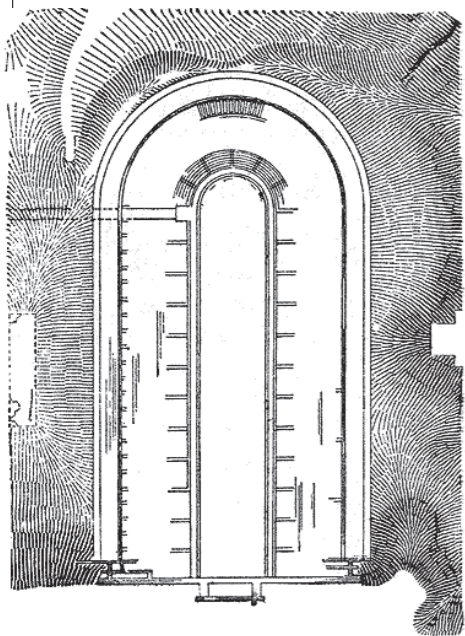




Typology Stadium

Organised sport, and the colossal crucibles in which it is watched, was proffered to the workers to impose discipline on their free time, writes *Tom Wilkinson*





The Yankee Stadium (opening spread, left) in the Bronx, New York City, 1923. The Yellow Wall (opening spread, right) in Dortmund holds a seething mass of 25,000 standing fans, captured here by Andreas Gursky. The Piazza Santa Croce (left) in Florence contained a game of Calcio Fiorentino (historic football) in 1688. The 144 CE Panathenaic Stadium (far left) in Athens is the only stadium in the world built entirely of marble



BETTMANN / GETTY

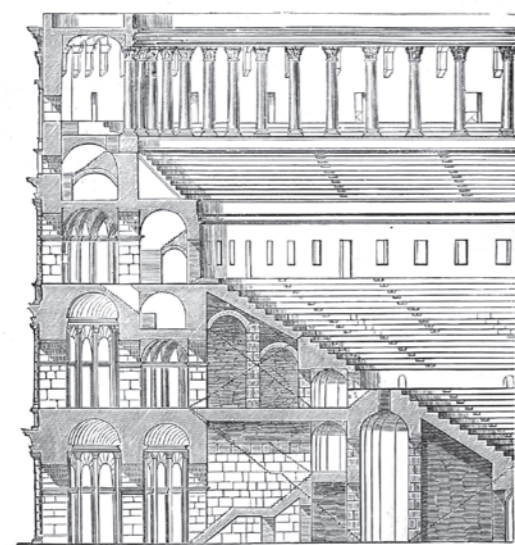


The Estadio Nacional in Santiago, Chile, 1938, was used as a prison camp (left) after the 1973 coup d'état. Rio's Maracanã Stadium, site of 1950 FIFA (below)



DREW HALLOWELL / GETTY

The Colosseum in Rome, (right), built in 70–80 CE, is thought to have housed up to 87,000 spectators. The original Ryōgoku Kokugikan arena (far right) in Tokyo, built in 1909, was used principally for sumo wrestling, which became a national sport



‘The stadium is caught between spectacle and social condenser: this is its potential and its tragedy’



The stadium is caught somewhere between spectacle and social condenser: this is its potential and its tragedy. The world's largest football stand, the so-called Yellow Wall in Dortmund, which holds nearly 25,000 standing fans, demonstrates this well. Home to the team's ultras, this vertical mass is a tinder box of emotion and solidarity, simultaneously eerie and spectacle in itself. At crucial moments the crowd produces synchronised displays, unfurling vast banners or showering itself in yellow confetti. This is thrilling to watch and surely even more thrilling to participate in. It is also peculiarly reminiscent of Rungrado Stadium in Pyongyang – supposedly the biggest in the world, with a claimed capacity of 150,000 – and the elaborate political festivities that take place there.

This juxtaposition points to the root of this hybrid organism. Though stadium

builders have occasionally glanced to antiquity for formal references, this technology for the production of mass spectacle was forged in the crucible of modernisation. Organised sport itself developed out of Social Darwinism and bureaucratisation in response to jostling between European nations in the wake of 1789. First inculcated in the ruling classes by British public schools, it was disseminated to the workers in order to discipline their hard-won new leisure time. The practice soon spread to colonial subjects, albeit not at first to the Brown ones. (Activity on the periphery also echoed in the metropole: several British football stands are nicknamed the Kop, after Spion Kop hill, site of a Second Boer War battle.)

And so, as Tennyson put it, the Victorians ‘taught the world to play’, but this was a strange kind of leisure: regimented, bureaucratic, condescendingly pedagogic,

ruined by racism and eugenic ideals, and thoroughly suffused by capital. This is not the end of the story, however. Workers' sports movements and the rising sporting supremacy of colonial subjects – and, at the more lumpen end of the spectrum, hooliganism and right-wing factions – point to the lurking possibility of organised sport as a locus of opposition.

This bipolar tension is concentrated in the stadium. The type emerged piecemeal, as football stands were erected around pitches in the late 19th century, first along one flank and then another, until eventually the space was fully enclosed – thereby restricting spectatorship to ticket holders. Stadium design *ex nihilo* was pioneered by Scottish architect Archibald Leitch, who completed a home for his beloved Rangers at Ibrox Park in 1899. Its partial collapse three years later killed 25, injuring hundreds more. This was only the first of many catastrophes in



RICHARD ROSS / GETTY

the history of the type; the organisation of masses demands effective engineering and crowd control, with terrible consequences if they fail.

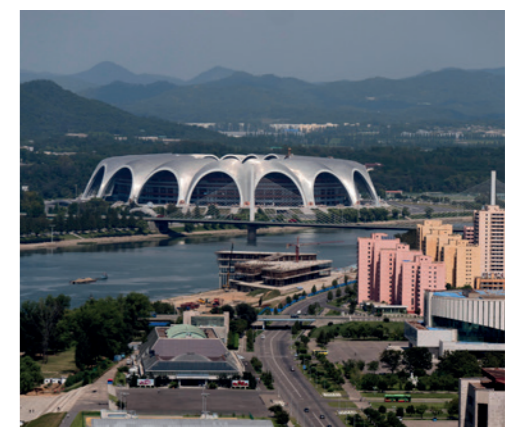
Nevertheless, Leitch went on to build many more stadiums, often with historicist brick facades. These were fairly inept in terms of composition, their meagre grandiosity inadequate to the scale of the buildings behind them – something like a pediment on an ocean liner – but the ones that survive are much loved by fans (and the stands themselves are impressively spare). Parallel historicising tendencies also appeared in early ballpark design in the US. The sturdy concrete facade of Yankee Stadium gestured vaguely to the Colosseum, its rotunda deformed to fit the ballpark. Unlike goal sports, baseball does not have fixed spatial parameters, which has led to a rich variety of plans.

Similar to Leitch's works, Yankee Stadium

accommodated vast crowds – 60,000 when it opened in 1923, expanding to 80,000 five years later. These buildings had double- or even triple-decker stands held up by columns. This was a boom time for organised sports, as for all popular entertainments. Urbanisation and new media created huge audiences, and hence the possibility of lucrative returns on investments in sporting infrastructure. The most sophisticated example of the interwar years was Feyenoord in Rotterdam, which opened in 1936. Designed by Leendert van der Vlugt and Johannes Brinkman, the exposed frame of the facade-less structure points to the hinterland of these architects – they had designed the famous Van Nelle Factory together. Leitch had also begun his career building factories, in his case in Britain's colonies. The common origin of modern labour and leisure is thus laid bare, but the Dutch pair took this parallelism further,

Bristol Motor Speedway (above) in Tennessee opened in 1961 and accommodates up to 162,000 spectators. According to North Korea's official seating

capacity, Rungrado Stadium (below) in Pyongyang, 1989, is the largest stadium in the world. The Tijuana bullring (left) is in the sights of animal rights activists



IMAGEBROKER / ALAMY

using organisational analysis to produce a structure capable of processing multitudes with Taylorist efficiency: it could purge its 64,000 spectators in minutes.

The same year that Feyenoord opened, the Nazis completed their stadium for the Berlin Olympics. A greater contrast could hardly be imagined: instead of lightweight industrial materials Werner March's stone amphitheatre looks back once again to the Colosseum. (The Italians also went Classical, in the case of the Mussolini Stadium in Rome, or structurally expressive, as in Nervi's stadium in Florence). Whereas previous Olympic hosts had attempted to accommodate the events within one arena, with the result that they were rendered invisible by unsuitably expansive settings, the Nazis hit on the idea of building separate facilities within one park, a precedent frequently invoked since.

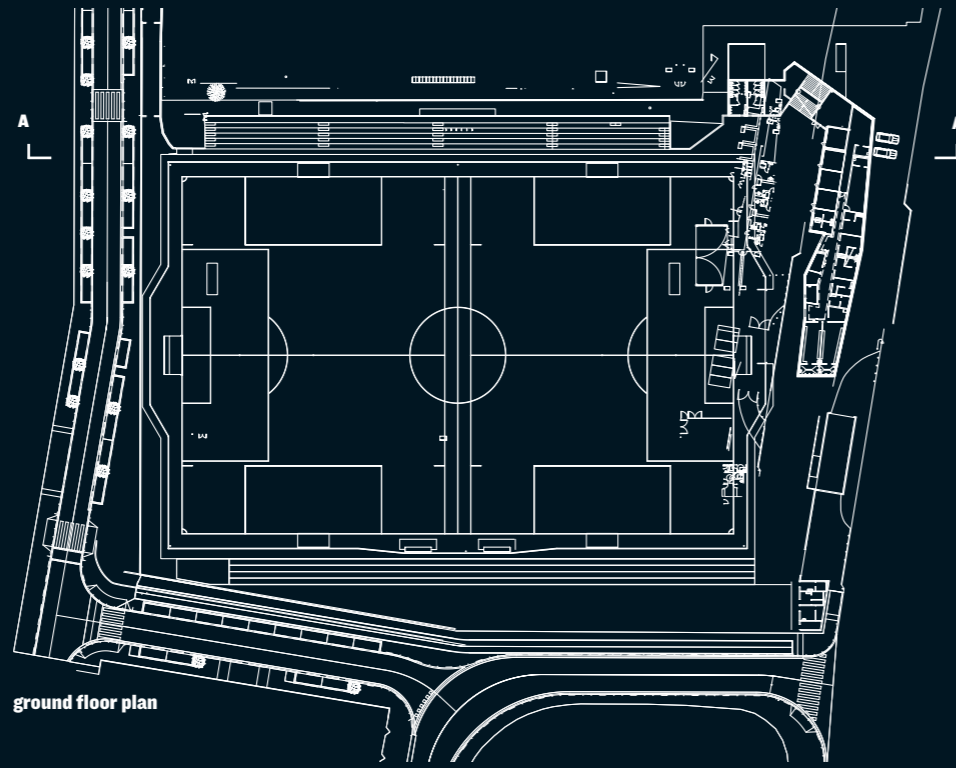
Location is a key consideration in stadium

**Malpasse Stadium,
Marseille, France**
Guillaume Pepin and
Fabrice Giraud
2019



BOTH IMAGES: WE ARE CONTENTS

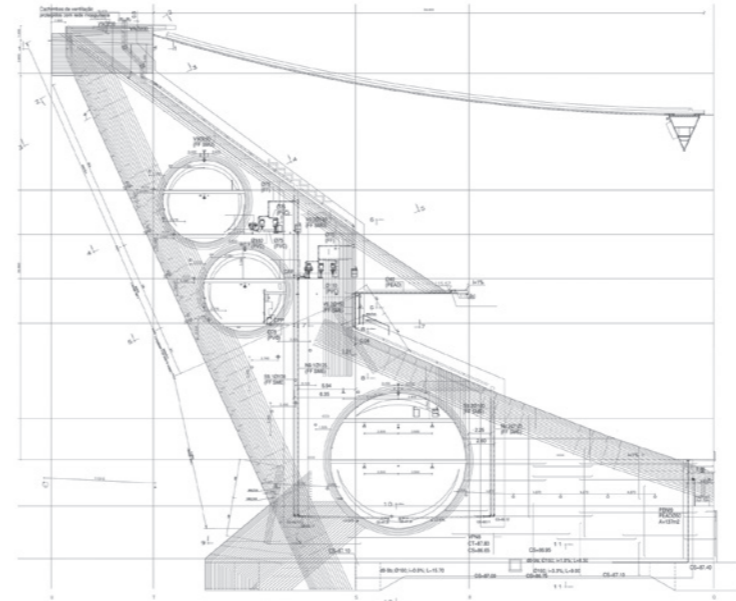
While some large-capacity stadiums try all sorts of dubious tricks in the attempt to blend in with their surroundings, smaller facilities stand a better chance of achieving this without having to resort to improbable metaphors and vernacular references. This is doubly true when the surroundings themselves are known for their somewhat unforgiving qualities. This project in the 13th arrondissement of Marseille is an expansion of an extant pitch which proceeds by retracting partially beneath the surface. The low-lying, fair-faced concrete structure encompasses such essential facilities as changing rooms and toilets, with a little drama supplied by a staircase that gives access to the stands via the pitch. The stadium forms a modest but sociable centrepiece to the surrounding working-class district of tower blocks, which has been subjected to much disruptive (and controversial) renovation over the last decade.



ground floor plan



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JONATHAN DANIEL / GETTY

Braga Municipal Stadium (top left) by Eduardo Souto de Moura, 2003; Frei Otto's tented structure of the 1972 Munich Olympic stadium, designed with Günter Behnisch (above); the elaborately retractable roof of the Montreal Olympic Stadium (right) by Roger Taillibert, 1976, has been out of action for most of the building's operational life; baseball fans (left) watch the game from the roofs of surrounding buildings bought up by Chicago Cubs owner, Tom Ricketts

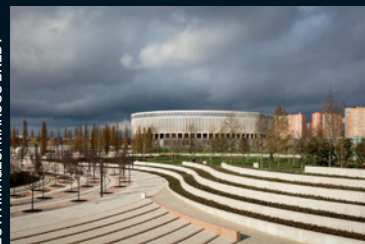


design. Football pitches are often to be found in proletarian inner-city districts, as befits that intensely parochial sport, but the rise of the car rendered cheaper suburban sites more attractive in the US. Olympic parks require large tranches of land, often serving as a pretext for the 'regeneration' of decayed peri-urban areas and the eviction of working-class communities. Modern stadiums are rarely sited with the Beaux-Arts pomp of Luzhniki in Moscow, strung on the axis between the university and the mooted Palace of the Soviets. Nevertheless, some do successfully engage with urban and natural features, sometimes to dramatic effect: for instance Lumen Field, which frames a view of the Seattle skyline, or HPCA Stadium in Dharamshala at the foot of the Himalayas. Looking down instead of up, spectators at the Ottmar Hitzfeld Stadium in Switzerland - the highest stadium in Europe - have a panoramic view

from their Alpine perch. This harks back to the Greeks, who often built their amphitheatres against natural backdrops. Generally speaking, though, the Greeks and their sacral sporting infrastructure have had a negligible legacy in modern stadium design. The first modern Olympics took place in an inappropriate emulation of the ancient hippodrome, with the result that runners had to decelerate to take the tight bends. This aside, the revived games have little to do with antiquity, being instead a child of the nation state; Coubertin hoped to strengthen France in the wake of the Battle of Sedan. They have remained intimately bound up with geopolitics, with increasingly insane budgets as each host attempts to outdo the last, and as such they are inevitably accompanied by concomitantly rising corruption. These conditions have produced many remarkable and appallingly extravagant buildings. The 1928 Amsterdam

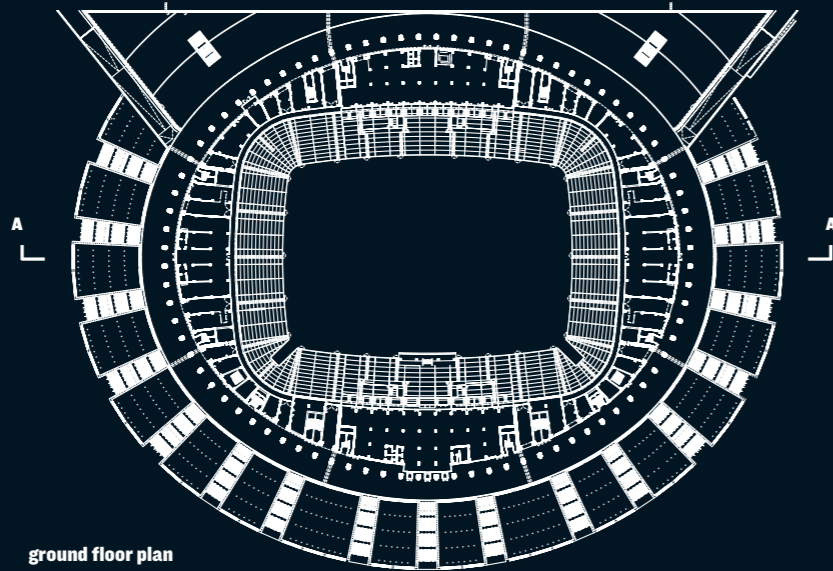
Olympics, for example, took place in a brick stadium designed by Jan Wils, a founder member of De Stijl. It has all the substantiality of Berlin without the latter's historicism; it was also the first games to receive corporate sponsorship, from Coca-Cola. After the war, stadiums adapted to a new technology, TV, and the riches it conjured. Structural innovation resulted. The first fully televised Olympics took place in Tokyo in 1964, where Kenzo Tange's gymnasium, influenced by Eero Saarinen's Yale ice rink of 1958, strung its roof from cables; in turn these influenced Frei Otto's diaphanous canopies for the 1972 Munich Olympics, intended to shrug off the weight of the Nazi past. These spaces were controlled environments devoid of columns, offering unencumbered views for spectators both present and televisual. (Souto de Moura's Braga Stadium is a recent, virtuosic scion of

Krasnodar FC Stadium, Russia
Von Gerkan, Marg and Partners
2019

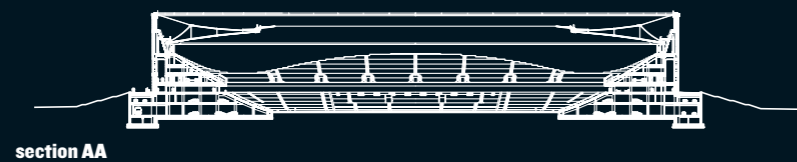


BOTH IMAGES: MARCUS BREDT

Generally speaking, columniated rotundas are avoided by today's stadium builders. It just looks a bit too Berlin 1936. This is despite the wider trend back to the Classical – and in fact we did have a near-miss in this genre in the form of Herzog & de Meuron's proposed reworking of Stamford Bridge in London; recently scrapped, it would have been surrounded by cyclopean brick colonnades had it gone ahead. However, in Russia such things tend to evoke postwar Soviet stadiums instead, especially Luzhniki in Moscow, and as these were a site of relaxation away from party politics, they have far less disturbing connotations. And perhaps they summon an echo of national grandeur, too, as for example in the case of this football stadium in Krasnodar, which is clad in travertine pilasters, no less. The building was designed by German practice GMP, who are also responsible (among many other projects) for the new Brandenburg Airport.



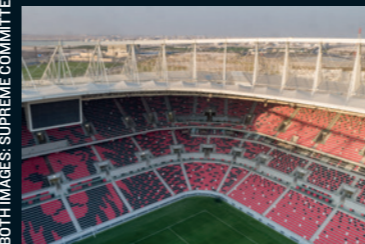
ground floor plan



section AA

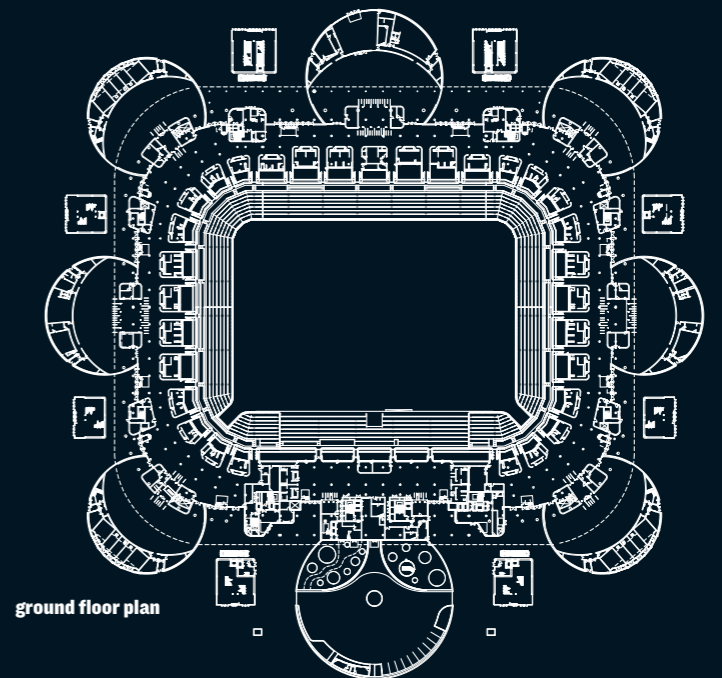


Ahmed Bin Ali Stadium, Al Rayyan, Qatar
Pattern Design
2020

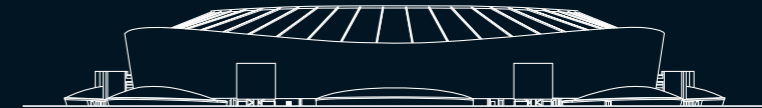


BOTH IMAGES: SUPREME COMMITTEE FOR DELIVERY & LEGACY

In recent years the predominant form of the stadium has been the blob, the classic example being Herzog & de Meuron's Allianz Arena outside Munich, and 1,325 rather more anonymous projects by US stadium specialists Populous. These buildings tend to employ ingenious, if not especially elegant, engineering in order to shelter the seats, and the resulting structure is then swaddled in cladding of some sort. This can be enlivened by jazzing up the envelope, for instance, in the case of Munich, by using glowing bubble wrap. This is a far cry from the exposed skeleton of Feyenoord, but evidently not all situations are as amenable to hulking industrial-looking structures as the Rotterdam docks. This stadium for the 2022 World Cup stands on the edge of the Qatari desert, with which – the architects claim – it merges, thanks to surrounding concessions 'inspired by sand-dunes'. The stadium itself is decorated with a cut-out pattern referencing traditional Qatari facades. In the end these gestures to local culture are rather absurd: the stadium is a vast object planted in the desert by the whirlwind of cash that swirls around FIFA. What is more, the building, which is open to the elements, is air conditioned. As such it is emblematic of the destructive tendencies of international sporting organisations.



ground floor plan



west elevation





COLIN MCPHERSON / CORBIS / GETTY



ALEX LIVESSEY / GETTY



APS (UK) / ALAMY

Everton FC (above) write large seen from a side street in Walton, Liverpool; the stadiums for Dundee FC and Dundee United FC (above left) are the closest in Europe. Highbury Square luxury apartments (left) flank the Arsenal football pitch



ALASTAIR MCKAY / GETTY

in an all-too-typical example of the rampant gentrification of proletarian pursuits. West Ham supporters queue for food outside the Boleyn Ground (below), the club's home from 1904 to 2016

'Football pitches are often to be found in proletarian inner-city districts, as befits that intensely parochial sport'

this cable-stayed lineage.)

Previous attempts to do away with obstructions had, following Nervi's precedent, employed cantilevers, such as Dundee's thrillingly cobbled-together Tannadice Park, which seems to grow out of the allotment sheds around it - its cantilevered stand dates from 1962 - and the Womersley stand at Galashiels from 1964. Another early cantilever was installed at Hillsborough, later scene of a catastrophe that would transform stadiums throughout the UK: after 1989, standing areas were banished in favour of all-seaters. As well as becoming safer, the game was thereby made more palatable for the middle classes, a process that had begun in 1985 in continental Europe in the wake of rioting Liverpool fans who caused the death of 39 Juventus supporters at the rickety Heysel Stadium in Brussels. British clubs were banned from UEFA for the next five years

and there was a wave of rebuilding.

The gentrification of sport had begun much earlier in the US. In the 1960s, fully roofed stadiums hermetically sealed sports for the benefit of richer audiences and the cameras. The 1965 Houston Astrodome was a pioneer in several regards. The first fully roofed and air-conditioned stadium in the world, it initially had a transparent covering, but this needed shading to prevent glare, which killed the grass below. This in turn necessitated the introduction of artificial turf, which took the name of the stadium: AstroTurf. Private boxes were also introduced here for the first time (and Roy Hofheinz, the building's impresario, built a hideous apartment for himself within the structure), although there were precedents for these, especially in aristocratic sports such as racing. This then was a gentrification of formerly proletarian pursuits, and a recognition that huge revenues could be

extracted from corporate clients - which led to the whirlwind rebuilding and renaming of stadiums after their ever-changing sponsors.

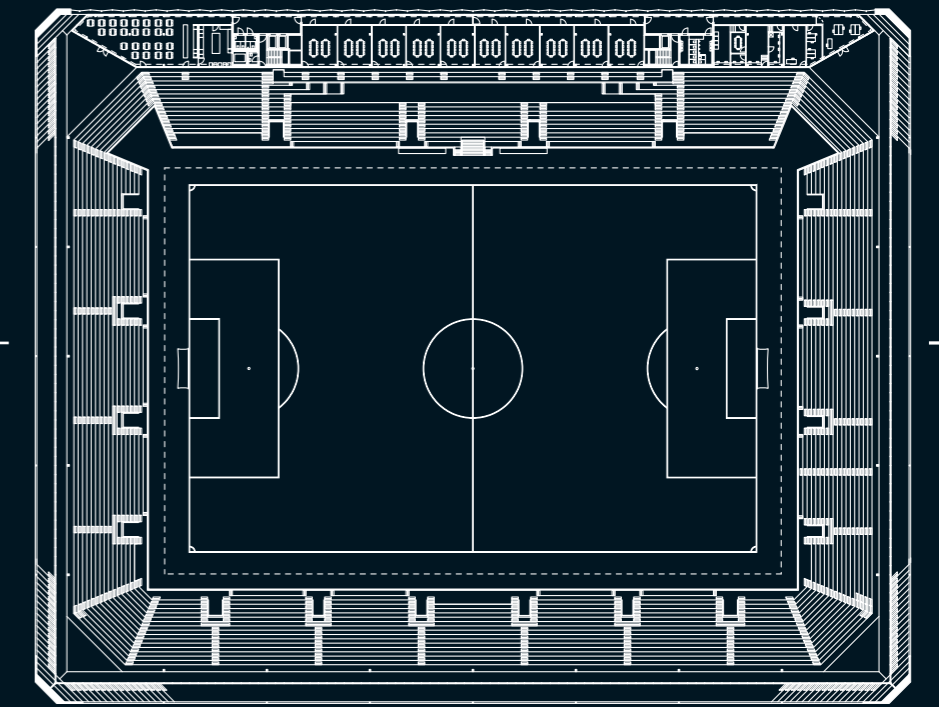
This, it hardly needs to be added, is not congruent with the recent ecological imperative, but sometimes expansion has taken the form of impressive adaptations, such as Milan's San Siro, crowned with an oil rig-like superstructure in 1990 (the stadium is now sadly doomed). In any case, what goes on outside is immaterial within the air-conditioned box: here one observes the game through glass while seated in an armchair, as if watching TV. There has been a reaction against this antisocial tendency with the trend for 'retro' facilities in the US, but over the last year the stadium has been sanitised entirely, with cardboard cut-outs and recorded cheers replacing live spectators. Fans' desperation to return, however, illuminates the enduring allure of subsumption in the crowd.

Lausanne Football Stadium, Switzerland :mlzd and Sollberger Bögli 2020

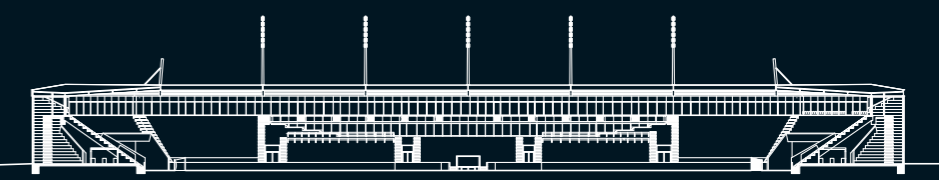


BOTH IMAGES: ARIEL HUBER

By way of contrast to more mealy-mouthed stadium builders, the designers of this new building on Lausanne's green periphery have not pretended to bridge the gap between urban and rural, or any such sleight of hand: instead they have produced a punchy concrete structure towering over the inevitable surrounding car park. Well, this is Switzerland after all, and of course it looks very well-made too, with striking concertina glazing along the main facade and boldly cantilevered corners. The building is crowned with a sheltering black steel carapace, adding a Miesian garnish to the Brutalist main dish, and giving, from the upper walkway, impressive views of the city and the mountains. As a new home for the local club, the stadium supersedes the Stade Olympique of 1954, and is dedicated exclusively to football, thus resolving the often unsatisfactory experience of viewing sports in a multi-use arena.



second floor plan



section AA

