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The interval getting substance
corridors in the network-city

"From the onset of urbanization more than 10.000 years ago, the formation of cityspace may have taken two different paths, one more densely agglomerated, designed with permanence and continuity in mind, and invested with monumental forms that help to centralize the urban polity, economy, and culture; the other more dispersed, agglomerated around multiple nodes, and open enough to permit residential resettlement in new areas rather than continuous rebuilding at the same sites." (Edward Soja, 2000, p. 54)

History and becoming

The multipolar network city appears to be the leading paradigm in discussions and strategical documents on planning in Europe. Often attention is mainly focussed on the nodes of these urban networks. The concept of multipolar urban networks though doesn't only comprise urban centres, as nodes, connected by diverse types of infrastructure. It also means the interval, the space between the nodes in the network, getting substance, swinging between smooth (ideological, economical, political) and striated (material, local, build) space (Deleuze and Guattari 1988, Doel 1999). An important concept for this interval getting substance is the corridor, as a spatial organization principle, along infrastructures in and between networks.
In recent Dutch spatial planning reports corridors presented as both existing in unplanned form and as a new spatial concept when controlled and planned.
Concepts have a becoming and a history (Deleuze and Guattari, 1994) and in order to comprehend a concept and the stakes at hold it is important to unravel this becoming and history. This paragraph focusses on the history and becoming of linear urban developments.

Since 1960's corridor development appears in spatial studies. The history of linear development, though goes further back in history. Linear urbanisation can be divided in two interferering and inseparable components: as spatial concept and as socio-economic concept.
Mode and extend of urbanization is for an important part the spatial translation of socio-economic processes and organization of production. The organization of production and (by that) the organization of our society is at present subject to important changes.

A paradigm-shift from fordist production to post-fordist or post-industrial production, as part of a larger paradigm-shift from modern to post- or even post-postmodern society can be recognised.

From the end of the nineteenth century idea's rise about linear organization of housing, working and recreation, as well for new cities as for the expansion and linking of existing ones.. The main assumptions at the basis of these ideas where; efficiency (of production and transportation), hygiene (air and space), accessibility of services, recreation and work and the combination of urban and rural advantages. Next to these assumptions, also the affection with technology, speed and industry played an important part.

Yet before the (early) modern plans for linear urbanization where introduces there has been a history of more or less linear urban systems. One of the earliest known examples is the Cypriot settlement Khirokitia, dating from the sixth century BC. These premodern linear settlements where often formed due to geographical or geological circumstances.
As shown in the cases of Athens and the Roman Via Aemilia and Via Romagnia linear urban systems could also have a military purpose. These Roman 'strings of beads' still function as an important linear urban system, contributing strongly to the North-Italian economy.
In the Middle Ages the Hanseatic cities formed an important economic multipolar network.

George Collins states that linear urbanization is a natural process: *"since immemorial times man has, under certain conditions, settled in lineal towns"* and puts that *"today this tendency has taken on a new and frightening dimension as the tentacular radii of adjacent cities interlace with each other and produces the wide and uncontrolled strips of built up area that are considered to be the major crisis of our era. These natural settlement patterns testify of tremendous forces that could presumably be harnessed into rational lines of growth in the interests of a more wholesome environment"* (1968: 3). Collins comes tho the same conclusion as the authors of the Dutch planning document De ruimte van Nederland (1999), the space of the Netherlands, concerning spontaneous corridor development and plea for 'planned corridors', to facilitate growth and minimize spatial competition with the landscape and economical competition with the city.

The linear garden city
The first real design for a linear city is probably made by Arturo Soria Y Mata, who around 1880 designed his Ciudad Lineal; a linear garden-city, connecting existing Spanish urban centre's, trying to diffuse the difference between urban and rural area's. The plan consists of a central railroad with on both sides gridded slabs for housing and working. Soria y Mata aimed on involving all villages around Madrid in his Ciudad Lineal, in order to bring the country to the city and the city to the country. This has been an ideal during the whole modern movement, and also has influence on the postmodern movement: *"Peripheral urbanization in the eyes of the builders and the dwellers is to be functionally as little countryside as possible and as much city as possible, ... aesthetically as little city as possible and as much countryside as possible"*, Hoffman-Axthelm (1991).

Soria stated about his plan that every point of the linear city a new community could arise as the branch on a tree. In this fashion a linear-urban network could arise. Only a small part of the plan was realised. The plan got a lot of attention in many publications and has been an important source of inspiration for later designs of linear cities. The concept of the Ciudad Lineal was further developed by designers like Gonzales de Castillo en George Beloit Levy. The linear garden-city concept has been leading concept of the linear city movement till halfway the nineteen-twenties.
Image: Ciudad Lineal, by Arturo Soria y Mata, 1982

The linear city as one building
Besides the linear garden city there is another concept that exists from 1900 till the 1970's; the singular plan, the linear city as one building. An early example is Edgar Chambles' Roadtown (1910). A stretched dwelling-building with a monorail system in the basement, a promenade on the roof an public spaces and shops at regular intervals. The design was made to facilitate he colonization of America's rural area.
Image: Roadtown, by Edgar Chambles, 1910.

The fordist linear city
At the end of the 1920's other linear concepts are developed such as the assembly-line-city, the ladder and precursors of the network city, that borrowed a lot of components form the gardencity concept. These designs are based on the situation of parallel zones along one single line. The form arose as the urban expression of the fordist means of production. From this concept mainly the designs for Tractorstoi (Miliutin) and Magnitogorsk (Leonidov/OSA) are familiar. El Lissitzky writes about these designs: *"No other place on earth provides a better opportunity for its* [the linear city] *realization than the USSR , where industrial combines are sprouting in the desolate steppe like spring mushrooms, evolving their own particular form apparently well suited to embrace a wide range of functional requirements, such as the organization of industry according to assembly-line methods, and the settlement of large masses of people at a short distance from work"*. (El Lissitzky; 1970)
Image: Magnitogorsk, by J.L. Leonidov, 1929

Just as the design from Soria Y Mata, the designs from Miliutin en Leonidov have had great influence on their successors, such as Soetewey and Le Corbursier. At the end 'thirties Le Corbusier makes a plan for a fordist linear city along (partly existing) infrastructure to form corridors through Europe. Striking about this corridor-plan is its linearity, it is not a real network. Le Corbusier described three types of human settlement in this design; centralized farms, (existing) centric cities for cultural and political life, and the linear industrial city connecting the urban centres.
Image: European Road-citys, Le Corburier, 1942.

Combinatory linear plans
A main critique on the linear plans has been that they could not fit the social activities, housingpatterns and concentrated arousal associated with cities. Attempts to resolve these critiques resulted in combinations of linear and other urban concepts. Complex examples of combined linear plans are the designs from O.F. Schweizer en Ludwig Hilbersheimer. Albert Pope describes Hilbersheimers designs as Ladders (1996), referring to their morphology. These designs contain many components from the assembly-line-city such as linear zoning and a main infrastructural work next to the industrial core. Difference is the broad sprawl of the hosing zones, and the highly detailed drawings. Assembly-line-cities were mostly represented as schemes or rough sketches.

Another concept for linear plans are the 'radial satellites', as a continuation of the concept of the city with radial extensions. In this concept the expanding city creates or incorporates satellites outside its surface and connects them with urbanized transportation axis. An example of this concept is the 'Design for the year 2000' for Washington DC (1961). The lack of connections between the different satellites makes it a centralised and hierarchic urban system instead of a polycentric (regional) network.
Image: Washington DC, Radial corridorplan for the year 2000, 1961.

Corridors
Halfway the nineteen-sixties in America and Europe 'development axis' and 'connection axis' are regularly mentioned in discussions on urban structure. These axis or corridors

mainly get attention from geographers. During the years also planners and policy makers give attention to corridors. In 1965 John Friedmann and William Alonso mention the development axis as a way to lead expansion of urban concentrations towards peripheral areas. Friedman and Alonso define development axes as *"elongated corridors along principal transport routes linking two or more metropolitan regions. Their prospects for development may be said to be roughly proportional to the size of the centres they link and inversely proportional to some function of the distance separating them."* (Friedman and Alonso, 1965)

Another early study on corridors has been done by C.F.J. Whebell. He introduces the corridor as *"very persistent historically, and [...] one of the mayor urban systems in the New World"* (AAAG, 1969). Whebell defines a corridor as 'a linear system of urban places together with the linking surface transportation media'. He mainly describes the forming of 'unplanned corridors' as part of a 'corridor centred economic landscape' developing in time. Contradictory to this Whebell describes Hilbersheimers linear designs, which are clearly planned, as examples of modern corridors.

Whebell describes a econo-spatial dialectic; a location or settlement can not be explained without considering commerce an production, and vise versa. Settlements that were founded in more fertile and more accessible locations than others were from the beginning ahead of the others and could develop as centres for trade. Therefore they could maintain a position of technological and financial superiority and make investments to improve their position such as roads, railways and highways.

Corridors and the urban hierarchy

Whebell distinguishes between continental/subcontinental corridors, regional and local corridors. In the Dutch discussion on corridors halfway the 'nineties, a comparable tripartite distinction is made. Just as the corridor as a system competes with the surrounding area, there also is competition within corridors themselves. competition on scale-advantages, transport costs and agglomerations mainly takes place inside the corridor. In this struggle, some centres of the corridor develop at cost of other centres that develop slower due to time-space aspects inside corridor systems. Whebell describes the growth of corridors and urban networks as a continuing process of some centres being economically in the lead due to their geographical starting position and maintaining that lead by making investments in accessibility. According tho Whebells model, after first settlement, the most accessible routes between centres come to development, by which the centres along the crossings undergo the most economic growth. From then on infrastructure extends and improves by which the activity in the nodes grows further more. When after this period rial-transport got introduced, rail-connections where made between the important centres. These railroads, often in combination with rivers make it possible that industries arise in the centres along the rail-road. In this phase the corridors are forming themselves. The next phase, motorised transport is featured by flows of goods and people by car. Though cars are more flexible than trains, the centres that already where connected by rail appear to have gained such an economical lead compared to the periphery that most economic traffic and industrial production continues to take place over there. Car-traffic seems to follow mostly the corridors that have been developed by railroads. In the last phase, metropolitanism, this effect gets consolidated by making highways between the important centres. These highways only link a few centres directly and simulate commerce between these centres, increasing their economic lead even more.

Four important elements of Whebells corridor theory are: quality and configuration of the land, direction and distance, settlement behaviour and diffusion of knowledge, and historical time. In Whebell's theory the 'spatial fix' is an important one; capital in his model is

not flexible; investments are for long periods and tie companies to a location. Under present postfordist organization of production and transportation this spatial fix is of less importance. Companies have become more mobile, and the share of finance-capital and commercial services has increased. Companies are now looking for locations where knowledge, accessability, image and labour-surplus concentrate. Planed corridors can facilitate this and may thereby introduce a new certain level of 'spatial fix'. Therefore it is essential to study the processes and features of 'spontaneous' corridor-development, because accessability alone is not enough. The elements from Whebells corridor-theory can be modified into: image and configuration of the region, position and time, settlement behaviour and concentration of knowledge, and ephemeral time.

Europe and the Netherlands
In Europe the 'development-axis' concepts enters discussions in the second half of the sixties, like in the Spatial Planning Conferences of '67 and '71. Leading Dutch geographers and planners (Verburg, Hoekveld, Van den Berg) try to translate Friedmans 'development axis' to the Dutch situation. In the Second Nota Spatial Planning (1966), the concept is transformed into 'bundled deconcentration'. During the nineteen-eighties the corridor concept reappears in several European reports. Next to the concept of corridors linking of infrastructure and economic growth, also the corridor as urbanization concept revives. In 1993 a study has been done on a so-called unplanned corridor; the corridor-study Amsterdam-Utrecht, but a few years later again plans have been made for planned corridors by, among others, Rem Koolhaas and Riek Bakker. In 1996 a study has been made on a 'two flows strategy', combining economic and ecologic infrastructures. Representations of study showed many morphological and functional similarities with Miliutins schemes for Magnitogorsk (1930).

In the Netherlands the discussion about corridors was reintroduced in 1995 by a report of the VNO/NCW (a Dutch employers organization) as a critique on the policy of 'Urban Nodes'; VNO/NCW stated that economic activity is not limited tot nodes but stretches along main infrastructure-axes. The corridor in this report was seen mainly as an economic spatial concept and a plea for free settlement of company's along main infrastructure.

The following discussions lead to the publication of a range of articles and strategic documents, such as Corridors in balans, Corridors in balance (VROMraad, 1999) and De ruimte van Nederland, The space of the Netherlands (VROM, 1999) in which the concept was developed from economic-spatial concept to an urban-spatial concept. Diverse types of corridors are discussed in these documents: the corridor as a connection-axis, the corridor as a development-axis, the corridor as an urbanization-axis. One corridor can exist as a combination of the diverse types.

Collins already in his article of 1968 mentions the linear city as *"natural settlement for a population of the move, serving him as a way station or caravanseral*". This fits the current idea's in spatial sciences and arts about the nomadic (and monadic) urbanite and the Deleuzian concepts of 'nomadic landscape' and 'nomadic thinking'. From Collins' stand it is man that is mobile and that along the lines he uses 'services' arise to feed, dress, employ, habit and relax him. In our postmodern society capital is taking over this mobility, due to decentralization of production and new ICT and transport technologies, and it is man that has to become even more mobile in order to keep up with this.

Postmodern Urban Development

The social, economic and cultural context in which current spatial developments take place can be described as Post-modern or more specific Post-fordist. The last decades can be characterized by the rising of several post-isms, such as; poststructuralism, postfordism and

postindustrialism. These post-isms can be seen as a collection of interferating concepts in a new plane of immanence; post-modernism.

Postmodernism can be seen as style, epoch and method.

- Postmodernism as stile is often regarded as 'double coded'. Charles Jenks writes about postmodern architecture that is should contain a code that is popular, traditional, slow changing, full of cliche's, romantic nostalgia and familylife and on the other hand a code that is connected with the fast changing society with new functions, materials, technologies, organization of production, ideologies and fashions: dialectic and pluriform.
- Postmodernism as epoch consists of the transformation of modern-functionalist relations in more complex and pluriform relations. Frederic Jameson describes postmodernism as *"a periodising concept whose function is to correlate the emergence of new formal features in culture with the emergence of a new type of social life and a new economic order"*. (H. Foster, 1985). Jameson (1984) states that old organization and perception systems are destroyed and replaces by a postmodern hyperspace.
- Postmodernism as method contains among others Derrida's deconstructivism and Deleuze's nomadic thinking. Hal Foster describes postmodernism as a strategy of interference; focussed on the deconstruction of modernism in order *"to open its closed system ... to challenge its master narratives with the 'discourse of others'."* (H. Foster, 1985)

The collection of post-isms is very diverse and relations are complex. The relations can be made clear when we see the postmodern plane of immanence as a double coding; an orientation on globalization and the body, the global and the local, the macro and the micro. The postmodern society links the local and the global. Global developments, the internationalization of the economy and culture, reflect back on national societies, undermining those structures and promoting local ones. Edward Soja describes in Postmetropolis (2000) a vision that integrates the global and local perspective; glocalization.

The dialectic between globalization and the body connects post-isms mainly concerning economy and geography (postfordism and postindustrialism) with post-isms that are more concerned with philosophy, arts, architecture etc. (postmodernism in arts, poststructuralism, post-postmodernism). Especially for urban planning and design this dialectic between macro and micro is very important, because cities are both 'cities in a world-economy' and the life-environment for individuals and groups.

Two schools can be recognized in the studying of economic globalization en the worldwide sprawl/dispersal of urban-industrial capitalism since the seventies. On the one hand there is a internalist school, based on economy, international relations, strategic studies and management-science. This school aims at the unravelling of internal processes of the capitalist economy as expressed in specific local contexts and places. On the other hand there is an externalist school based on a geopolitical economic perspective. This school focusses on the global and macro-economic forces that determine these internal processes and specific geographies.

Both approaches individually don't lead to satisfying results. Soja recognises in the beginning of the nineties a corrosion of the polar thinking and describes the rise a 'recombinatoric alternative'; a thinking based on a 'both / and also', instead of 'one or the other'. In this atmosphere the term 'glocalization' arose: a 'telescopic' mix of global and local vision, adapted tho local conditions; a localization of globalization. (Soja, 1999).

By pulling th local into the global and the global into the local, glocalization contests that globalization and localization are different or opposite processes. The rethinking of globalization leads to the recognition that it is not just a process on global scale but is continually localized. Nation-state loses importance in this glocal world: *"It is precisely this breaking down and reconstitution of spatial scales, from the most intimate spaces of the body, household, and home to the metropolitan region and the territorial nation-state, that is so deeply involved in the contemporary intensification of globalization."* (Soja, 1999, p. 200). This glocalization can, according to Soja, be seen as a startingpoint for the reconception of not only the relations between global and local, but also the whole tissue of relations that define spatiality in present social life and especially the specific spatiality of urbanism.

Postfordism / Postindustrialism

"Post-modernity reverses or qualifies some of the typical spatial movements and arrangements of modernity. The concentration of populations in large cities is countered by a movement of de-concentration, de-centralization and dispersal. Much of this is related to postfordist developments. It is also the result of the 'de-industrialization' of many regions of western societies - with much manufacturing being exported to non-western societies - and post-industrial 're-industrialization' based on high-tech, research-based concerns which have preferred new locations in suburban and ex-urban areas, especially those near university cities." (Krishan Kumar, 1995, p. 122)

A distinction can be made between postindustrialism and postfordism. Postindustrialism concentrates mainly on computerizing of society; the information or knowledge society; the replacement of labour and production by knowledge, information and communication. Postfordism describes the new organization of production, transport and companies in combination with an intensification and flexibilization of capital, privatization, the retreating government and a pluriform working-class in search for new forms of and basis for organization. An important spatial feature of both -isms is the reconceptualization of time and distance. Soja describes the postfordist regime of flexible accumulation as *"a complex mix of both de-industrialization (especially the decline of large-scale, vertically integrated, often assembly-line, mass production industries) and re-industrialization (particularly the rise of small and middle-size firms flexibly specializing in craft-based and/or high technology facilitated production of diverse goods and services), this restructuring of the organization of production and the labour process has also been associated with a repatterning of urbanization and a new dynamic of geographically uneven development"* (Soja, Thirdspace, 1996). Besides this de- and re-industrialization the postfordist and postindustrial condition also implies a de-territorialization and re-territorialization; a complex simultaneity of two interwoven restructuring processes. De-territorialization concerns the collapsing of fordist worlds of production and the related spatial segregation of labour, hegemony in politics and discourse of the modern nation-state, and established patterns of real-and-imagined cultural and spatial identity. Re-territorialization can be described as the critical reaction on globalization and postfordist restructuring, that generates new performances from individuals, collectives, networks, cities, regions, companies, cultures etc. in order to reconstruct their territorial behaviour, spatiality and lived space as mens of resistance or adaption. The postfordist urban region appears as multicentred, nodal, flexible and global. An important feature of the postfordist and postindustrial regime of accumulation is the repression of space and conventional distance by time, mad possible by new communication and transportation technologies. One way to represent this repression of distance is by making tempographical maps. On these maps distances are not measured in kilometres but in time. An example of such a tempographical map is given here. This map shows Europe with Rotterdam as centre and distance represented as hours travelling by high-speed train.

Image: Speed in Europe, On European tracks, Netherlands Architecture Institute

Thirdspace
The city, and urban space, has to be regarded as a historical-social-spatial phenomenon, or as a trialectic of first-, second- and thirdspace. The concept of third space was introduced by Henri Lefebvre in 'The production of Space', in 1997 it was reintroduced and further developed by Edward Soja. Firstspace, or 'perceived space' is physical and empirical perceivable as form and process. Secondspace, or 'conceived space' is urban space as mental of ideative field, conceptualized in the imagination, as reflexive thought, as symbolic representation of conceived space. It forms the urban imaginary; 'thoughts about space'. Thirdspace or lived space is an other way of thinking about production of space, incorporating first- and secondspace, but simultaneously focussing on the complex geographical and spatial imaginary; lived space, a simultaneous real-and-imagined locus of individual and collective experience and process. The anthropologist Arjun Appadurai describes the imagination as a social practice "*The image, the imagined, the imaginary - these are all terms that direct us to something critical and new in global cultural processes: the imagination as a social practice. [...] the imagination has become an organized field of social practices, a form of work (in the sense of both labour and culturally organized practice), and a form of negotiation between sites of agency (individuals) and globally defined fields of possibility... The imagination is now cental to all forms of agency, is itself a social fact, and is the key component of the new global order."* (Appadurai,1996)
One can state that interpretations and constructed images of reality now have become just as important as any 'real' material reality, because these interpretations and images are diffused and accepted and become the basis on which people act: they become real. Such interpretations and images are central to the organization and evolution of markets and (spatial) processes, and, as will be shown, of planning documents. Two recent Dutch strategic planning reports that deal with the network-city and its intervals; De ruimte van Nederland (1999) and the Vijfde Nota Ruimtelijke Ordening (2001) appear to be founded for an important part on subjectivities such as the sense of crowdedness and the sense of societal dynamics and romanticized nostalgic images of the city and the country. Thereby spatial imaginary is playing a big role in the Dutch spatial planning policy of the coming years.

Urban networks and corridors in Dutch strategic planning documents

Dutch planners, urban designers and spatial policy makers are searching for a ways to cope with economic growth and the changes in mobility, organization of production, ICT and lifestyle. For some years the corridor-concept was one of the leading concepts in spatial discussions but due tot lack of definition and struggle for specific interests this concept got mostly abandoned. In the latest strategic planning document, the Fifth Nota Spatial Planing, the concept of the network-city is embraced, mainly focussing on the nodes regional, national and international networks. Eventhough former strategic documents speak about the spontaneous and possibility of planned corridors; the 'interval' getting substance. In this paragraph the arising of the network-city concept in combination with the abandoning of the corridor concept is discussed. For this three important documents of the Dutch ministry of spatial planning are studied: Corridors in Balans (1999), De Ruimte van Nederland (1999), Vijfde Nota Ruimtelijke Ordening (2001). In these succeeding reports the shift is made from a corridor based spatial planning towards a combination of corridors and nodes and finally the choice to concentrate only on the nodes in international, national and regional urban networks.

In Corridors in Balans, Corridors in balance, corridors where presented as urbanization-axis, meant to absorb deconcentrating tendencies in spatial development, with as much mixture of functions as possible. The report defines corridors as: *"urbanization axis, constructed*

along roads and railroads and where possible along water, composed by (existing) urban centres in combination with interjacent building zones, in suburban densities, meant for companies and offices as well as services and housing." Corridors where presented not as a new spatial policy but as complementary to existing policies. Corridor development according to this document should not be competitive to city or corroding the quality of the rural area. Corridors could link and distance from mainports, nature reserves and cities.
In this document the corridor is not seen as just a transport axis but as a spatial concept -the interval getting substance- on three scales; European megacorridors, national corridors and regional corridors. Corridors in balans distinguishes between 'unplanned corridorforming' and 'planned corridordevelopment'.

Due to lack of space and lack of accessibility (certain) company's settle along infrastructure bundles outside the city. For a diverse and functional optimization a methodological/ systematic approach is needed. In this document 'spontaneous' corridor development between urban nodes is recognized as an existing phenomenon and competing economically with urban centres and spatially with the countryside. Planned corridor development is meant to be complementary to the city and strengthen the functioning of the urban labour market and by that strengthening the city. The document focusses on potentials, optimization, design and regulation. Several conditions or criteria for corridors in order to prevent negative effects for urban centres and rural area are mentioned: selectivity and regional differentiation, complementary, attention for design, demonstrable need for space, involving the connecting urban centres and surrounding rural area, proper control-instruments. These criteria seem quite week, and should count for any big project. Besides that a single relation between domain and value is chosen. Other combinations are also possible such as adequate differentiation or aesthetic differentiation. A matrix of domains and values could be made. Problem with the criterium about adequate regulations is that the government concerning spatial planning is getting more and more part of the parties involved instead of above those actors. Besides this the other parties are becoming more footloose. Fast changing strategic alliances have to be made.

The following strategic planning document De ruimte van Nederland, the space of the Netherlands, was meant as preamble for the main strategic report for spatial planning in the Netherlands for the coming years. This document is characterized by a modernist belief in progress whereby technological innovativity will facilitate economic growth and diminution of environmental pollution. The report appears to be mainly founded on two subjective stands: a progressing sense of crowdedness and a strong sense of societal dynamic.
This 'sense of dynamic' results in the (spatial-)economic aspects of the report; knowledge-economy, qualitative and quantitative growth of infrastructure and mainports, bundled urbanization along infrastructure and public-private cooperation for 'nature development'.
The strategic startingpoints of the report are; a mobile urban society, compact cities and development of regional differentiated corridors, for which a coherent policy has to be developed.

The 'sense of societal dynamics' is said to be due to the absorbation in bigger connections; globalizing economy, international cultural influences, technological innovations etc. This dynamic causes, according to the document a demand for 'choice' and 'development' by companies and citizens. The document focusses on participation of the Netherlands in the network-economy with main focus on distribution and knowledge. This focus on knowledge leads to a (geographical) segregation of labour and knowledge and the introduction of knowledge as means of production. This segregation (and competition) is made possible by the new technologies founding the global economy. The economic-technologic developments result in progressing competition between cities and metropolises, based on

physical and knowledge infrastructure, labour-surplus and quality of housing/working environment.

The document gives four perspectives to facilitate the growing demand for houses -due to individualization, population growth and economic growth-, and demand for growth of high-quality knowledge- and capital-intensive industrial production, (inter)national distribution, commercial services and landscape. Finally the four perspectives are combined into one final perspective; Stedenland plus, city-land plus: a strategy aimed on compact cities complemented with controlled development of regional differentiated corridors. On regional level the nota speaks about urban networks, forming one housing and one labour market. Assumed advantages are; freedom of choice due to mobility and accessibility, real profit for the environment, and attractive and safe housing-environments.

Corridors

The document speaks about corridor-development by companies along infrastructure, as a way to concentrate urban sprawl and diminish economic and spatial competition. *"Deconcentration needs to be bundled as much as possible along urbanization-axis with a broad mixture of functions"*. The development of the M4 corridor west of London shows that corridor development can also be created by other mechanisms such as the concentration of knowledge-centres, image or labour-surplus. In case of the M4 corridor infrastructure was following the spatial developments (due to concentration and expansion of (military) knowledge-centres) instead of initiating them.
Also a distinction can be made between networks of infrastructure and networks of transport; place of spaces versus place of flows. This space of flows is not determined by places but by position and function in (borderless) networks. Networks of infrastructure are durable, long term investments. Networks of transport are more dynamic. They have a dialectic relationship; transport extorts infrastructure, infrastructure facilitates transport.

The nota, especially the part involving the compact-city approach is focussed on a polarisation of city and countryside, based on a romantic and nostalgic image of both the city and the countryside. The mentioned concept Stedenland, city-land aims on dividing city and countryside, in order to strengthen the contrast between build and unbuild space. In this concept the city is meant for housing and working and excitement and the rural area as open space for nature, environment, agriculture, spatial experiences and quietness. The modernist ideal of diminishing the differences between city and landscape -in spatial, economical and qualitative sense- are clearly abandoned. The only mixing or encountering of urban and rural area in this rural area would be along the urbanized corridors.

Image: Six types of corridors, represented in 'Corridors in Balans'.

In De ruimte van Nederland there already was a shift notable from a corridors based concept to a concept that is more focussed on development and intensification of the urban centres and some nature reserves. In latest strategic document, the Vijfde Nota Ruimtelijke Ordening, fifth nota spatial planning, this development is continued and the concept of corridors is not longer mentioned. In the fifth nota municipalities are forced to draw 'red contours' around villages and cities, a border to marcate the space they want to use the coming years for expansion. The provinces have to draw 'green contours' around their nature reserves. These contours have to be approved in 2005. The area that is nor inside a red, nor inside a green contour called 'balance-area', a balance between new developments and existing landscape has to be made.

The government wants to promote cooperation between cities in regional networks, instead of competition. Municipalities in a urban network have to make collective agreements on

where to locate new housing, working and recreation area's. Agreements on these topics between cities in the regional networks are voluntary, when the networks are crossing borders, these foreign municipalities have to get involved as well. The national governments supports the development of the national and regional urban networks financially.

In the 5th nota the corridor as urbanization / spatial development axis is mostly abandoned, or at least not mentioned as such. (New) infrastructure is supposed to be mainly function as transport axis, and less as concept of spatial development. On the other hand the sprawl of housing, companies and offices outside the urban centres such as mentioned in Corridors in balans won't stop. This development will take place in the balance-areas on which the 5th nota is very vague. Policy on this topic should not be ignored. Especially if the concentration policy in network nodes appears to be insufficient and not meeting the needs and demands of citizens and companies.

The three main spatial instruments of the fifth nota are: intensification, combination and transformation (ICT...) are not only valid for the nodes of the networks. They also can be used for the corridors and in that way strengthen the 'red' and 'green contours', strengthen the (cooperation within) urban networks and define the 'balance areas'.

A planned corridor-development can provide a grip on the current spontaneity of the interval getting substance and provide planners and designers with tools and criteria to strengthen the urban network and provide new spatial conditions, complementary to the city and the countryside. Corridors can be the valves of the spatially restricted urban nodes and facilitate both spatial intensive and - extensive housing and working environments that prefer locations outside the centres, in order to be better accessible, have more relation to the rural landscape and so on. These corridors can function on local, regional, national and even international scale.

Selected readings:

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