Grasping the spatial paradoxes of finance: theoretical lessons from the case of Amsterdam

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INTRODUCTION

Mapping the hierarchy of financial centers is a staid parlor game played by a small number of social scientists. While spatial to the bone, geographers have never succeeded in vesting a monopoly on this topic. In fact, the first post-war scholars interested in the dynamics of financial centers came from economic history. Kindleberger’s booklet of 1974 on the rise of financial centers is still the starting point for many scholars (Kindleberger, 1974). And even in the 21st century the most impressive work has come from economic historians such as Cassis (2006) and Michie (2006).

The renewed interest in the fate of financial centers can be traced back to the ‘second wave of globalization’ that started in the mid 1970s. The effects of globalization 2.0 on the field of geography are hard to overestimate. Without exaggeration one could claim that without it there would have been no neo-Marshallian cluster theory, no rediscovery of industrial districts, no relational geography, no creative industry research as well as no ‘World City Hypothesis’ in its many manifestations.

In this chapter, I zoom in on recent attempts to come to grips with the spatial dynamics of financial centers, focusing on the spatial paradoxes thrown up by those dynamics. In the next section I give a brief overview of the extant explanations for these dynamics. I end the section with highlighting some problems linked to these explanations. The subsequent section presents the empirical case around which this chapter is construed and explains why the recent fate of Amsterdam serves as a critical case for theory development. The final section embarks upon a theoretical discussion, arguing for theoretical pluralism to do justice to the complexity of the field of finance and the position of financial centers in that field.

EXPLAINING FINANCIAL CENTERS

Cities are as old as the Neolithic revolution. When people shifted to agriculture as their main source of livelihood, they simultaneously discovered the advantages of congregating in larger communities and the division of labor it made possible (Braudel, 1982; Bairoch, 1988; but see Taylor, 2010a, 2010b for an alternative account). The rise of financial centers, though, is closely linked to the incremental development of regional and global trading networks that connected different economies and allowed the processing of surpluses through long distance trade relationships that were managed by traders located in specific urban settings that specialized in providing the infrastructure and networks needed for those managerial tasks (Braudel, 1982; Arrighi, 1994; Cassis, 2006).
While more widespread than suggested by the Eurocentric literature, the European city-state is still the ideal typical example of such a trading center. According to Braudel and Arrighi, the first ‘World Cities’ developed among a band of European city-states that connected the trading circuits of the North and Baltic seas with the Mediterranean. Cities like Genoa, Amsterdam and, later, London started their careers as centers of physical trade management that over time transformed into the processing of trade contracts and the financial flows linked to those contracts (Cassis, 2006).

The question why some cities developed such specialties while others did not was traditionally answered by highlighting geophysical contingencies. Kindleberger, Cassis and Michie (2006) stress the importance of a natural harbor to develop an entrepôt-function for a larger ‘hinterland’, on the back of which a specialization in trade finance, shipping finance and insurance could develop. These financial functions, after they reach a certain threshold, may even survive the disappearance of the trading and storing of valuable commodities, and even the complete disappearance of the nearby harbor, as is demonstrated by London, New York and Amsterdam.

A second set of explanation builds on geopolitical observations. Arrighi in particular links the rise and demise of financial centers to the global dominance and hence the size of the ‘national’ economy in which the financial center is embedded (1994). This suggests a genealogy that has a center start out as coordinator of national trading and capital flows, transform itself into a center that allocates capital over an expanding area as ‘national’ agents start dominating extra-national economic spaces and back again to the national level as the dominance of those agents starts to wane. In Arrighi’s narrative, size is all. Genoa and Amsterdam could only make their claim to world fame in a context of fragmented national economies and underdeveloped nation-states. As soon as England had succeeded in integrating its national markets, its much larger ‘hinterland’ rapidly turned the British Isles into the Empire of the late 19th/early 20th century, with London as its global control center. The next phase in capitalist history started when the US, after the Civil War, integrated a continent sized economy, generating sufficient returns to serve as the armament manufacturer for the allies during the Second World War. The ensuing ‘Empire’ quickly developed its own control center, in the form of New York, whose advantage over competitors was built on the back of a large harbor and the trade related financial specializations that required.

Geographers have been much more interested in reproduction over time of financial centers than in their rise (or decline). Reading off from the urban concentration of financial activities underlying causal variables such as dedicated infrastructures, specialized labor markets and the knowledge generating or knowledge dispersing advantages of proximities, economic geographers have simply viewed those centers as cases of neo-Marshallian clusters (Thrift, 1994; Engelen, 2007; Karreman and Van der Knaap, 2009). As such, economic geography clearly starts from the assumption of path dependency, suggesting that decline and change are a theoretical anomaly, especially endogenous change. Less contested is exogenous change, caused by war, geopolitical shifts or technological change. Hence there have been some spatially inclined observers who have claimed that the virtualization and digitalization of trade would lead to despatialization (O’Brien, 1992; Castells, 1996; Cairncross, 1998).

A fourth explanation is provided by New Economic Geography (NEG), an attempt by economists to apply a micro-economic perspective to spatial behavior (Krugman,
In this view, clusters are the outcome of individual cost–benefit decisions over where to set up shop. Given an economic universe with friction — that is, in which transactions are costly, contracts are incomplete and markets are not automatically clearing — firms will rationally decide to co-locate. The beauty of this lies not only in parsimony but also in the dynamic theoretical predictions it generates. Due to declining transaction costs and rising co-location costs, location decisions will follow a U-shaped pattern: under conditions of high transaction costs firms will cluster to minimize those costs, while decreasing transaction costs result in dispersal (Grote, 2007).

A final strand of theorizing is known as ‘relational geography’. Both Sassen and Taylor claim parenthood to this approach (Sassen, 1991; Taylor, 1997, 2004). While the emphasis is on tracing relations between ‘world cities’ in order to theorize the contextual dynamics between those cities, the implicit assumption is that urban centers serve as nodes for coordination and control of economic/financial activities in different regionalized economies and hence follow a spatial division of labor. As such, the implicit conceptualization of globalization in the relational approach is one which sees the increasing linkages between ‘world cities’ located in different regions as reflecting economic development along ‘our’ historical lines.

EXPLANATORY CAVEATS

While covering a wide variety of aspects, each of these approaches suffers from different explanatory limitations, inviting geographers to break new theoretical territory. The geophysical and geopolitical explanations favored by economic historians are unable to deal with the much stronger historical continuity than their emphasis on exogenous shocks warrants. The top eight financial centers identified by Cassis around 1780 (London, Paris, Amsterdam, Brussels, Frankfurt, Hamburg, Geneva, New York) are still in the top ten more than 200 years later (Cassis, 2006). In other words, decline is never absolute and seems to leave a ‘residue’ of contacts, expertise and infrastructure which, under precipitous circumstances, does serve as a springboard for new growth.

Initially relational geography was criticized for data deficiency (Short et al., 1996) and its economic and Eurocentric view of globalization (Robinson, 2002). GaWC was explicitly established by Peter Taylor and collaborators to address these deficiencies (see www.lboro.ac.uk/gawc/index.html). Less discussed is the absence of an explanatory mechanism, resulting in a body of literature that is strong and ingenious in description and operationalization but weaker in explanation and conceptualization. What causes the dynamics between world cities? Why do some decline and others rise relative to one another? Why do linkages between world cities become denser or looser over time? Is it merely an effect of development? Or do we observe new divisions of labor and new modes of interconnectedness coming into existence? Because of its empirical ambitions, relational geography has not developed the theoretical resources to answer these why-questions.

In a curious twist, this is true too for the causal narrative underlying neo-Marshallian cluster theory and NEG. Here the problem is not theoretical humility but the reverse;
a too mechanical application of one causal mechanism to a too complex object. What is cause and what effect? Do firms follow the labor market or vice versa? This is a long standing bone of contention between cluster theorists. The same is true for dedicated institutions. Are they the cause of firm clustering or its effect? If, as empirical research suggests, the causal arrow runs from firm to institution, cluster theory is only able to explain reproduction not the genesis of a cluster. Further causal indecisiveness concerns the underspecified nature of the claim that proximity matters. Co-location is often seen as a proof of the salience of proximity. But there is increasing evidence that in many instances co-located firms do not interact (Kloosterman, 2008; Engelen and Grote, 2009), raising deep and troubling questions about the extent to which causal explanations can be read off from empirical observations. A final unresolved issue is whether it makes sense to reframe location decisions in cost–benefit terms. While intentionality surely plays a role in location decisions, it is bad metaphysics to project it at the cluster as a whole.

Given these caveats, there is a pressing need for more theoretical openness in studies of financial centers. Below, I use data on the Amsterdam financial center to demonstrate that.

THE CASE OF AMSTERDAM

The Amsterdam financial center has strong historical roots which reach back to the 17th century, when, on the back of rapidly developing trading networks and shipping routes, it developed specialties in trade and finance that turned Amsterdam into one big information processing entity (see Lesger, 2001). These linkages, networks and circuits of information processing proved strong enough to withstand large geopolitical and geo-economic shifts (Arrighi, 1994; Cassis, 2006). While its heyday was in the mid 17th century, it lost its position as location of choice for emitting sovereign bonds only at the beginning of the 19th century, after the blockade of its harbors during the Napoleonic wars. Even then, the dormant infrastructure only needed a small dose of pollination, which came in the second half of the century with the ‘first wave of globalization’ spawned by the ‘Hundred year’s peace’ (Polanyi, 1944).

During the 20th century, Amsterdam underwent the same fits and starts as other European financial centers. Over time, the Netherlands had developed an open, strongly trade oriented economy, harboring a relatively large number of MNCs (Katzenstein, 1985), strong, internationally oriented banks that were managed from Amsterdam based head offices, markets for equities, bonds and derivatives that were unique on the European continent and a pre-funded pension system, as well as the dedicated institutions, specialized labor force and the well developed linkages between financial firms and other producer services identified by cluster theory as crucial (Engelen et al., 2010).

Given these starting conditions, we would have expected a growth trajectory of Amsterdam during the 2000s much in line with developments in other financial centers. In other words, decline after the bursting of the ICT bubble in 2001, strong growth again on the back of the structured finance bubble between 2003 and 2007, followed by a new phase of decline from the outbreak of the crisis.
Disconfirming Observations

The empirics suggest otherwise. First there is the relative drop of Amsterdam on the Global Financial Centres Index, a bi-annual meta-index that was launched in March 2007 by the City of London Corporation. In its first edition, Amsterdam ranked 23rd, just below Dublin (22nd) and Edinburgh (15th) but well above Dubai (25th), Luxembourg (26th) and Brussels (31st) (GFCI, 2007). In the edition of March 2010, Amsterdam reached just number 35, below Luxembourg (10), Dublin (31) and Munich (33), and only just above Brussels (39), suggesting a drop in relative ranking during the bursting of the bubble of 2007 (GFCI, 2010).

A second set of disconfirming observations comes from employment development in the Amsterdam financial center. While the age of ‘financialization’ brought a dramatic shift in the main sources of value for households, firms and national economies, it did not result in a growing share of financial services in overall employment (Krippner, 2005). Nevertheless, ‘financialization’ did affect the intra-sectoral and spatial distributions of financial services workers. To put it bluntly: employment decline in retail was largely offset by employment gains in wholesale (investment banking, asset management, proprietary trading), especially in strongly financialized economies.

This is demonstrated by Figure 22.1 that gives indexed employment figures for five financial centers. The biggest winner is Luxembourg, which broke its record of 2001 in 2005 and has since booked strong growth before falling slightly during the crisis. While the pattern of New York and London looks similar – loss on the back of the
2001 crisis, rapid uptake from 2003 onward, strong growth between 2003 and 2007, big losses over the latest crisis – the main difference concerns the size of the 2001 losses; big in New York, slight in London. Frankfurt and Amsterdam betray a different employment pattern. While employment is much less volatile, reflecting the much stronger legal employment protection offered in these countries, what is striking is the absence of any serious rise in employment since the stock market crisis of 2001. While decline in Frankfurt is to be expected, given the adversity of Germany to Anglo-American finance, Amsterdam is located in a strongly financialized national economy and hence should have experienced a growth pattern similar to London and New York. Instead it experienced decline. Why?

Explaining Decline

To answer that question, we need to disaggregate between different segments of the financial services. Since growth is in wholesale financial activities, which, in the Amsterdam context, boils down to trading (exchange related activities), asset management and investment banking, it is these activities that we will zoom in upon.

Trading

As Figure 22.2 demonstrates, Amsterdam has experienced strong losses in employment in exchange related activities. The rapid rise in the second half of the 1990s has turned into its opposite after the 2001 meltdown. The employment trends in trading stand in stark contrast to the revenues earned by the Amsterdam based exchange operator, NYSE Euronex, which over the investment cycle has seen year-on-year increases, mainly because of the rise of daily trades as a result of the growing popularity of automated trading. How come?

During the late 1990s exchanges and their operators underwent a dramatic transformation, with dramatic consequences for some financial centers. Before the 1990s, trade in exchange based financial products took place on physical trading floors, which almost everywhere resulted in concentric location patterns of brokers, banks, and clearing and settlement organizations around the building where the trading floors were located. With the digitization of trading data – the rise of the Bloomberg interface, instant news provision and the launch of the Blackberry smartphone in 1999 – and the dematerialization of shares, bonds and derivative contracts, these physical anchors were gradually lifted. Firms that used to play the physical floor resorted to electronic remote access gates, resulting in an outflow of foreign banks, a merger wave among Dutch brokers, and a movement from the city center to new locations on the outskirts of Amsterdam.

These developments were nested in a wider narrative, of the transformation of equity exchanges from national trading venues to transnational electronic platforms that serve as nodes in a networked flow of digital orders that is currently in the process of fragmenting as a result of the rise of new venues made possible by new regulation (MiFiD in Europe (Posner, 2009)) and new technologies (see Michie, 2006). This is indicated by the strong penetration of foreign investors in Amsterdam. Over 80 percent of shares traded in the secondary equity market are ‘owned’ by foreign investors, while over 70 percent of all new listings in Amsterdam between 2004 and 2008 were by foreign firms (Engelen and Grote, 2009).
Source: O+S Amsterdam

Figure 22.2 Exchange related employment
**Asset management**

The employment trend of the Amsterdam asset management industry is even more pronounced. As Figure 22.3 shows, Amsterdam has lost approximately half of its employment in asset management. This trend too appears to be unrelated to the overall investment cycle, although the downward swing since 2008 does suggest some cycle related volatility. So what happened?

The size of employment in asset management is not so much determined by investment opportunities as by the size of the pools of capital to be managed. In the Netherlands the biggest pools of capital by far are those managed by pension funds. Being roughly equal to Dutch GDP these mandatory savings are managed by more than 600 small to very large pension funds, the largest three of which control more than half.

While they used to function as subsidiaries of the budgetary machinery of the Dutch state the largest three public pension funds were privatized in the mid 1990s to grant them access to a larger set of investment opportunities in a context of declining state debt. Initially this spawned a shift from sovereign bonds to shares, traded on the Amsterdam exchange. This generated a surge in transactions for Amsterdam based brokers and asset managers, largely explaining the growth of employment in these two fields of activity in the second half of the 1990s (see Fernandez, 2010). However, as pension funds professionalized they shifted their mandates increasingly to big foreign asset managers like Blackrock, State Street, Barclays and Goldman Sachs. Currently two thirds of Dutch pension savings are managed by Anglo-American asset managers, resulting in a decimation of the Amsterdam asset management industry.

**Banking**

The employment developments in banking are hardest to interpret, predominantly because banks combine so many different activities. When capital was unleashed in the mid 1970s, banks responded with an unprecedented merger wave, leading to national consolidation and, in the 2000s, hesitant attempts at cross border mergers. In the Netherlands consolidation was actively stimulated by the regulator, who feared that the small size of the Dutch home market would disadvantage Dutch banks in the integrated European banking market to be. According to data from the G10, the Netherlands has one of the most concentrated banking markets; the top five banks have a market share of 76 percent (G10, 2001).

Second, the business model of banking has radically changed over the last decades. ICT has eradicated many routine tasks. The ATM is of course a case in point. In an overbanked country like the Netherlands, this has rapidly shrunk banking networks. While banks still had 6152 branches in 2000, 6 years later that number had declined to 3100 (De Jong, 2009).

Finally, banking has undergone a true ‘financial services revolution’ since the early 1980s (Moran, 1991). While banks traditionally absorbed excess capital and allocated it to firms and households with capital needs, since finance was unleashed they have increasingly been banking for themselves. This is visible both in their source of funding, which came increasingly from the short term interbank money market (Gorton, 2010), as in their main source of profits, which increasingly came from fees and commissions.

The root cause of this was excessive financial innovation, resulting in an increased hiring of academically trained and highly paid workers, which stood at the cradle of
Figure 22.3  Asset management employment: Amsterdam, 1995–2009 (2nd Q)

Source: O+S Amsterdam
the sharply rising income and wealth inequalities in a small number of international financial centers (Duménil and Levy, 2004; Kaplan and Rauh, 2007).

According to OECD data, Dutch banks have undergone similar developments, albeit not to the same extent as UK, US and Swiss banks, suggesting a much milder ‘banking revolution’ in the Netherlands itself and a similar spatial distribution of fee revenues to Swiss and German banks, that is, nationally based commercial banks with London based investment bank-units generating well over half of total revenues.

How did this affect Amsterdam? As Figure 22.4 demonstrates it is hard to tease out a clear trend from the available employment data. Rapid growth between the mid 1990s and the early 2000s was followed by a steep fall in the wake of the bursting of the ICT bubble in 2001. However, in contrast to trading and asset management, 2003 saw a quick uptake in banking employment. It was only in 2009 that employment started to fall again, mainly due to the takeover and breakup of ABN Amro, resulting in thousands of job losses, especially in its Amsterdam head office (Engelen and Musterd, 2010).

In short, Amsterdam was hit by a triple whammy. First, the retail part of Amsterdam banking experienced similar decline as banking elsewhere, due to labour replacing capital investments in the form of ATMs, automated processing, offshoring and outsourcing and Internet banking. Moreover, Amsterdam failed to compensate these losses by gains in wholesale employment. Bypassing the Amsterdam financial center, Dutch banks and pension funds tapped directly into the financial networks provided by London. Secondly, Amsterdam, like financial centers elsewhere, was hit by the crisis of 2007–2009. Nevertheless, the marginally smaller employment losses compared with larger financial centers corroborate the claim that most fee revenues were earned in London, not Amsterdam. Finally, Amsterdam was hit by the unique event of the takeover and breakup of ABN Amro, its largest, most ambitious and most interconnected universal bank. While not unrelated to the wave of deregulation that ignited the banking revolution, the takeover and breakup of ABN Amro is still a contingency hard to fit into any theoretical framework.

DISCUSSION

How to make theoretical sense of these different narratives? Neo-Marshallian cluster theory clearly fails. Despite excellent starting conditions, Amsterdam experienced pronounced losses of employment in financial services. To frame this in cluster theoretical terms: the centripetal forces of proximity that used to hold the Amsterdam financial center together have clearly lost their powers vis-à-vis London. Both asset management and banking were vulnerable to capture by London based traders, bankers and firms, suggesting a hierarchical financial market structure that is dominated by London and New York, allowing local players to simply bypass smaller national financial centers, which, before the virtualization of finance, used to serve as pipelines between global and national capital circuits.

The second candidate, NEG, at first sight has more to offer. The causal mechanisms stipulated by NEG clearly are at work in the Amsterdam case. Declining transaction and information costs have lowered the threshold for foreign financial service providers to tap Dutch based capital pools, while simultaneously allowing Dutch banks to insert...
Figure 22.4  Banking employment: Amsterdam, 1995–2009/2nd Q

Source: O+S Amsterdam
themselves into foreign networks and expertise elsewhere. Increasing standardization, transparency and deregulation also made comparisons of the value added of the positive externalities generated by proximity in different financial centers more easy. The more flows of capital, firms and expertise left Amsterdam for London, the harder it became for Amsterdam to maintain its position. This is clearly captured by NEG. However, NEG has nothing to say about timing or about the London ability to withstand the centrifugal forces of decreasing transaction and information costs.

Relational geography, the third candidate, has something to offer the Amsterdam case too. The emphasis that relational geography puts upon the proximity of London to Amsterdam in a hierarchically ordered market field clearly is relevant for explaining why Dutch capital pools were increasingly using the London interface to break into global capital flows. Moreover, Dutch banks increasingly resorted to a similar ‘satellite’ strategy as Swiss and German banks had followed, shifting their wholesale activities lock, stock and barrel to London. This again suggests a ‘space of flows’ that is hierarchically structured on the back of an internationalizing division of labor, as is stressed by relational geography. That being said, the theoretical caveats mentioned above still stand.

So, in order to explain the Amsterdam case we apparently have to resort to different theoretical perspectives that stress different causal mechanisms and use different data sources and techniques of analysis. In particular, I would like to claim, we need a comparative political economy that acknowledges the cultural turn (Jessop, 2007) and is able to make sense of institutional uneveness and hybridity (Yeung, 2004; Engelen et al., 2010), of variegated social linkages (Brenner, 2004), of unequally distributed resources and resource coalitions (Helleiner et al., 2009), and of the homogenizing and differentiating effects of shared socio-technical assemblages, devices and discourses (Djelic and Quack, 2007).

Applied to Amsterdam this suggests an historical reconstruction of elite action, informed by political conceptualizations of reality, at the supranational, national and subnational levels. The wave of regulation that kick started the global financial services revolution came from a targeted attempt of a global shadow elite to integrate financial markets (Abdelal, 2007; Wedel, 2009), speed up cross border transactions, shift from pay-as-you-go to prefunded pension systems, enhance the ability of banks to securitize assets, expand the number of products available and speed up financial innovation; projects that were largely informed by a vernacularized version of a body of theory that became known as the Efficient Market Hypothesis and that originated from libertarian scholars based at new US MBAs (Whitley, 1986; MacKenzie, 2006).

These cognitive principles were slowly dispersed over space and were taken up by a growing number of local elites, who used its premises to initiate local changes that were seen to serve their perceived interests, resulting in different forms of hybrid applications of what were seen as universal principles and techniques. Amsterdam was no exception. The Amsterdam financial elite responded to the ‘financial services revolution’ framed by the Big Bang in London in 1986 with a desperate attempt to transform the conservative, laid back ethos of the Amsterdam financial community into a vibrant pipeline between the US and the European continent. The 1978 derivative exchange was a first attempt at regulatory and organizational renewal. But so were the early initiatives of the Amsterdam broker community to integrate the Amsterdam exchanges, turn the operator into a publicly quoted limited liability corporation, rework itself into a high tech service
provider rather than an exchange, and initiate mergers with other European and finally US exchange operators. Together these changes, in a mere decade, have transformed the Amsterdam exchange from a national trading platform into a virtual transnational helicopter platform for mobile capital that is part of a continent crossing conglomerate, namely NYSE Euronext (Fernandez, 2010).

These are the meta-narratives underlying the decline of Amsterdam sketched in this chapter, that we as financial geographers need to tell. There is nothing simple about these narratives, as they betray the fascinating paradoxes of financial spatialities that have been thrown up anew by the financial crisis of 2007–2011. But complexity should not deject us. Rather it is a cue that we are chasing something important and less well understood.

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