Innovation in a non-innovative Setting: The Case of Emscher Park

By Charles Landry in 1999

History and background
The IBA-Emscher Park project in the middle of the Ruhr area - Germany's most industrialized zone is one of the most comprehensively thought through and innovative urban regeneration projects. Emscher Park in Germany is the name given to the 70 km long area comprising 800 sq. km straddling the Emscher river in which 2 million inhabitants live in 17 cities. It lies at the heart of the Ruhr area - the Ruhrgebiet - a dense urban agglomeration of 5.3 million people and one of Europe's most heavily urbanized and industrialized areas. It is within the Land North Rhine Westphalia with 17.6 million people and is located around the valleys of the Lippe, Ruhr and Emscher rivers and their confluences with the river Rhine. It includes the principal cities of Essen, Dortmund, Bochum, Gelsenkirchen and Duisburg. It has been a crucible of intense economic and social development in both the past and current industrial revolutions.

The Ruhrgebiet grew rapidly from virtually nothing in the early 19th century founded upon coal, iron and steel and later chemicals. The Ruhr's development was driven by massive, locally based industrial corporations such as Krupps and Thyssen and governments of whatever hue have historically unstintly supported this heartland of Germany's economy. Even in the 1960 and 1970's when it was becoming apparent that the coal and steel economy was in terminal decline in already developed countries German economic policy remained committed to high levels of investment. One reason was
social to avoid the ruptures and social unrest that contributed to Nazism, the other was to maintain consensus. Such was the dominance of these primary industries that until the 1960's there were no universities in the region, when a concerted period of action saw the opening of five, which have subsequently become important engines of the subsequent restructuring drive.

The environmental legacy industrialization left on the Ruhr landscape cannot be overstated - extreme degradation, a polluted landscape, mountainous slagheaps; chimneys reaching for the sky and blast furnaces many not operating anymore as well as towering gasholders. The Emscher itself had become an open sewer as the earth sunk and displaced itself breaking the sewage channels because of the mining activities below. The stench and smell on a bad day when the winds were not right could be unbearable.

The Ruhrgebiet reached its peak in the 1960's and has subsequently experienced a population decline of about 10% as the industrial base has been dismantled. Over 600,000 jobs have been lost and unemployment at 13% is amongst the highest in Germany. In 1987 a major crisis in the steel industry made it clear to all that this was no mere blip, but a crisis of deep structural significance, whose cataclysmic proportions stretched far beyond the factory gate in its economic and social impact.

The Land Government acknowledged the complex nature of the structural change and its own limited scope for action and did not pursue centralized and standardized forms of intervention. Instead it embarked on a policy of involving 'the creative potential' of those close to the problem. They created initiatives such as Zukunftinitiative Montanregion (ZIM) - Future Initiative Coal and Steel Region - in 1987, in which the state invited partnerships of local
institutions to propose projects for economic and social renewal. The proposed fields of action were to be in promoting innovation and technology, future oriented skills acquisition, improving the ecological and energy situation. 300 projects were supported by 1989 and the project was deemed such a success that it was extended geographically and in terms of remit to include cultural and image building projects.

The dominance of the large corporations was seen as having a debilitating effect on entrepreneurialism and small scale enterprise. The Ruhrgebiet was steeped in the semi-feudal mentality of the old corporatism. One writer (Grabher, 1991) described the major industrial complexes as 'cathedrals in the desert' to illustrate the self-contained style of operation of the big firms, offering few opportunities for small business to develop through supply chains or networks. The state thus initiated a Zentrum in NRW für Innovation und Technologie (ZENIT) to establish a network of innovation and technology centres and technology transfer centres to kickstart small enterprise development whilst the Gründungsoffensive was aimed at setting up new incubator units. The Pianet-Ruhr project aimed to integrate scientific organizations, consulting firms, chambers of commerce and unions in a regional network with an emphasis on trust building measures. Forum Zukunft Mittelstand aimed to offer a platform for Sme's to provide views on economic policy, encourage entrepreneurialism and promote innovation. Some of these initiatives have been regarded as top down and failing to engage the private sector with the state leading the process of change.

The result though is that the Land now has 31 R&D centres; 50 technology transfer offices; 48 technology centres to nurture new businesses, many of which are sector specific and 26 technology agencies to foster innovations. (Phil Wood)
The rise of the Emscher Park idea

Within the Ruhrgebiet restructuring process the wholesale reconstitution and 'renaturing' of the river Emscher had become the emblematic icon for a problem of epic proportions. The idea to turn an open sewer channelled in concrete to deal with overflow into a river where fish would swim and children play has an awe inspiring quality. Even the sound 'Von Kloake zum Fluss' - from sewer to river - resonates. To embark on a 30 year project separating clean from dirty water in a 350km stretch of rivers requires tenacity. To create green corridors throughout the region as linkages and to heal the ravages of industrialization is bold.

Yet the government initiatives to bring in new legislation in the 1980's to bring to account the large industrial polluters and local authorities already had had positive spin-offs giving credence to the potential. New markets in restorative and preventative technologies had developed with state support with a mass of new companies emerging and employing new techniques in quality assurance testing or environmental technology. By the late 1990's over 100,000 people were employed in this sector many spatially clustered around centres such as the Dortmund Technology Centre adjacent to the university.

The problem of degradation had been recognized and used as an opportunity to create new products and services with stringent standard setting and legislation helping to drive the innovative process. By being ahead of other old industrial regions which over time would 'catch up', export markets were being created.

The organizational vehicle used to trigger, spread and catalyze an array of innovative projects and thus structural renewal was the Internationale Bauaustellung Emscher Park (IBA) - the International
Building Exhibition. It started in 1989 and ended in 1999. This unprepossessing name stood for a process that had a century old history in Germany. The concept of the Internationale Bauaustellung is itself creative. The IBA was based on the classic 19th model of fairs, such as the World Fairs in Crystal Palace and Paris, to show new products and technologies. Usually lasting a period of 10 years with public support to create impact Emscher Park was the fifth. The first had been in Darmstadt prior to the First World War and involved creating a garden city settlement; the second in Stuttgart in the 1930's which encouraged the new architects form the Bauhaus; two in Berlin - one in the 1950's to develop the Hansaviertel, a dense urban settlement which by inserting buildings by architects such as Gropius or Alvar Aalto has a more open, green feel; the second in the 1980s in areas such as Kreuzberg. This IBA began to reshift and move away from an exclusive new building process towards rehabilitation and re-use of old buildings as well as social participation.

The core purpose of the fifth IBA was conceptually and practically to give impulses for regenerating Emscher Park ecologically, socially, economically and culturally. It was clear from the beginning that there were no easily adaptable models that could be just taken from the shelf. Providing a framework within which ideas, concepts could be trashed out, tested and explored both with experts and the population became a primary raison d'etre of the project. This occurred though seminars, competitions, media discussion, special events and participatory activities. In addition it was clear that the building exhibition had to create both buildings and allied concepts that in their power and resonance that could spin off far deeper into the psyche of the region.
The monoculture of coal and steel and its decline at the end of the 20th century etched itself not only into the physical landscape, but also the mindscape of the people - threatening to block future development. Degraded landscapes and their ecological consequences aside the diffuse urbanization was unattractive for modern industry as was the peoples' culture based on working for large conglomerates. Reconstruction to a modern economy by passive means was uncertain because of the dense settlement and coal and steel infrastructure. A process guided by the local authorities was equally seen as unlikely in spite of good locational factors such as being in the heart of Europe. The private sector was too weak with insufficient small businesses in relation to the size of the problems. Importantly the dying industrial culture still effected and determined the economic, political, cultural and social milieu. Without outside impulses, no innovative climate could develop to renew the culture, economy and ecology - the task to innovate in a non-innovative milieu became the issue.

That was the problem and it could not have been more comprehensive. Seeking to solve it - pace Manchester's Castlefield or Lowell in the US - had no historic precedent. In the past old economies were either restructured through economic growth, or left to reconstruct by their own devices - none had put ecological recuperation centre-stage. The challenge was to change Ruhr traditions to the idea of a flexible new economy with structures to match - a culture change without erasing memory.

Older regional theories give no hints as to how to deal with the renewal of such a deep seated industrial monoculture; whose ecology was so damaged; whose the infrastructural conditions for modern development too diverse and whose cultural and social orientations were too dependent on the past.
Former comprehensive planning models based on rationality assume the key actors have sufficient information, that there are no contradictions between objectives and interests; that there is money to proceed and that 'out of the tabula rasa the god like planning system will create a new world beyond good and evil'. Such a top down formulation of objectives is impossible - individuals are contradictory, different actors have different interests, and in existing social conditions there is no tabula rasa or clean sheet; any area is already occupied through owners, civic initiatives, existing and future users. This 'closed' model implies superhuman qualities. The model might work on a green field site but not a built up area. The objectives might be clear but not the possibilities to implement them.

In contrast to this closed model the more open planning model seeks to recognize the difficulties of competing political interests and to foster the art of muddling through. This strategy of small steps is a form of incrementailism seen at times as a resigned adaptation to the status quo. So the notion of thorough going change is transformed in urban settings to things like townscape improvement schemes, careful preservation and maintaining mixed uses or the social mix. There is no fundamental change of the development dynamic - a task that was necessary for the Emscher region.

The closed model is based on a technological rationality; the open one on a political one. The traditional comprehensive planning ideal is now not only unrealistic, but also has authoritarian features, such as the all knowing planner. The open model by contrast is adapted to the political power structure, but leaves open the question about how you can innovate through an incremental process.
This sets up a strategic dilemma: The need indeed obligation to innovate is confronted with the necessity to take into account interests and requirements for consensus. Innovations with long term impact are rarely compatible with existing policies; the need for consensus is greater the more far reaching the innovation. The democratic system fosters a kind of 'conservatism arising from complexity or tendency to institutional immobility because of balances created out of past battles'.

To innovate in the context of overarching endemic problems there are essentially two choices. The first is to initiate many individual, dispersed projects so that the consensus needs are reduced as different actors and authorities are involved. Yet reaching coordinated objectives becomes difficult because of the decentralization and fragmentation. The alternative is crisis or changing the actors. Yet decentralized decisions and mobilising new non-institutional actors both lead to the danger of things getting out of control and new demands. (Scharpf) The other approaches are landmark based initiatives, such as getting the Olympics, that use spectacular visibility to mobilize support to generate innovation versus the strategy of letting 1000 flowers bloom. The IBA was well aware that it needed to straddle these tensions and the director of the IBA Karl Ganser coined the phrase 'incrementalism with perspective'. This highlighted the need to create a framework within which isolated decentralized projects could be chosen and could progress.

It was clear to the organizers right from the beginning that just letting something happen does not guarantee innovation; nor that isolated projects and setting up branches of high tech companies does the innovation trick. It needed to tap into endogenous human capital, helped up by an influx of capital and know how from
outside. And even then regeneration cannot be promised. The alternative IBA was confronted with was to plan for innovation and creativity and to help shatter the conservative structures and to find new ways of articulating and acting with and for new actors. The danger that unforeseen dynamics would occur was not a fear but a hope.

The Emscher Park IBA took these complexities on board and developed them further conceptually. The sub-title of the 10 year project is: "A Workshop for the Future of Old Industrial Areas" which encapsulates the core concept of an experimentation zone, mutual learning and learning by doing. Main purpose of the IBA was to show models of the future and the major role the public sector could play in making it happen. The over 100 projects cluster around five themes for which proposals were invited, they are:

- Ecological regeneration of the Emscher river system - the complete rebuilding and 'renaturation' of 350km of polluted watercourses over a 30 period.

- Working in the Park - creating a chain of 22 science and technology centres on old industrial sites.

- Housing construction and integrated district development - refurbishing or building new 6000 properties according ecological and high aesthetic standards.

- New uses for old industrial buildings - finding radical alternatives instead of demolishing former mines, steelworks or factories.
Creating an Emscher landscape park and series of seven green corridors to distinguish major centres from each other.

Initially the IBA wanted to get involved in cultural issues but dropped this as it was difficult to judge criteria and so focused on housing, landmarks and physical renewal. After a 5 year review a shift on priorities took place to focus again on cultural issues, both in terms of events and creating a new culture as well as on tourism as part of an image strategy. Local economic development to ensure resources were locally recycled, sustainable building and self-build initiatives were priorities from 1996 onwards.

Over the decade more than 4500 people have been involved in the over 100 projects. Apart from this professional involvement many more users and other interested parties have taken part. With over £1 billion investment alone on the construction and related sectors over 30,000 people have been employed. These central public funds have levered many more times the amount. The real value though and future oriented long term gain is in the impulses it has given to a new form of living and working and which is an ecologically and culturally based renewal of the economic structure.

The range of projects encompass the spectacular, awe-inspiring and monumental to the everyday and the invisible. The underlying principle is to work with grain of the existing industrial culture and to celebrate it critically; not to erase it from memory; to build on memory and to bring structures back to life in new form; to combine old and new technology; to create pride and impact. To experiment with new forms of organization, ownership, involvement, style and aesthetics - and always to innovate.
Each of the 100 projects is seen as a learning initiative which may present a model for replication. The small housing estate design by women in Bergkamen has already impacted on the style of the local police headquarters nearby; the self-build initiative is getting new groups into the housing market as well as creating new social bonds; the 10 acre healing park Quellenbosch in Bottrop located near the hospital is self-consciously using plants to create a design that allows for new ‘sensual experiences’. It is intended to serve and support general healthcare, outpatient rehabilitation, aftercare and health self-help groups. There is a perfumed garden, a herb garden as well as a space for meditation, a gymnastics area and a tropical environment.

Integration of innovative objectives within projects is key. So nearly each project has a cultural dimension by bringing out and rethinking uses; the ecological element is highlighted through the use of new materials and building methods and recycling of resources such as rainwater and then using the project itself as a training and job generation initiative.

Three re-uses of industrial architect are particularly emblematic. The conversion of Europe's largest gasholder in Oberhausen, 120 metres high and 67 metres wide into an exhibition centre. Its massive interior is daunting and the panoramic view from the top giddy making. This icon is a landmark for the region. The first exhibition in 1994/1995 Feuer und Flamme - Fire and Flame - attracted 500,000 visitors; this was more oriented to the region's past history; the second on film and media towards the future. Finding a new use for this landmark spurred the development of Germany's largest shopping centre CentrO next door.
The second was changing Europe's largest coal mine Zeche Zollverein an area of 200 acres and 20 buildings into a conference, leisure and industrial design centre. The latter adapted by Norman Foster combining old structures with new maintaining even in many areas the grime of the past and tools that were just left there lying on closure. One of the region's most popular restaurants acquires its sense of originality because it is embedded into an old boiler house. The old coal works itself is a visitor attraction.

The third is transforming the stunning structures of the steel works in Duisburg-Meiderich into a landscape park: Duisburg Nord. The evening light show playing itself out on in slow motion on the old structures is unforgettable. Designed by Jonathan Park of Pink Floyd fame the forbidden area of factory becomes a nightly spectacular as visitors clamber up the steel structures in the dark. The largest alpine club in North Germany has its base in the park using the factory walls as climbing frames; the local diving association learns rescue techniques in the water filled gasholders into which shipwrecks and old trucks have been thrown. An evening concert takes place in the arena part of one of the sheds. In the day time families wonder through this industrial landscape as in any park elsewhere. The natural habitation has been allowed to grow again. The park has been conceived in a collaborative way with extensive consultation with citizens groups and the setting up of a competition with five internationally renowned landscape planning teams who compiled different proposals. In 1991 a committee determined the prize-winners and gave recommendations for further development along five themes: The "new wildlife", the "industrial museum", the "adventure playground", the "Volkspark" - the peoples park", and the "forum for culture".
New architecture or technology is equally central. The Tetrahedron monument crowning a mountain of slag in Bottrop, or the majestic and futuristic glass facade of the Wissenschaftspark Rheinelbe in Gelsenkirchen with the largest solar panel system in Europe. The ecology businesspark in Hamm or the Centre of the Future, which conducts world-leading research into the re-use of industrial areas. The list continues over a dozen technology centres and incubator units; scores of projects concerned with estate upgrading and housing; others concerned with re-using old coal and steel buildings as conference centres or galleries, to hold events or fairs; and finally creating new industrial parks. Importantly many of the major projects are designed to create the landscape linkages between the area as a whole. The backbone and skeleton of the project remains the 'renaturing' of the Emscher a 30 year project funded through local water rates.

**How the IBA works**

The IBA, led from the outset by Prof. Karl Ganser, a strong willed visionary former civil servant and planner architect, was a small, catalytic organization with approximately 30 staff. Its task was to develop, monitor and drive the working themes on the basis of quality standards and benchmarks that created ecologically based economic, cultural and social renewal. These standards involved organizational, social, design and aesthetic criteria. One criterion, for example, was openness to new forms of housing in terms of both style and social arrangements, such as user participation. This can be seen in the self-build initiatives to enable low income groups to get into the housing market. The IBA was deadline based in order to generate momentum and action. Its core mechanism was to mobilize expectations through the propaganda of a the good creative example. It was not involved in everything in the region - and thus represented a selective strategy - seeking to act as a catalyst, leaving out very
contentious areas like traffic and hoping that good models would spill over into other areas and thereby 'decrust the old system'. The IBA was a dispersed experimentation zone based on a series of learning projects.

The IBA worked with an advisory board, a group of specialist correspondents as well as networks of specialists and consultants outside and designated link people in each participating authority across the Emscher region. The IBA had strong support from the government of Nordrhone Westphalia, but no budget to sponsor projects directly. Nevertheless a political consensus was achieved in that IBA accredited projects have priority within government funding structures and thus are more or less guaranteed resourcing.

In effect the IBA helps bundle resources and is a branding device and quality benchmark. The key to its power is its gateway function and privileged link to the state. The IBA was a private company owned by the Land - 'part of, but not part of the public structures'. By this means an attempt was made to take the IBA above and out of politics. A block to innovation had been 'institutional immobilism' generated by the many layers of political authority in the region.

The role of the IBA was help find and develop ideas and initiatives through workshops, publications and competitions as well as feasibility studies. Indeed the emphasis on international competitions for projects was seen as the most effective way of enhancing quality and ideas generation. The IBA gave advice and consultancy to local projects; assisted in the setting up of local projects teams; helped assess quality issues; acted indirectly as broker for financing by giving credibility to projects. Each of the over 100 projects are autonomous, self-managed, responsible for getting their own finance and seek their own consensus within their own initiatives. The local
link people and correspondents were seen as what the IBA called 'multiplicators' to spread the Emscher Park ethos.

The IBA was not an agency nor a plan in the traditional sense, but a perspective on development. Its principles were anchored in a memorandum of understanding. The project partners were encouraged to involve themselves in an iterative process to discuss ideas and standards amongst themselves and with international specialists.

The IBA thus had no money, nor competences in law - it had no direct power. All IBA projects follow normal procedures of planning and financing; there was no special fund or development area status. The IBA powers were indirect levers: Its political status and its label which gives prestige. The key task of the IBA was to make sure the label is prestigious and that by the community agreeing with its core idea. Participation and cooperation have thus been seen as central elements. Only then will the Emscher region transform itself through its own multiplier effect.

There was the belief that there are 'no ideal solutions for exceptional problems', but only project models that apply widely and strongly integrate social, ecological and building based issues. IBA works against the idea of the the 'social laboratory here, the eco island there and the architectural icon somewhere else'. A key theme was to see problems as potential and the crisis as the opportunity, such as by creating an export industry through the process of dealing with Emscher's own problems. Forcing the region to go new ways would create the material conditions for its own modernization. 'The endogenous potential lies in the challenges of the old industrial region itself'. The objective was thus not to copy other models such as applying unthinkfully the cult of high tech.
The IBA took a light view of co-ordination and did not seek to determine how the Emscher region should develop as a whole - only within its own projects. This gave participants the choice to join in or not. The IBA's carrot was access to resources under certain conditions. Thus there was no need for overall political consensus and no need to go down to the level of lowest common denominator in projects. It allowed the IBA to keep its role as 'a guiding star' with its themes and quality standards.

The IBA approach had a series of implications and assumptions. The mobilization of endogenous potential and innovation would happen through the persuasive power of good solutions. This is a long term, indirect process which takes time. Yet if the overall problems get worse in the region or money dries up it will be more difficult to implement politically, because people will want short term strategies, such as supplying new jobs immediately. The dilemma though is that if you produce jobs quickly you only get low skilled jobs and thus the solution to the endemic structural problem is simply pushed into the future.

The second implication was that to get successfully going local culture needed to be at a breaking point - enough to shake up the political and institutional structure and allow new actors into play. At the same time the crisis could not be too bad to legitimate the firefighting approach. There needed to be an optimal problem level, that saw the necessity for innovation and that was not so bad and therefore bearable and so willing to consider long term solutions.

The IBA had to deal with a series of contradictions: Old industrial areas by definition have little endogenous, creative potential, otherwise they would have already escaped from emerging decline;
they usually have embedded restrictions through cultural attitudes or power groupings such as trade unions. They thus need impulses from outside and from above. The open and decentralized IBA system was mixed with standards which tended to be framed by elites rather than far reaching participation. Although the standards are in retrospect generally accepted, to change the populus the harder road of more comprehensive involvement might have been preferable, but difficult to implement. At the same time the IBA's widespread involvement with the existing system of local actors - and in the Emscher area there were many layers - might have ironically strengthened them when they needed to disappear as they were part of the problem. Thus whether the IBA end result and formula to limit planning to coordinating decentralized projects and helping initiate individual local projects creates the transformative, innovative effect is uncertain.

There is 'no ideal route to innovation in non-innovative regions. Every planning strategy has its strengths and weaknesses; problems overlay each other'. The key point is that the IBA was aware of past problems of regional planning and regeneration and took a narrow route to create a political initiative and impact somewhere between the overweening power of the masterplanning model and conservatism of incrementalism. (Häussermann/Siebel - benefited greatly etc.) This response is a reflection of a general dilemma of the early 21st century of the capacity of public institutions to act and implement effectively. The question thus arises whether local pilot projects can substantially change the overall system

One key dilemma for the IBA has been the extent to which it should get involved in the details of local politics. The entrenched political system and interests with long term majorities for the social democratic SPD has been a strong problem element in the renewal process. The dispersed local power bases of the 17 cities in the
region has made co-operation difficult. Thus the central tension of the IBA project is that the strength deriving from avoiding current political structures is also the central weakness. What happens now - post 1999 with the IBA closed, because the change is insufficiently embedded. The IBA has operated below the threshold of the conflicts of the Grossgruppen - the key players in the region - such as the Kommunal Verband Ruhr or city bosses.

A number of commentators believe the IBA should have involved itself in local politics earlier and worry that apart from the IBA network not enough innovative actors have been able to come through. The IBA they argue cannot rely on the 'lighthouse effect' of their projects and only by mixing it with the modernisers - a strong link into the economic power structures instead is necessary. By operating outside the system the IBA limited its own effectiveness and capacity to replicate and renew itself. Now the IBA is gone the worry is that the old guard will simply continue as before 1989. Indeed as an example the leader of Dortmund City Council, a former steel worker, has been in post for 25 years and has signalled his distaste for the IBA. Whilst the cities of Oberhausen and Duisburg have in parallel to the IBA process undergone radical restructuring to the new realities most city administrations are still dominated by the old elites. Building an IBA it has been said is not difficult, but building new, effective institutions in a organizationally dense arena is.

Another criticism voiced has been the relative weakness of grassroots participation. The IBA started with the intention of initiating many smaller participative social schemes, but this proved too complex, time-consuming and without visible results. The IBA was also under pressure to deliver and thus retreated more into physical infrastructure projects - a classic regeneration dilemma. The balance
between hardware and software was wrong (Ache) and there is insufficient evidence of best practice trickling down from flagship projects or evidence of the average Ruhrgebieter buying in to the IBA vision.

Outside experts, especially in the urban renewal field, who are shown the IBA and thus can see the overall picture leave impressed. Yet locals might be aware of a couple of IBA projects in their area and unable to grasp the overview, especially since many of the environmental improvements are invisible. Ironically the impact of change was most keenly felt for locals was when the Emscher stopped smelling of sewage. The longer term awareness campaign is still essential as locals have on occasion protested against developments such as the wind generator next door to the Eco-industrial park in Hamm.

An industrial culture does not easily jump into post-industrial culture. A work force brought up passively under the wing of monolithic conglomerates does not overnight - or in 10 years - change to being enterprising and self-reliant. Thus one of the strongest calling cards of the IBA has been its reuse of redundant industrial sites. The local working class have not seen their heritage simply fall into dereliction and nor has their collective memory been erased.

Many of the old industrial sites have been turned into technology and innovation centres, as part also of a wider Ruhrgebiet policy, and there is a widespread view that this large number is unsustainable. Rather than being engines of entrepreneurialism in the community they were being filled up with companies who found them comfortable and were reluctant to move on and become self-reliant. Equal criticism was targeted at Dortmund’s policy - not an IBA project - to catapult the city into the multimedia age through setting up a
Interactive Multimedia Academy. Eyeing Cologne with envy Dortmund sought to buy its way into the market, which it is felt has no real grounding, yet, in line with the cultural milieu and economic reality.

The unification of Germany put a further strain on the IBA project or successor initiatives. The IBA's grand vision relied on access to resources; something that is not guaranteed with more recessionary budgets. Working together is easier when resources are plentiful; scarcity brings out greater selfishness. Yet Ache argues that it is theoretically possible to maintain the IBA ideal at much lower cost but this would necessitate a degree of institutional and community embedding which had not taken place. The counter argument remains though that there would have also been less to show to act as inspiration.

**Where now Emscher?**

The new tourism masterplan for the Ruhr, an unthinkable idea pre-IBA, is now being put in place will change the perspective of the IBA and its image. The strategy has three key elements: Industrial culture; modern entertainment and unusual cultural events and it proposes an implementing agency called 'Reisen im Revier'. Under the first the 'Route of industrial culture' will seek to highlight 18 symbolically significant anchor points as a means of linking the region together. These points are merely starting blocks to go more deeply into a series of themes, such as worker settlements and housing; environmental improvement, social history or industrial reuse of buildings. Three points will have extensive visitor centres including Zeche Zollverein and the Duisburg-Meiderich. All forms of mobility will be encouraged; there will be routes to explore the region by foot, bike, bus, train and car. The cultural routes idea is an attempt to look at Emscher afresh. One part of the project is to connect the industrial railways into an Emscher Eisenbahn to explore
the Emscher landscape from the unusual perspective of factories and industrial pathways.

A second overarching idea is to make the Ruhr as a whole the world’s largest national industrial culture park. The other urban ones such as Castlefield in Manchester with 4.5 million visitors or Lowell with 3 million will be dwarfed. This symbolic park will be a living entity. Its objective is to make real the challenges of the past to create industrial society as well as to focus on urban structural change and how the future of industrial society might develop. This will involve not only museums, buildings but also virtual reality. Through an integrated management the scientific, educational and touristic aspects will be co-ordinated. For example, as part of revaluing industrial culture attempts are being made to get Zeche Zollverein on the Unesco world heritage list.

A third idea more focused on the contemporary is to create a 'Broadway on the Ruhr' whose authors believe has some reality to it given the Ruhr's theatre traditions and successful building of new musical theatres. It also has some utopia. Again as with the IBA concept ideas are used to push and pull reality. The constant interplay between past and future remains a key theme as does the use of competition to generate new ideas.

**Why is the IBA creative?**
The Emscher Park IBA is not perfect yet it is very creative; the criticism from the academic community concerning participation and embedding may be valid and true judgement about the real impact of the IBA will unfold the further memory recedes. The powerful political interests keeping the IBA at the forefront and pushing it will need to find new channels. There are a number of elements worth recalling, which form part of its impact and legacy.
° Boldness of vision: Emscher Park's true creativity comes from the combination of projects seen in their totality. One can dissect every project and find faults but as an overarching concept it is most powerful. To dare to think and take on ecologically driving the renewal of the economic base is not easy. To dare to want to create a new post-industrial culture for the region that remembers its past equally so. As so many urban renewal projects over-promise and under-deliver; Emscher delivers on balance well. Its sum is greater than its parts.

° Rethinking the building exhibition idea: Emscher Park IBA changed the idea of what such a exhibition process could be and extended its scope to include a deft use of symbolism such as in creating industrial monuments that found new uses, or in linking environmental improvement to economic development.

° Linking environmental improvement to economic development: Rather than seeing ecological restructuring merely as a cost it was seen also as a new economic sector and driver of a new export economy.

° An ethos of innovation: To be self-consciously innovative across a broad front from technology to social innovation requires conceptual clarity and tenacity. To embed an ethos of innovation from ecological building to powerful public art within a culturally conservative political structure is difficult. In the Emscher context the task definition and vision drove the innovation and force fed creativity; it is not being innovative for the sake of being innovative. Creativity is the instrument to achieve the objectives. Emscher Park is thus inevitably an experimentation zone.
Quality as a carrot and economic development driver: The use of quality standards to create and flesh out the vision as distinct from direct access to resources established a driving mechanism for the project. It made the IBA more light-footed and adaptable, allowing the IBA to focus on the conceptual and preparatory project work. Using the negotiations around the guidelines between public and private partners became an iterative process and part of the awareness raising campaign and a new form or regulatory incentive regime. A further levers to create quality was the use of competitions. As the IBA would only give its imprimatur - and thus enable access to resources - to projects with the right design and quality standards it created a kind of push and pull factor to guide development along certain paths.

The long term view: The core Emscher Park project 'renaturing' the Emscher river had a 30 year time scale. The director was a long term appointee - 10 years, providing continuity of vision and thus allowing a more paced approach. Although pressure mounted to deliver early on and staging posts and pacing devices were needed at least there was a recognition that thorough-going regeneration takes a long time if it is to go deep.

Strategic: Each project designated as an IBA initiative was aimed at becoming an innovative practice or good example of its type; its purpose was to fit into the overarching themes and thus apart from formal plans and procedures.

Integration: The central idea and operating philosophy to integrate was both conceptual and practical. Linking the ecological, economic, social and cultural aspects acted as a spur to lateral thinking and the generation of solutions that cut across existing boundaries in terms of disciplines, departments or sectors.
° The broad notion of sustainability: Sustainability was interpreted as an integrated concept covering also the cultural, economic and the social and not solely seen as ecology based.

° Unconventional coupling: The unusual mixes fostered by the IBA, such as the idea of working in a park; or the combination of slag heaps and public art or coal mines turned into modern design centres creates lateral thinking both in the audience as well as those trying to conceive the idea. The element of surprise in Emscher such as the corridor of innovative architecture that the 100 projects represent cutting through a formerly degraded landscape acts as a stimulus and creates a desire to understand more deeply.

° Indirect control: The power levers were indirect and thus less liable to cause friction. There was the freedom to join in with IBA activities, yet once quality and design thresholds has been met to be part of it but also able to implement projects autonomously. This light touch and independence meant a number of projects, some pre-dating IBA like the Eco-industry park in Hamm, were willing to sail under the IBA banner as it was mutually beneficial.

° Weakness into strength: A key concept was the idea of turning environmental degradation problems into an opportunity to explore new products. This was possible because the Emscher idea did not happen on a blank sheet: the setting up of universities in the 1960’s and the skills and expertise they generated, for instance, provided a significant pre-condition for regional growth. Now the Ruhr area is the biggest exporter of new environmentally friendly coal mining technology in the process creating a new industry. Counterintuitively furthermore the stringent environmental standards drove economic development by forcing companies to come up with solutions.
Overcoming the seeming contradictions, as between high standards and economic viability and its link to economic development jumps one out of linear thinking.

° The pressure of the target date: The special project status of the IBA speeded up the planning process and the time dated scope of IBA focused on achieving targets.

° Maximizing insider/outsider potential: Karl Ganser was both an insider and an outsider. He was previously high up in the Land administration, thus well connected and knew how the system worked; yet he had previously been a planner and architect in Munich and was not bound up in Ruhr culture. The IBA itself was both on the inside track through its connections with government and on the outside by not being part of it. It thus had greater freedom of movement to make something happen.

° Giving value to the idea of industrial culture: What an asset is became re-valued. Industrial detritus became industrial monuments and carriers of culture thus avoiding erasing the peoples' memory. Industrial landmarks became sources of civic pride. The role of the director Ganser was strong in particular in creating this cultural vision.

° An urban R&D zone: Using the IBA as an experimentation zone meant many projects that might have got stuck in planning were allowed. Equally projects such as the estate in Bergkamen designed by women might not have happened. They now have credibility and are replicable. The R&D function was only possible because boundaries were disobeyed.
Project champions and multiplicators: As a time-dated coordinating body of decentralized projects the IBA had no formal institutional link into the future. Many of the official correspondents have crucial roles as unofficial ambassadors, disciples and 'multiplicators' whose long term effectiveness as guardians of the idea remains to be seen.

Branding as the driver: The Emscher Park IBA stands as a brand; a way of addressing urban projects in old industrial areas; a quality label; a sign for innovation; an image or an aura. Much of the IBA' value lies in the power of its brand; IBA branded projects created attention and access to funding. The key task is to maintain the quality of the brand into the future, which is why the standard setting was so important. The IBA brand thus embodies an ethos and symbolic resonance witnessed by projects such as the Duisburg - Meiderich nightly steel factory light show.

The power of symbols: The IBA was very good at using symbols. The designation of the Emscher concept as a park or the concept of 'living and working in the park' or creation of new garden settlements in itself has symbolic resonance and signals aspirations. The word park stands in contrast to polluting industrial degradation. The play on symbolics goes much further: Projects continually contrast old and new, past and future, such as new uses for derelict structures. Setting these contrasts sharply together and creating an interplay between them has been a means of fostering debate.

Pacing devices and staging posts: Using events as catalysts such as garden festivals to build momentum and interim achievements that can be celebrated was an important component to maintain confidence.
° A new urban planning and communications process: With the multiplicators the Emscher strategy making process has created a new network of Emscher type people. This includes also the association of 60 new institutions such as technology centres. The attempt is good yet there is doubt - because of the problem of insufficiently embedding change - that old patterns are being broken.

° Structure versus personalities: The leadership qualities of the director were essential to drive the IBA vision forward. The particular balance between the Land government bureaucracy and the leadership of the IBA was significant: The relative freedom the director Karl Ganser was allowed is unusual, but that is because he was part of the Land structure and could work it. By contrast he was not able to work the local authority structure in the same way and thus had to develop the decentralized approach to avoid having to confront local interests head on.

° The iconic and the everyday: A quite finely tuned balance exists between the iconic and the smaller projects, although many felt the threshold of small projects was too large. The gasometer on the one hand a self-build housing project on the other. Yet the system of landmarks has been successful with the population where grandparents go up landmarks to explain to kids life in the past. Especially poignant is the fact that most industrial landmarks were no-go areas before.

° Attention to different perspectives and niches: The womens' estate design projects are one example of inserting a different perspective on development allowing the full flowering of an idea to unfold in its entirety. The same is true for some of the innovation
centres such as the Eco-industry park. Obvious as these ideas are, rarely is it possible to follow through consequently on one idea.

° Each project is a learning device: A large proportion of projects were not seen as end statements in themselves, but as zones where experiments needed to be monitored and evaluated. Each new self-build housing project builds previous ones; each new technology park equally so. And the vision of continual ecological improvement overlaying everything meant the IBA project automatically has had a learning and reflection device embedded in it that can permanently drive innovation. But what happens to this learning without the IBA as a co-ordinator?

**Concluding comment**
The Emscher project was a deliberately planned cluster of projects that simultaneously pursued goals of economic restructuring, physical rehabilitation and environmental improvement: What makes the IBA outstanding is the synergy between them, which makes the whole achievement much greater than the sum of the parts. The project has strong creative elements undoubtedly, yet the extent to which Emscher has become the seedbed for an innovative milieu remains in the air. A start has been made, but can a series of projects without deepseated culture change and extensive involvement of people over a long term or substantial resources from outside, such as the government, carry creative momentum forward? The key question is: What would the situation have been without IBA Emscher Park? At a minimum the visual impact of the landscape and its image would have been far worse. Clearly projects such as CentrO, the massive shopping centre have been sucked into the area, but is it innovative? A direct comparison can be made between the development Emscher and Ruhr region and North Yorkshire as most of the cities are twinned with each other and they have a similar industrial history.
There the link between ecological renewal and economic development has simply not been made in the first place and in the meantime most industrial heritage has disappear. Where will their identity come from, how will it be nurtured when memory has been erased?

The current 10 year IBA programme is in 43 cities in Saxony-Anhalt in the former Eastern Germany and can be researched under www.iba-stadtumbau.de/index.php?iba_in_saxony-anhalt