ISAR PLAN
THE WILD AS THE NEW URBAN?
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Abstract

In the eighteenth century, Rousseau praised the beauty of the wild and untamed, and twentieth century environmental movements
celebrated the healing effects of wilderness on the human soul. But while Romantics and later Environmentalists sought salvation away
from the city - 'into the wild' - it is now the wild that is conquering the city again, becoming a sign of urban elegance and "coolness".
Improvised rather than planned, claimed rather than given, the contemporary urban open space seems to reverse the old antagonism
that opposed the tamed, exploited and orderly (the "policé"), to the dangerous, purposeless and amorphous – the savage originating
from the dark sylva and the northern wastes.

In recent decades the gardens of Gilles Clément or Piet Oudolf brought at high costs the poetry of formal vagueness and apparent
vegetal spontaneity into the wastelands of nineteenth century New York railways and Paris factories - two cities seen as ultimate temples
of urbanity. With them, the urban garden has seen the return of grasses and annual flowers, occasionally rehabilitating indigenous, even
toxic or invasive plants. More recently, with the transformation of the Isar River in Munich, the return of the wild has gone a step further
in scale and meaning: About eight kilometers of channeled waters have been partially "set free" by a design that celebrates natural
fluctuations and indigenous riparian vegetation in the heart of Bavaria's capital city. Each year after the spring floods, meadows and
muddy river flats punctuated by young willows are again open to a growing public of urban hikers, picnickers, party-goers and beach
lovers, becoming a much loved urban space and an iconic manifestation of the city's quality of life and individual freedom.

For the recent design of the central segment of the river, however, a fierce quarrel has opposed the supporters of a sharp landscape
design that accepted the urban and artificial character of the river, to the outspoken proponents of a nature-like design. New expectations
and illusions had arisen with the dreams of regained wilderness that challenged the consensual tradition of the city, the adaptability
of its urban infrastructure, and the ethics of the designers commissioned to reconcile the inherent contradictions of the brief. With its
nature-like island and meandering banks stabilized by invisible stones and concrete foundations, has the Isar become merely a pastiche,
being to riparian nature what Queen Marie-Antoinette's Hamlet was to actual countryside? The discussion is still ongoing, but beyond
the controversy, the Isar Plan has so far succeeded in accommodating seasonal flooding, individual contemplation and mass-recreation,
creating a flexible and unprogrammed space that is not a park, not a flood zone and not a nature reserve, and yet all these together. In
this regard the Isar Plan might be the forerunner of a genuine trend that sees cities reinventing a form of wilderness that can answer the
need to accommodate natural fluctuation, the disillusionment of suburban settlers and the expectations of Homo ludens, turning the wild
into a new hybrid condition for urbanity.

Introduction

In the context of increasingly controlled living environments, numerous recent urban designs
have fostered spontaneous vegetation and natural dynamics as a source of formal inspiration, if not as
a design goal, making various attempts to reconcile
urbanity and ecology. This movement is not totally
new: In the early 1990s, Gilles Clément made a
spectacular attempt at bringing wilderness back
into formal gardens with his Jardin en Mouvement,
in one of the densest and most formalized cities in
the world. Clément described how living organisms
continuously changed, moved, spread or disappeared,
making it vain to try capturing them within a fixed
architectural frame. Ecology empowered, considered
at worldwide scale and cultivated in urban gardens,
challenged the permanence of architectural forms,
and pushed architecture into the background
(Clément, 1994). Spatial design was in this case
irrelevant, or at its best useful to facilitate vegetal
freedom and monitor public access. With the Jardin
en Mouvement created on the land abandoned by
the Citroën factories Clément initiated vegetal
dynamics through initial planting and seeding—
its growth being later monitored though selective
maintenance, playing with the spontaneous dynamics
of competition and colonization.

Fifteen years after the opening of the Parc
Citroën, Piet Oudolf brought grasses back into the
heart of New York City with the transformation
of the abandoned High Line railway into a public
promenade. The soft, undulating beds of perennial
grasses echoed the design of the paths and benches,
suggesting a mixed flow of people and vegetation.
The symbiosis between formal wilderness and urban
elements was reminiscent of the spontaneous growth
of previous decades, wherein the train tracks were
colonized by pioneer vegetation – which ironically
had to be fully removed before being reinstalled in
a more stable interpretation (Oudolf, 2010: 188).
Both gardens were celebrated for their aesthetic and iconic values: The ruins of industrialization could create space for nature in the heart of the densest cities. While the countryside appeared increasingly mechanized, and nature confined to limited reserves, the city seemed to be a suitable habitat for wild vegetation, and obsolete infrastructures offered promising playgrounds for natural processes and urban regeneration. Furthermore, the reintroduction of wilderness in the public spaces of Paris and New York attracted thousands of visitors, showing that nature wasn’t anymore “the Outside” or “the Other,” but was now deeply entwined with anthropogenic processes, becoming the center of all attentions—and a potent factor of urbanity.

In the meantime, the empowerment of ecology within urban and water management policies had generated new ambitions for the renaturalization of hydraulic infrastructures and channelled rivers, leading to new combined developments at the turn of the century. Numerous rivers and floodplains were again transformed in order to restore the riparian habitats damaged by channelling and flood defense works, and were simultaneously reopened to public uses. Riparian habitats were known to be associated with dynamic conditions, meaning that not only should space be found for uncultivated vegetation, but also for natural fluctuations such as flooding, erosion and sedimentation. The Bavarian capital city took this combined strategy a step further with the Isar Plan, making a spectacular attempt to reconcile ecology, seasonal flood processes, and urban recreation in the heart of the city between the Museum Island and the Eisenbahn Bridge. However, the fierce controversy surrounding the design process soon revealed the contradictions inherent in an enterprise of “wilderness restoration,” contradictions that should be made explicit in order to avoid delusional expectations and allow for actual results in terms of ecology and urban quality.

**How the Isar River became an urban space and a nature icon**

Originally started at the edge of the city, the Isar Plan—named after the stream that flows from the Alps through Munich to the Danube—was consistently pulled through the city to Museum Island, in the heart of the city, and is now planned to expand further downstream along the historical Englischer Garten. For its vast scale and popular interest, the Isar Plan can already be considered as the most comprehensive floodplain restoration plan yet made in urban settings. It is a plan that closely associates flood management with ecological restoration and urban life, effectively addressing what might be the greatest challenge in the field.

Before the Isar became an urban space and icon, the river was long regarded as an infrastructural element at best, and more often than not it was seen as an enemy of the city. Economically valuable for mining, transport, and power but feared for its violent summer floods, the Isar, as a whole, long remained a functional space rather than a positive factor of urban life and development. Before the Isar Plan was implemented, it would have been hard to imagine that the floodplain south of Museum Island could ever assume such a prominent place in the city’s mental geography - today comparable in popularity to the Englischer Garten, built north of the city in the late eighteenth century. Indeed, contrary to the development of most European capital cities, Munich had never developed a representative riverfront nor formal promenades along its river. Before modern dams curbed its fluctuations, the river showed the typical characteristics of alpine rivers: high seasonal fluctuations, strong erosion and steady material transport, which led to frequent changes in the river’s morphology in width, depth and stream flow distribution. With increased discharge and velocity in summertime, most flooding occurred in that season (Böhm et al., 2006: 791). Besides being occasionally dangerous, the Isar was also unsatisfying in regard to the canons of landscape aesthetics, being neither a mountain torrent nor a peaceful stream. The Isar was “not always a beautiful river,” its riverbed being at times almost empty, at other times filled by a furious stream carrying stones and dead trees through the city (Thalgott, 2013).
Historically, Munich thus long maintained a safe distance from the turbulent alpine river, as the location of Eastern Gate still shows: the Isartor built in 1337 kept the Isar at a distance of about 400 meters. Four hundred years later, the plan drawn by Maximilian de Groth still showed sparse urbanization between the Isartor and the stream, although the river was partly contained on its western side. In the late nineteenth century, Munich finally followed the principles of engineer Johann Tulla, known as the “Man who tamed the Rhine,” who wrote: “Every river or stream needs only one bed, and if it has several arms, one should work towards a narrowed stream. It should be kept as straight as possible” (Vischer, 2000). Only geometry and functionality could beautify rivers, naturally erratic and dangerous. Following these precepts, the Isar was progressively narrowed and straightened, a parallel flood meadow being kept along the main riverbed to buffer summer floods, and a few side branches remaining for the sake of hydro-power plants.

Despite its lack of aesthetic quality, public amenities, and elaborated design, the Isar floodplain was already used by local young people in the years following World War 2, precisely because they appreciated the absence of social control and its “unregulated freedom” in terms of uses (Düchs, 2014: 15). In the late 1970s and early 1980s, environmental concerns grew in Bavaria’s capital. The urban population had increased from about 832,000 in 1950 to 1,315,000 inhabitants in 1975. Munich’s rapid growth and high per capita land use had left little space for public green spaces, and parks were “rather scattered islands, except the river Isar floodplain” (Oppermann et al., 2005: 79). Enriched by its flourishing automobile industry, the city also suffered from air pollution and was regularly shrouded in smog, with no natural winds evacuating the gas emissions (Thalgott, 2013). Furthermore, only two open corridors remained to bring fresh air into the city—the east-west oriented railway, and the northeast-southwest oriented Isar—making the latter an important factor in pollution dispersion and a much appreciated space for urban recreation, helping the inhabitants live with Bavaria’s hot continental summers. Not yet a public space, the Isar floodplain south of the center was acknowledged as a
Isar Plan in the Region of Munich
key asset for improving the city’s environmental and living quality, prompting a movement that generated discussions around its potential redevelopment.

In the early eighties the city took the first official steps that would eventually lead to the transformation of the Isar. The attention then slowly shifted from flood safety to environmental quality and usability. The term ‘Korset’ was used to describe the existing condition of the channeled river—narrow, strict and monotonous. The 1983 Urban Development Plan established the transformation of the Isar as an official goal, a transformation that should turn the stream into “a constitutive urban element in a near-natural state” (Landeshauptstadt München, 1983).

In July 1984, the municipal bill Natur in der Stadt (Nature in the City) stressed the fact that the Isar had “lost its character of wild Alpine river” within the city, and suggested eight measures to restore, “as far as possible,” its natural features. The proposed measures carefully maintained the functionality of the river as a source of electrical power and as a flood-proof riverbed, but suggested removing all obsolete infrastructures in order to allow riparian vegetation to once again conquer the river space. Although the Isar’s potential as public and recreational space was not yet explicit, the multi-purpose character of the project was now agreed. The bill also formulated a perspective on nature that would remain a key feature in later development: a combination of voluntarism, protection, and restoration of an “authentic” natural landscape by expanding the space available for erosion and sedimentation, and through the removal of non-native vegetation. Although concise and precise, the motion was not free of romanticism when it suggested abandoning the winter bed’s constraining gravel banks for the “free play of Nature’s forces.”

The proposal of Günter Grizmek, then professor of landscape architecture at the TU Munich, to promote “useful technical landscapes” as new urban spaces was at the time neglected: (Oppermann et al., 2005: 75) rather, politicians promoted a return to a nature-like state, which was seen as a question of ecology, but also as an issue of identity. The river had lost its character of Wildfluß der Alpen (wild Alpine stream) and should be returned part of its authentic wilderness. With the Isar Plan, the identity of Bavaria was at stake.

Preliminary studies were developed for the stretch south of the city, applying analytical methods to elaborate a draft design in the tradition of Landschaftsplanung rather than Landschaftsarchitektur. The study included a comprehensive atlas of flora and fauna, existing public uses and spatial qualities, which later were merged into a conflict and value analysis of all aspects in relation to one another (Blasy&Mader, 1998). Following this preliminary study, the southern part of the Isar from the Grosshesselohe Bridge to the Eisenbahn Bridge, was transformed by the City of Munich and the Bavarian Water Board without design competition nor broad public discussion. In the spirit of the popular Flaucher area—the last wide and braided river segment in the Munich area—the channeled river was transformed and softened. Straight embankments were removed, restoring the accessibility of the stream, whose water had since also been cleaned from toxic wastes. Hard edges that used to form a uniform boundary between main bed and floodplain were softened, enabling habitats to be reestablished by slowing the stream along the shore, and a part of the floodplain itself was left open for the frequent river’s fluctuations. “The Isar will flow again,” celebrated the Süddeutsche Zeitung in 1998, addressing the first segment being renaturalized (Süddeutsche Zeitung, 1998).

Motivated to pursue the transformation of the Isar further downstream, the City of Munich and the Bavarian Water Board were, however, sensitive to the urban situation of this last segment. Instead of extending similar ecological measures, the two authorities jointly organized a landscape design competition in 2003 for this 1.6 kilometer stretch from the Eisenbahn Bridge down to Museum Island. As stated in the brief, the proposals should improve the biological quality of the riverbed and its shores, diversify the stream structure, and restore sediment transport. They should also facilitate recreational uses in an open “nature-like” (naturnah) landscape. Finally, the project should be “aesthetically attractive” and enhance the cultural value of the “Isar Space,” (Isarraum) combining an open character with prominent urban features (Baumeister, 2003: 10-12). Implicitly, the project should also integrate the constraints created by strong discharge fluctuations, the presence of hydropower plants, and other sensitive infrastructures in and around the riverbed that otherwise were making it impossible to fully release the river current without putting the city’s vital infrastructure at risk.

The first prize was awarded to the team led by landscape architect Irene Burkhardt, who proposed separating the main stream and a new recreational...
space through a sculptural levee. While the main flow would keep its linear character, the former floodplain was to be lowered and reopened to the stream, offering shallow waters, soft embankments, and a wide-open meadow for recreation. The levee itself was drawn as a hybrid structure, usable as both a beach and as a pier for small boats.

The second prize was awarded to the team led by landscape architect Winfried Jerney, whose proposal was almost the opposite of the first prize winners: a curvy design, suggesting a stream that freely formed meanders, islands and riverbanks through spontaneous deposits and erosional processes. Challenging the reality of technical constrains, this second design suggested a restored freedom and revived a desire for wilderness reminiscent of Jean-Jacques Rousseau’s romanticism. In a controversy regarding his essay *Emile, or On Education*, Rousseau had been accused by the Archbishop of Paris of putting too much trust in Man and Nature, arguing that youth was comparable to “a torrent that overflows despite the powerful dikes built to contain it. What would happen, then, if no obstacle stopped its flow and broke its force?” To which Rousseau had answered: “What would happen, then, if no obstacle stopped its flow and broke its force? I could say: It is a torrent that topples your impotent dikes and breaks everything. Broaden its bed and allow it to run without obstacle. It will never do harm” (Rousseau, 1762, 2001 ed.: 5). Although the dispute concerned education rather than hydraulics, it revealed the fierce opposition between the then prevailing coercive technicism and Rousseau’s vision of Nature’s intrinsic goodness, provided Man does not try to constrain it. The contradictory outcome of the Isar competition 250 years later reflected this ongoing controversy—questioning sharp geometries and generating dreams of a harmless and harmonious nature flowing freely through the city: questions and dreams that soon challenged the ambiguous decision of the jury.

“Concretization” versus “Renaturalization”

Although Jerney’s project seemed romantic to the city’s engineers with regard to what could actually be left to natural forces, it let the public believe in the possibility of the full restoration of natural processes within the existing high-water channel. A heated discussion started around the two projects which grew into a public quarrel, opposing supporters of an urban, functional, and “honest” design, to supporters of a full renaturalization. Public meetings were held in the neighboring districts, where an active part of the population rejected the winning design for its consciously built character and its linearity. The design was depicted as “banal” and some baptized the central pier/levee the “the concrete monster.” Combative flyers spread the slogan: “renaturalization not concretization,” (Renaturieren statt Betonieren) calling for the implementation of the second prize rather than the choice of the jury.

The professional press remained relatively silent on the controversy. In 2003, the national Garten+Landschaft journal stressed the intrinsic complexity of the assignment: “to find a good compromise that, on the one hand, copes in its form with the contradictory urban and landscape aspects but also with the spirit of a natural restructuring, and, on the other, integrates the various leisure opportunities present in the central recreation area” (Zinsser, 2003:14). The article further asserts that “the designs of the first two winning entries” would be “further deepened and discussed,” not specifying an implicit breach in a procedure that
should otherwise have led to commissioning the first prize winners to detail and build their proposal. The City of Munich, through the Baureferat (Building Department), instead took a neutral stance in the controversy, stressing that both the first and second prize entries were feasible. Without clear support from the commissioners, the construction of the first prize seemed compromised. After a period of public consultation and emotional discussions involving commissioners, designers, district representatives, and citizens, Irene Burckhardt eventually agreed to compromise and promised that the team would “deal with the design in a critical way” (Süddeutsche Zeitung, 2003). Only in January 2005 would the Süddeutsche Zeitung announce that a compromise for Isar renaturalization had finally been found: “The two prize-winners share the planning section” (Süddeutsche Zeitung, 2005). This compromise presented by the Baureferat was officially approved two months later by Munich’s City Council, finally launching the design phase after an eighteen-month delay. It was by then too late for the Isar to be ready for the 2005 Federal Garden Exhibition (Bundesgartenschau), due to open in April of that same year. Ironically, the sharp geometries imagined by Gilles Vexlard for the exhibition’s main ground generated similarly negative reactions: one “really needs to get used to it,” politely conceded Munich’s First Mayor Christian Ude in a public Q&A session.

The compromise eventually elaborated by the two teams ensured the safety of urban infrastructures while formally suggesting freedom through curvy shores and islands. An article published in Garten+Landschaft introduced the new “near-natural urban landscape” (Garten+Landschaft, 2010). The pictures showed the striking contrast between the formerly straight embankment walls and the new curves stabilized, however, by a stone and concrete bed to hold the “wilderness” in place. The cross-sections left no doubt about the hidden fortifications needed to achieve the “renaturalization,” the ideal of which was described as something the project “never was and never could have been” (Engelmeyer, 2013): a sixty-centimeter thick stone bed covered by grass to resist flood erosion; a trench filled with stones along the water’s edge up to two-meters in section; stone pavement to fasten the river banks; a stone belt to stabilize the Weideinsel (Meadow Island), and a concrete wall meters deep poured into the preexisting levees to avoid cutting the existing trees.

In terms of morphology, the riverbed is still very far from having recovered its original width and meandering nature, as a simple comparison of the river’s past states shows. Although it mimics a natural stream, the new shore remains as fixed as it was a century earlier: shore variability is as limited as before, as it is stabilized by invisible foundations, and the stream still tends to follow the deepest channel on the left bank side. Occasionally, alluvial materials have to be redistributed mechanically by bulldozers in order to restore the area after flooding – indicating that while the two fundamental river processes of erosion and deposition were considered in the design, its morphology was meant to be kept in a fixed shape. Finally, the new shallow slopes intensively used by the public leave no space for alluvial vegetation and attendant habitats to develop. As landscape architect Oliver Engelmeyer clearly puts it, people had “thought [our first design] was wrong because [water] management was made visible. Now we still have the same issues, hidden beneath the greenery, and every time there is a flood you have to put it back in again” (Engelmeyer, 2013). All in all, the Isar now can be seen as a man-made channel in drag, defined by urban uses and constraints but shaped in order to make it look like a wild alpine river without
actually having its performative characteristics: The “renaturalization” label retrospectively put on the design appears illegitimate in many ways.

Yet the most spectacular achievement of the Isar project is not its post-romantic natural appearance, but rather its ability to accommodate and withstand the extreme floods that regularly cover the whole area combined with its ability to accommodate an intense urban life, with up to 30,000 people gathering on warm weekends. The *Isarraum*, which can resist spring and summer floods and still remain accessible, is today intensely used and widely praised for its informal qualities. The relatively simple and robust design does enhance the river flow and its fluctuations. The former binary variation—meadow flooded or dry—has evolved towards a permanent and gradual transformation of the river scenery, following variations in discharge made visible by the new stepped banks and shallow shores that allow visitors to see and to access the water. Contrary to the waterfall built in the Englischer Garten to mimic the distant Alps, the Isar is here actually flooded. Beyond its formal ambiguity, the transformation of the Isar demonstrates that a place defined by riverine fluctuations and risk mitigation can also provide room for urbanity, and that urban space can in return provide room for flooding, thanks to a decade of social, cultural and technical negotiation between the river’s spatial requirements and the expectations of Munich’s inhabitants. In the quest for a new flood risk awareness and resilience, on the part of individuals as well as societies, public space functions here as a reality check: Experience of the flood is able to bring to the fore notions of natural processes and acceptable risk, and can serve to train citizens to appreciate the pleasures and dangers involved in an adequate way—much more effectively than communication campaigns or dramatized news or apocalyptic fictions do.

Besides resisting regular floods, the hydraulic function of the floodplain also implies that no buildings can be built in the high-water channel, limiting any public facilities established there. But, then again, these constraints put on formalized and commercial activities are highly valued by the inhabitants: “You can’t have events happening, and people like it for that: there is nothing you have to pay for, no beer gardens...It’s a nice thing to have, such a space that is...empty” (Engelmeyer, 2013). Beyond romantic formalism, Munich has created an open space with no predefined use or program, a space that is officially not a regulated park, not a flood zone and not a protected nature reserve, and yet it is a hybrid of all these together. The lack of predefined program and the freedom of use provided in a dense urban environment is valued as liberating in contrast to fully equipped and commercial urban spaces. It allows the city to be again a place of improvisation and user-defined activities, from solitary meditation to family picnics and collective binge-drinking, restoring the essence of a public
domain defined not by its “formal characteristics but in the overlapping and exchange between different social realms” (Hajer et al., 2001: 113).

The return of the Wild

Recently in Rotterdam, The New Institute (formerly Netherlands Architecture Institute) inaugurated “the New Garden” on an empty lot next to the main building which formerly hosted temporary installations. The New Garden is built of sand, rubble from an asphalt road and prefab elements from sewage pipes randomly placed, as if they were abandoned on a building site. Like Gilles Clément’s Jardin en Mouvement, the only legible geometry is the path crossing the garden, offering a shortcut from the city center to the entrance of the Institute and to the Museumpark. Pioneer vegetation—partly seeded, partly spontaneous—slowly colonizes the barren ground. The New Garden seems to emerge spontaneously from a waste landscape hastily shaped by a bulldozer, punctuated by urban leftovers and later defined by visitors who feel invited to walk over this playful topography and to sit on a tree trunk. If the path was not paved it would look very much like one of the many unsolicited, informal “elephant paths” crossing formal public spaces. Here again, the future form is to be defined by spontaneous colonization from plants and people. Reminiscent of the classical gardens of ruins, this reconstructed chaos brings the interdependence of nature and city to an ironic paroxysm: The former Architecture Institute stages a city in ruins to facilitate the development of wilderness. Within this wilderness a new, spontaneous urbanity can, in its turn, recreate a space of spontaneity and coexistence for humans and the biosphere. The concrete panel introducing the New Garden ironically reminds of a gravestone, as if it were marking the death of architecture and the return of the city to a state of impermanence as a necessary condition for the return of the wild and the rebirth of urbanity. Candidly extending the 1994 Jardin en Mouvement, the (not so) New Garden adds to the ongoing Parisian experiment the temporary nature of an exhibition venue: City ruins and new nature will be removed in one or two years, and the Institute will reclaim again what was temporarily left for nature.

As the New Garden and the Isar Plan suggest, the demand for informal, fluctuant, unprogrammed and “dirty” landscapes should in both cases be acknowledged as the expression of a genuine cultural change in regard to attitudes toward nature, and as responding to a public desire for elasticity within the urban fabric: Sustainability (seen as a condition enabling biodiversity) paradoxically includes fluctuation and destructibility. Beyond metaphors and formal illusions, the Isar Plan physically allows for the superimposition of riverine and urban dynamics. The relation between city and nature is, in this way, acknowledged as a reflexive one, as it is not clear to what extent nature is changing urban space though seasonal floods, or urban culture is changing nature through evolving standards and behaviors. Nature and cities are in this sense both agents of change, as natural and urban processes influence each other in a negotiated redistribution of space. The reintroduction of natural processes within the urban environment paradoxically appears as a highly cultural enterprise: It should be communicated as such to avoid future misunderstandings, and to allow designers to play an active role in the redefinition and the ongoing hybridization of wilderness and urbanity.

*Interviews held in 2013 by the author with Christiane Thalgott (Former Head of the City Planning Departement in Munich), Daniela Schaufuss (Head of Hydraulic Engineering and Maintenance Department, City Planning Departement in Munich) and Oliver Engelmeyer (Burkhardt | Engelmayer Landschaftsarchitekten Stadtplaner Partnerschaft).

*Quotes originally made in other language than English were translated by the author.

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