothly between two rocks to hurdle into the pool, which I now explored, feeling beneath the bubbling surface with hands and feet, diving under, and swimming against the current to hover in the
middle. Immediately uphill, a tributary stream cascaded down a series of waterfalls and saucered pools over mounds of tufa accumulated through the centuries. If it weren't so natural and ancient, it would be easy to mistake tufa for the kind of artificial rocks you see at the Chelsea Flower Show. It is really petrified water that has built up, like the fur in a kettle, from the lime that is carried in the streams. It is voluptuous and spongy and loves to dress itself in fine mosses and algae.

I flopped out on to a rock, up the grassy side, and clambered, dripping, to bathe in a second pool some thirty yards upstream. The boisterous water took my breath away all over again and I returned to the circular pool, where I swam down once more to the bottom under the waterfall and surfaced inside it, coming out with head, hands and feet frozen, feeling wonderful. I thawed them in the gentle, dished, tufa pool, like a warm bath after the frigid beck, its water slipping over the sunlit stone.

I wondered how many walkers must have slid into these tempting waters, remote and hidden though they are. Sunlight reflected back off the rounded white rocks on the bottom, and soft cushions of fine, tight grass and thyme were scattered languidly around the margin, as though for some nocturnal gathering of the nymphs. J. B. Priestley, when he was travelling about these parts in 1933, met a woman who lived in one of the remote Dales farmhouses, 'a solid West Riding countrywoman and not one of your fanciful arts-and-crafts misses', who swore that she saw fairies dancing on the hillside. There are still some places left in England that have unquestioned magic about them. This pool had me enchanted; I could have stayed there quite happily all day and night with the attendant naiads. But a man must take care never to kiss a water sprite. As the English folk-song 'George Collins' relates, it will lead to certain death, and that of any woman he subsequently kisses. The old pagan deities may have fled much of our land, but they have not yet forsaken all their haunts.

Made ravenous by the cold water, I demolished a prosaic sandwich lunch reclining on a cushion of thyme, with my head resting on a clump of moss the size and texture of a British Railways antimacassar, then decided to climb up alongside the tributary gill, through a scree of scattered rock, past the occasional modest waterfall, towards some caves at the top of Cowside. Sleepy dor-beetles crept about in the grass, and Yorkshire rabbits darted out everywhere, more agile than their lazy Suffolk cousins, bounding between the rocks like bagatelle balls. The head of the steep cleft was a mass of springs spouting extravagantly over a giant sponge of tufa, decked out in mosses, ferns, liverworts and algae. I sat in the cave and ate another cheese sandwich, spiced with sorrel leaves I had gathered on the way up, grateful for the generous hint that sent me to this wild and beautiful spa.

In the morning, I drove over to Malham and walked out of the village in bright sunshine towards the headwater of the River Aire above the spectacular Gordale Scar waterfall. Some of the grazing meadows here contained great pastel blue pools of meadow crane's-bill, and it lined the roadside verges, with here and there a patch of the striking magenta bloody crane's-bill. The warm weather, and the previous day's rain, had brought on an abundance of grasshopper song and swelled the streams. Ascending the mass of tufa beside the waterfall, I reached the edge of the limestone pavements that stretch away above it to the north, and to the source of the Gordale Beck at the remote Middle House Farm near Malham Tarn. By the time it reaches Malham, the beck has gathered enough water to be worth calling a river, the Aire, that will flow on through Skipton and Leeds and into the brown expanse of the Humber at Goole, above Hull.

The path levelled out along a ridge, and I dropped down the stepped rock walls to the beck, half-hidden in a steep cleft as it approaches the waterfall. Here there were pools, dished from the yielding limestone and built up like coil pots out of tufa. It was sheltered, sunny, and warmed by great natural solar panels of white rock. I took advantage of the utter solitude for a delicious limestone plunge. I chose my bath with care, and soon settled on the right one, upholstered in moss and deep enough for an icy swallow in the hot sun. Rolling out, I contrived to lie reading on the rustic poolside with my toes in the exquisite coolness.
It wasn't long before I was joined by a leech, exploring my pool with great thoroughness and the most elegant swimming. It is hard to say how big it was because it kept changing shape, looping and stretching out its black stocking of a body as women do when they're trying tights for quality in Marks & Spencer. It varied between an inch-and-a-half and three-and-a-half inches, and it was the most graceful aquatic creature I have ever seen. Like pigs, leeches suffer in our language from the abuse of their name. There was a self-contained air about it as it inspected the rim of the pool, as well there might be, since leeches are hermaphrodites, like their relatives the earthworms. It seemed in no hurry; the leech family are an easy-going lot who put off breeding until they are six or seven, and can live to the age of fifteen. Of our eleven native species, only four actually suck blood. The rest prey on molluscs and small aquatic creatures and swallow them whole. A single meal will apparently keep a leech going for six months, a fact that causes Theodore H. Savory to recommend them as pets in *The World of Small Animals*. I was lucky enough to be taught zoology by Savory, who kept leeches in his laboratory at school, a magic land full of books, belljars and butterfly nets, peopled by Latin-labelled living spiders (his first love) peering at us bi-peds from mahogany-framed glass pans. I had felt instantly at home in his classroom, recognising the comforting aroma of my suburban bedroom, crammed as it was with semi-derelict vivariums full of my scaled and creeping friends: lizards, newts, slow-worms, stick insects, tree frogs and white mice.

My leech could well have been a medicinal leech, although it hadn't shown much interest in my toes, or my arm when I put it into the water, and I imagine we must have been in there bathing together. Medicinal leeches seem to have become rare by 1802, when Wordsworth wrote 'Resolution and Independence', in which he meets an ancient leech-gatherer by a pond who tells him:

> Once I could meet with them on every side;  
> But they have dwindled long by slow decay;  
> Yet still I persevere, and find them where I may.

However, they now seem to be relatively abundant in places. And they can still save lives: there is even a successful leech-farming business in Wales supplying hospitals all over the world. There are fish leeches, too, and the duck leech, which feeds inside the noses of birds. In order to spread to new habitats, a leech with wanderlust needs animals to come to its pond or stream and drink. Once attached, it can be carried to the next watering-hole by the unwitting host. Here in Gordale, leeches could well be carried by sheep.

An emperor dragonfly soared out over the waterfalls into the infinite blue air of the ravine beyond, and my leech continued its graceful undulating swim round the pool, then disappeared into a miniaure cave in the tufa. There were tadpoles in there too, quite undeveloped, water shrimps and caddis larvae, and a drowned black beetle. Having tasted, and bathed in, the sweetness of the innocent Gordale Beck, it seemed extraordinary that its journey through a hundred miles of our land would turn it so quickly into the polluted tide of Humber. W. H. Auden's line: 'A culture is no better than its woods' holds true for rivers too.
Floating pools in open water

Selection from: The Springboard in the Pond

The idea that swimming essentially is a game played by man, Eros, and Thanatos has always been found irresistible. In preceding centuries, when swimming was the sport of romantics like Byron, Swinburne, and Shelley, the art of staying afloat was not known to all, and certainly not to Shelley, who drowned miserably while beating the waves of the Mediterranean. As Charles Sprawson, swimming historian par excellence, noted, "when Shelley drowned off Viareggio, a volume of Sophocles clutched in one hand, it was the culmination of a love affair with water that influenced him to sink rather than swim. 'Arms at his side he fell submissive through the waves.' It was as though the act of swimming somehow disturbed and diluted his 'fornication avec l'onde.'"

By fitting this study into my much larger projected tetralogy of the architecture of the elements, I can examine in greater range and depth the primitive force of water, its tactile quality and its powers of metamorphism. Bachelard, in a groundbreaking work on the four elements in which he explores the poetic imagination of matter, distinguishes two kinds of "forces imaginantes." The first, the "imagination formelle"—attracted to novelty, variety, and the unexpected—is interested in the external form. The second, the "imagination matérielle," concentrates on the constant, the primitif, and the eternal, and explores the internal shape "où la forme est interne." In further extending his distinction to the epistemology of form, attributing to vision the nominative force and to touch the cognitive one—"La vue les nomme, mais la main les connaît"—Bachelard pries open the long-closed argument that "man doesn't think matter" by inviting us to cover our eyes and try to "feel matter" again. For the knowledge and perception of architecture this is a most enticing invitation; for our present investigation of the synthesis of architecture and water, it offers invaluable clues.
5. Dorothy Leefers, "Geographic Aspects of the Private Swimming Pool Industry in Los Angeles" (M.A. thesis, UCLA, 1961). Since literature on private pools is rare and since field studies, especially in southern California with its provincial paranoia about security, are a hazardous business, much of my research had to be conducted on the highest levels, literally—reconnaissance flights and aerial photography. At times this resulted in breathtaking discoveries, sometimes in mere glimpses of the vast mire plus a number of hearings. More often, repeatedly, I found that important monuments of swimming history had been updated (or hygienic reasons?) so much as to be unrecognizable, or had been simply destroyed.

6. In a such a degree that even recently Kelly Klein, wife of the fashion designer, felt compelled to air a long-held concern about this matter in the promotion of her glitz, well-stocked photo album, Pools (New York: Knopf, 1982). "After looking for a book...that might inspire me and help me to decide what kind of pool to build, I realized there weren't any books on pools." There are, however, catalogues, do-it-yourself manuals, and practical guides such as The $7.95 Sunset Swimming Pools, and a variety of pool manufacturers' magazines. With the exception of the works of Thomas D. Church, such as Your Private Waterscape of Intimate Gardens (San Francisco: G. D. MacMillan-Hill, 1960), books on swimming pools are rare indeed and, when available, deal chiefly with public pools. The best American study on the swimming pool industry, concentrating on the West Coast and including a fair number of photographs, is Ray Couper, "Pools History: A History of the Pool and Spa Industry," Pool and Spa News, fifteen issues, 1978-1982 (November 17, 1986—October 23, 1988). In London, The Architectural Press has published several handbooks on the design and planning of public swimming pools, among which are: John Dawes, Design and Planning of Swimming Pools (1976), and Anthony Wilson, Aquatics: Architecture and Water (1980). In France, Editions de Manneur published Piscines, équipements sportifs, by Sophie Roche-Saulet and Sophie Naudet (1980), dealing exclusively with recent public pools. In the Netherlands, the photographic essay by Daria Scapicchia and Peter Nijhoff, Zwemvijveringen (1980), provided some long-needed documentation on the country's many public pools. The German-speaking part of the world is much better represented in both the historical and the practical field, yet the two most complete studies on swimming pool history and design are already almost a century old: Felix Genzmer,

This Modest... This study commenced as an architectural one, and attention is primarily focused upon the outdoor swimming pool as a building type, one that is most rewarding in its simplicity of form, its economy of materials, and in the irresistible vulgarity of its use. No other building type compares, in the purity of its mathematics and the modesty of its phenomenal appearance, to this unpretentious hole in the ground. Even garages and parking lots offer more in terms of complexity and sublimity, but they lack the pool's ceaseless power to inspire interpretation, analysis, fantasy, or just straightforward narration. The pool urges us to make excursions into the mysterious realms of mythology, the soothing depths of psychology, the adventurous heights of social biology, and the powerful history of religions and ideas (fig. 1.3). But this modest hole in the ground also demands that we remain as close as possible to its original point of departure; its simple form excludes endless structural or stylistic ramifications.

So the focus is directed toward the private pool, and most of its history is traced in the country of its widest and most imaginative development, the United States. The fashion of owning a swimming pool initially appeared on the East Coast, moving later to California and more particularly to Los Angeles. Mirroring the glamour of Hollywood, Los Angeles quickly became the "swimming pool capital of the world," and that city ultimately supplies most of the reference material.

However, although in this volume the private outdoor pool plays the main part, no history could take off without attending to the early beginnings of swimming instruction and the pools that were built around it. The public floating pools of the late eighteenth and early nineteenth centuries—the first public floating baths were those in Paris, 1761, Frankfurt, 1774, and Vienna, 1781; the first floating swimming pool was installed in Vienna in 1812—offer provocative insights not only into the teaching of swimming but also into the rationale of the unique architectural form that resulted from the activity it was supposed to accommodate. Thus before we leave Europe for America and launch ourselves into the private pool, we must touch on the history of swimming, the floating pool, and some remarkable landbound public pools.

The domestication of water itself requires brief investigation as well. Consider the importance of this topic in the formation of the bourgeoisie. While continuing many feudal customs and traditions, the new rich sought to improve on the hygienic habits of their illustrious predecessors, introducing hot and cold running water and the separate bathroom or water closet, manifesting thereby not only bourgeois technical advances but a serious new attitude toward hygiene. And just as hygienic hydraulics gained ground, so did athletic. The bourgeois desire to transform bathing into swimming, to make the pool the extension of the bathroom, resulted in a revolution in the use and design of domestic water. Backyard swimming pools established themselves as decorative and practical additions to the house and the garden in a way that not even such an important building type as the private garage could match.
Yet in terms of written publicity, the swimming pool, oddly enough, has attracted scant attention, and what little there is deals predominantly with bathhouses, spas, and the act of bathing—classical, therapeutic, and so forth. Moreover, the history of the swimming pool, which in more than one aspect is bifurcated into opposites, serves the other half of the term—swimming—equally badly. Although the present book is not the place to tackle such an enormous topic, I have tried to formulate a few essential questions that merit some long overdue answers: Why do people swim? Do they do so for pleasure or do they swim for survival? Are humans well equipped for swimming, or are they born drowning? If so, what drove them to build swimming pools? How do these pools follow their owners' intentions, and what, finally, do the owners do with their swimming pools?

Frogs, Swans. The argument of this book is centered on man's attitude toward swimming. Penguins ambivalent as this may be. While almost everything evokes a two-sidedness, surely this is nowhere more manifest than with water. On the one hand there is its destructive power in the form of rainstorms, floods, and the arch-destroyer, the deluge; on the other, its life-bringing springs. Water acts as both "Naturspender" and "Erotikon," as Horst Bredekamp has so aptly written.

There are three basic attitudes toward water: the hydrophilic, the hydrophobic, and the hydro-opportunistic. Hydrophilia is a direct, uncompromising longing for the wet. Surrounded by water, the wet body is "in its element"; only when resting does it seek the comfort of the dry. This is the way of the amphibian (fig. 1.4). Still hydrophilic, yet less directly committed and with certain conditions and reservations, is the way of the hydro-neutral.


More strongly represented were, and still are, the historical studies of the baths and swimming pools in hydrotherapeutic establishments and spas. With a certain regularity exhibitions are staged, with or without accompanying catalogues, and lavishly appointed books find their way to the bookshop. Alex Lytle O'Sullivan's Taking the Waters (New York: Abbeville, 1992), and the three books by Ulrike Kiby—Bad und Bademeinungen von der Antike bis zur Gegenwart (1993), Badewannen, Geister, Heute, Morgen (1993), and Bäder und Badekultur in Orient und Okzident, Anziehende Spuren (1995), all published by DuMont in Cologne—are the most recent. The best, however, is Lisa Deister, ed., Villas d'eau en France (Paris: Institut français de l'architecture, 1985).

For a more extensive listing of studies on the subject, refer to the bibliography. All in all, Kelly Klein's remark was quite justified.
hydro-opportunistic creature who prefers a life on land, with occasional excursions into the wet as necessary. Finally there is hydrophobia, defined in the present context as the melancholic condition of the dry body, afflicted by strong reservations about water that often are aggravated into aversion, but feeling socially, morally, or medically obligated to take to the pool with due regard to mitigating circumstances.

Hydrophilic man uses a pool for swimming, and frequently gets access by means of a diving board. Hydrophobic man employs the pool for anything except swimming, often organizing parties around it, having musicians play amid it, or floating upon it himself via inflatable beasts and small vessels that keep it from touching him directly. Hydro-opportunistic man uses water only when he wants to achieve specific, water-related goals; lacking the irresistible longing of hydrophilic man, he needs other incentives—all sorts of playful, profitable, even hazardous challenges—for entering the water. For him the pool is not the end but the voyage, the cushion for a fast ride on the aquachute.

In the text these three types are metaphorically illustrated by three animals: the frog who lives in, the swan on, and the penguin next to, the water. They symbolize, respectively, the hydrophilic, the hydrophobic, and the hydro-opportunistic spirits; whether loving, hating, or just using water, they share a very great attraction to it. This includes the type who, for the sake of clarity, has here been indicated as hydrophobic but in actuality might be called "mildly hydrophilic with strong resisting tendencies."
The Sacred. The pool is very much a challenge when it comes to interpretation. Although the Profane, it may be small in size, the range of its references and the scope and profundity of its meanings are overwhelming. That indeed is the beauty of this subject. Fascinating fields such as the culture, engineering, politics, religion, and philosophy (here mainly understood as the history of ideas) of water, as well as the history of swimming, diving, the outdoors, and related fields of modern recreation, are brought within reach.9

While the pool allows, even invites, intellectual wanderings, at the same time it prevents the wanderer from losing his way. However far his excursions may take him, the simplicity of the architectural object enables him to pick up the thread where he left it, leaving no room for confusion, bombast, or contrivedness. The architectural part—the artifact—is, from the outset, easy to define, whereas its contents—the natural part—are highly complex. The container encloses but also retains, holds together, and keeps from spilling. While stirring the imagination, it also prevents it from rambling; the container both kindles and quenches. Without this paradoxical mechanism, working with the history and the philosophy of water would simply be impossible. For the history of water per se, which incorporates the history of life, of the world, of just about everything, threatens to become its own deluge. With the introduction of the swimming pool as focal point, however, the deluge can be evaded.

This does not mean that complexity and confusion have been altogether banished. Take, for example, the first book that caught my attention, on the basis of its fitting title, The Treatise of the Pool. Contrary to expectations, this small volume was a theological treatise on the sacredness of water in the thirteenth century, by Obadiah Maimonides (1228–1265).10 The word “pool” had nothing to do with the modern meaning but was used exclusively to denote cistern, a collector of drinking water, which the owner had to keep flawlessly clean. The cleanliness of the pool and the purity of the water led to a series of religious meditations on the ways to God.

Although not what I had hoped, the book unwittingly suggested an urgent avenue of interpretation—that water could be in different states of sanctity. Whether contained in formally identical containers or insignificant ones—swimming pools, ponds, puddles, deep spots in a river—water commands various states of respect, even awe. The systematics of this transformation may be illustrated by the traditional French term for swimming pool: piscine.

Piscine Piscine (Latin piscina) originally meant fishpond. Quatremère de Quincy, in his contribution to the Encyclopédie méthodique (1825 edition), distinguished two sorts of piscines: the fishpond, designed to keep fish for commercial and domestic consumption, later a decorative feature in the gardens of wealthy Romans such as the famed Lucullus, and the cistern, a reservoir for drinking water.11 But during the Christian period—something Qua-
tremère had no desire to discuss—the piscine became better known as the baptismal font, a holy-water vessel found at the entrance to a Catholic church. Viollet-le-Duc included "Piscine" in the Dictionnaire raisonné exclusively as a liturgical vessel, hinting neither at its profane history nor its vulgar future.12

As late as 1885, Ernest Bosc in his Dictionnaire raisonné could do no more than refer to a piscine in classical times as "a vessel large and deep enough to allow one or more persons to lower themselves into the water it contains," and to a piscine in the other meaning of the term as a "credence" (table) of natural stone that we find in churches.13 Even Léonce Reynaud, considered by several present-day writers as a "progressive" theoretician, did little more than mention the modern variant of the Roman thermes in which one could occasionally find "a piscine or common bath."14 It is difficult to say precisely when piscine became identical with swimming pool. The compilers of the most recent portfolio, Piscines; équipements nautiques (1991), deduced, from the fact that the Grande encyclopédie of 1890 still defined piscine exclusively as a development of the Roman thermes and as a liturgical vessel, that the term in the modern sense only came into use in the early twentieth century.15

As the meaning of the contents of the pool changed from secular to religious and back to secular—an inversion of its original interpretation—the physical composition altered as well. Like the water in Plato's theory of emanation, which gradually loses its purity on its way to civilization, the natural, life-bringing eau vive is set aside to make way for what is now understood as clean water free from germs. In fact, however, the water that is now considered to be fit for the piscine is clinically dead.

Until the advent of modern times, man's attitude toward water had been inspired by reverence and respect. Water was seen as the element of life and of death, and as such it was sacred in all respects.16 And although water continued to be treated with respect, the general attitude changed from a religious to a philosophical and from a philosophical to a practical and aesthetic one, thus from sacred to profane to vulgar.

About the same time that the Picturesque movement carried the aesthetic attitude to its meaningfully associative limits, water also began to gain importance as a means of industrial production and as a simple, if costly, commodity with which the streets of the cosmopolis could be washed and the newly invented water closets could be flushed. Arguably, modern culture begins with the invention of the water closet, the valve closet of Alexander Cummings being patented in 1775 while Joseph Bramah logged in his improved version in 1778. The famed Thomas Crapper lent his name to a major part of our hygienic exercises, not unlike le Docteur Foubelle, whose name has become synonymous with the garbage can, and Monsieur Robinet, who has become homonymous with the water faucet he patented.17

The vulgarization of water, the introduction of universal hygiene, and the democratization of power were products of enlightened thinking that eventually led to the foundation of the first modern and distinctly hydro-vulgar society, that of the United States.
Surely it is no coincidence that in the years between Cummings’s and Bramah’s respective patents, the thirteen original colonies declared themselves independent. And although the (re-)invention of swimming was largely a product of continental enlightenment, the ideology of individualism, the increasing employment of private water, and the vast dissemination of private pools has made the United States the main hunting ground for this study.  

Of a different nature and of a more recent origin was another constituent of the swimming culture: the interest in physical health and athleticism. In fact, the history of swimming instruction coincides with the beginning of organized physical education in the military and the improvement of the athletic constitution by the Turnverein. Two military superpowers of the early nineteenth century, Austria-Hungary and Prussia, organized swimming instruction in enclosed rectangular spaces following the choreographies of military drill. Natural irregularity and freedom were deemed inimical to the development of the martial spirit.

**Pools for Ponds** The narrative that follows examines the origin of the man-made pool in the pond of nature, the product of a paradoxical play of nature and artifice where man relived his evolutionary past as an aquatic ape in the company of frogs and fish. At first, man, like the baby that leaves the womb, swam instinctively, without fear; then, at a certain point in his evolutionary life, he developed hydrophobic anxieties. Swimming stopped being automatic and the art of swimming had to be taught.

The history of swimming became the history of the instruction of swimming. Pools began to resemble parade grounds or classrooms as insouciant paddling was replaced by drill and exercise—breaststroke, sidestroke, backstroke, crawl—and the pool became a center for survival strategies. The springboard acted as a therapeutic means to cure the swimmer’s original fear of unfathomable depths. High boards and diving towers first cultivated, then helped him to overcome, his angst. The excitement of the free fall, of ultimate weightlessness, became an addiction. At that moment the nervous balance between controlled hydrophobia and restrained hydrophilia tilted in favor of reckless hydro-ecstatica. This was the period of Leni Riefenstahl’s flying divers and the “Aktkultur” naturalists of Hans Surén, who gave free rein to their "Aryan-Olympic Spirit" in the water-rich territories of northern Germany.

In America, the hydrophilic period manifests its most radical efflorescence in and around Hollywood. Instead of exposing their skin to the pallid sun of the Baltic, Americans delivered their bodies to the sun-beaten pools of southern California, either in physical reality or virtually, on the tinsel screen, which reflected the high point of American swimming. In the neo-bourgeois period after the Second World War, a strong tendency toward coziness, family togetherness, neo-puritanism, and all the other war-related regressions replaced Eros and Thanatos with family-oriented socializing. The swimming pool and its hydro-opportunistic attractions became the center of family life. Activities—cookouts on Sundays, fully dressed...
sunbathing and uninspired swimming in Bermuda shorts, floating on rubber mattresses, playing volleyball in pools that become shallower every day—developed not so much in as on or around the pool.

Then spreading litigation further diluted the experience; aquachutes arrived and the diving board was expelled. The relentless march of litigation, combined with an increasingly all-consuming, apocalyptic fear of, and for, the environment, led to the gradual drying up of most private as well as public swimming waters. We are left with a growing number of indoor aqua-amusement parks, where the open air has been exchanged for the stifling temperatures of the digitally controlled hothouse and swimming is replaced by hydro-opportunistic voyages in serpentine tubes.

An entire history of sanctity and sacrilege, of sacredness and profanity, may be found within these developments. Yet at the end, the story has reversed itself. If the pond became pool, now—as we can read in the media of our times—the pool has reverted to the pond: “You don’t see many diving boards in pools these days,” the New York Times informed its readers. “They want pools to pass for ponds.” This is where the book ends.
"On observa ici, qu’i l’ait foutu de confonde
la notio n, qui est l’action de nager; se nager.
ne se baigner dans le sens des anciens, etait une maniere de se
baigner dans un var beaucoup plus grand que
l’aqueduc.
18. Here Rousseau refers to the popular
belief that the salamander could survive in
fire, and perhaps actually burn itself. His first
mention of the education (1762; Paris: Edition
La renaissance du livre, n.d.), tome premier, livre
second, 141. In "Une education exclu-
sive... préfère toujours les instructions un
plus coûteuses aux plus communes. ... Ainsi
mes amis, vous ne pouvez pas avoir
un appro-
". Quo qu’il en coûte beaucoup pour cela, mais
que vous n’allez pas nager parce qu’il n’en coûte rien,
je n’en sui s nager. Et ce que nage on se
moi, et l’on en nage peut sans l’avar
appro... Èméli sera dans l’eau comme
sur la terre. Que ne peut-il vivre dans tous les
étendits? S’il en pouvait apprendre à
voler dans les airs, j’en ferai un aigle!"
19. It was Sigfried Giedion who intro-
duced Basewod into the history of
swimming-as-regeneration, as "one of the
first to incorporate swimming, fencing,
riding and outdoor life in education. The
Meeting of Fun and the Bathing," Mechaniz-
ization Takes Command (1948; New York:
Oxford University Press, 1969), 653. Fig.
492. "Mechanization Takes Command," transcribed
into German, appeared in Werk 44, no. 9
(1957), 296-297. Later than Basewod, but
highly important as the first institutional-
izer of physical education, was Theodor
Che. Fr. Guts Mutus or Gutsmuths or
Gutsmut, author of Spiele zur Umsch
(1796), as well as his Lehr
buch der Schwimmkunst (Heim, 1798).
20. Giedion's enthusiastic advocacy of
modernism hygiene, manifested an early
interest in the technicalities and architec-
ture of public bathhouses and swimming. Das Bad im
Kulturpurz, 1935, "The Mechanization of the Bath" in
Mechanization Takes Command. The
most recent source for the Parisian river
baths is Deux siècles d’architecture sport-
ive (Paris: planche, gynéma... Paris:
Délégation à l’action artistique de la ville
de Paris, Mairie du XII, annamendement,
1948). The best of Docteur Poitevin
accommodated hot and cold baths, steam
baths, and a barber and wigmaker’s shop.
The baths were opened to the public in
1760.
21. Giedion, Mechanization Takes Com-
mand, 654-655. See also Hans Kraemer,
ed., "Der Mensch und das Wasser" in Der

"Elements of Education" of 1774, a study of the role of physical training as a part of elemen-
tary education, was more influential in the eastern regions, but both Rousseau and Basewod shared
a practical philosophy aimed at "hardening" mind and body.

In Emile, for example, Rousseau suggested that various degrees of "hardening"
could be achieved if babies could be bathed in water that was gradually decreased in tempera-
ture. The important role that aquatic hygiene would begin to play may be illustrated by the
advance of a new type of amphibrus architecture: the floating bath and the floating pool.

Floating Baths Just as the notatio of the Campus Martius was no more than a simple broad-
ening of the river, so the early eighteenth-century floating baths and pools were
but part of river life. Floating baths, bains flottants or Flussbäder, first made an appearance
in Paris, Frankfurt, and Vienna in the 1760s, at about the time of the publication of Emile.
The first documented floating bath on the Seine was that of Docteur Poitevin. Sigfried Giedion
highlighted the role of the good doctor who, in deference to the dicta that bathing was ac-
ceptable chiefly for its medicinal benefits, could only open his public bath by invoking the
endorsement of the "Doyens et Docteurs Regens" of the faculty of medicine.

In 1760 Poitevin began to accommodate his warm baths and showers on
a specially constructed barge that was anchored in the river Seine. Plans of the Poitevin
barges were published in the Encyclopéde in the same year as Emile, 1762. Maxime Du Camp, chroni-
cler of Second Empire Paris, confirmed that the first floating hot baths were indeed those of
Poitevin, whose widow, "the moment he died, married his bathing manager Vigier, who was
responsible for making the bathing trade into a vastly expanding and highly respectable busi-
ness. The Vigier baths remained popular up to the time when most households were begin-
ing to be connected to the city's main water supply, in the mid-nineteenth century.

In his seminal study Bäder und Badeanstalten (1909), Wilhelm Schleyer identi-
fies Frankfurt as the first city to have a public floating swimming bath, in the river Main; it
opened the same year as Basewod's Elementarwerk was published—1774—to be followed in
1800 by a Badeschiff, a bathing barge. Vienna was a close runner-up, with a floating bathhouse
in the Danube near the Augarten, designed by the municipal and judicial physician Pascal (or
Pasqual) Joseph Ferro in 1781 (fig. 1.3). With exquisite timing, Ferro launched his bathing barge
in the same year that he published its pictures in his pioneering study Von Gebrauch der kalten
Bäder, in which he advocated the medical use of free, natural, cold water as superior to the
temperature-controlled water of the bathhouses. The Ferro bath consisted simply of two rows
of changing cabinets girded together on a floating platform. Access to the river was through
a hole in each cabin, where a generously permeable wooden barrel was hung. The bather was
just to sit there exposed to the cold and dark water of the river; if he could hardly be expected
to derive any enjoyment from it, he might safely benefit medicinal effects.
kind of bathing was definitively different from swimming; on the whole a sedentary affair, it belonged in the medico-social realm.\footnote{29}

**Floating Pools** Floating pools, and the swimming schools they often accommodated, appeared some thirty years after floating baths. The first "floating" swimming school, later destroyed by ice, was founded in 1786 by a swimming instructor called Barthélemy Turquin.\footnote{29} Before he was able to establish his école de natation, Turquin was forced to endure several years of litigation with Poitevin, who claimed exclusive title to the privilege of exploiting a bathing barge on the river. But Turquin prevailed, even upgrading his school to école royale de natation. Installed in 1796 on the Seine off the Quai d'Orsay, Turquin's establishment subsequently became even better known as the royal swimming school of his son-in-law, Deligny.

The popularity of swimming was considerably enhanced by the circumstance that France was involved in building the largest army ever raised, an army in perpetual need of swimmers, swimming instructors, and teaching establishments.\footnote{29} So when Deligny wanted to build a bain flottant for his swimming school, he derived its plan and arrangement from an engraving in Docteur Le Roux's 1782 supplement to one of many variations on Thévenot's *Art de nager*, originally published in 1696, perhaps because that also had been directed toward a public of young soldiers and—a novelty—navy men. ("Ouvrage utile à tout le monde, et destiné particulièrement à l'éducation des jeunes militaires du Corps Royal de la Marine.")\footnote{29} Deligny came up with a barge measuring 106 by 30 meters, which was not freely floating but partly supported on wooden pilings. Around a central rectangle, left open for the water of the river...
was followed all over Europe. In Holland, where Democritian mazes tended to have a deeper impression than French ones, a Renoir-type barge called "Bade Anstalt" was modeled in the river Amstel, at the Oude Turfmarkt, Amsterdam (1844-1912; see note 26).

26. Fern's main concern, however, was to take bathing out of the bathhouse into free nature. That neither nature nor society was ready for taking the waters al fresco was a small obstacle that Fern thought could be overcome by installing mesh cages below and cabins all around to keep onlookers out. Fern's spirit must have been congenial to Theodor Gut-Muths (1759-1836; see note 19), who established the so-called "philanthropie" or reform school "Erziehungsanstalt" in Schneizelbad, for physical, moral, and practical education. Gut-Muths's example was followed by Friedrich Wilhelm Jahn (1789-1852; see below). Influential also was the Swiss educator Johann Heinrich Pestalozzi (1746-1827) with his article "Über Körperbildung," Wochenschrift für Menschenbildung (Basel, 1807).

Exposure of the body to fresh air and especially water was the specialty of the "water doctor" (Karoobana) Vinzenz Pichonitz (1779-1851), founder of a center for hydrotherapy in Lichtenberg, Schlesien, which became a popular spa (Kurort) from 1830. Pichonitz's method had an impressive following in the American world, as at Dr. Richard Burton's spa, "The Irish Gräfenberg," in Saint Anns, of 1856. See Giedion, Mechanization Takes Command, 639-671.

Other American hydrotherapists were Pfarber Sebastian Kneipp (1821-1897), M. Plater, Die neue Heilmethode (Berlin and Leipzig, 1865; 2nd ed. E. E. Buz), Die neue Heilmethode (C. 1900). In America, Bernard Shaw (1866), M. A. T. E. J. L. B., Die Heilian Methode (n.d. Physical culture (1911, 1ed. New York, 1928), ruthlessly applied to swimming and in subfreezing temperatures to harden his spoiled countrymen.

27. Barthélémy Tcart, Arles au public sur l'établissement d'une école de natation (Paris, 1786; copy in the Bibliothèque Nationale). See Deux siècles d'architecture sportive à Paris, 39. Originally most "swimming lessons" were quasi-professional lifesavers, frequently Bretons who had earned their livelihood saving shipwrecked mariners. Only a few made it to the elevated level of the Parisian écoles de natation.

28. Already in the seventeenth and early eighteenth centuries spas were established expressly for the rehabilitation of the wounded—in Saint-Amand (1698), Bourbonne (1794), and Amelie, Matti-Warm and Steine, eds., Der Bad, 200.

Seine, four wooden pontoons were interconnected and covered with decks on which a variety of structures were erected: "340 changing cabins, distributed over two floors, six private salons, seven common rooms..." There was an "appartement" reserved for members of the royal family, with an "antichambre," a waiting room, a salon, and a private exit. In addition to the "rotonde" or "amphithéâtre" with a café, a restaurant, and a club room, there was an instruction room where swimming was taught "dry," a first aid post with a bed, a barbershop, a pedicure salon, and rooms for the chief instructor and the bath attendants. The school's clientele was very distinguished. Among the many high-ranking officers and aristocrats, the most elevated pupils were Charles X, king of France from 1824 to 1830, and his successor, Louis Philippe, who reigned from 1830 to 1848.

To attract such prestigious patrons, it was necessary to maintain the baths in as luxurious a state as possible. This was incredibly expensive, and in 1840 Deligny was forced to sell his establishment to the ambitious brothers Burgh. It had fallen into such a deplorable state that the barge had to be rebuilt from scratch; only various ornamental pieces from the roof were recycled for the new floating pool. A recurring theme in the reports on the rebuilding is that the bateau-cénotaphe that had transported Napoleon's ashes from St. Helena was utilized in the operation.

This time the fuselage consisted of fourteen hulls, five on each side and two at each end. The bottom of the pool, made of planks, gradually inclined from 0.6 to 2 meters, finally reaching 4.5 meters at the bottom of the river. The area was surrounded by nets to keep away swimmers in and unwanted matter out. At the deep end a diving tower, terrifying in its dimensions, had been assembled from elements of a spiral staircase and a ship's mast. Designed by the architects Philastre and Cambron, the rebuilt baths had cost the princely sum of 250,000 francs, thanks chiefly to the lavish decoration in a Turco-Arabic style. On August 6, 1899, the Deligny pool hosted the very first swimming championships held in France.

In 1937 the original system of overall permeability was replaced; now river water was pumped up, filtered, and then conducted into a watertight basin in a closed system where water floated on water separated by a steel wall. In 1953 the management caught up with the postwar fashion of sunbathing and had large sun decks installed. After a fire in 1953, a complete modernization took place that gave the Bains Deligny its subsequent and final look (figs. 1.4, 1.5), a floating unit measuring 115 by 25 meters, with a pool of 50 by 15 meters ranging in depth from 0.8 to 2 meters. Strongly articulated by the dark background of the houses on the Quai Anatole France (former Quai d'Orsay) was the silhouette, which resembled that of an aircraft carrier.

The Bains Deligny became a popular hangout for a fashionable crowd that included heiresses like Barbara Hutton and movie stars like Audrey Hepburn, Michele Morgan, and of course Esther Williams. It also served as meeting place, pick-up joint, and display "beach" for those of various sexual proclivities. On July 8, 1993, Les Bains Deligny were de-
stroyed by an explosion of unidentified origin. The wooden superstructure was devoured by flames, the pontoons sank, and the pool caisson filled with muddy Seine water. During the summer of 1994 most of the various components were salvaged and cleaned; "la plage de Paris" is expected to be restored to its former glory.

By the mid-nineteenth century, bathing and swimming barges had become a familiar, if not unavoidable, sight along the Seine, especially when looking toward the Pont Neuf and the Île de la Cité. A splendid fin-de-siècle photograph (fig. 1.6) shows all of them except the Deligny, which had moved to its present location near the Gare (now Musée) d'Orsay. Taken from the Quai du Louvre toward the Place Dauphine and the Pont Neuf, it reveals three large floating pools (bains froids or bains de Seine). Closest to the Louvre are the Bains des Fleurs (pour dames) and the Bains Leneru-Hugo. The pool near the Pont Neuf that resembles a Mississippi river boat—with palm trees, not funnels, emerging from the roof—is Les Bains Chauds de la Samaritaine.

The same photo shows Les Bains Henri IV, docked at the pointed end of the Square du Vert Galant with its monument to Henri IV, whence the bath's name. Tucked in between the Bains Henri IV and the Square du Vert Galant were the old Bains Poitevin-Vigier, which had expanded from one boat in 1761 to a fleet of four in 1800. The most luxurious of these became the object of passionate descriptions: "It was there that the peaceful bourgeois could sweetly luxuriate in the depths of his tub, quietly soaking, his favorite playthings—watch, thermometer, handkerchief, snuffbox—at hand, his spectacles firmly planted on his nose and, under his eyes, his favorite reading. That is what he likes the best—filling and refilling his tub, artfully regulating the temperature, proudly watching his big belly floating on the surface [fig.

Saint-Amand was specifically designed as a thermal hospital for the military by the fortifications engineer Vauban.

29. Thévenot, L'art de nager, démonstré par figures, avec des avis pour se baigner utilement (Paris: T. Mortier, 1692). Supplemen-
tement, 1782.

30. Deux siècles d'architecture sportive à Paris, 26–27.

31. Ibid., 24. Primary sources are Eugène Briiffault, Paris dans l'eau (Paris, 1844), and Eugène Briiffault, "Une journée à l'é-

32. Data were taken from the following sources: "Les origines de la Piscine De-
ligny," Paris, 1946, Proces verbal de visite; commission de surveillance; bo-
treux recueil du public en stationne-
ment, 20 février 1948, Archives of the Bains Deligny, and the help of Frédéric Tell.

33. See for example the à la mode novel L'archichambrière by Gabriel Matzneff (1948), which dealt generously with daily visits to the Deligny (thanks to Brigitte Forger, Brussels) Also, Bruno van der Werve, "Les bains Deligny; Saint Tropez

op de Seine," De Gea Krent, no. 101 (Sep-
tember 7, 1991), 23. For a charming pic-
ture of the pool in the years around World War II, see Henri Cartier-Bresson, American Paris (London: Thames and Hudson, 1994).
In his bath, the Parisian bourgeois dreams of the Orient, of its sensual delights, its scents, the voluptuous beauties of the seraglio, of opium and its ecstasies, while at the same time he could simply take a bite to eat."

Yes, a bite to eat and a smoke were among the simple pleasures of the hydrophilic Parisian around 1845. At lunch time, baths and pools were generally deserted, although one or two enthusiasts might be observed standing ankle deep in the water. Patrons were more likely to be in the restaurant, "waiting for the lamb chops to be cooked, [where] several explosions of champagne bottles being uncorked could be heard while coffee, often fortified with rum [le gloria], and punch scented the air. Cigars went up in smoke all over the place." It was the time of the cigar, an exotic new smoke that added high fashion to the pleasures of bathing. The swimming school even smelled like the most chic restaurant of the day: "Sommes-nous chez Véfour ou à l'école de natation?"

Neither cigars nor opium nor voluptuous hours were to be had at the Bains Henri IV, a pool 77.7 meters long and 14.8 meters wide, designed for swimming, not lounging (fig. 1.8). The wooden pool floor slanted from a depth of 0.5 to 1.9 meters; the pool was closed off from the river by a mesh fence. Its dependence on the Viennese swimming school of 1813 is clearly visible in the general layout of decks, cabins, and the footbridge that crosses the pool midway, separating the shallow pool (Bassin 1 in the plan) from the deep one (Bassin 2).
1.6. Opposite, left: Paris: bathing establishments along the Seine at the fin-de-siècle. (Loyer, Paris: Nineteenth Century, 1988.)


1.8. Above: Paris, Bains Henri IV, plan. (Genzmer, Bade- und Schwimmsäle, 1899.)
Floating in the Low Countries, renowned both for the struggle against a boundless supply of water as well as for the many modes of enjoying it, offer a varied history of swimming. The Netherlands Society to Prevent Drowning (Nederlandse Maatschappij tot het Redden van Drenkelingen) was founded as early as 1767, preceding the introduction of military swimming by almost a century. The military stimulus reached Holland from neighboring Germany, evinced by the introduction of several river-based swimming pools and full-floating pools derived from the model of the Berliner Militär-Schwimmanstalt, whose founder, General von Pfuel, had achieved some celebrity in the Netherlands.

In 1845 the Dane C. W. Ploenius, or Plönius, a follower of von Pfuel originally from the Gymnastic Institute in Copenhagen and later attached to the Royal Military Academy in Breda, built a pool in the IJ, the vast inlet of the Zuiderzee that served as Amsterdam’s harbor. Doctor Amtzenius, a local advocate of sports and swimming, wrote on the occasion of the pool’s dedication in 1846: “In imitation of the work General von Pfuel achieved in Prussia, our army has finally taken up the teaching of swimming. However, this demonstrates that our government shows more interest in the well-being of our military than in that of our civilians. . . . It certainly would have been more effective if our Dutch youth could have shared in this beneficial initiative.”

In fact, the Germanic fashion had been introduced two years earlier, in 1844, when the first bathing barge in the Netherlands opened, anchored in the river Amstel at the Rokin by the central Dam square, from which the city derives its name. Built on a former regular service barge, as it was a place for structure that was distinctly reminiscent of its Austro-Germanic forerunners, it was called the "Bade-Anstalt." It was demolished in 1914.

In contrast, the pool Ploenius was to build at Westerdoksdijk between 1845 and 1846 was of the semi-aquatic type, its main buildings anchored to the bank and its four (I) swimming docks projecting into the harbor (fig. 1.22). An ambitiously conceived structure with an overall length of 70 meters, erected over a foundation of pilings like almost all of Amsterdam's buildings, it comprised a service wing attached to the dike and two semifloating basins, 2.5 meters at their deepest, jutting out into the inlet. Predictably the structure was thoroughly permeable, allowing the waters of the IJ and the Amstel to follow their course unhindered. Instruction was accomplished from rowboats provided with a superstructure to which lines were attached; four pupils could be served simultaneously (fig. 1.23).

In keeping with its dominant ratio of water to land, Holland is distinguished by its large number of river and harbor pools. The Handbuch der Architektur for 1899 noted that "of the other European states only Holland is worth mentioning. Whereas the Italians mainly concentrate their swimming pools in the coastal areas, the Dutch make use also of their inland waters. Even in the smallest places one finds well-developed floating baths, as long as water conditions permit."

Amsterdam was probably the best place to look. Besides those cited above, there had been at least two floating swimming pools in the river Amstel. The earliest was the Bad- en Zweminrichting in the Buiten-Amstel, built in 1856 but demolished in 1862. It measured 89.5 by 34 meters and had two pools, one for beginners and one, with a springboard, for advanced swimmers. The establishment included a billiard room, a lounge, and seven bathtubs (fig. 1.24). Its successor (fig. 1.25) opened to the public in July 1881 (it had to be restored in May 1887). This one was anchored in the middle of the river, the better to scoop out water of the best available quality, and consequently could be reached only by private boats or small ferries. A large platform was created at one end to accommodate an elegant cafe (Cafe de Amstel) and a jetty that received customers and their means of transportation.

Possibly the largest floating pool of its time was the Bad- en Zweminrichting Th. Van Heemstede Obelt, named after its owner-director. With an English degree in sanitary engineering, Theo van Heemstede Obelt had founded a business in porcelain water closets and bathtubs; he subsequently utilized his goods in his own bathing establishment, constructed in 1881 in the south-central part of the Amsterdam harbor at the De Ruyterkade (fig. 1.26). This was near the site of the future Central Station, and the advent of that colossus required the displacement of the pool to the opposite bank, where it could be reached by a special six-cent 'swimming-pool ferry.' Reputed to be "one of the largest, if not the largest of its kind,"
Bad- en Zwem-inrichting

in aanbouw buiten de Kaperspoort, April 1881.
harbor pool at De Ruyterkade comprised three swimming pools for men, women, and children, respectively, with 250 changing cabins for men and 60 for women. In addition there were service rooms, hot baths and showers, and a restaurant.66

Below the surface, cages of mesh and planks fenced in the swimming area, keeping out debris and the larger impurities while ensuring a constant flow of water. The underside consisted of a sloping, solid wood floor that was covered with white sand to give the impression of an unspoiled Polynesian beach (!); the depth increased from 0.6 to 3.5 meters, and to 5 meters in the diving area. The diving tower was an impressive steel structure that blended picturesquely with the surrounding tall ships and steamers in the harbor. The sheer magnitude of the complex may be grasped by noting the presence of a hospital room, with a doctor and an array of machinery to assist in cases of drowning and sudden indisposition, and a steam-driven laundry. Swimming pools of the size and prestige of the Van Heemstede Obel establishment, with its permanent staff of forty, were expected to provide a full line of traditional services that included steam baths and showers.66

**Floating at Sea** It took a while before river pollution aroused serious concern, but by the 1890s the downstream reaches of most rivers—such as those in Bremen, Hamburg, Amsterdam, and Paris—had become so unfit for bathing that swimmers either went to the fixed outdoor and indoor pools or to the seaside. The search for cleaner water had already resulted in the colossal floating bath, Bagno Maria, in the Bay of Trieste. Built in 1858 for two Italian entrepreneurs, Chiozza and Ferrari, by the German firm of Gebrüder Strudthof

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66. The first swimming club for women was [Amsterdamse Dames Zwemclub], founded in 1875, followed by Hollandsche Dames Zwemclub, 1886, both resident in the Van Heemstede Obel establishment. De Volkskron, October 26, 1917. The first swimming club for men was possibly the one in Upsala, Sweden, founded in 1794. 67. Gezemer, Bade- und Schwimman- stalt, 78. Other features included a restaurant and a terrace overlooking the men’s pool and, charming detail, the house of the director placed exactly in the middle, so as to separate the men’s pool from that of the ladies.
Constructivistische eenden (Constructivist ducks)

Nauwe verwanten

In de architectuur wordt originaliteit geprezen. Daarom valt het op als gebouwen op elkaar lijken. Vandaag gaat het over de Pekinggeend van Maarten Kloos.

Door BERNARD HULSMAN

De bambooboot – zo noemenAmsterdammers het grote Chinese restaurant dat nu al meer dan twintig jaar in het Oosterdok drift, sinds 8 augustus, toen de Olympische Spelen in Peking begonnen, heeft de bambooboot gezelschap gekregen van een ander drijvend cultuurfestival uit China: de Pekinggeend.

De Pekinggeend is een drijvend zwembad dat vlakbij het Amsterdamse architectuurcentrum Arcaam ligt. Met de door Arcaam-directeur Maarten Kloos ontworpen betonnen bak wil het centrum de discussie over een drijvend zwembad in Amsterdam heropenen. Verschillende Europese steden, zoals Berlijn, hebben al jaren een drijvend zwembad, maar in Amsterdam, na Velsen toen de Europese waterstof bij uitstek, bleek een paar jaar geleden na lang gestreng een drijvend zwembad niet mogelijk.


De tekening hoort bij Koolhaas’ sprookje The Story of the Post. Er was eens in Moskou een anonimous constructivistische architect, zo begint dit sprokje. Die ontwierp in de jaren twintig een lang, recht- boogig zwembad van stalen platen. Het was de tijd dat constructivisten in de Sovjet-Unie vliegende steden en kunstmatige planeten tekenden. De planeten bleven ongebruikt, maar het zwembad was wel haalbaar: architectenstudenten zetten het drijvende zwembad in hun vrije tijd in elkaar. Het werd het populairste moderne gebouw van Moskou.

Wegens arbeidsketten moeten de studenten zelf als badmeester aan de slag in hun zwembad. Op een dag ontdekten ze dat als ze allemaal in dezelfde richting zwommen, het zwembad begon te bewegen in tegengestelde richting. De orkaan was simpelweg reactief.

Toen de moderne architectuur in de jaren dertig onder Stalin in ongenade viel in de Sovjet-Unie, besloten de inmiddels afgestudeerde architecten met het zwembad naar de vrijheid te vluchten. Na veertig jaar zwommen kwamen ze in New York aan. Manhattan kwam hun vertrouwen niet ontvallen. Ze steeds met meer en hogere torens ontworpen, wel af. Hadden ze veertig jaar geslaagd voor niets?

De New Yorkse architecten bekeken het zwembad met afkeving. Het was een staaltje van modernisme waar ze niets van moesten hebben. Nierstien besloot ze hun sovjet-collega’s een medaille te geven. Maar het was wel een oude medaille, met een inscriptie uit de jaren dertig, „De weg naar de zondebok is niet makkelijk”, stond erop. Dit was voor de Russische constructivisten het sein om Manhattan te verlaten. Ze sprongen in het water en begonnen weer te zwemmen.

The Story of the Pool
(1977)

MOSCOW, 1923

At school one day, a student designed a floating swimming pool. Nobody remembered who it was. The idea had been in the air. Others were designing flying cities, spherical theaters, whole artificial planets. Someone had to invent the floating swimming pool. The floating pool—an enclave of purity in contaminated surroundings—seemed a first step, modest yet radical, in a gradual program of improving the world through architecture.

To prove the strength of the idea, the architecture students decided to build a prototype in their spare time. The pool was a long rectangle of metal sheets bolted onto a steel frame. Two seemingly endless linear locker rooms formed its long sides—one for men, the other for women. At either end was a glass lobby with two transparent walls; one wall exposed the healthy, sometimes exciting underwater activities in the pool, and the other fish agonizing in polluted water. It was thus a truly dialectical room, used for physical exercise, artificial sunbathing and socializing between the almost naked swimmers.

The prototype became the most popular structure in the history of Modern Architecture. Due to the chronic Soviet labor shortage, the architects/builders were also the lifeguards. One day they discovered that if they swam in unison—in regular synchronized laps from one end of the pool to the other—the pool would begin to move slowly in the opposite direction. They were amazed at this involuntary locomotion; actually, it was explained by a simple law of physics: action = reaction.

In the early thirties, the political situation, which had once stimulated projects such as the pool, became rigid, even ominous. A few years later still (the pool was quite rusty now, but popular as ever), the ideology it represented became suspect. An idea such as the pool, its shiftiness, its almost invisible physical presence, the iceberg-like quality of its submerged social activity, all these became suddenly subversive.

In a secret meeting, the architects/lifeguards decided to use the pool as a vehicle for their escape to freedom. Through the now well-rehearsed method of auto-propulsion, they could go anywhere in the world where there was water. It was only logical that they wanted to go to America, especially New York. In a way, the pool was a Manhattan block realized in Moscow, which would now reach its logical destination.

Early one morning in the Stalinist thirties, the architects directed the pool away from Moscow by swimming their relentless laps in the direction of the golden onions of the Kremlin.

NEW YORK, 1976

A rotating schedule gave each lifeguard/architect a turn at the command of the “ship” (an opportunity rejected by some hardcore anarchists, who preferred the anonymous integrity of continuous swimming to such responsibilities).

After four decades of crossing the Atlantic, their swimsuits (front and back panels were exactly the same, a standardization following a 1922 edict to simplify and ac-
Italian was too them. They had always dreamt of stainless-steel Chrysies and flying Empires States. At school, they had even had much bold visions, of which, ironically, the pool (almost invisible—practically submerged in the pollution of the East River) was proof: with the clouds reflected in its surface, it was more than a skyscraper—it was a patch of heaven here on earth.

Only the Zeppelins they had seen crossing the Atlantic with infuriating velocity 40 years before were missing. They had expected them to hover over the Metropolis like a dense cloud drift of weightless holes.

When the pool docked near Wall Street, the architects/swimmers/lifeguards were shocked at the uniformity (dress, behavior) of the visitors, who swamped the craft in a brute rush through the lockers and showers, completely ignoring the instructions of the superintendents.

Had Communism reached America while they were crossing the Atlantic? they wondered in horror. This was exactly what they had sworn all this time to avoid, this crassness, lack of individuality, which did not even disappear when all the businessmen stepped out of their Brooks Brothers suits. (Their unexpected circumscriptions contributed to this impression in the eyes of the provincial Russians.)

They took off again in shock, directing the pool further upstream: a rusty salmon, ready—finally—to spawn?

3 MONTHS LATER

The architects of New York were uneasy about the sudden influx of Constructivists (some quite famous, others long thought to have been exiled to Siberia—if not executed—after Frank Lloyd Wright visited the USSR in 1937 and betrayed his Modern colleagues in the name of Architecture). The New Yorkers did not hesitate to criticize the design of the pool. They were all against Modernism now, ignoring the spectacular decline of their profession, their own increasingly pathetic irrelevance, their desperate production of flaccid country mansions, the limp suspense of their tite complexities, the dry taste of their fabricated poetry, the agonies of their irrelevant sophistication, they complained that the pool was so bland, so rectilinear, so unadventurous, so boring; there were no historical allusions; there was no decoration; there was no . . . shear, no tension, no will—only straight lines, right angles, and the drab color of rust. (In its ruthless simplicity, the pool threatened them—like a thermom-eter that might be inserted in their projects to take the temperature of their decadence.)

Still, to have Constructivism over with, the New Yorkers decided to give their so-called colleagues a collective medal at a discreet waterside ceremony. Against the background of the Skyline, the dapper spokesman of New York's architects gave a gracious speech. The medal had an old inscription from the thirties, he reminded the swimmers. It was by now irrelevant, he said, but none of Manhattan's present architects had been able to think of a new motto . . .

The Russians read it. It said THERE IS NO EASY WAY FROM THE EARTH TO THE STARS. Looking at the starry sky reflected in the narrow rectangle of their pool, one architect/lifeguard, still dripping wet from the last lap, answered for all of them: "We just went from Moscow to New York . . ." Then they dove into the water to assume their familiar formation.

5 MINUTES LATER

In front of Welfare Palace Hotel, the raft of the Constructivists collided with the raft of the Medusa; optimism vs. pessimism. The steel of the pool slices through the plastic of the sculpture like a knife through butter.

Credits:

City of the Captive Globe: Rem Koolhaas, with Zoe Zenghelis.
Hotel Sphinx: Elia and Zoe Zenghelis.
New Welfare Island: Rem Koolhaas, with German Martinez, Richard Perlmutter; painting by Zoe Zenghelis.


Between 1972 and 1976 much of the work on the Manhattan projects was produced at the Institute for Architecture and Urban Studies in New York, with the assistance of its interns and students.
Hamburg - concept

http://www.komat.de/susanne-lorenz/alsterschuten.htm

Architect + Artist: Gilbert Wilk + Susanne Lorenz
Wolfsburg, Germany - Floating Gym and Spa

Architect/designer: Max Wehberg
800 m² floating platform.
40 x 9 meter floating open air pool 30 cm above the water, heated. A terrace, solarium and spa elements like massage rooms.
Modular buildings consisting of ten identical units that can be assembled in different shapes. These ready-made units (7,60 x 2,00 m and 3,80 height) are mounted and connected on steel beams at the location. They form a construction complete with integrated technical services. The shape of the building can be adjusted to its purpose.
New York - Floating pool lady

http://www.floatingpool.org/
Architect/designer: Jonathan Kirschenfeld Associates with a team of engineering consultants
25 meter, seven lane pool, room for 170 swimmers.
Locker rooms, bathrooms, showers, spray pool and a snack bar are collected around a raised court
and terrace overlooking the pool. On the shore a 3716 m2 big city beach with fields for volleyball and
soccer, parasols, beach chairs, food and drinks.
Originally a cargo ship of about 25 x 80 meter.
Berlin - Badeschiff Berlin

http://www.arena-berlin.de/badeschiff.aspx
Architect + Artist: Gilbert Wilk + Susanne Lorenz

Constructed from a cargo barge.

Size of the pool: 32.50 x 8.20 m, 2m depth.

Depth of bench (sides): 0.55 m

Depth of bench (corners (quoin)): 2.10 m

Water capacity: 395 m³

Amount of swimmers: 60 and persons on the surrounding benches in the pool.

Size of the wooden squares: 30 m x 6.25 m

Size of the footbridge bank to P1: 11 m x 5 m

P1 to P2: 5 m x 11.25 m

P2 to pool: 5 m x 7.50 m

Max 44 m into the river Spree

Attachment: Flexibly anchored, adjusts to height of water in Spree.

Paris - Piscine-Joséphine-Baker

http://www.paris.fr/portail/Sport/Portal.lut?page_id=6085

Architect/design: Robert de Busni
Pool: 25 x 10 meter
Spray pool: 50 m2
Sport facilities.
Open all year, roof can be opened and closed.
Build in sections, constructed at the location, can be moved if necessary.
Water from the river (Seine) is purified, used and drained as cleaner water back into the river.
Vienna - Badeschiff Wien

http://www.badeschiff.at/

Constructed from two cargo barges.
Bath: 6 x 30 meter, 1.60 depth.
400 m² sun deck
200 m² terrace on quayside.
Club in 'loading room'
800 seats total
Swimming, Recreation and Culture - Impressions

Open air movie - 'pluk de nacht'

Japanese Macaques (Macaca fuscata). Jigokudani Hot Spring, Nagano Prefecture, Japan.

Bath of Neptune - Ostia Antica, Italy

Great Roman Bath - Bath, United Kingdom

Alhambra – Granada
Municipal pool at the (nieuwe) Diep

Swim and bathing establishment 'De Amstel' in the middle of the river at the (later) Amsteldijk ca. 108-120 and Weesperzijde 130-135, 21 August 1892

Outdoor pool - Hearst Castle, V.S.

Chess players - Szechenyi Furdo, Hungary
Floating pool (probably open water) - Wuzhou, China

Ocean Pool - Bondi Beach, Australia

Leça Swimming Pools by alvaro siza. 1966