ANDERS UNDERTHUN

The "Scalar Struggle" for Norwegian Gas

Introduction

In 2006, Norway's export of natural gas was surpassed only by Russia and Canada, and accounted for 15 per cent of total European gas consumption (NPD 2007). By contrast, barely 1 per cent of Norway's total gas production was consumed domestically. In 2005 and 2006, a national interest network, the "Gas Alliance", gained parliamentary acceptance for two policy suggestions about how Norway could enhance this share and thus embed the natural resource more firmly in domestic space. First, the parliament decided to support the intention of state-financed gas infrastructure. Second, the Gas Alliance gained support for a NOK 1.1 billion research programme on the industrial utilisation of natural gas feedstock called "Gassmaks". This chapter briefly discusses how these strategies demonstrate the *scalar struggle* associated with pressures of globalisation and Europeanisation on other scales of social and economic organisation.

Research Fellow Anders Underthun
Department of Geography, Norwegian University of Science and Technology (NTNU), Trondheim, Norway
anders.underthun@samfunn.ntnu.no
CAS Fellow 2007/2008

Scale and scalar struggles

Scale refers to "[…] one or more levels of representation, experience and organisation of geographical events and processes." (Johnston *et al.* 2000). This definition implies that scale is socially constructed and represents an important dimension of power. For instance, Lefebvre (1990) focuses on the spatial power of the state bureaucracy, whereas within Marxist geography, the social construction of scale has been explained by the expansionary logic of capitalism (Harvey 1982). The concept of 'scalar struggle' stems from the Gramsci-inspired work of Neil Smith (1984) who analysed how the hegemony of capitalist organisation at the national level has been challenged by other spatial scales, most notably the global one, through neoliberal legislation and expansionary capitalism. The rise of the *supra-national* (i.e. the European), *regional* or *local* scale as geographical markers of capitalist organisation and competition, also demonstrate this *rescaling* (Brenner 2004). However, Swyngedouw (1997) emphasises that the national scale still retains considerable spatial powers. Rescaling has rather led to definitional 'clashes of scales', where resurgent nationalisms often object to the way in which globalisation standardises and/or disrupts scalar configurations of wage settlements, employment schemes and the like. Thus, scalar struggles are often strategies for social struggles. The politics of natural gas in Norway aptly demonstrates dimensions of scalar struggles.

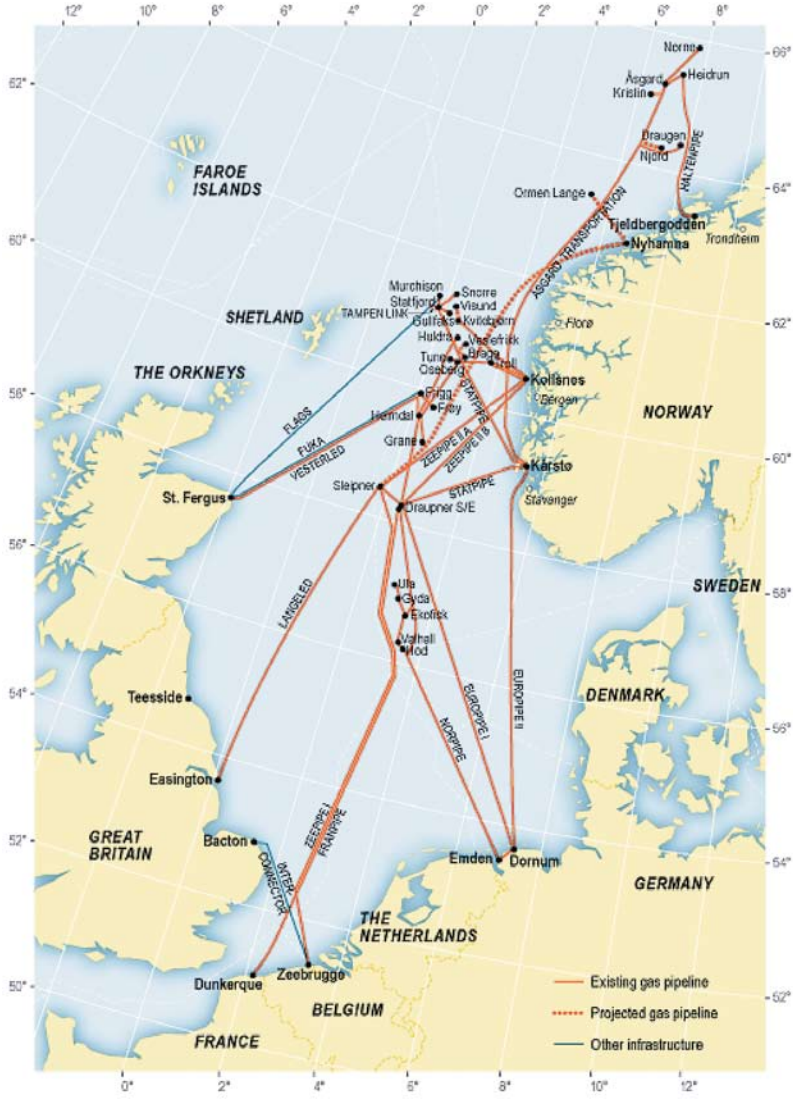

Figure 1

Source: The Norwegan Petroleum Directorate (2007)

The scalar dynamic of natural gas

Historically, the volatile nature of natural gas made it a highly *localised* asset due to the cost and difficulty of long distance transport. In fact, most of the US natural gas discovered in association with oil in the beginning of the 20th century was flared off. In 1947, American geologists estimated that approximately 1000 billion cubic metres of gas were flared each year in the US oil fields from the 1920s onwards (Arneson 1998). In comparison, total gas production of 2006 in Norway was 90 billion cubic metres (NPD 2007). The difficulty of transport also explains the historical concentration of infrastructure and feedstock utilising industrial facilities close to the source, for instance, along the American Gulf Coast (Chapman 1991). Moreover, gas surpluses far from major markets are still used as localisation advantages in the Middle East as these gas resources offer energy and feedstock at a good price for profit-seeking companies. Norsk Hydro's establishment of aluminium production in Qatar is a good example.

During the 20th century, the geographical expansion of gas markets in the USA was enabled by advances in the steel industry, while the existing infrastructure for coal-based gas helped the development of the European natural gas grid (Arneson 1998). The scalar dynamic of natural gas thus developed from a largely local phenomenon, to a regional, national and trans-national one, where end-users could locate relatively far from the original source. The petrochemical industry in Austria is an example in point. The technological development of cooling gas to liquid form (LNG), originally a US patent from the late 1950s, has enabled even longer distance transportation of gas and diminished the need for excess flaring in remote locations such as Qatar.

Though portrayed above in evolutionary scalar terms, the dynamic of gas markets has not always been the strict 'ladder' of geographical levels from the local to the global. Both the European and the Canada-USA natural gas grids were connected from an early point. It is, however, important to remember that the national level still enjoys the role of the landlord, collecting economic rent from company profits.

The case of Norwegian gas is interesting in scalar terms as the first deliveries of natural gas from the North Sea oil and gas fields did not go via the Norwegian mainland and were not operated by Norwegian operators. Here, a European market already existed while the market in Norway was almost non-existent due to the historical abundance of hydroelectric power. It therefore made sense to construct direct infrastructure to European locations from the Norwegian Continental Shelf.

The first scalar struggle for Norwegian gas

Strong national interest groups advocated the landfall of gas for domestic refining and industrial utilisation from the mid-1970s despite the non-existent Norwegian market (Arneson 1998). There were several reasons for this. The oil crisis of 1973 had prompted a discussion on national energy security. There was also a general fear of the "curse of natural resources" (Auty 1995), where historical examples shed gloomy light on the negative effects of export reliance. This argument was coupled to potential industrial synergies (innovations and employment) from grand infrastructure projects, often highlighted as a contrasting advantage of successful resource economies to the resource curse hypothesis (Bridge 2008). The gas from the giant gas fields Statfjord and Troll was finally brought ashore in the late 1980s and early 1990s to Norway for refining before being redirected to the European market.

The state contributed first and foremost through investments by state-owned Statoil, which was, at the time, a principal instrument of Norwegian industrial policy (Ryggvik 2000). Second, Norwegian sub-contractors were favoured at the expense of foreign companies when it came to the construction work and this aided the build-up of a world-class industry in offshore petroleum facilitation. Third, the state was highly influential in contributing to the establishment of the Norwegian petrochemical industry in a conscious attempt to utilise natural gas feedstock. It is fair to say that all these efforts were clear demonstrations of the production of scalar configurations that enjoyed hegemony on a national scale at the time.

The second scalar struggle for Norwegian gas

Throughout the 1990s and early 2000s, Norway's politics of natural gas management were challenged by other scales of influence. The Norwegian affiliation with the EU through its membership of the European Economic Agreement from 1994 entailed that the state lost some of its regulatory powers both in terms of direct subsidies to firms and regions, and in terms of the favourable contracting of Norwegian suppliers. Furthermore, the EU gas market directive from 2001 made it difficult to subsidise Norwegian gas markets as the directive was meant to provide more open and equal access to gas flows on the part of buyers. The scalar context thus limits state intervention in a manner that is very unlike Qatar's conditions for offering cheap gas to multinational companies.

The partial privatisation of Statoil in 2001 may have amplified the global direction and specialisation in which this company and the oil and gas unit of Norsk Hydro, now merged as StatoilHydro, oriented their activities. As part of their corporate restructuring, the two companies have also sold most of their natural gas-utilising downstream activities in Norway. The incentive for StatoilHydro to direct more gas to the Norwegian market is therefore very limited. Even though two more landfalls have been established in Hammerfest and Nyhamna in recent years, the infrastructure has not been constructed to encourage local exploitation to a great extent, but rather to serve as export platforms.

It is thus fair to suggest that there has been a rescaling of natural gas management to the European and the global level, but that this has not left the national level deprived. By the end of 2007, the Norwegian "Petroleum fund" had grown to a staggering NOK 2019 billion (Norges Bank 2008). Nevertheless, the Gas Alliance, a powerful political network consisting of Norwegian coastal regions, the Confederation of Norwegian Trade Unions (LO) and the Confederation of Norwegian Enterprise (NHO), have challenged the tendency towards rescaling by suggesting more active state policies in promoting domestic gas consumption.

For the coastal regions and LO, these strategies were seen as an opportunity to capture capital investments and secure employment, while NHO saw easy access to natural gas and related research funding as vital for the global competitiveness of certain manufacturing industries. The network attempted to revitalise the state as the primary scale of intervention, while it also was forced to adapt this strategy to the other scales of influence[1]. The two policy outcomes mentioned in the introduction mirror this adaptive scalar strategy. First, the Norwegian parliament voted in favour of providing financial support to domestic gas infrastructure, though in a manner that was commensurate with European competition imperatives. The creation of a research programme intended to boost industrial utilisation of natural gas feedstock (NFR 2006) is perhaps a stronger expression of the scalar struggle. To receive grants, all applicants to the programme must guarantee that activities will be performed *exclusively* within Norwegian space. Another interesting dimension to this strategy is

1: See Underthun 2008 and Reitan *et al.* 2008 for a more thorough background and analysis of these networks at the regional and national level.

that LNG research was eliminated from the programme as LO in particular considered LNG-related activities as promoting exports rather than domestic consumption.

It remains highly questionable whether these strategies will prove effective for resisting the pressures of globalisation and Europeanisation. However, they do demonstrate the windows of opportunity for prolonged national scalar influence as well as how scalar struggles take different shapes depending on the scalar configuration in which they are based.

References

Arneson, S. 1998. *Blått gull. Historien om naturgassen.* Villrose Norsk Forlag, Oslo.

Auty, R. 1995. 'The resource curse hypothesis.' *Economic Geography* 71 (3) 257–273

Brenner, N. 2004. *New state spaces: urban governance and the rescaling of statehood.* Oxford University Press, Oxford.

Bridge, G. 2008. 'Global production networks and the extractive sector: governing resource-based development.' *Journal of Economic Geography* 8 (3) 389–419.

Harvey, D. 1982. *The Limits to Capital* Basil Blackwell, Oxford.

Johnston, R.J, D.Gregory, Pratt, G and M. Watts. 2000. *The Dictionary of Human Geography.* Blackwell Publishing Ltd, Oxford.

Lefebvre, H. 1990. *The Production of Space.* Blackwell Publishers Ltd, London.

NFR, 2006. *GASSMAKS. Utredning av behov for nasjonal satsing på forskning for økt verdiskaping fra naturgass gjennom industriell foredling.* Norges forskningsråd, Oslo.

Norges Bank, 2008. *The government pension fund: Size and returns.* http://www.norges-bank.no/Templates/Article____41397.aspx Accessed 31st of May 2008.

NPD, 2007. *Facts 2007: The Norwegian Petroleum Sector.* The Norwegian Petroleum Directorate.

Reitan, M., E. G. Syrstad & A. Underthun. 2008. 'Regional mobilisering og nasjonal koordinering i styringsnettverk. En casestudie av norsk gasspolitikk', *Tidsskrift for samfunnsforskning* 49 (2) 179–209.

Ryggvik, H. 2000. *Norsk oljevirksomhet mellom det nasjonale og det internasjonale. En studie av selskapsstruktur og internasjonalisering.* Dr.Philos-thesis, The University of Oslo.

Smith, N. 1984. *Uneven development: nature, capital and the production of space.* Basil Blackwell, Oxford.

Swyngedouw, E. 1997. 'Neither global nor local: "glocalization" and the politics of scale.' In K Cox (ed) *Spaces of Globalization.* Guilford, New York, pp. 137–66.

Underthun, A. 2008. 'Piping the politics of space: natural gas and the engagement of scale in regional strategies of economic development', *Environment and Planning C: Government and Policy* 26 (4) 752–766.