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Cooperative institutions for metropolitan infrastructure development

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Polycentric spatial development: institutional challenges

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Policies supporting a polycentric metropolitan spatial structure have been suggested as an effective way to achieve sustainable environmental, economic and social urban development. However, there are significant challenges to implementing a polycentric spatial strategy in practice. Metropolitan space is governed by many large and small municipalities and infrastructure investments are determined by local, regional and national authorities and private developers. Polycentric spatial strategies meet classic collective action problems since local costs and benefits are asymmetrical. Most metropolitan regions lack effective institutions for resolving social dilemmas and collective action challenges that could facilitate land use and transport policies supporting polycentric or other sustainable spatial strategies. This study of intermunicipal dialogue regarding the polycentric spatial strategy in the Stockholm region suggests that cooperation for polycentric spatial development may in fact lead instead to a corridor development pattern.

The European Spatial Development Perspective (European Commission 1999) argues that polycentric urban systems are more equitable, efficient and sustainable than mono-centric or dispersed urban systems, and should therefore be actively encouraged by national and regional planning. The concept of polycentric spatial development has been adopted in national planning systems across the EU. (Halbert et al. 2006) Such policies typically involve concentrating new building in a few designated urban cores and ensuring that cores are linked to the metropolitan centre and to each other. Analysis of how a metropolitan area might transform from a monocentric to polycentric urban spatial structure typically utilize models that study changes in the built environment or traffic patterns or use the principles of new economic geography to describe economic forces driving agglomeration and dispersion. This paper will argue that the institutional challenges associated with polycentric spatial development in metropolitan regions have been largely ignored in both planning theory and practice.

Albrechts (2001) raises this issue in his analysis of institutions necessary to achieve the vision of a polycentric “Flemish Diamond”. Albrechts argues that new institutional frameworks are needed to coordinate public and private actors in the strategic issues related to polynucleated urban structure. The selection of such issues is underscored as critical; “only when the issue at stake surpasses the capacity of the individual cities and a win-win situation can be provided, may cities be willing to consider delegating parts of their competence to another authority.” (Albrechts 2001, p 743.) Albrecht advocates the creation of new informal arenas that can build the reciprocal trust and understanding” needed to challenge “the power of dominant discourses.” (ibid.)

This paper takes these lessons as a starting point and compares them to the experience of the Stockholm metropolitan region. A study of cooperation among local municipalities on the issue of polycentric spatial development finds that Stockholm's experience is not unlike that of Flanders. However, we also find that the informal cooperative institutions that provide a forum for dialogue regarding polycentric development may in fact end up supporting a corridor structure of spatial development. This is because the selection of strategic issues focuses cooperation on only one type of development initiative supporting polycentric development (radial transit links) but not other key aspects (coordination of local land use plans and transport links among urban cores). The reluctance of municipalities to move discourse from polite lip service to a meaningful discussion of land use development conflicts can be viewed as a classic social dilemma and understood as underinvestment in collective action. However, we also suggest that institutions for intermunicipal cooperation may contribute to building social capital that can increase the potential for land use cooperation over time.

Metropolitan space is governed by many large and small municipalities and infrastructure investments are determined by local, regional and national authorities and private developers. Polycentric spatial strategies meet classic collective action problems since local costs and benefits are asymmetrical. Most metropolitan regions lack effective institutions for resolving social dilemmas and collective action challenges that could facilitate land use and transport policies supporting polycentric or other sustainable spatial strategies. Collective action requires that actors recognize their own interdependencies, agree on the pros and cons of different metropolitan land-use alternatives and are able to form institutions for arriving at common decisions. Each actor's contribution to the process reflects estimations of individual and common payoffs, costs and risks associated with various levels of contribution or defection. Achieving a polycentric metropolitan settlement structure requires that municipalities, developers, and regional and national authorities agree on essential investments and restrictions related to transportation and land use planning. This includes deciding where and what to build, but also where and what *not* to build. In the vast majority of metropolitan regions, this creates a classic collective action problem with asymmetrical benefits and costs associated with investment and policy alternatives.

This essay is based on the results of a research project focusing on cooperation between and among municipalities and companies in the planning of housing and other infrastructure. (Stockholms Handelskammare, 2009). This study included a review of both planning documents and relevant theoretical literature. Approximately thirty interviews with representatives for municipalities (both civil servants and politicians), real estate development companies, and regional representatives were conducted to deepen understanding of cooperative processes in three cases including Täby-Arninge.

Case: The Stockholm Metropolitan Region and the Täby-Arninge core

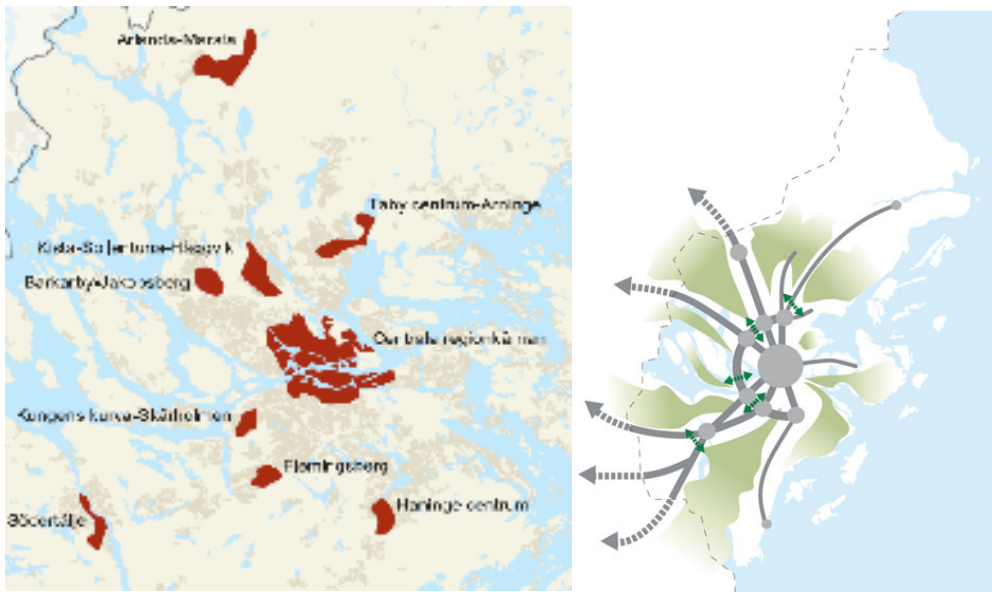
Since 2001, the development plans for the Stockholm Region have proposed the development of eight "urban cores": three each to the north and south of central Stockholm and two outer cores. The arguments for developing/strengthening urban cores within the metropolitan region basically reflect those of the European Spatial Development Perspective: a more socially and economically cohesive region with balanced spatial development throughout the region and improved preconditions for

sustainable growth and local service provision.¹ To achieve this, Stockholm's urban cores are envisioned as offering a rich mix of housing, workplaces, local services, culture and recreation opportunities, health care and education. However, some cores are more "general" in character while others have a strong profile as a business cluster location, retail centre, or airport city. Cores should have good access to the central city area (Stockholm) via radial corridors but also have strong links to each other.

The designation of the urban cores is the result of an extensive analysis of trends in workplace location, economic drivers, commuting patterns and built environment development in Stockholm County. However, the choice of which agglomerations to designate as cores, and in particular the perimeter of these areas, is more reflective of normative goals than of economic or social drivers. Sollentuna, Kista, Jakobsberg and Södertälje show signs of having the capacity to develop as "urban nuclei", based on built environment analysis of trends between 1991 and 2004. (Adolphsson 2009) However, others such as Täby-Arninge are no more "cores" than any number of other suburban bedroom communities with locally significant shopping centres.² Rather, their inclusion has more to do with their strategic location with respect to other regional goals. It is no accident that the six inner cores are chosen at almost equidistant intervals: three north and three south. This reflects long-standing goals for the region to improve the cohesion and accessibility between Stockholm's prosperous northern suburbs and its rather more struggling southern areas. Completing the transit system to include transverse links in a ring around the central city area is one of the foundations of this strategy (see right map below) but its realization is still a long way off. A polycentric spatial form is also a spatial development vision that respects, preserves and supports the region's green structure, a series of protected "wedges" that provide an unbroken natural area from the centre of Stockholm all the way out to its hinterlands. There is an obvious conflict between these goals, as transverse links between urban cores will dissect these wedges, but the regional plan claims that careful planning and design can minimize threats to the natural areas, and indeed that improved access to recreation areas within the green wedges will help residents appreciate the need to protect them. (RUFs 2010). The maps below note the designated inner and outer urban cores (left) and the green structure overlaid with both current and envisioned transit linking them to the centre and to each other (right).

¹ Another important argument for a polynucleated urban structure is to improve the prospects for rural areas through explicit links between metropolitan cores and their surrounding hinterlands, but this is only tangentially addressed in Stockholm's strategy.

² Täby-Arninge is, by international standards neither "urban" nor a "core." Nevertheless, we have chosen to call it an urban core to reflect its designation as such in the regional plan.



The Täby-Arninge core

Two areas within the Municipality of Täby, Täby Centre and Arninge, together comprise one of the eight urban cores envisioned in the regional development plan. This core is to the Northeast of the City of Stockholm on a plane with two other cores, Kista-Sollentuna-Häggvik (a mixed core including the IT cluster in Kista) and Barkarby-Jakobsberg (which includes a strong retail centre). The strategic goal for Täby municipality as a whole includes increasing the municipal population to 80 000 (a 25 percent increase to 2030), building 10 000 additional housing units and providing 20 000 additional jobs. Täby's municipal comprehensive plan for the period 2010-2030 also includes the following goals:

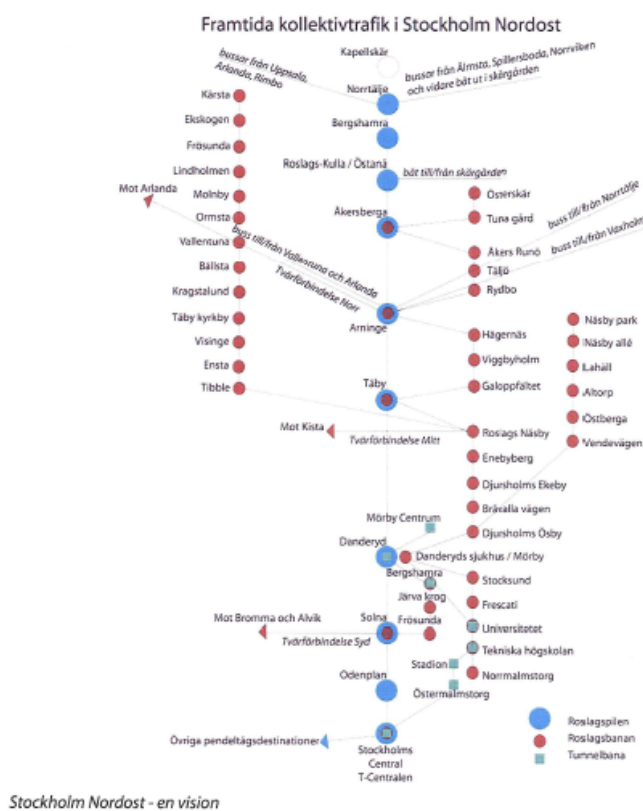
- A “green city in Stockholm” with natural areas that comprise about half of the municipality’s area and with green corridors and parks within and between built areas
- A more urban character, with focus on dense urban structures marked by more multi-family dwellings and townhouses with a varied design
- Improved public transit links to Täby, including a double rail line on the existing Roslagsbanan and complementary transit improvements
- Improved local service provision, particularly services offered to an aging population.

The title “Täby-Arninge” might be expected to reflect a strong functional link between these areas. In fact, it is rather used to underscore the need to better link these currently isolated areas. Täby Centre is a moderately sized suburban centre with a mix of housing types and a shopping centre that attracts shoppers from the Northeast part of Stockholm. Arninge has almost no housing, but is rather a location for “big box” retail and business centres. Arninge has arguably stronger functional links to similar areas in other municipalities, in particular the Rosenkälla business park/centre in Österåker municipality, than to Täby’s central area. Täby’s development plan calls for a better balance of workplaces and housing as well as a large indoor skiing facility and other sport facilities large and unique enough to attract visitors from the entire region. However, current development projects are focused on the area in and around Täby’s central areas.

Preferences and plans in surrounding communities

Surrounding communities have their own development plans, many as ambitious as those of Täby-Arninge in terms of new housing, workplaces or retail and most envisioning a more urbanized central area and better accessibility to the rest of the region. None of the municipalities interviewed, nor private developers, noted any concentration of new development in Täby-Arninge as opposed to the central areas of Vallentuna, Österåker, Vaxholm, Sollentuna or Danderyd. A leading politician in Täby even noted that the development plans in Täby would likely have been the same regardless of the regional plan.

However, both interviews and the document review stressed a strong interest in the potential of a polycentric spatial strategy to further improve road and rail links, especially along north-south corridors linking to Norrtälje in the north and Stockholm in the south, and to Arlanda airport. Täby's comprehensive plan and associated information material envisions "a new, faster and higher-capacity rail transit solution" as necessary to develop Täby-Arninge as an urban core. That Täby refrains from further specification of what transit alternatives should be prioritized reflects a heated and ongoing discussion among the northeast municipalities, the regional transport authority SL, the regional planning office (*Regionplanekontoret*) and the national transportation authority (*Trafikverket*). In recent decades many alternatives have been discussed. The table below, entitled "Future transit in Stockholm Northeast" shows all of the many alternatives for future public transit investments. Only the red stations (Roslagsbanan) are actually built.



In brief, actor positions on this issue can be summarized as follows:

- *Stockholm Nordost*, an informal intermunicipal cooperation group, has a future vision for Stockholm's northeast area based on improvements to an existing commuter rail line (Roslagsbanen), extensions and new links (Roslagspilen), a rapid rail link between northeast municipalities and central Stockholm. These are also proposed in the regional plan.
- The *Stockholm County Council's transportation and planning committee* (Regionplane-och trafiknämnden) has expressed doubts about the socioeconomic effectiveness of new rail links and prefers a focus on renovating/improving the existing Roslagsbanan and investigating new bus service in other areas (RTN 2008-0204/F07-115/SA20)
- *Business groups* such as the Stockholm Chamber of Commerce and its local committees have on several occasions expressed support for an extension of the subway from central Stockholm as an alternative offering the best potential for business growth.
- *The national transportation authority (Trafikverket)* produced a feasibility study of several transit options for Northeast Stockholm that does not express support for a particular solution. Its position is described by many respondents as "waiting."
- *The regional transit authority SL* has not expressed support for a new commuter rail link to the northeast but rather supports renovations to the Roslagsbanan as well as transverse links among Stockholm's northern communities (such as the other urban cores Sollentuna and Kista)
- The preferences of the municipalities vary: some like Österåker prefer to maintain/improve Roslagsbanan and fear that other solutions such as the Roslagspilen would create local barrier effects and moreover drain investment funds from needed improvement to existing transit. Other municipalities stress the need to improve transit links to Arlanda airport.

Potential for active and coordinated planning

Developing Täby-Arninge as an urban core require coordinated subregional development. What incentives do other municipalities in this part of the metropolitan region have to contribute to developing an urban core in Täby?

Our study shows that most municipalities surrounding Täby have not analyzed how Täby's development as a regional core might affect their own development. Since the entire core is within Täby's municipal borders, land use issues are regarded as "Täby's business". There are some development initiatives, mostly shopping centres and business parks, that could be said to be in competition with development plants in Täby-Arninge. On the other hand, municipalities note that this type of competition arises with or without a regional vision that designates Täby-Arninge as a metropolitan node. In other words, surrounding communities are interested in discussing the implications of specific development projects, not the designation of Täby-Arninge as an urban core as such.

Several respondents noted that the plants for urban development in Täby-Arninge are mostly relevant to Täby itself. A "serious" interpretation of the polycentric strategy would, in the eyes of many surrounding communities, mean instead that they would be asked to restrict their own development, or that national funds would be targeted towards investments that would attract people or firms to the entire northeast region, as a new university or regional hospital. Surrounding "non-core" municipalities

do not consider Täby's development plans as a threat to their local planning monopoly because there are no signs that strategic national or county investments (in education, transport, or health care, for example) reflect a polycentric vision.

Nevertheless, surrounding municipalities are more than happy to pay lip service to a polycentric spatial development strategy if it means that investments in the regional transportation system can be hastened. Municipalities describe clear pros—and cons—of specific transport solutions for their own development and they are strongly motivated to cooperate to develop better accessibility along a north-south corridor and between Stockholm's northeast area and Arlanda airport.

What is necessary to motivate intermunicipal cooperation, even in issues where local communities may have conflicting interests. Stockholm Nordost (formerly called UNO) has for over twenty years been a forum for intermunicipal cooperation among the municipalities of Danderyd, Vallentuna, Vaxholm, Ästeråker and more recently, Norrtälje. Even if the commitment of time and energy from these communities has varied over time, those interviewed express strong support for this cooperative forum. Stockholm Nordost has become a platform for (somewhat) open discussions about the subregion's future. In recent years Stockholm Nordost has produced a vision for transport solutions and local development plans that have helped municipalities see links—and to a much lesser extent, potential conflicts—between their own priorities and those of others. The fact that the national transport authority, the regional planning office and other key actors refer to Stockholm Nordost's visions in their own documents speaks for this organization's legitimacy as a representative of the northeast municipalities' interests. At the same time it is unclear whether or not Stockholm Nordost can be as effective as an arena for collective action, including conflict resolution, as it is for general discussions and vision development. Many respondents noted that signals from the national government and national authorities are essential to motivate cooperation among municipalities. Municipal planners, regional planners, municipal politicians and business representatives stressed that national feasibility studies for new roads or rail links are critical to implementation of a polycentric vision, but that such studies rarely reflect local development potential. Respondents report varied views on the potential for municipalities to build coalitions to lobby for transport solutions. In general, respondents in the Stockholm study reported that both public and private actors were strongly motivated to cooperate to support transit solutions, despite strong and conflicting opinions regarding alternative transit alternatives. In other words, if the national level was willing to invest in one or more transit projects, local municipalities and a range of other public and private actors might be willing to present united support for one solution. However, no respondents described interest in revising local land use plans to concentrate building development in Täby-Arninge or other designated urban cores.

Respondents also noted that the regional planning office (Regionplanekontoret) has in recent years become more sensitive to local concerns. The development of the most recent regional plan (RUF 2010) involved more dialogue among a broad range of actors than before, and respondents consider the analyses and maps produced by the regional planning office were of great value in facilitating subregional cooperation and planning local areas. Such materials help individual actors see their own actions in a broader spatial perspective and identify common interests. Both municipalities and business representatives, however, describe the polycentric spatial strategy as "the regional planning office's

invention” and both our interviews and those conducted in other studies reveal a frustration among municipalities that the implications of this strategy for specific development alternatives are unclear (see also Hårsman and Hansen, 2010). A common complaint is that the delimitation of cores is arbitrary and does not reflect functional links. For example, the Rosenkälla area of Österåker has arguably closer ties to Arninge than Arninge has to Täby, and Österåker has unsuccessfully appealed to the regional planning office for inclusion of Rosenkälla in the Täby-Arninge core.

A comparison of documents and statements from the regional planning office, regional transit authority and Stockholm Nordost, together with interview observations, reveal clear differences in strategic perspectives. The transit authority and regional planning office underscore the need for transverse links among urban cores, while municipalities and business organizations have far more interest in better access to Arlanda airport and the central city area of Stockholm. The polycentric strategy itself is also questioned, with many respondents preferring an urban corridor strategy with developments focused around transit stations. It is easier for individual communities to see the benefits of improving communications along existing routes than new links. Moreover, the region’s green structure makes Täby functionally isolated from the other urban cores. As a local politician from Sollentuna (a designated core to the west of Täby) noted, “it is more natural for us to cooperate with communities between here and Stockholm because we have development projects that border each other. Our homeowners move here from these communities (including Stockholm), and our children will move there when they leave home. Between us and Täby is a beautiful woodland, but this hardly motivates cooperation.”³

Discussion

Stockholm’s polycentric strategy is based on region-wide ambitions for a balanced and sustainable development for the region. Even municipalities that are not designated as cores can benefit from the development of a polycentric spatial structure, particularly if they lead to the building of new roads and transit links that improve surrounding municipalities’ accessibility and attractiveness. Nevertheless, this study reveals rather little interest from these surrounding municipalities to adapt local land use plans such that they support a concentration of development to the urban cores. On the other hand, there is a strong interest, in many of these communities near or along the north-south corridors, to cooperate and adapt their local plans to support new roads and transit.

The literature on institutions provides some explanations as to why it may be easier to develop cooperative arenas for the development of a new transportation corridor than for an urban core in a polycentric region. Organisations such as cooperation groups, formal or informal, are formed to coordinate actors with a common interest that cannot be realized without cooperation (Booher and Innes 2002, Forester 2007). Another motivation to cooperate is the presence of explicit scale benefits that reduce costs and risks for partners. The individual actors’ decision to invest time and money in a cooperation initiative is based on an estimation of potential payoffs —profits, losses and risks associated with cooperating or defecting as well as cooperating at various levels of investment. (Olson 1965, Alexander 2007, Ostrom 2005). Nevertheless even when all actors would benefit from coordinating

³ There are in fact examples of intermunicipal cooperation regarding for example recreational facilities within the protected green wedges.

their actions, there may be hinders to realizing cooperation. A social dilemma arises when each individual actor's decision is rational but leads to a collective result that benefits none, such as failure to invest or underinvestment in new infrastructure. (Kollock 1998, Heckathorn 1996). Another typical problem is that actors may have strong incentives for free riding if actors estimate that others are willing to bear the costs of collective action (Olson 1965). This phenomenon is common when the distribution of payoffs among actors is uneven or when net payoffs are difficult to estimate (Scharpf 1997, Hårsman and Rader Olsson 2002). A third hinder to collective action occurs when actors cannot agree on a common problem definition (Alexander 2007). Absent a clear problem focus and proposals for policy alternatives, actors cannot estimate the costs and benefits of cooperating within institutions for collective action.

A new road or rail corridor affects several public and private actors. The new or improved link creates opportunities for new real estate development and workplaces near stations and exits. However, the costs and benefits are not equally distributed among municipalities. Institutional theory suggests that in these situations, those communities that benefit most from a new transportation corridor have a higher willingness to pay for its development and can compensate communities that experience net costs. There is in other words often significant room for negotiation and dialogue based in each actor's estimates of costs and benefits as well as a common interest in the issue. In the case of Täby -Arninge, surrounding communities can be said to have a strong incentive to cooperate to lobby for new transport infrastructure, in particular because a united front increases their bargaining power with the national transportation authorities that will ultimately finance the majority of the costs.

Suppose that a group of municipalities decide to cooperate to develop an urban core. The municipality designated as a core will benefit from national or private investments that add capital infrastructure and increase accessibility: transport infrastructure, schools, or other facilities that attract new residents and in particular highly educated professionals that tend to demand urban amenities and diversity. Surrounding communities can also benefit, if the same infrastructure is in close enough proximity to increase their attractiveness as well. However they can also lose, if they compete for residents with other communities whose relative competitiveness is improved (such as the designated core). Benefits are indirect and may well be difficult to estimate, making it more difficult to motivate public and private actors to invest in common initiatives (housing areas, shopping centres, transport infrastructure etc) related to core development. The definition of what defines a core, how its central areas differ from that of other municipal centres and the relevance of the polycentric vision to national transport policy is unclear.

What would be a rational strategy a municipality located near a designated regional urban core and estimating that the development of such a core could have some sort of positive impact on its own development? Should it seek cooperation with others with similar interests? The answer is not obvious—because what would such cooperation entail, exactly? It might involve cooperation to produce essential infrastructure—transportation, housing, recreational facilities, transit station area development, new retail, etc. But each of these many initiatives has a specific group of affected actors and often a specific institutional structure for decisionmaking and financing from national authorities and private interests. A municipality may therefore find it more effective to cooperate for the

development of a specific initiative (say, a new transit link) than for an only vaguely defined urban core. Polycentric metropolitan area development has inherent risks for social dilemmas. A “non-core” municipality may pursue a free rider strategy, reasoning that national or regional authorities and core municipalities will be willing to bear associated costs.

Many of those interviewed, both public and private actors, noted that they have not yet seen signals that Stockholm’s polycentric strategy has implications for local or national investment plans. What would happen, for example, if the Swedish government targeted investments in education, research, culture, health care or transportation to a regional polycentric development strategy? This would provide a strong incentive for both core and surrounding municipalities as well as private developers to arrive at a common vision and create institutions for determining roles, funding responsibilities and compensation for adversely affected areas. The current situation, where support for developing urban cores is estimated to have little effect on either public or private investments, the most rational standpoint for “non-core” municipalities may well be to “casually support” polycentrism in the regional plan. Interviews also revealed that “core” municipalities were reluctant to “make too much” of their status as designated cores, because they feared risking their relationships with surrounding municipalities. “As long as this is just a regional planning vision, we may as well support it discreetly. It doesn’t affect our planning one way or another.”

The regional planning documents describing Stockholm’s vision for a polycentric metropolitan spatial structure specifically note that transportation investments alone are not sufficient in the realization of this goal. Rather transport investments must accompany a range of other land use development initiatives and restrictions. The same documents underscore that “too many cores, particularly if they are in close proximity, will result in competition for a limited labor and consumer market and the cores will tend to be too small and insufficiently attractive to compete with the regional centre.”(Regionplane- och trafikkontoret 2003, p.21; author’s translation.)⁴

The challenge lies in the institutional structure guiding investments in transportation and land use decisions in Sweden. Transport investments are, notwithstanding the growing importance of local and private contributions, still determined by national level authorities. However land use is equally dominated by local municipalities, in cooperation with private developers. Despite continual exhortations and initiatives to coordinate transportation and land use planning, land development initiatives rely on reliable decisions or strong signals that associated transportation infrastructure is or will be in place. In other words, transportation decisions are made first and local authorities then do their best to maximize the development opportunities they offer. Private developers interviews reported that their strategies and investment commitments, in turn, are rarely made without strong expectations that associated planning approvals will be forthcoming.

This may well have critical implications for the way municipalities (and indeed, private developers) make individual and common decisions in response to a regional polycentric planning strategy. Compare two

⁴ This is in reference to “outer” cores, but the same logic holds true for inner cores, whose development depends not only on development in the core but on the urban amenities of the core in relation to surrounding agglomerations.

possible effects to spatial form resulting from a new transportation link between two designated urban cores. In the first scenario there is either a law or a binding agreement between core and non-core municipalities to limit land development outside the core areas. The cores grow in density and size, and this has a positive effect on some neighboring municipalities (increased transport accessibility to these communities leads some households and companies to locate there.) The competitive position of the entire region is enhanced. However this also leads to a redistribution of resources within the area represented by the core and surrounding communities, since the core municipalities' relative competitiveness has been enhanced. For any one municipality, this can lead to a net effect that is positive, if the regional competitiveness benefit is larger than the local redistributive effect—or negative if the redistributive effect is larger.

In the absence of laws, cooperative agreements or a strong sense of cooperative will among municipalities near a designated urban core, all municipalities will likely exploit opportunities to develop land near the new transportation link. They will likely be willing to contribute to the production of offramps or stations that raise land values in their own communities. The competitiveness of the entire region may increase in the short term, because more areas are developed with good accessibility to the rest of the region, and the redistributive effect is dampened. A “membrane” of exploited mark may develop along the entire corridor, particularly if it is a motorway or a light rail line with many stops. In the long term, the competitiveness of the region may suffer from overspeculation as municipalities compete for the same consumers, households and firms, and congestion would increase along the corridor. Even in this scenario, some communities will win and others lose. The transport link that was built to strengthen a polycentric built structure would in this scenario actually lead to an intensification of the corridor spatial structure that can already be said to characterize the Stockholm region.

The latter scenario would seem to be the more likely, given the strongly entrenched local planning monopoly assured by the Swedish national Planning and Building Act (Plan-och bygglagen, PBL) and the relatively limited cooperation on land use planning among the Stockholm region's municipalities. The County Administrative Board, (the deconcentrated representative of national government interests at the regional level) in fact expressed its hesitance regarding the long term potential that some urban cores might merge: “(Regarding) the proposal to let the urban cores grow together, (We) do not see what regional advantages this would offer. On the contrary this would encroach upon the regional green structure. The areas between the urban cores do not have the same locational advantages as areas within the urban cores. It would seem more natural that the urban cores would thus develop along communication corridors.”⁵

Note that in the quote above, the term “cores” seems instead to describe station areas that could develop along transit corridors. This confusion between corridor and polynucleated development is also reflected in the documents describing the visions of other actors. For example the intermunicipal cooperation association Stockholm NordOst describes its vision in terms of both corridor development (along E18 and the so-called Roslagspilen) and regional core development (in Täby-Arninge, but with equal emphasis on central area development in surrounding municipalities.)

⁵ Stockholm County Administrative Board, official comment on the regional plan RUF5 2010, 300-08-50159

A somewhat surprising finding from the interviews in this study was the reluctance of almost all affected interests—municipalities, municipal organizations, national and regional authorities and developers—to discuss the possible conflicts involved in implementing a polycentric strategy. Most admitted that the dialogue within for example forums for intermunicipal cooperation, or events held by the regional planning office, focused on region-wide benefits but not conflicts associated with specific development initiatives. In particular, the question of restricting development such as new shopping centres or housing areas outside core areas has been systematically ignored.

The planning literature includes extensive analysis of the ways in which powerful actors manipulate discourse, agendas and information flow in general to hinder opposing views from finding a voice in planning dialogue or narratives. (References to come) However there is less analysis of why all actors may choose to downplay potential conflicts associated with collective action. In this case it would appear that supporting a polycentric vision is judged to be a more effective way to achieve a range of other goals than supporting those goals directly. The national road and rail authorities, for example, have started to use the polycentric strategy as an argument for implementing initiatives that would likely have been approved with or without the policy. (Stockholms Handelskammare, 2009)

Suppose that an actor makes a decision about whether or not to participate in intermunicipal or other cooperative forums for coordinated policies related to polycentric development based on her estimation of benefits, costs (in this case primarily transaction costs), and risks associated with participating or defecting. We have already argued that this value will be easier to estimate the costs and benefits to each actor associated with specific initiatives and alternative policy packages are discussed within the cooperative forum. However, this level of specificity also reduces the opportunity for polycentric rhetoric to be exploited to further individual goals.

Information regarding the potential costs and benefits associated with various policy options is valuable but also varies depending on the behavior of other actors. The higher the information level used to inform the cooperative forum's agenda, the more easily each actor can evaluate costs and benefits. The more specifically conflicts among actors are specified, the lower the transaction costs may be to reach consensus or negotiate a compromise. Why then would a group of diverse actors prefer to participate in low-information environments? Why should they be so reluctant to move the discourse from a general discussion of regional benefits from polycentric development, to a meaningful discussion of policy effects?

The interviews reveal that many actors reason that a low information environment is preferable in the absence of signals that the polycentric strategy will affect national investments. To paraphrase one respondent (a politician from a non-core municipality), "It won't affect our local development initiatives because we have a local planning monopoly, and it supports our common interest in better public transport. Why wake a sleeping bear?"

This still begs the question of why municipalities are willing to invest time and energy discussing polycentric development within organizations like Stockholm Nordost. Why participate at all? It may be that two parallel decisions are at work. In the case of transport, municipalities see an opportunity to

debate transit alternatives that can result in a meaningful coalition to lobby the national government, once national and regional transit authority preferences become more clear. In the case of local land use, there is no attempt to coordinate strategies and there is some indication that municipal representatives are careful about the information they share regarding some project plans. However, they are able to keep tabs on the development plans of surrounding municipalities, which is valuable in their own planning.

In an earlier paper we suggested that actors participating in non-binding dialogue regarding issues of common interest may be motivated by the expectation of relational rewards, social capital that can lower transaction costs in other arenas for collaboration (Rader Olsson 2009). The Täby-Arninge study would seem to support this notion; several respondents described their motivation for participating in discussions about polycentric development as related not to the outcomes of those discussions *per se*, but rather to the opportunity to meet other municipalities in a different type of institutional environment. For example, when another local transport project encountered financing problems, the municipalities of Täby, Österåker and Vallentuna agreed to help co-finance the project. According to our interviews, this was due to the trust and open attitude built up as a result of dialogue within Stockholm Nordost/UNO. Importantly, some respondents described an increased willingness to cooperate with municipalities on some issues even if they have deep conflicts in other areas.

Another possibility is that the reluctance of municipalities to use these institutions to analyse and debate the complex costs and benefits to surrounding municipalities of concentrating development in Täby-Arninge reflects a classic example where the collective action institutions result in an underinvestment (of time and energy) in outputs that would benefit all, such as a coordinated land use plan that includes compensation for “losing” municipalities.

Perhaps both phenomena are at work. It may be that the high transaction costs—cognitive costs associated with analyzing the complex and uncertain costs and benefits of polycentric spatial development and the potential for various scenarios will occur—motivate municipal actors to keep their cooperation politely vague. However, they nevertheless choose to contribute to the cost of maintaining institutions for cooperation such as Stockholm Nordost because participation generates relational rewards that may be valuable as the likelihood of various scenarios becomes more clear.

Conclusions

Albrechts notes that “the selection of (a limited number of) strategic issue is crucial to strategic spatial planning”, and that this type of specific, limited strategic cooperation in a variety of different institutional contexts and actor constellations will be necessary to achieve a polynucleated metropolitan vision. In line with Albrechts’ study of the institutional preconditions for polycentric development in Flanders, we find that municipalities are more willing to cooperate on issues regarding traffic and transport, where the value of building a coalition is clear and local political autonomy is not threatened. Even if there are clear divisions in transport project preferences, there would seem to be room for negotiation due to a consensus regarding the need for better links to the airport and among northeast communities. However, there is less interest in linking to other urban cores (besides the airport) and no willingness to compromise the local land use planning monopoly to serve regional interests.

It may be that this strategic selection of only a few issues related to polycentric spatial development may in fact lead to a rather different spatial outcome, namely a corridor development with new building focused along north-south radial corridors. The strongly protected system of green wedges, argued to support the polycentric spatial vision by hindering sprawl between cores, may ironically also contribute instead to a corridor development pattern. Communities express more kinship with communities with whom they share what one respondent described as an “active border,” with built areas bordering each other and regular contact among households in communities along the north-south corridor. It would be fascinating to test this hypothesis in a future study, perhaps using the incidence of intermunicipal cooperative agreements and partnerships as evidence.

Our findings suggest that it may be just as important to study the institutional factors involved in transitions to polycentric urban regions as it is to understand economic driving forces. Models of new economic geography and land use/transport models are valuable in determining where developers will want to locate but do not consider the motivations of municipalities, who control land use, to release or retain certain areas for development. In the case of Stockholm, designated urban cores only partly reflect economic and social forces driving spatial settlement patterns. Admittedly the regional polycentric strategy lacks binding authority and does not yet seem to have affected local land use strategies or national investments. However, the increasing frequency with which the strategy is referred to in local, regional and national plans may reflect its growing influence.

This study may also contribute to the literature on collective action by reframing underinvestment in cooperative forums, in this case maintaining low-information discourses rather than discussing potential conflicts and benefits, as perhaps instead being very rational collective investments in social capital that can prove valuable to future cooperation.

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