

The Blind Spot. How Three Cities in Three Different Countries Counteracted the Crisis in the 1970s

By Per Åke Nilsson*

This article describes how the world-wide economic crisis in the 1970s hit three towns, Kiruna, Holstebro and Dortmund and how planners in these cities counteracted the crisis. Their economic bases, iron ore, farming and steel, eroded and caused mass unemployment. More or less unconsciously, the planners used the so called butterfly theory, here called the theory of the blind spot. They had to meet unexpected problems with unexpected actions. The study started more than thirty years ago. By following up today what happened over time, it has been possible to see the effects of the counteractions brought about by politicians, industry and public planners.

Introduction

The background for this article lies in the aftermath of the worldwide recession that occurred in Europe from 1970 to 1985, especially within regions with a traditional industry. Paasi (2011) recognizes regions as a matter of identity, network and boundedness and the recession caused a questioning of this perceived identity.¹ Both those in power and ordinary people had to reconsider what actually the base for the industry of the region was, in other words, the identity of the region.² The three regions in this study, Kiruna in Sweden, Dortmund in Germany and Holstebro in Denmark, are typical for this reconsidering. Kiruna had its identity in the boundedness of iron ore deposits, Dortmund had its identity in steel production, which in turn had its existence on coal deposits in the area, and Holstebro had its existence based on the surrounding agriculture. All these identities became questioned by the world-wide economic crisis in the late 1970s: Kiruna by a decreasing demand of iron ore, Dortmund of an old-fashioned technology incapable of meeting new demands which in turn locked the coal pits, and Holstebro by a demographic crisis due to the decreased workforce within agriculture, which resulted in youngsters leaving the town.

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1. A. Paasi, "The region, identity and power," *Procedia - Social and Behavioral Sciences* 14, (2011): 9-16.

2. J. Gren, *Den perfekta regionen?* (Lund: Studentlitteratur, 2002); V. Terpstra and B. Simonin, "Strategic Alliances in a Triad," *Journal of International Marketing*, no.1 (1993): 4-25.

A study based on these presumptions was conducted by the author on cases from these economically stricken regions.³ The study was based especially on how the actors involved became forced to cooperate by interactive planning to counteract the problems caused by the crisis. By cooperation, they realised that the way out of the crisis probably had been hidden behind a dead angle, caused by their own perception of the identity of the region. This so called blind spot in their eyes had prevented them from seeing alternative solutions.⁴

After 25 years, it should be time to update the study and check what happened with these ideas of interactive planning.

Theory

New Paradigms

From the middle of the last century, especially during the 1970s, a vivid debate within planning science has questioned the leading scientific method *positivism* for its inability to study human behaviour.⁵ The background for that criticism was the insight that the tool-box for positivism, created by natural scientists, did not contain concepts suitable for a study of human behaviour. Studies in natural sciences were based on ontology with focus on “dead” material, so called “objective” research. This was not applicable to social science, critics claimed, since it dealt with studies on humans conducted by humans. Social science ontology, by its very nature, had to contain a lot of bias, based on generalizations out of case studies, containing so called “soft” values.⁶

Planning theory, with its mix of both natural and social sciences, was originally not much affected by that criticism of positivism until the 1980s. Within planning, the general view on development studies was how to find, detect and formulate the linear connections between cause and effect without social or moral considerations, so called top-down planning. This fitted in very well with positivistic guidelines.⁷ Good planning resulted, by its very nature, in good living.

3. P. Å. Nilsson, *The success-story of Kiruna* (Östersund: MidSweden University, 1988).

4. P.Å. Nilsson, “The Blind Spot,” *Razvoj Development Journal* VI (1991): 37-50.

5. J. Schumpeter, *Capitalism, Socialism and Democracy* (London: Routledge, 1943); T. Kuhn, *The Structure of Scientific Revolutions* (University of Chicago Press, 1962); M. Polanyi, *The Tacit Dimension*. (New York: Anchor Books, 1967); T. R. Moore, “Why allow planners to do what they do?” *Journal of American Institute of Planners* 44 (1978): 387-389; A. Giddens, *Central Problems in Social Theory*. (London: MacMillan, 1979); P. Adey, *Mobility* (London: Routledge, 2010).

6. M. Polanyi, *Personal knowledge. Towards a Post Critical Philosophy*. (London: Routledge, 1958); C. Lévi-Strauss, *Anthropologie Structurale* (Paris: Plon, 1974); B. Flyvbjerg, *Rationalitet og magt. Det konkrete videnskab* (Aalborg University, 1991); J. Urry, *Sociology beyond societies* (London, Routledge, 2000).

7. G. Myrdal, *Theory and Undeveloped Regions* (London: Duckworth, 1957); R. L. Ackoff, *A Concept of Corporate Planning*. (New York: Wiley, 1970); Storper and B. Harrison,

That presumption was questioned by many critics, especially within the concept of *advocacy planning*, which appeared already in the 1960s, inspired by the civil rights movement in the USA. The concept stated that the striving for a strict linear connection between cause and effect was not likely to be achieved in social science, since the planner cannot, as a human being act in a value-neutral way.⁸ To diverse interests in society, always found in a planning process, planners should be forced to take position. According to the advocacy planning principle, this positioning should be on the so called “right” side. Since many interests were contrary to each other, *interaction* between actors became a necessary ingredient in a planning process to identify what decisive common interests were on the “right side”. To cooperate and show respect for each other, despite disagreements, was regarded as a necessity.⁹ At the bottom of these, mostly left-wing discussions, it is possible to find a right-wing debater, Hayek (1960),¹⁰ who predicted a situation where only a constitution could foster development. The human mind has cognitive shortcomings and is by that not capable of finding the right development trend alone. Only in a collective based on liberty, it is possible to find a rational way forward.

For after-war planners in the Western World, used to a very favourable planning situation due to the continuous increase of welfare and political stability, the conditions in the 1970s with its worldwide recession became a planning night-mare. After 1973, people’s real income was reduced for the first time after the war and planning apprehended to become a worthless activity. The national 5-year-plan in Sweden for economic development, launched in 1979, became obsolete before it left the printing house due to the unpredictable political situation.¹¹ The shocking insight became also apparent in Germany when they realised that the *Ruhrgebiet* no longer was the backbone of both German and European economic growth.¹² In Denmark, the rationalising of the agriculture resulted in a substantially smaller need for manual workforce.¹³

In that situation, the concept of advocate planning inspired planners to search for other types of planning. “Planning with uncertainty”, a

“Flexibility, hierarchy and regional development: The changing structure of industrial production systems and their forms of governance in the 1990s,” *Research Policy* 20 (1991): 407-422; T. B. Lawrence and N. Phillips, “From Moby Dick to Free Willy: Macrocultural discourse and institutional entrepreneurship in emerging institutional fields,” *Organization* 11, no. 5 (2004): 689-711.

8. P. Davidoff, “Advocacy and pluralism in planning,” *Journal of the American Institute of Planners* 28 (1965): 331-338.

9. J. Friedmann, *Planning in the Public Domain: From Knowledge to Action*. (Princeton University Press, 1987); J. Forester, *Planning in the face of power* (California University Press, 1989).

10. F. A. Hayek, *The Constitution of Liberty* (University of Chicago Press, 1960).

11. Å. Andersson and U. Strömquist, *K-samhällets framtid* (Stockholm: Prisma, 1988); O. Eriksson, *Bortom Storstadsideerna* (Stockholm: Carlsson, 1989); K. Nilsson, “Place reinvention by real changed image,” *Northern Perspectives* (1995): 33.

12. M. Castells, *High Technology, Space and Society* (Washington: Sage, 1985); G. Hennings, R. Kahnert and K. Kunzmann, *Restructuring an industrial city in Germany: The case of Dortmund*. (Universität Dortmund, 1987).

13. L. Lindeborg and L. Lindkvist, *Kulturens kraft* (Stockholm: SNS, 2010).

circumscription for “planning without knowing anything”, extorted a new view on planning. One of these new views, implementation planning with roots in advocate planning, changed the previous top-down planning to an inclusive and bottom-up planning.¹⁴ The scarce interest for evaluation also had to be called in question.¹⁵

Chaos Theory

Critics of positivism also came from researchers within its own ranks, like physicists and chemists Prigogine, showed how chaos can develop to order and vice versa and together with unexpected the existence of nonlinear dynamics and non-equilibrium in nature.¹⁶ Thompson (1982) and Careri (1984) followed up the chaos theory by focusing on instability in nature.¹⁷ Blinder & Budd (1979), as economists, had blamed the traditional economy for creating the crisis in the middle of the 1970s, pointing to different shocks in the economy due to unexpected results of for example the liberalization of the monetary policy.¹⁸ Piore & Sabel (1984), also economists, followed up Blinder’s reasoning and described the shortcomings of traditional economic theories to explain a non-linear development. The authors found the causes of the economic critics in the 1970s in social unrest at the end of the 1960s and the liberalisation of economic transfers at the beginning of the 1970s and together with the huge increases in oil prices, this disorder caused an un-predictable and inexplicable situation.¹⁹

The new ideas about chaos theory showed among other things how spontaneous or irreversible actions from outside might cause unpredicted development directions.²⁰ In contrast to the *domino* effect, which is based on known characteristics, the *butterfly* effect theory, coined by Edward Lorenz, demonstrated that a slight change of irreversible and unpredicted actions in a

14. Giddens, *Central Problems in Social Theory*, 1979; E. A. Brugger, “Endogene Entwicklung: Ein Konzept zwischen Utopie und Realität,” *Informationen zur Raumentwicklung*, Heft ½ (1984): 1-19.

15. N. Lichfield, *Community impact evaluation* (London: UCL Press, 1966); R. L. Ackoff, “Resurrecting the future of Operational Research,” *Journal of Operational Research Society* 30, no. 3 (1979): 189-199; P. A. Sabatier and D. Mazmanian, “The conditions of effective implementation: a guide to accomplishing policy objectives,” *Policy Analysis* 5 (1979): 481-504; A. Wildavsky, *Speaking truth to power: The art and craft of policy analysis* (Boston: Little Brown, 1979).

16. I. Prigogine and G. Nicolis, *Self-Organization in Non-Equilibrium Systems* (Wiley, 1984); I. Prigogine, and I. Stengers, *Order out of Chaos: Man's new dialogue with nature* (Flamingo, 1984).

17. Thompson, J. (1982). *Instabilities and catastrophes in science and engineering* (Chichester: Wiley); G. Careri, *Order and disorder in matter* (California. Benjamin Cummings, 1984).

18. A. Blinder and J. Budd, *Economic Policy and the Great Stagflation* (New York: Academic Press, 1979).

19. M. Piore and C. Sabel, *The second industrial divide*. (New York: Basic Books, 1984).

20. E. Lorenz, “Deterministic Non-periodic flow,” *Journal of the Atmospheric Sciences* 20 (1963): 130-141; R. Thom, *Stabilité structurelle et morphogénèse - essai d'une théorie générale de modèles* (Massachusetts: Benjamin, Reading, 1972).

process may cause an enormous outcome, exemplified by the presumption that a wing-beat of a butterfly in the Caribbean can, under certain conditions, cause a chain reaction ending for example in a storm in Europe. How to predict these unintended and spontaneous inputs into a process became a considerable undertaking for planners to figure out. In order to predict such processes, it required a preparedness to embark upon the almost impossible undertaking to find out everything about the conditions around the points of departure of the process even if these causes normally were hidden for the observer. Planners had hence to look at circumstances beside and behind the occurrence of the process, which required a sense for being unconventional. Some saw a similarity with the biophysical concept called the “blind spot” in the eye which hides certain things where the optic nerve passes through the optic disc.²¹

The striving to find these hidden objects forced planners to see hidden causes of development.²² A shift of focus to what is un-natural and non-traditional to observe was necessary. The main obstacle for that lies in an infrastructure consisting of networks which have been established by heavy investments, combined with thinking, unlikely to change its frames.²³

Method

The aim of this study is to exemplify how the *theory of blind spot* has had an impact on an interactive planning situation and its development over time, coping with three unexpected and different economic crisis in three different municipalities in three different countries. In that study, the following principles have been followed, as designed in Ackoff's paradigm:

- *The participative principle.* The result of planning is not merely the use of a plan but more the engagement in a plan and a planning process.

21. N. Alderman and A. Thwaites, “Some problems of stimulating technological change at the local level,” *Razvoj Development Journal* VI, no. 1 (1991): 61-79; Nilsson, “The Blind Spot. A Contribution to a new Type of Regional Policy” (1991): 37-50; L. Leydesdorff, “The triple helix model and the study of knowledge-based innovation systems,” *International journal of contemporary sociology* 42, no. 1 (2005): 1-16; P. Cavanagh, “The flash grab effect,” *Vision Research* 91 (2013): 8-20.

22. G. Thörnquist, *On Fragmentation and Coherence in Regional Research* (Lund University, 1979); Brugger, *Endogene Entwicklung: Ein Konzept zwischen Utopie und Realität. Informationen zur Raumentwicklung*, 1984; M. Porter, *The competitive advantage of nations* (London: MacMillan, 1990); T. Claydon and J. Beardwell, *Human Resource Management – a contemporary approach* (Essex: Pearson Education Ltd, 2001); R. Currie, “Determining Stakeholders for Feasibility Analysis,” *Annals of Tourism Research* 36, no. 1, (2009): 41-63; K. Nilsson, *Place reinvention by real changed image.* (Place reinvention: Northern Perspectives, 2009), 33; Adey, *Mobility*.

23. W. Stöhr and D. R. Fraser, *Development from above or below? The dialectics of regional planning in developing countries* (Chichester: Wiley, 1981); A. Pred, “Place as historically contingent process,” *Annals of the Association of American Geographers* 74 (1984): 279-297; Alderman and Thwaites, “Some problems of stimulating technological change at the local level,” 61-79.

Especially the participation by those concerned and/or “struck” by the planning has been studied and if their involvement in that case has unveiled hidden problems associated to the plan.

- *The principle of continuity.* The cyclic character of the planning processes has been studied, especially if it has generated sustainable development directions.
- *The holistic principle.* The reactions and impact of interests not directly concerned by the planning process have been studied like the impact on the planning process of those units of administration or/and organisations and companies outside the public sector, and if these have contributed to reveal hidden problems and outcomes.

The method is descriptive, based on documents and reports.

Results

The Situation during the 1970s

Kiruna

Background

Kiruna is Sweden’s northernmost town, 140 km north of the Arctic Circle. The only reason for its location is the findings of iron ore there. The mining started in pure wilderness in 1898 and a 250 km long railway was opened four years later to the year-round ice-free Atlantic harbour in the Norwegian Narvik. The mining company LKAB (Luossavaara-Kirunavaara Aktiebolag) dominated Kiruna since the beginning almost totally. Its first manager was a conservative and patriarchal man with concerns about town planning and the social situation of the inhabitants. This implied that the company financially supported the city administration with housing, schools and medical care up to the 1950s.²⁴

In 1975, Kiruna was struck by the worldwide recession by a less demand for iron ore. To meet that shrinking demand, the company gradually stored unsold ores at the Narvik shipping port in Norway, and when it became overfull, in Kiruna. In 1983, even the store in Kiruna became full so the company had to reduce its production to 50% (Figure 1) and the work-force from 3 000 employees to 1 200. The number of inhabitants in the city shrunk from 31 000 to slightly more than 25 000. Unemployment trebled to a level of 10 % and 500 empty municipality-owned houses.²⁵

24. L. Brunnström, *Kiruna- ett samhällsbygge i sekelskiftets Sverige*. Dissertation (Umeå University, 1980); F. Backman, *Making place for space: A history of "Space Town" Kiruna 1943-2000*. Dissertation (Umeå University, 2015).

25. Nilsson, *The success-story of Kiruna. A Comparative Study on Regional Development*; I. Liljenäs, *From mine to outer space: the case of Kiruna* (Umeå University, 1992); Backman, “Making place for space: A history of "Space Town" Kiruna 1943-2000”.

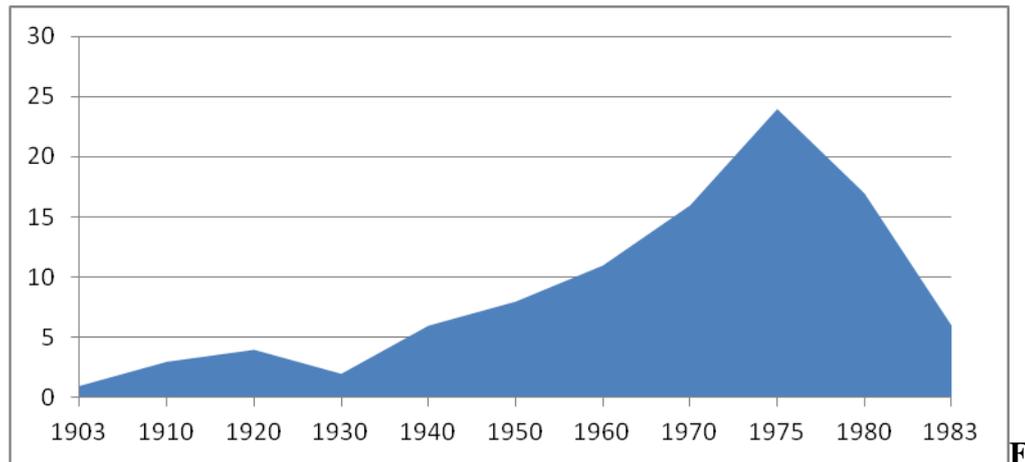


figure 1. *From Kiruna Exported Iron Ore 1903-1985*

Source: Nilsson 1988.

But Kiruna has another quality. The high latitude is very favourable for northern light studies and for reception of satellite information. This has been utilized and exploited since 1943 and in 1957 a geophysical observatory was built in Kiruna²⁶. The first Sputnik satellite in Russia in 1957 started an activity to expand satellite studies in the Western world and in 1964, the European Space Research Organisation ESRO established, together with the Swedish state, a rocket base in Kiruna: *Esrange*.²⁷ When the crisis in the 1970s occurred, the space track had just started with about 200 employees, an almost negligent amount compared to the workforce of LKAB, but the intention was to develop it by the possibility to receive satellite information (Figure 2). Kiruna has a unique position close to the North Pole since all satellites had to pass there.²⁸

26. A. Brekke, A. and A. Egeland, *The northern light: from mythology to space research*. (Berlin: Springer, 1983); J. Krieger, A. Russo and L. Sebesta, *A history of the European Space Agency 1958-1987* (Noordwijk: ESA, 2000); R. Launius, "The historical dimension of space exploration," *Space Policy* 16 (2000): 23-38.

27. B. Hultquist, *Space, science and me: Memoirs on Swedish space research* (Noordwijk: ESA, 2003).

28. N. Worms and G. Källstrand, *A short history of Swedish space activities* (Noordwijk: ESA, 2007); A. Siddiqi, *The red rocket's glare* (Cambridge University Press, 2010); Backman, *Making place for space: A history of "Space Town" Kiruna 1943-2000*.

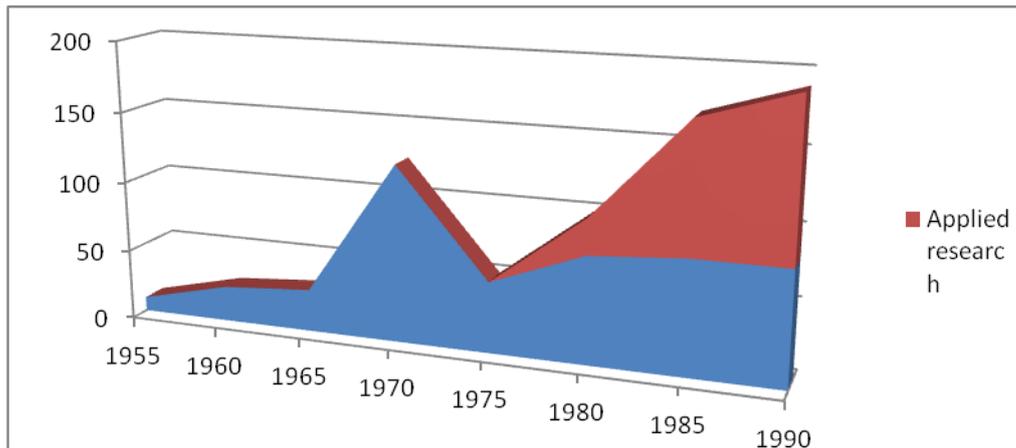


Figure 2. *Development of Number of Persons Involved in Space Activities 1955-1990.*

Source: Nilsson 1988.

Reactions

When LKAB reduced its capacity and fired 1 800 employees, the planning bodies concerned were the administrations of the mining company and the municipality. From having had an almost dominant impact even on town planning, the mining company now realised that the mutual dependency shifted for them from being a leading partner to becoming an equivalent partner concerning the planning. This consciousness led to a support of an appointment of a joint delegation between company and administration. There was a clear insight from both company and city that the situation required a diversification of economic structures in Kiruna as a solution of the problem. The Swedish government assisted the delegation with a substantial sum of regional money with free hands to use it, which made it possible to promote the interaction between different sectors of the town.²⁹

The mining company offered space for a development centre in a shut-down mine building, which developed to a “green-house” for newly started companies. Another joint project was established with the goal to develop and increase the capacity of existing enterprises and to locate new enterprises to Kiruna. In 1982, another project started with courses in entrepreneurship where the participants were paid a salary, which resulted in 40 new companies. The private enterprises were given possibilities to set up a local financing company to offer access to risk-capital. A diversification of the economic structure was in focus.³⁰

State money was also allocated to support education and research, especially within the space sector. An agreement between mining company and school administration was signed, based on a promise by the company to offer one full year payment for at least 1 000 of the dismissed employees if they

29. L. Engström and H. Ohlsson, “Utvärdering av Malmfältsdelegationen,” *Economic Studies*, no. 163. Umeå University (1985).

30. *Ibid.*

agreed to be placed behind a school desk. This became a good opportunity for many to shift track and direction. Several started a career within the space sector. This was facilitated by the fact that some of the staff at the space observatory shared positions both at the space centre and at the secondary school. The new education possibilities fit them very well and facilitated a rapid start both at a secondary school level but also at a university level. A master program within space research was established in cooperation with the University of Gothenburg aiming at a civil engineer exam.³¹

Dortmund

Background

Dortmund is located in Nord-Rhein Westphalen at the Eastern edge of the *Ruhrgebiet*, the main industrial complex in Germany. During the last two hundred years, the region around the small river Ruhr on its way to Rhein, has been a powerful centre for coal mining and steel production, dominated by the Hösch Company in Dortmund. The population development reached its first peak in 1929 but during World War II, the city lost 200 000 inhabitants. A second peak appeared in 1965 with over 600 000 inhabitants (Figure 3).³²

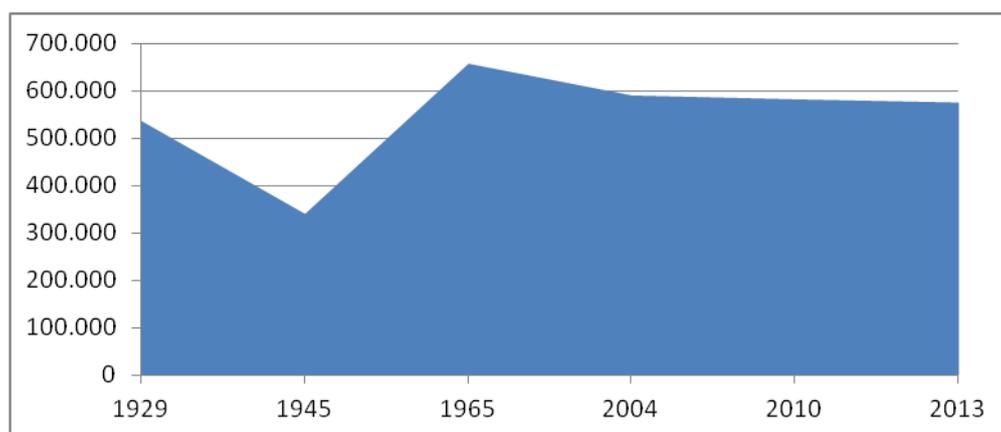


Figure 3. Population Development in Dortmund 1895 - 2013

Source: Nilsson 1988.

31. L. Engström, H. d:o Ohlsson, N. Worms and G. Källstrand, *A short history of Swedish space activities* (Noordwijk: ESA, 2007); Backman, *Making place for space: A history of "Space Town" Kiruna 1943-2000*.

32. Kommunalverband Ruhrgebiet, *Strukturanalyse Ruhrgebiet. Wirtschaft im Ruhrgebiet zwischen Strukturwandel und Politik*, 1982; J. Bömer, E. Lürig, Y. Utku, and D. Zimmermann, "Stadtentwicklung in Dortmund seit 1945," *Blaue Reihe* 135. Institut für Raumplanung, Technische Universität, 2013, 59-72.

Reactions

The world recession during the 1970s hit Dortmund in a very hard way, both by the decreased demand of raw steel and, as a result of that, also the demand for coal. Dortmund became the German city with the highest unemployment rate, 17%. Out of a labour force of 275 000 employees, about 30 000 were released. The Hoesch Company had not updated its methods for steel production. Instead the diversification of products and productions, focus was still on raw steel, produced at more or less outdated production lines. The company decided to update the methods by building a new generation steelwork in 1981 but at that time, the company was simply at the edge of bankruptcy. The demand for coal disappeared and the last coal pit was closed in 1987. The city was no longer a coal mining town.³³

However, Dortmund's excellent infrastructure position with access to a large regional market and excellent education facilities still existed, despite all the negative factors. And like in Kiruna, a joint undertaking of the planning of the town had to be undertaken, diminishing the almost absolute control of the Hoesch Company by forming a joint task group, which forced the council members to accept that they had to get alternatives to the Hoesch Company. For the politicians, however, new investments should anyway be in more heavy industries.³⁴

During the management by the Krupp family of the "Ruhrgebiet", higher education was not allowed in the "gebiet". Workers should remain workers. The first universities in Dortmund were not established until 1965. A Technical University was established in 1968 and later on, a Technology Centre (Fachhochschule) in 1972. These local universities tried to convince the city board to look at alternative activities since the world economy had changed its structure from heavy industry to more market oriented activities facilitated by the digital revolution.³⁵

The European Social Fund and the university staff convinced the board to ask for support from the EU for a remake of the special city districts where there were a lot of unemployed young people.³⁶ The most pregnant idea of the revitalization of the city emanated from the department for town planning at the technical university. Among other suggestions, the assumption was put forward that if it had been possible to contaminate the city and its soil with coal

33. Hennings, Kahnert and Kunzmann, *Restructuring an industrial city in Germany: The case of Dortmund*.

34. Ibid.; K. Dörre and B. Röttger, *Im Schatten der Globalisierung- Strukturpolitik, Netzwerke und Gewerkschaften in altindustriellen regionen* (Wiesbaden: 2006).

35. Thom, *Stabilité structurelle et morphogénèse - essai d'une théorie générale de modèles*; Piore and Sabel, *The second industrial divide*.

36. M. Fleischhauer, *Bodenpreisentwicklung und Nutzungswände - Beispiel Dortmund*. Arbeitspapier 168 (Dortmund Universität, 1999); R. Staubach, *Von der erhaltenden Stadsneuerung zur integrierten Stadtteilentwicklung*, Dortmund Universität, Dortmund Beiträge zur Raumplanung Bd 100, 2000, 84-93; J. Beyer and C. Frese, "Die Bedeutung des Europäischen Sozialfonds in der Stadt Dortmund für eine moderne Beschäftigungspolitik," in *Stadtentwicklung in Dortmund seit 1945*. Institut für Raumplanung, Technische Universität, Blaue Reihe 135, 2013, 119-136.

dust, it should also be possible to restore it to its former shape from the dirtiest city in Germany to the most attractive one. This resulted in a decision of the board to develop possibilities, together with the Technological University, for becoming the leading one in Germany in advanced environmental technology for restoring a polluted environment.³⁷

Implementation of new establishments was facilitated by a commercial chamber. The political parties engaged after a while in a systematic break up of traditional structure. In 1985 the Technology Centre Dortmund started to host visiting researchers and planners from different disciplines such as technology, IT and business consulting.

When the politicians realized that they had to plan for the future in a totally different way than what they had been done up till now, they focused on technological change to replace the out-dated production of the raw steel production of the Hösch Company. The plans were manifested in three visions: *Dortmund today*, *Dortmund tomorrow* and *Dortmund the day after tomorrow*. The first vision aimed at *ad hoc* activities which should secure the survival of today's Dortmund. The second vision implied an adaption to new and modernised technology and the third vision had focus on very specialised, salient high technology, supported by a considerable investment in the Dortmund University of technology. The city had to transform to a city as a centre for modern technology and service industries.³⁸

One way to remake Dortmund to an attractive city was a decision to support culture. As an example, the planning department at the university showed figures saying that the "music industry" employed more people in Germany than the steel industry, if production of music instruments, concert halls, written music etc. was included. Another example was a change of an abandoned coal pit to a cultivation centre, a military barrack became a commercial development centre and the establishment of a new park in a worn out housing.³⁹

Holstebro

Background

Holstebro is a small town in Denmark on the west coast of Jutland. It is located in the middle of an agricultural landscape and with its town council for a long time is dominated by farmers. The structural change within agriculture in Denmark during the 1960s had a negative impact on Holstebro. The city was not prepared for the change and had few ideas of what to do.

37. K. Kunzmann, K. "Hinterraumplanung"- *Ein neuer Studiengang an der abteilung Raumplanung* (Institut für Raumplanung, Universität Dortmund, 1979); U. Küpper, *Über die Grenzen hinaus Bonn* (Mehr Beschäftigung, 1997), 96-108.; Hennings, Kahnert and Kunzmann, *Restructuring an industrial city in Germany: The case of Dortmund*.

38. Brugger, "Endogene Entwicklung: Ein Konzept zwischen Utopie und Realität."

39. Hennings, Kahnert and Kunzmann, *Restructuring an industrial city in Germany: The case of Dortmund*; Lindeborg, *Kulturen som lokaliseringfaktor*.

The population growth in Holstebro from 1950 to 1990 was from 18 000 to 35 000 but that growth does not show the rate between urban and agrarian populations or between youngster and adult persons. Many from the agrarian area moved into the city due to the mechanisation of the agriculture and youngsters left town due to lack of a future there.

A lot of unemployed people commuted to nearby industrial towns like Herning and the city centre became more or less depopulated during day-time (Regionplan Nordjylland 1983; Holstebro Municipality 2011). Holstebro got the label as Denmark's most boring city. The politicians had to reconsider their politics. The question was only how.

Reactions

Like in Kiruna and Dortmund, there was also in Holstebro a symbiosis between the agrarian enterprises and city council members. The farmer dominated board had to do something to stop the leakage of young inhabitants and the commuting to Herning. The coordination of the planning actors within the city administration became necessary. The mayor decided therefore to establish a task group consisting of the city council and the persons from the technical and economic departments.⁴⁰

The task group realised that in order to stop the outflow of the youngsters, the town had to become more attractive. The first activity for that was an effort to support culture and if this became successful, it could result in job opportunities and thereby decrease the commuting. The task group started this effort by a decision to purchase a statue. Since the knowledge of culture among the politicians was limited, a man from the administration, familiar with art, was sent to buy a statue. At the same time, the national government in Copenhagen, initiated by the minister of culture, decided to elect three towns as leading "culture towns" of the country. Holstebro was one of the applicants and during the qualification round, only Holstebro stayed as an applicant and got the whole sum. This facilitated the decision to buy the statue.

The purchase was a statue of Iacometti, "Woman on a Cart", and it was bought in 1966. The farmers thought that they got very little out of the rather substantial sum spent on this statue. For most of the citizens, the lady looked famished and miserable. People put food packages at the base of her and many were rather embarrassed. But since money already was spent, the board had to make most out of it and international press was both impressed and puzzled over the fact that a Dogpatch town like Holstebro had put a statue of Iacometti on the city square (Figure 4). When the politicians realised the actual value of the statue, millions of DKK, they rapidly changed attitude and became very proud of the capture.⁴¹

40. Regionplan Nordjylland, Aalborg: Nordjyllands amt-kommune (1986); Holstebro, *Tal og trends* (Holstebro Kommune, 2011).

41. O. Haug, K. Jacobsen, M. Järvi, P. Å. Nilsson, T. Palsson, P. von Pfaler and G. Östbye, *Det jyske under – myt eller verklighet* (Stockholm: Nordplan 1990, 1990); L. Lindeborg, "Turning the tide with 'Woman on a Cart'. The amazing case of Holstebro," in *The value of arts and culture for regional development*, (ed.) L. Lindeborg and L. Lindkvist (London: Routledge, 2013).



Figure 4. *Woman on a Cart*

Source: Photo: Lena Wikström.

In the year 1961, twelve artists had arranged a culture-week in Holstebro with up to 2 000 visitors. Now, the political task-group inspired individuals and companies to follow up that event and fill the empty spaces of the almost abandoned city centre. Parallel with the decision to by the statue, a house of culture, *Holstebrohallen*, was built. The audience became the biggest performance space on the Danish West bank. Famous performers like Dario Fo, Arthur Rubinstein and Leonard Cohen visited the hall. The idea was that a good culture environment would attract entrepreneurs and industries by its very existence (Holstebro Municipality Figures and trends 2011).

The year after, an open art museum was established at a bourgeois villa bought by the city with a permanent exhibition of Danish art from after 1930. Later on, the exhibition also included ethnic art from all over the world, photographs and craft objects. A Norwegian director, Eugenio Barba, was on personal relations invited by the mayor to buy a farm outside Holstebro. He came and established an experimental theatre there, *Odin Theatre*, to the astonishment of the surrounding neighbours. After being invited to the biennale of Venice, where he presented his experimental theatre, his barn was visited by the avant-garde theatre directors from all over Europe.⁴²

The task group realised that it had to be expanded by planners from the whole society with ideas and experiences from cultural events. Now, when they had put forward culture, environment and good architecture, the city attracted both blue and white collar skilled persons. Persons from outside cities started to commute to Holstebro and their number overrated out-commuters

42. L. Lindeborg, *Kulturen som lokaliseringfaktor* (Stockholm: Ds 1991:22, 1991).

with 300 persons in 1970 and this figure doubled to 600 in 1987. Self-confidence among the citizens became a result of the new culture policy.⁴³

The Situation 2014

Kiruna Renewal

In 2014, 23 000 people live in Kiruna, slightly less than 1975 (Figure 5).

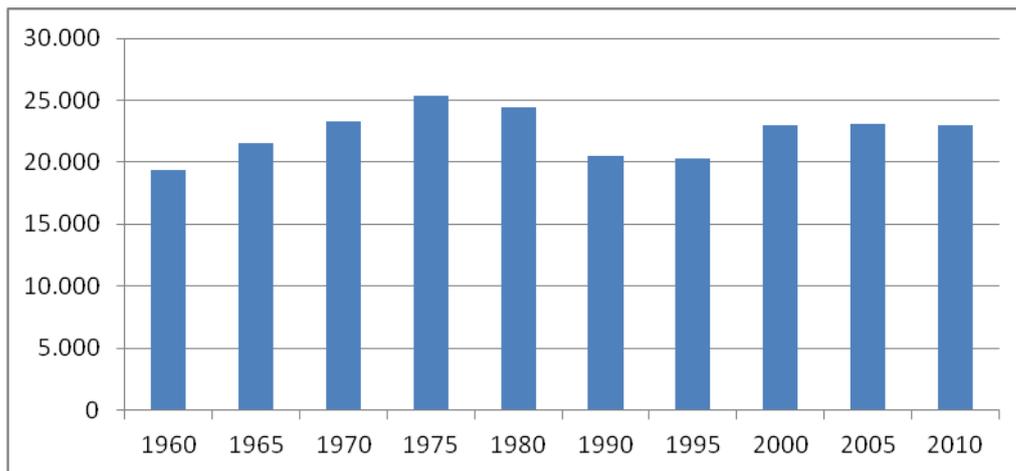


Figure 5. *Demographic Development 1987 – 2010*

Source: Statistic Yearbook Denmark.

Paasi (2011) defines, as noted in the Introduction, a region as a matter of identity, network and boundedness, a horizontal definition.⁴⁴ Backman (2015) also finds a vertical definition where city-buildings, the subterranean mine, and the heaven with the space research, form a special entity which also can be called a region.⁴⁵ The start of the space track in 1957 with the Swedish Institute of Space Physics (IRF) accomplishes such a vertical region (Figure 6) even if the space track wasn't meant to become a diversification of the mining town image of Kiruna, just a side kick due to the occurrence of the Northern light.⁴⁶

43. Lindeborg, "Turning the tide with 'Woman on a Cart'. The amazing case of Holstebro."

44. Paasi, "The region, identity and power."

45. A. Jaworski and T. Crispin, *Semiotic landscapes: Language, image, space Continuum* (International Publishing Group, 2010).

46. Backman, *Making place for space: A history of "Space Town" Kiruna 1943-2000*.

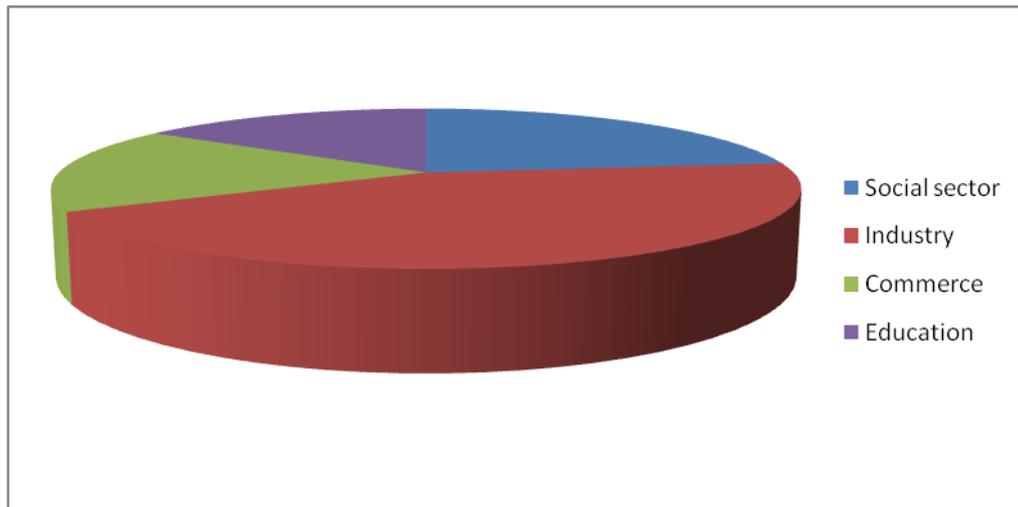


Figure 6. *Employed 2011 in Kiruna by Sector*

Source: Kiruna Community.

However, the establishment of the Esrange Space Center in 1966 by ESRO (European Space Research Organisation), made the space track visible. Its aim was to establish a European co-ordinated programme for peaceful space research, combined with advanced research for technological development, and to support industry in the member countries. A great number of rocket projects were executed between November 1966 and June 1972.⁴⁷ The development had 5 employees in 1957 and when Esrange started, there were 180 employed at the base.

In 1974 Esrange Space Center, the facility for scientific balloons, plays since 1978 an important role in various satellite projects and has today a world leading position in exercising control and supervision of satellites. In 2014, IRF cooperates with the Universities of Luleå and Umeå as well as with national and international higher education. IRF is also involved in the frontline of global space research with instruments circulating or on their way to Mars, Venus and Saturnus. Since 1996, IRF has also had an atmospheric research programme with focus on studies of atmospheric dynamics, transfer of mass and energy between different regions of the atmosphere, stratospheric ozone and seasonally specific stratospheric and mesospheric clouds, particularly in the Polar Regions in the Arctic and Antarctica.⁴⁸

In the meantime, the iron ore production in Kiruna survived the crisis and actually rocketed in iron ore production. The company met the demand crisis of ore by product development. They abandoned the raw ore and made pellets of it by a new process. This required an establishment of a new, costly, establishment. This was regarded by a lot of expertise as an almost lunatic activity during depression but actually it saved the production and increased

47. Hultquist, *Space, science and me: Memoirs on Swedish space research*.

48. U. Brändström, *The Auroral Large Imaging System* (Dissertation Umeå University, 2003); Nilsson, "Place reinvention by real changed image"; Fördel rymd, *Om Rymdområdet i Sverige*. (Rymdagendan, 2011); Backman, *Making place for space: A history of "Space Town" Kiruna 1943-2000*.

the amount of ore dug up from the mine. The company passed the peak of year 1975 both concerning the produced ton iron ore, 25 000 000 tons aiming at 25 to 40 million in 2015, and the number of employed, from 3 000 to about 5 000. The mining company was convinced that such flexibility in planning, based on knowledge, environmental awareness and innovative minds, would constitute future development.⁴⁹

Dortmund Renewal

The population of Dortmund has not increased after the crisis but the structure of the population has, however, changed (Figure 7). Younger people (18 to 25-year old) in particular come to settle in Dortmund mainly because of its universities or other education-related activities

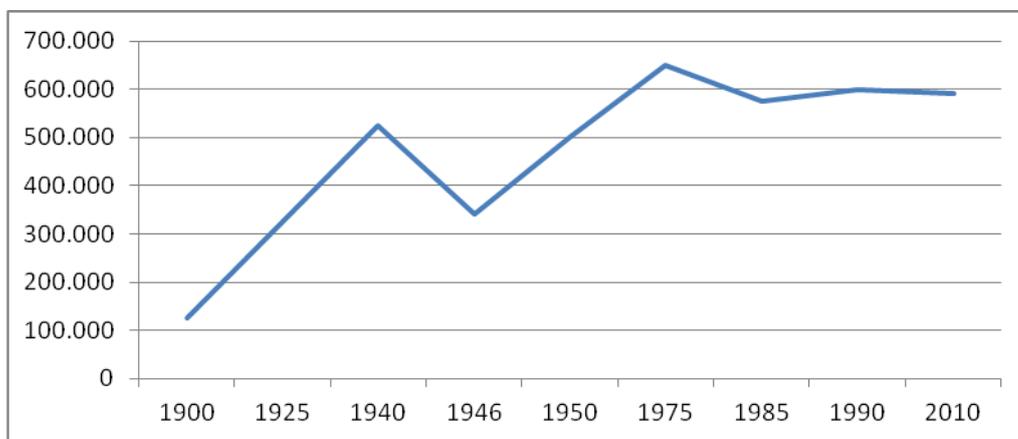


Figure 7. Demographic Development in Dortmund 1987 -2010

Source: Bömer et al.

The objectives proclaimed during the crisis, like an accelerated technological development and improvement of environmental conditions, have been met with several activities.

Concerning the technological acceleration, Dortmund is now home to a number of medium-sized information technology companies, many linked to the local university *Technologie Zentrum Dortmund*. The city works closely together with research institutes, private universities, and companies to collaborate on the commercialisation of science initiatives. The academic world is an important feature of the city, attracting about 45,000 students. The *Technische Universität Dortmund*, founded in 1968, dominates with departments for natural sciences, engineering, economics and humanities.⁵⁰

49. M. Eliason and D. Storrie, *The Echo of Displacement WP* (Institute for Social and Economic Research, 2004-20, University of Essex, 2004); Backman, *Making place for space: A history of "Space Town" Kiruna 1943-2000*.

50. J. Bömer and M. Albrecht, "Entwicklungsgeschichte und Probleme des Gesundheitswesens in Dortmund nach 1945," in *Stadtentwicklung in Dortmund seit 1945*, (ed.) H. Bömer and D. Zimmermann. Blaue Reihe 135, Institut für Raumplanung, Technische Universität, 2013, 59-72.

Among reports from the institute 2015, reports are found about why change that replaces old structures in regions occurs.⁵¹ Among research projects at the institute, several concern climate change, risk management and increasing resilience of urban planning.⁵²

Concerning the environmental improvement, money for development of urban areas was from the start used for a student project at the university. The aim was to do something about a residential quarter in Northern Dortmund but after a while, this activity was extended to a general public planning process with focus on citizen participation and at the end it resulted not only in a successful renewal of a very shabby city district but also to an environmental renewal of large parts of the city area.⁵³ Despite considerable problems, like immigration from poor countries and prostitution, it has functioned as a planning laboratory.⁵⁴

The social-democratic dominance in politics was broken during 1999-2004 and a new unemployment policy was adopted. The idea was employment-transfers, a deliberate action to move people from the industry sector to the growing service sector. The motto became "Qualification instead of dismissing". In 1990, a new project started by the North-Rhein Westfalen government where social efforts were directed with priority to long-time unemployed persons. It involved not only municipality administrators but also corporate unions, labour unions, social workers and churches. Focus was on creating possibilities for retraining long-time unemployed and previous coal-miners.⁵⁵ There is not a unanimous picture of the development. Bugimil et al. (2012) found that even if a lot has happened in Nordrhein-Westfalen concerning creativity and investment in human capital, even more could be gained with more and deeper cooperation between communities, industry and the civil society.⁵⁶

As a result of the idea that the music industry can match the number of employees with the steel industry, the city has developed a tradition of music and theatre. The point of departure has been the opera house, built in 1904, destroyed in World War II and reopened in 1966 as *Opernhaus Dortmund* and houses today *Dortmunder Philharmoniker*. It is operated by the organisation

51. T. Terfrüchte, *Regional Handlungsräume – Gliederung und Einflussfaktoren am Beispiel Nordrhein-Westfalens* (University of Dortmund, Metropolis und Region Band 14, 2015).

52. Homepage Institut für Raumplanung 2015 (Technische Universität Dortmund).

53. U. Ellermann and S. Rommelfanger, *Die Erneuerung von Hinterhöfen in Dortmund* (Berlin: Jahrbuch Stadserneuerung, 1992), 299-313.

54. Kunzmann, "Hinterraumplanung"- Ein neuer Studiengang an der abteilung Raumplanung Institut für Raumplanung; M. Schmidt and D. Zimmermann, "Energiepolitik in Dortmund vor dem Hintergrund der Energiewende," in *Stadtentwicklung in Dortmund seit 1945*, (ed.) H. Bömer and D. Zimmermann. Dortmund Universität: Blaue Reihe, 2013, 95-116; R. Staubach, "Der Planerladen in der Dortmunder Nordstadt," in *Stadtentwicklung in Dortmund seit 1945*, (ed.) H. Bömer and D. Zimmermann. Dortmund Universität: Blaue Reihe, 2013.

55. Bömer and Albrecht, "Entwicklungsgeschichte und Probleme des Gesundheitswesens in Dortmund nach 1945," 59-72.

56. J. Bugimil, R. Heinze, F. Lehner and N. P. Strohmeier, *Viel erreicht – wenig gewonnen: Ein realistischer Blick auf das Ruhrgebiet* (Essen: Klartext, 2012).

Theater Dortmund together with other locations, including *Konzerthaus Dortmund*. The Dortmund U-Tower, which was once a brewery, is now the centre of creative industries and the *Museum am Ostwall*. Another sign of development is the football club *Borussia Dortmund* as a leading club in Germany and in Europe with a stadium (Signal Iduna Park) with a capacity of 80 000 spectators, built in 1971.⁵⁷

Holstebro Renewal

The population of Holstebro has increased from 18 500 in 1960 to 57 000 persons in 2012 (Figure 8).⁵⁸

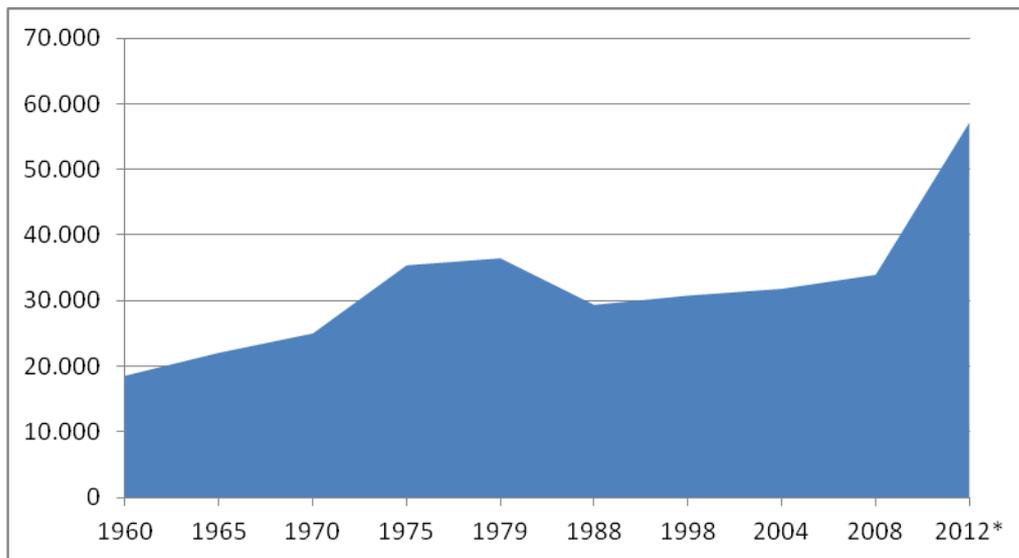


Figure 8. Demographic Development in Holstebro

Source: Statistical Yearbook Denmark.

When the task group, consisting of city council members and city administrators, decided in 1966 to use their public grant as special “culture city” to buy the statue of Iacometti, they used the money extremely well. Unveiling “Woman on chart” in front of the building of *Hostebrohallen* became a lasting success. Many have declared that art and culture can play a role in regional development and this is an evident evidence of that.⁵⁹

57. Dortmund 2012, *Mehr Einwohner, mehr Studierende, Mehr Übernachtungen. 2012-12-31. The new Dortmund - space for change.* (Stadt Dortmund - City of Dortmund: 2012).

58. After merger with other communities.

59. D. J. Greenwood, “Culture by the pound: An anthropological perspective on tourism as commoditization,” in *Host and guests: The cultural anthropology of tourism*, (ed.) V. J. Smith. University of Pennsylvania Press, 1989, 171-185; K. Hollinshead, “‘Worldmaking’ and the transformation of place and culture,” in *The critical turn in tourism studies: Innovative research methodologies*, (ed.) I. Ateljevic, A. Pritchard and N. Morgan. Elsevier Amsterdam, 2007, 165-193; Backhaus, “Sublimity in the Otherness,” in *The Illuminating Traveler*, (ed.) M. Itkonen and E. Huijbens. University of Jyväskylä & Akureyri, 2008, 17-54; Lindeborg and Lindkvist, *Kulturens kraft*; Westerdahl and Skoglund, “The role of arts and culture in regional

After a while, Holstebrohallen changed name to *Holstebro Music Theater* and has been renovated with a new architectural outfit and become considered as one of the most spectacular theaters in Denmark with an audience for 1 200 visitors. The statue right outside the hall has become the starting and ending point for daily sightseeing tours during the summer⁶⁰. Since there is a risk that it might be damaged, it is placed on a plate which constitutes the roof of an elevator that takes her up in the morning and down to the underground in the evening. Both events are followed by greetings from the inhabitants. The *Odin Theater* has, since then started, brought over eighty avant-garde theatre productions in more than sixty countries on five continents. However, the future is dependent on who will take over when Barba retires.

As a side effect and source of inspiration, Holstebro has undertaken a new strategy for trade and industry, especially within climate adaption, food industry and health care. Holstebro is well suited as a small town for concentrating many things to the city centre. The politicians have established an interplay between trade industry and cultural with synergetic effects.

The possibility to use these competences has given Holstebro a reputation of being a culture city. The number of commuters to Holstebro for administration and culture exceeds the number of commuters from Holstebro by slightly more than 2 000 persons or 8% (Tal of trends). A third of employed persons in Holstebro are found within administration and culture while a fifth is found within the industry (Tal & Trends).

Conclusions

The Principle of Integration

In all three examples, the county councils were dominated by and integrated in private interests. When these interests were jeopardized by the crisis, the political representatives took command and initiated integrated planning units where all interests could work together. In Kiruna, a joint delegation between company and administration was appointed with the clear insight that a solution required a diversification of the economic structure of Kiruna. In Dortmund, the planning of the town was a joint undertaking between the Hösch Company and the town council. In Holstebro, the mayor decided therefore to establish a task group consisting of the city council and persons from the technical and economic departments.

Common for all three activities was the insight that a broad engagement in the planning process could open for a situation where unexpected problems and solutions might lead to a change in planning thinking.

cooperation"; L. Zan, S. Bonini, M. Lusiani, D. Shoup, P. Ferri and F. Onofri, *Managing Cultural Heritage* (London: Ashgate, 2015).

60. Visit Holstebro Magasin, *Natur, oplevelser, Kunst & Kultur* (Holstebro Town, 2014).

The Principle of Continuity

In Kiruna, state money offered for recovering was allocated to support education and research, especially within the space sector and an agreement between the mining company and the school administration was signed. In Dortmund, a joint undertaking between the Hösch Company and the town council was decided. Together with the minister of labour in Bonn, the university staff convinced the board to ask for support from the European Social Fund within the EU by offering unemployed young people to work with it. Among other suggestions, the joint board also launched the assumption that if it had been possible to contaminate the city and its soil with coal dust, it should also be possible to restore it to its former shape. In Holstebro, a coordination of the planning actors within the city administration became necessary and the mayor decided to establish a task group consisting of the city council and persons from the technical and economic departments

Common for all three activities was the insight that planning, evaluation and revision should open for a situation where unexpected problems and solutions lead to a change in planning reflexions and better continuity.

The Holistic Principle

Both these principles need a holistic approach, based on creativity.

The search for creativity in Kiruna resulted in a situation where the space became an alternative, though not in the same strength, to the mining. The start in 1957 of the Swedish Institute of Space Physics (IRF) together with the establishment of the Esrange Space Center in 1966 by ESRO (European Space Research Organisation) made the space track visible and contributed to a diversification of commercial life. The town is now simultaneously called *space city* and *mining city*. In Dortmund, the efforts to diversify the commercial life with the help of the universities have been successful. A deliberate action to move people from the industry sector has had progress and also an effort to mobilise inhabitants to participate in planning and concern for the environment of the city. Holstebro has showed that art and culture can play a role in regional development. This has inspired the actors within the city to undertake strategies for trade and industry, especially within climate adaption, food industry and health care.

The success-stories of the three towns are based on an acquired holistic view on development.

The Blind Spot

This acquired view can be summarized in the concept of the blind spot.

In all three places, the city council members came from stricken parts of the community, like miners and farmers. They realised the gravity in the situation and acted almost directly. Without probably being very familiar with advocacy planning as a theory, they put it into practice. They saw the necessity

to react together with corporate and political groups in a joint effort to try to stop the devastating development. The means were over all almost the same: investments in education, high tech, and culture. The participation of representatives from affected groups was almost unanimous.

By raised money from the community and the companies together with state funds, it became possible to establish some sort of continuity in the activities. They were both *ad hoc* but also long-sighted. A lot of them are still significant. At last, they managed to give the cities a new brand. Kiruna became the space town, Dortmund got rid of its shabby image and has become attractive, Holstebro changed from a dull town to a vibrant one.

Since society consists of three different planning spheres in a hierarchical system, the council members had to get grip of them all. The imperturbable bio-physical sphere, the mines, the coal pits and the meadows were not totally imperturbable any more. They had shifted their character and impact and by that they had shaken the middle sphere, the infrastructure: communications had to change their channels and routes, houses stood empty, tax income was reduced. At the end of the day, politicians and other decision-makers, the third sphere, had to act with their influence on social conditions, moral, ethics and economy.⁶¹

Unconscious of the *butterfly effect* theory, they realised that something from the outer world had had an irreversible effect on their situation. They could not totally explain the causes of the situation and how to get away from the problems but they realised that they had to do something different, something unexpected. They looked, according to the butterfly theory, at circumstances beside and behind the occurrence of the process, and found a space track, a high tech track and a culture track. They realised that planning is not only the use of a plan but more the engagement in a plan and a planning process and that not only those directly concerned by the planning process should be involved but also the units of the administration or/and organisations and companies outside the public sector.

It is not overt that they actually based their decisions on e.g. the ideas of the appearance of a second industrial divide (Piore and Sabel 1984) or the possibility to use the idea of competitive advantages among nations (Porter 1990), even if they were in line with them. But they definitely relied, consciously or unconsciously, on constructive destruction, launched by Schumpeter (1943).⁶² Out of crisis and destruction, new structures, paradigms

61. Thörnquist, *On Fragmentation and Coherence in Regional Research*; O. Ruin, "Sweden in the 1960s: Policy-making becomes more difficult," in J. J. Richardson: *Policy-stiles in Western Europe*, (ed.) J. J. Richardson. London: Allen & Unwin, 1982, 141-167; Pred, "Place as historically contingent process"; H. Armstrong and J. Taylor, *Regional economics and policy* (New York: Harvester, 1993); N. Aarsæter and J. O. Bærenholdt, *Coping Strategies in the North: Local Practices in the Context of Global Restructuring* (Copenhagen, Nordic Council, 1998); R. Imrie, "Disability and discourses of mobility and movement," *Environment & Planning* 32 (2000): 1641-1656; Christian Fredriksson and Lukas Smas, *Demographic changes, housing policies and urban planning* (Nordregio WP 2013), 4.

62. Piore and Sabel, *The second industrial divide* (New York: Basic Books, 1984); Porter, *The competitive advantage of nations*; Schumpeter, *Capitalism, Socialism and Democracy*.

and discourses may arise. The blind spot, covering these solutions, had to be unveiled by looking aside or behind.

During history, great wars have occurred every century after the 17th century: the 30 year war, the Spanish successor war, the Napoleon war and World War I and II. Typical for these wars are that they started in the beginning of each century and it took about fifty years to start them. Likewise, it took fifty years to reach a peace treaty. The peace treaty after the World War II was signed in 1990 and after that, it should according to history, take fifty years to start a new disastrous war in the 2040s. Probably did the final engagement in the peace process change from revenge to cooperation and finally time was mature to look aside from revenge.

The fact that history always repeats itself is unproved, and probably unbelievable, saying but we live now in a turbulent era and the need for looking beside what we think we see may be more needed than ever. When continuity disappears and when stable trends deviate and new trends appear, focus has to change. Killing “darlings” should be thought possible and doing radical ideological and political turns is perhaps a necessity for today’s planners, politicians and administrators to meet new mainstreams among ordinary people.

An example where the blind spot theory might be useful is concerning the digitalization wave. Many believe that the development is inevitable and that the benefit transcends its costs. A holistic look behind the trend may give a hunch of different trends and back-lashes as a planning alternative. Of course, the blind may also be hiding impossible development trends so it is not the definitive solution, just a possible alternative.

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