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Markets and Merchants:

*Commercial and Cultural Integration in Northwest Europe, 1300-1700**

In the twelfth and thirteenth centuries commercial exchange increased in northwestern Europe. Trade increased and expanded around the North Sea and eastward to the Baltic and southward along the Atlantic coast.¹ Markets for goods showed the first signs of interdependence, of integration. The growing volume and value of commerce made feasible and advisable the creation of networks through which participants could exchange information as well as carry out transactions. The flowering of commercial connections was promoted by a long term rise in population which indicated and was a result of a sustained increase in output of a broad range of goods, including foodstuffs, and also the ability of the expanding transport network to deliver supplies where demand existed. In the thirteenth century a pattern emerged which would become the norm in succeeding centuries. Economic integration and, in its wake, cultural integration in northwestern Europe was underway.

MARKET INTEGRATION: THEORY

The concept of market integration had been long known. There is a continuing question of how best to measure the phenomenon. Alfred Marshall in the late nineteenth century discussed the effects of trade on prices. He noted the tendency of prices to come together in two different markets thanks to trade between them. That would, he theorized, be especially true for goods which are similar in character, easily described and travel well. His example was grain.² The theory of the single price forms the basis for measuring integration. The tendency of prices to equalize or not equalize among the urban markets of northwestern Europe makes possible measuring the intensity of commercial ties and so to explore the foundation for cultural exchange.

* I am grateful for the suggestions and comments of Maryanne Kowaleski and those who raised questions during the discussion in Prato.

¹ R. HAMMEL-KIESOW, *Lübeck and the Baltic Trade in Bulk Goods for the North Sea Region 1150-1400*, in *Cogs, Cargoes, and Commerce Maritime Bulk Trade in Northern Europe 1150-1400*, L. BERGGREN, N. HYBEL, A. LANDEN eds., Toronto 2002, pp. 83-88. N. HYBEL, *The Grain Trade in Northern Europe before 1350*, in "The Economic History Review", 55, 2002, n. 2, pp. 219-247.

² A. MARSHALL, *Principles of Economics*, eighth edition, London 1920, pp. 270-273.

There has been considerable work in recent decades on market integration. My own work on the topic was originally concentrated on connections between the Baltic and the Low Countries beginning in the fifteenth century.³ The work later expanded and was joined by other studies of market integration.⁴ Examining the results of that earlier work and combining it selectively with some new calculations on regional developments has the potential for yielding some better understanding of the emergence of maritime networks and its timing in late medieval and Renaissance northwestern Europe.

Grains were the most widely traded goods in the period. There is much more and more consistent price data for them than for other goods. The data is in general easily available through the Allen-Unger Database of prices, standardized to volume of grain and cost in quantities of silver.⁵ Because of the range of uses of grains, the relative ease of shipping the product and its geographical scope the grain trade is more easily studied than any other in the period. Prices for grain before 1300 are extremely rare. While a single series for wheat in southern England stretches well back into the thirteenth century there is no corresponding data to compare with those numbers.⁶ It is really only in the fifteenth century that figures for a number of towns are available. The quantity of data increases over later centuries. In all cases, however, there are gaps in series. Those can be a single year here and there but also a decade or two missing, the sources for prices being lost for one reason or another. Such gaps can throw some results into doubt. What appears to be the case in a table or a graph may be created by a simple lack of information so care is needed in evaluating the numbers.

³ R.W. UNGER, *Integration of Baltic and Low Countries Grain Markets, 1400-1800*, in *The Interactions of Amsterdam and Antwerp with the Baltic Region, 1400-1800*, ed. J.M. VAN WINTER, Leiden, 1983, pp. 1-10. R.C. ALLEN, R.W. UNGER, *Breath of the Market for Polish Grain 1500-1800*, in *Baltic Affairs Relations between the Netherlands and North-Eastern Europe 1500-1800*, J.P.S. LEMMINK, J.S.A.M. VAN KONINGSBRUGGE eds., Nijmegen 1990, pp. 1-18. The later, more specific studies of market development in medieval and early modern Europe in different parts of the region and with different categories for selecting the scope of research include: R.W. UNGER, *Feeding Low Countries Towns: the Grain Trade in the Fifteenth Century*, in "Revue Belge de Philologie et d'Histoire", 77, 1999, n. 2, pp. 329-358. IDEM, *Sources of food supplies for European capitals in the eighteenth century*, in "Mélanges de l'École Française de Rome, Italie et Méditerranée", 112, 2000, pp. 577-587. IDEM, *Thresholds for Market Integration in the Low Countries and England in the Fifteenth Century*, in *Money, Markets and Trade in Late Medieval Europe Essays in Honour of John H. A. Munro*, L. ARMSTRONG, I. ELBL, M.M. ELBL eds., Leiden 2007, pp. 349-380. IDEM, *Maritime Transport and the Integration of Low Countries Grain Markets in the Late Middle Ages*, in *Food supply, demand and trade Aspects of the economic relationship between town and countryside (Middle Ages - 19th century)*, P. VAN CRUYNINGEN, E. THOEN eds., Turnhout 2012, pp. 101-122.

⁴ Most notably C. VAN BOCHOVE, *The economic consequences of the Dutch: economic integration around the North Sea, 1500-1800*, Amsterdam 2008. Also for Spain, R. GRAFE, *Tracing the Market the Empirical Challenge*, Princeton 2012, and V.N. BATEMAN, *The Evolution of Markets in Early Modern Europe, 1350-1800: A Study of Wheat Prices*, in "The Economic History Review", 64, 2011, n. 2, pp. 447-471, among others.

⁵ Allen-Unger Global Commodity Prices Database (<http://www.gcpdb.info/>). Accessed March 20, 2018.

⁶ Prices from southern England are those reported by J.E. THOROLD ROGERS, *A History of Agriculture and Prices in England from the Year after the Oxford Parliament (1259) to the Commencement of the Continental War (1793) Compiled Entirely from Original and Contemporaneous Records*, Oxford 1882, who used the records of a number of different institutions, most of them in or near London, as his sources.

MARKET INTEGRATION: DATA

The general indication is a rise and then decline of integration of markets in northern Europe from 1300 to 1700.⁷ The difference in the average price of wheat in northwestern Europe to the average price of wheat in Baltic ports tended to go up from the middle of the sixteenth century, the opposite of expectations. As markets integrate the prices should move together and prices should converge. In the absence of any barriers to trade the ratio should be unity and the difference should tend to zero. Of course transportation costs would dictate some difference between prices in two markets and the gap created by the expense of moving the good could and did vary over time. Even so, if markets became more integrated the expectation is that rises and falls in prices in two places should follow the same pattern. Deviation from a consistent pattern, the rise in prices for wheat in the west compared to those in the northeast in the sixteenth and more so in the seventeenth centuries, suggests anything but a smooth path to integration. Wheat prices which survive from towns in the Baltic are few before 1700 so the commodity is not the best indicator of the tendency toward integration. Rye was the more common grain export from the Baltic to western Europe and for it the pattern is more clear. The difference in the average of rye prices in western ports compared to the average in Baltic ones was low and somewhat consistent in the fifteenth and sixteenth centuries and then began to decline in the middle of the seventeenth. Taking the ratio of average prices in the Baltic to average prices in western ports for the two grains generates results which are not entirely consistent with the comparison of the differences in the price averages. The ratio tended toward unity for part of the sixteenth century and for rye it was true again in the second half of the seventeenth century. The ratio of average wheat prices showed a decline to 1600 but remained well above one down through the seventeenth century. The sporadic nature of wheat price data for the Baltic region helps to explain the confusing results.⁸

Taking wheat prices in eighteen different markets comparing them to prices in southern England, the latter because it provides the longest and most complete data series for the good, yields little indication of a move toward integration.⁹ The use of a five-year moving average of the ratio smooths out some but not all of the extreme swings in the relative prices in markets. [See Graph 1] Even with smoothing it is clear that the mid fifteenth century dramatic increase in wheat prices in Leiden influences results considerably. Still there are signs of a movement toward integration in the seventeenth century, moving back to the situation in the fifteenth. Since ratios are made up of two numbers changes in the denominator heavily affect the result. [See Graph 2] The rise in the price of wheat in southern England in the sev-

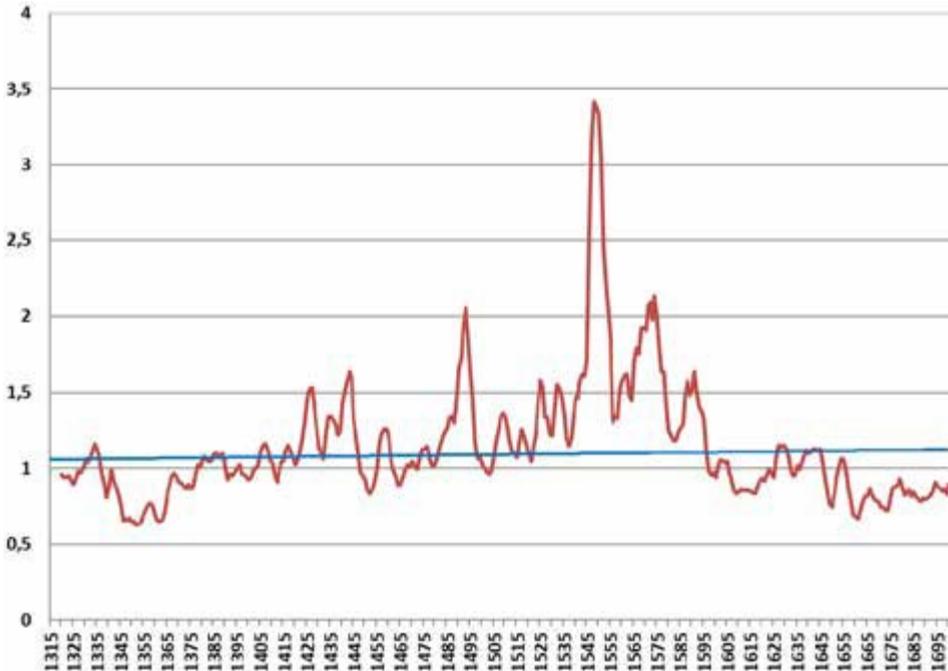
⁷ G. FEDERICO, *How Much Do We Know About Market Integration in Europe?*, in "The Economic History Review", 65, 2012, n. 2, pp. 470-497, 491, in large part agrees though noting how difficult it is to make a definitive statement.

⁸ R.W. UNGER, *Maritime Transport and the Integration of Low Countries Grain Markets*, cit., pp. 104-106.

⁹ The eighteen are Amsterdam, Angers, Arnhem, Bruges, Chester, Cologne, Douai, Edinburgh, Exeter, Frankfurt, Leiden, Lier, Louvain, Strasbourg, Tours, Utrecht, Wurzburg and Winchester.

enteenth century is an explanation for the fall in the ratio to the average price in the other eighteen markets but the fact that the other markets did not respond by shipping grain to London to take advantage of rising prices there and so raise prices proportionally in their own markets is a further indication of a less than fully integrated market in wheat in northwestern Europe by the seventeenth century.

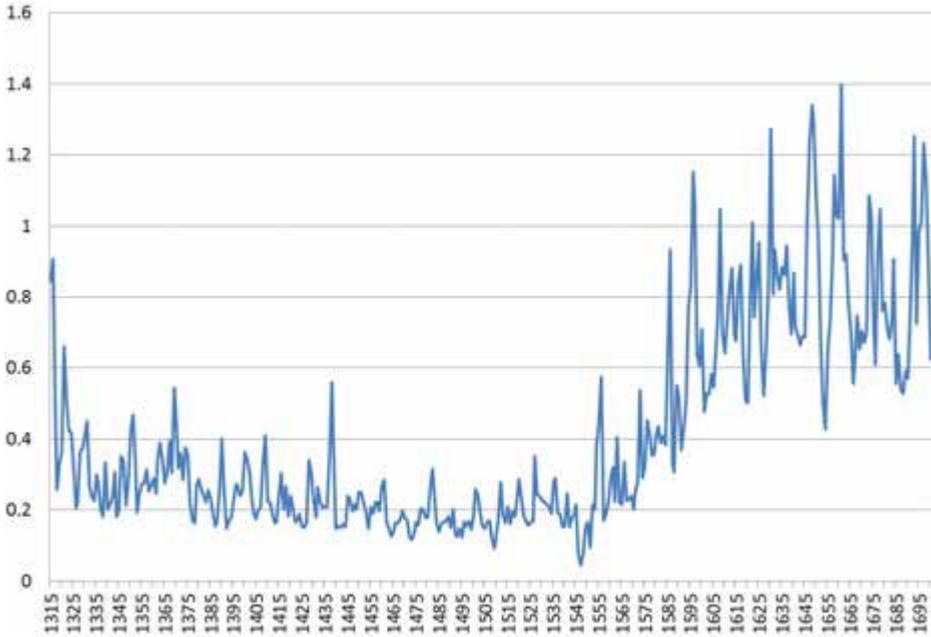
Graph 1. **Ratio of Average Price of Wheat in 18 Markets to Price in Southern England (five-year moving average) with exponential trendline**



Market integration tends to reduce price fluctuations, imports or exports to other sites in order to fetch higher prices serving to soften swings. Variance measures the degree of fluctuation and data for the ratio of averages of wheat prices in those eighteen markets to prices in southern England produces similar results to the series of five-year moving averages. [See Table 1] The measure is an indication, even if a poor one, of trends in market efficiency.¹⁰ The 100 years from 1521 to 1620 were stormy ones. The variance drops back to a low level for the rest of the seventeenth century, back to levels not seen since the fourteenth and early fifteenth.

¹⁰ G. FEDERICO, *How Much Do We Know About Market Integration*, cit., pp. 484-485.

Graph 2. Prices of wheat in Southern England (grams of silver per litre)



Tab. 1. Variance in the Average Ratio for Wheat Prices in Eighteen Markets to Prices in Southern England

1320-1420	0.019
1421-1520	0.069
1521-1620	0.355
1621-1700	0.022

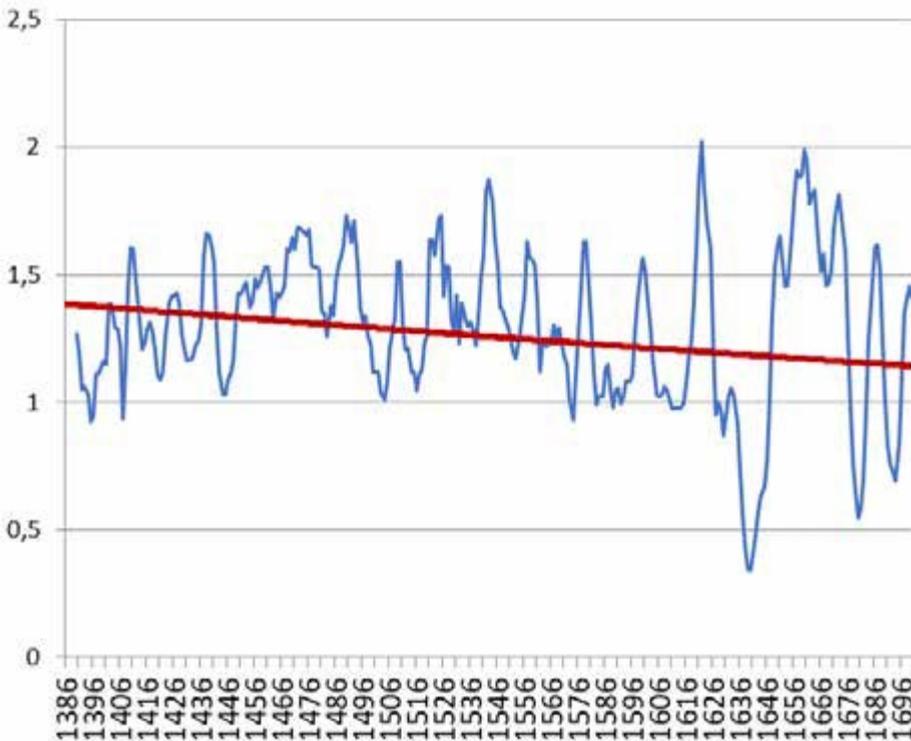
Source: Allen-Unger Global Commodity Prices Database (<http://www.gcpdb.info/>). Accessed March 20, 2018.

Rye prices are not much more help in measuring market integration. For southern England, a region with relatively high incomes for northern Europe, the price data for the seventeenth century have so many gaps that the series from there can not be used as a basis for comparison. Instead the price series from Strasbourg is the denominator of the ratio of the average of prices in eighteen markets. Some of the eighteen are different from those used for wheat because of the availability of data. Included in this case are four sites in eastern Europe. Ports like Gdansk and Rostock would have been sources of rye imports into western Europe in the seventeenth century and before.¹¹ For rye there are extensive fluctuations in the ratio of

¹¹ The eighteen markets are Amsterdam, Angers, Antwerp, Arnhem, Bruges, Brussels, Cologne,

the average to prices in Strasbourg. [See Graph 3] Even so there is a more distinct trend toward unity even though fluctuations increase for the second half of the seventeenth century. The pattern with wheat prices is somewhat reproduced with low levels of variance from 1421 to 1520. The figure rises after that with the last eighty years of the seventeenth century generating a considerably higher number. [See Table 2] The sharp rises in the price of rye at Strasbourg in the seventeenth century and so the swings in the denominator help to explain the higher variance. [See Graph 4]. Despite those source-related effects for rye prices there is more reason to believe that the tendency over the long run, despite difficulties, was toward increasing market integration.

Graph 3. Ratio of Average Price of Rye in 18 markets to Price in Strasbourg (five-year moving average) with exponential trendline



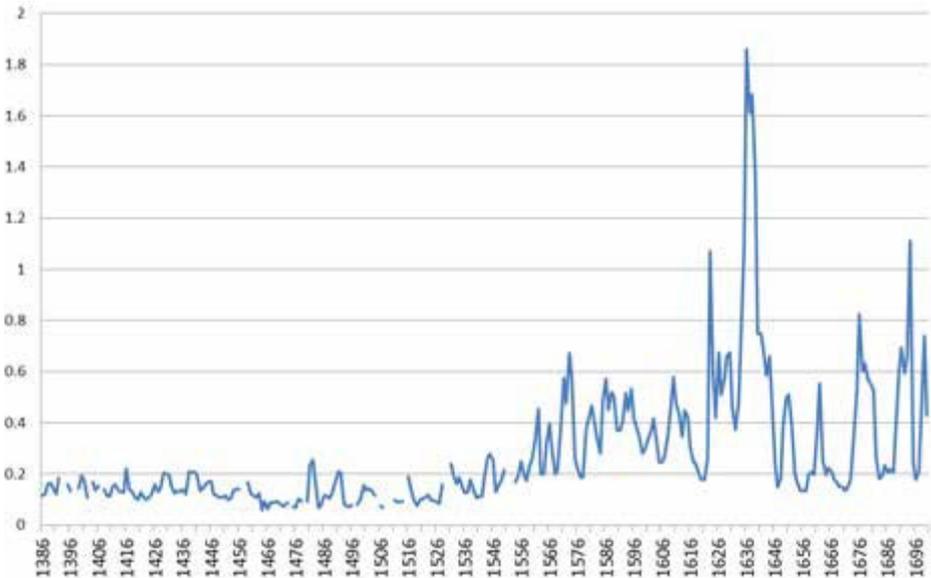
Coutances, Frankfurt, Gdansk, Leiden, Leipzig, Louvain, Paris, Rostock, Southern England, Warsaw and Wurzburg.

Tab. 2. **Variance in the Average Ratio for Rye Prices in Eighteen Markets to Prices in Strasbourg**

1386-1420	0.122
1421-1520	0.105
1521-1620	0.147
1621-1700	0.356

Source: Allen-Unger Global Commodity Prices Database (<http://www.gcpcb.info/>). Accessed March 20, 2018.

Graph 4. **Price of Rye in Strasbourg (grams of silver per litre)**



INTEGRATION OF REGIONAL MARKETS

Stephan Epstein toward the end of the last century argued that the economies of certain regions became more integrated in the closing centuries of the Middle Ages. The rising importance of regional fairs, he explained, was because they functioned as sites connecting two or more of those relatively more integrated regions. A number of fairs appeared in the fourteenth and fifteenth centuries at places that had not previously had much of a role in trade. That was evidence that some regions were enjoying rising levels of integration.¹² If he was correct then not looking at the overall picture but rather zooming in on smaller geographical areas might

¹² S.R. EPSTEIN, *Regional Fairs, Institutional Innovation, and Economic Growth in Late Medieval Europe*, in “The Economic History Review”, 47, 1994, n. 3, 459-482.

well produce more promising results. The data on prices, examined in certain novel ways, tends to support his conclusions with implications for the extent of commercial connections and also cultural influence.

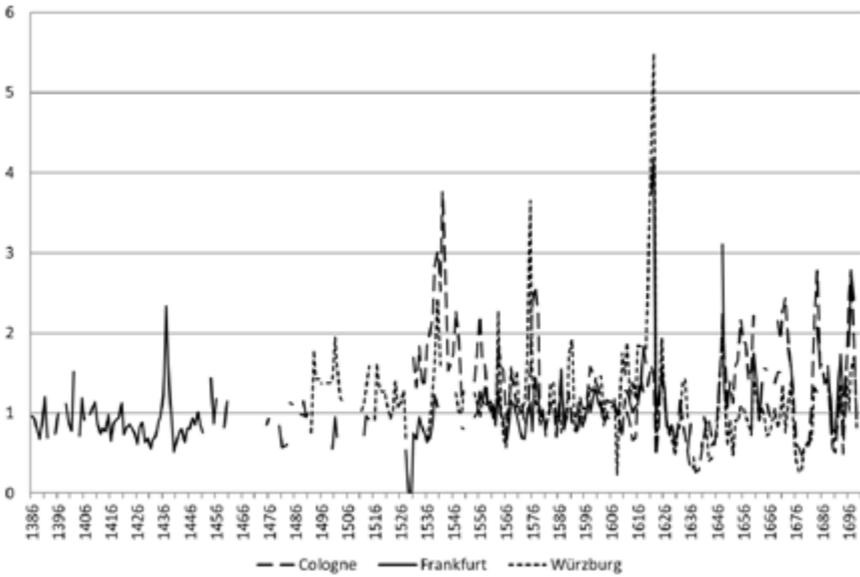
Using the ratios of prices of rye to those in Strasbourg a comparison of three other towns in the valleys of Rhine and Main, towns relatively easily accessible to each other by river, shows curves following very similar patterns.¹³ [See Graph 5] The 1622 Wurzburg figure does create considerable distortion but otherwise the commonality of the movement of prices is clear. For wheat, where more extensive data are available, some similar results emerge. For eight towns in the Low Countries the middle of the sixteenth century was a time of unstable prices, easily attributed to a combination of weather shocks and civil war. [See Graph 6] Prices in Douai remained consistently lower than in London and for that matter in towns to the north, though, by the seventeenth century it too seemed to be falling into line with the rest of the Low Countries with variations and prices similar to the rest. For four towns in the Rhine and Main valleys the pattern in wheat prices was similar. The 1547 Cologne price does distort the picture but at the same time indicates that the mid sixteenth century was a period of disruption in markets. [See Graph 7] For four towns in Britain the pattern for wheat prices is repeated. [See Graph 8] Edinburgh is an outlier when surviving data begin to appear in 1557 but in the course of the seventeenth century the town falls into line with the others. There is also disruption in the mid sixteenth century with Exeter prices swinging dramatically higher for a short time in the 1560s and then falling back into the general pattern.

Statistically rather than graphically correlations of prices in nearby markets produce further confirmation of a pattern of increasingly strong regional integration, supporting Epstein's argument. For shorter periods of time the indications are even stronger. For the long fifteenth century prices for towns in the Low Countries show strong correlations and when broken down into sub-periods of 1384 to 1477 and 1478 to 1520 the rising coefficients become more obvious. The move toward integration was, of course, not as strong with some pairs of towns as with others. Even so the pattern of a strongly developing regional market in the Low Countries, even over a period of disruption from foreign and internal wars, seems clear. The results hold for both wheat and rye.¹⁴

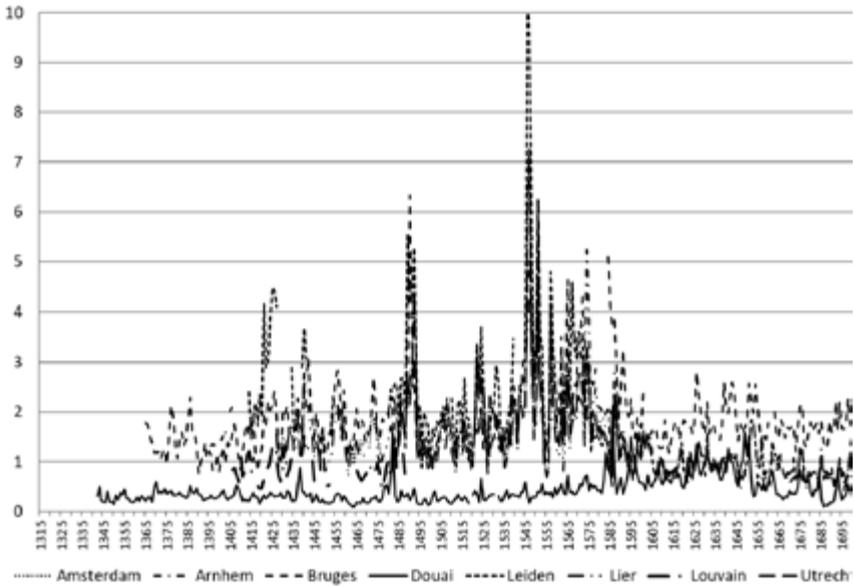
¹³ The three other towns in the river valleys were Cologne, Frankfurt and Wurzburg.

¹⁴ R.W. UNGER, *Feeding Low Countries Towns*, cit., 348-353.

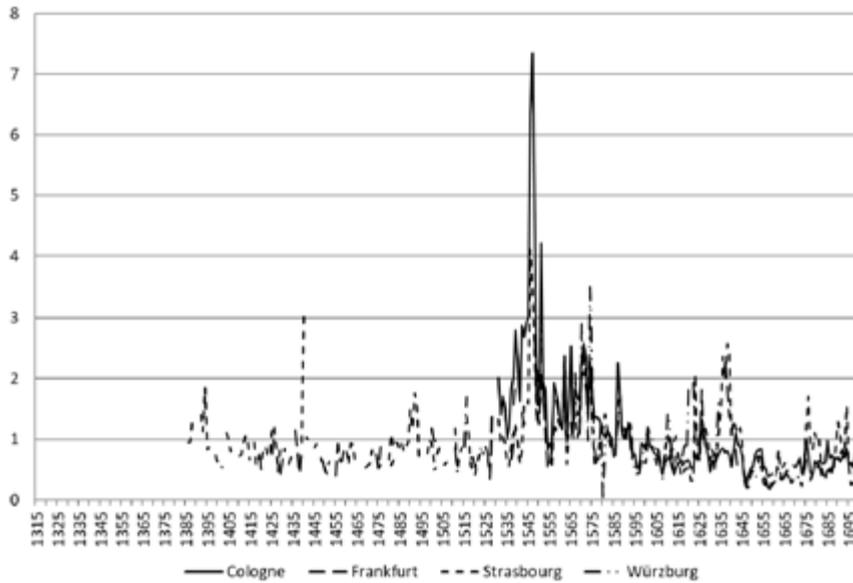
Graph. 5. Ratio of rye prices in 3 Rhine-Main Valley markets to prices in Strasbourg



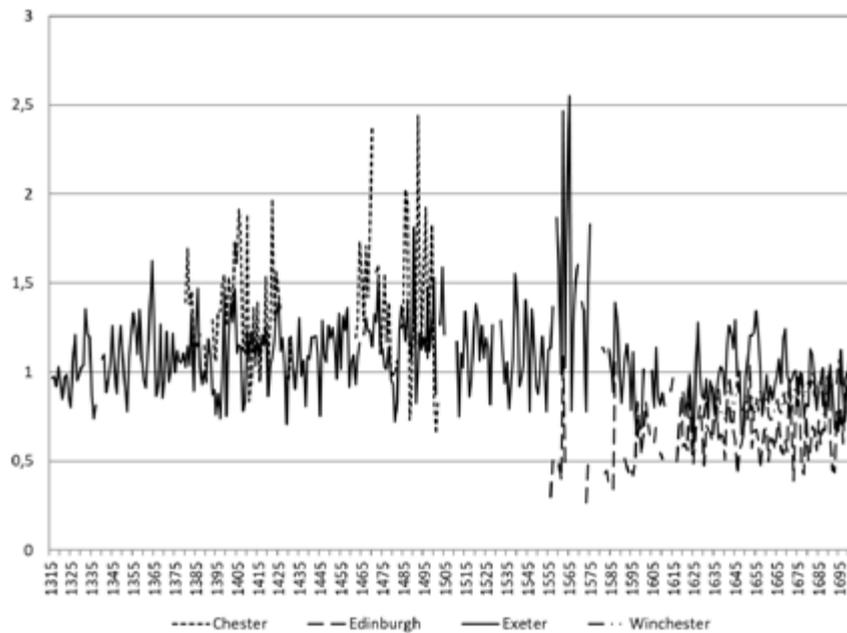
Graph. 6. Ratio of wheat prices in 8 Low Countries markets to prices in Southern England



Graph. 7. Ratio of wheat prices in 4 Rhine-Main Valley markets to prices in Southern England



Graph. 8. Ratio of wheat prices in 4 British markets to prices in Southern England



Looking beyond the Low Countries and placing the correlation of grain prices between pairs of cities in a hierarchy of the level of correlation generates some groupings. In that exercise covering the years from 1260 to 1510 there are different results for wheat and rye because data come from different cities for the two types of grain. For wheat there are towns like Exeter and London which appear to be part of the same market. There are also clusters of towns, for example, in the Low Countries counties of Brabant, Flanders and Holland. There are exceptions to the pattern with some towns near each other showing lower correlations than with the big cities of the region, that is London and Paris. That result may reflect the ease of shipping from one place to another, that is on the presence of a convenient maritime connection.¹⁵ For wheat a comparison of towns in the northwest with those in Iberia produces signs of little or no correlation, the expected result at least for the late Middle Ages. For rye there are indications of at least two clusters of towns, the first in the Low Countries and the other in and near Bavaria. There is the same seemingly contradictory result of certain pairs of towns close geographically but not close in the pattern of price formation. The Low Countries produce some examples.¹⁶

Tab. 3. **Pearson Correlations between Pairs of Cities**

Wheat Prices	Dates	Pearson R
Southern England and Exeter	1316-1700	0.94
Amsterdam and Leiden	1467-1700	0.84
Amsterdam and Bruges	1462-1700	0.79
Utrecht and Douai	1462-1700	0.65
Strasbourg and Cologne	1531-1700	0.58
Rye Prices		
Frankfurt and Strasbourg	1350-1700	0.84
Paris and Angers	1580-1700	0.64
Wurzburg and Strasbourg	1471-1700	0.60
Arnhem and Amsterdam	1544-1700	0.51
Wurzburg and Cologne	1531-1700	0.50
Amsterdam and Gdansk	1538-1700	0.49
Brussels and Bruges	1401-1500	0.47
Paris and Strasbourg	1520-1700	0.30

Source: Allen-Unger Global Commodity Prices Database (<http://www.gcpdb.info/>). Accessed March 20, 2018.

¹⁵ J.A. GALLOWAY, *One Market or Many? London and the Grain Trade of England*, in *Trade, Urban Hinterlands and Market Integration, C.1300-1600: A Collection of Working Papers Given at a Conference Organised by the Centre for Metropolitan History and Supported by the Economic and Social Research Council, 7 July 1999*, ed. J.A. GALLOWAY, London 2000, pp. 36-39, 42.

¹⁶ R.W. UNGER, *Maritime Transport and the Integration of Low Countries Grain Markets*, cit., pp. 110-111.

The results are similar for the longer period. Comparisons are made using pairs of towns in a similar way for as long as there are two surviving price series with a limited number of gaps. [See Table 3] Towns close to each other and with easy access one to the other produce very impressive levels of correlation for wheat prices. Even where transport between the two was not as simple, for example Utrecht and Douai, the relationship of prices proves relatively strong. For rye prices the numbers are not as impressive. The strongest correlation, between Frankfurt and Strasbourg, presumably indicates the value of being close to each other on the same river. At the other extreme the low correlation between Paris and Strasbourg rye prices indicate that what regional markets were emerging depended very much on easy transport links, that is on waterways be they rivers or seas. Paris prices were more closely related to those in Angers, two towns which did not enjoy the luxury of a riverine connection such as that of Würzburg and Strasbourg. The data strongly suggest that instead of a large single market in the fourteenth and fifteenth centuries there was rather the emergence of a series of regional markets in northwest Europe. The most notable example with roots extending back to the thirteenth century was one around the southern North Sea and English Channel with London relying on suppliers not only close to the city but also in northeastern France and even the Low Countries.¹⁷ Those same regions, if market conditions changed, could also be recipients of grain from farmland in southeastern England close to London.¹⁸

The result from the comparison of rye prices in Amsterdam and Gdansk from 1538 to 1700 suggests a connection of the same magnitude of that between Brussels and Bruges and between Würzburg and Cologne, two cases where the distance was considerably less and where rivers and canals afforded reasonable to good access for inland vessels. The correlation between the Dutch centre of trade to northeast Europe and the Baltic port supports the argument that while regional markets emerged in the late Middle Ages the connections between those clusters of towns increased over time and that there was a much larger market emerging across northern Europe thanks to maritime shipping. Vessels sailing the North Sea and into the Baltic were creating a more unified northern European market in the sixteenth and the seventeenth centuries.

There is a consistent problem and a serious one with establishing the trend toward commercial integration between the Baltic and western Europe. While there may be some, even if sporadic, data about prices it is only in the rarest of cases before the seventeenth century that there is any surviving evidence at all of the volume of goods traded. English customs accounts start at end of the thirteenth century and become very helpful for the fifteenth and beyond. They can give early indications of volume. The tolls collected by the king of Denmark in the Øresund began even in the fifteenth century but it is the second half of the sixteenth before

¹⁷ J.A. GALLOWAY, *Metropolitan Food and Fuel Supply in Medieval England: Regional and International Contexts*, in *Food Supply, Demand and Trade: Aspects of the Economic Relationship between Town and Countryside (Middle Ages - 19th Century)*, P. VAN CRUYNINGEN, E. THOEN eds., Turnhout 2012, pp. 9-10.

¹⁸ D. KEENE, *Medieval London and Its Supply Hinterlands*, in "Regional Environmental Change", 12, 2012, n. 2, pp. 263-270.

surviving records offer consistent and sustained annual data. Numbers for some commodities turn up in some ports in northern Europe now and again before the eighteenth century but those records are typically sporadic and the taxes they report were often levied for a short time for special reasons.¹⁹ Data on commodity flows can leave false impressions about levels of or the direction of integration. There was a boom in Baltic trade for Dutch merchants and shippers in the closing years of the sixteenth and first half of the seventeenth century. The rise of the Dutch, their emergence as prominent economic and political players in Europe and beyond, is attributed to the success in the so-called mother trade to the Baltic.²⁰ Despite Milja van Tielhof's pushing the study back into the fifteenth century it is really after 1570 when the Sound Toll records become abundant enough to have some reliable knowledge about the scale of the exchange, something which Aksel Christensen showed effectively and in considerable detail. There was trade in grain from the Baltic before the Danish levies began, carried presumably in cogs from German ports. There are indications from a few sources that exports from Poland to the Low Countries were underway in the fifteenth century.²¹ How sustained and how large they were is impossible to isolate. There is seemingly no way to know what was new in the sixteenth century and what was substitution of one route for another or substitution of one group of merchants for another and of one network for another. There must be doubt about how novel was the Dutch trade boom and about the impact of the trade on the integration of markets. It is certain, however, that there were clear and obvious and extensive cultural spinoffs from that commercial connection.

TRADE AS THE FOUNDATION FOR CULTURAL EXCHANGE

The trading relations yielded cultural influences, directly and indirectly. The networks of merchants, traders and shippers created pathways for the exchange of a long and varied list of practices and of goods which were cultural markers, embodying alien patterns of action which people, over time, adopted and made their own. Despite the ups and downs, there was a long term trend toward growth in exchange within regions at the end of the Middle Ages and across northern Europe in

¹⁹ C.E. HILL, *The Danish Sound Dues and the Command of the Baltic: A Study of International Relations*, Durham (NC), 1926. N.E. BANG, K. KORST, *Tabeller over Skibsfart Og Varetransport Gennem Øresund 1661-1783 Og Gennem Storebalt 1701-1748 = Tables De La Navigation Et Du Transport Des Marchandises Passant Par Le Sund 1661-1783 Et Par Le Grand-Belt 1701-1748*, 2 vols., Copenhagen 1930. S. JENKS, *Das Danziger Pfundzollbuch Von 1409 Und 1411*, Cologne 2012.

²⁰ On the development of the trade see A.E. CHRISTENSEN, *Dutch trade to the Baltic about 1600 : studies in the Sound Toll Register and Dutch shipping records*, Copenhagen 1941. M. VAN TIELHOF, *De Hollandse Graanhandel, 1470-1570: Koren Op De Amsterdamsse Molen*, The Hague 1995. EADEM, *The "Mother of All Trades": The Baltic Grain Trade in Amsterdam from the Late 16th to the Early 19th Century*, Leiden 2002. Sound Toll Registers online, a project of the University of Groningen and Tresoar, Frisian Historical and Literary Centre at Leeuwarden: <http://www.soundtoll.nl/index.php/en/welkom> Accessed April 4, 2018.

²¹ For example, H. SAMSONOWICZ, *Untersuchungen Über Das Danziger Bürgerkapital in Der Zweiten Hälfte Des 15. Jahrhunderts, Abhandlungen Zur Handels-Und Sozialgeschichte*, Weimar 1969, pp. 28, 35, 37.

the Renaissance. Producers and consumers in different places became more dependent on each other for supplies of goods. The fluctuations and variations in production and consumption make it difficult to discern long term trends.²² While market integration may be hard to chart there was a growing interdependence of markets. Their extent of integration was a sign of trade even if the volume might not show a linear rising trend. The existence of persistent if not always expanding connections was a positive force for the creation of networks among merchants and for laying down the foundation for cultural exchange. Contact for the transmission of cultural practices did not require consistent commercial connections. Even sporadic connections could prove effective. The degree of market integration did not determine the character and extent of influence across distance. The more extensive trade relationship, however, the greater were the opportunities and the greater the impetus for cultural exchange.

At the end of the last century there was significant research concentrated on common features of the culture prevailing in different jurisdictions around the North and Baltic Seas in the seventeenth and eighteenth centuries. Lex Heerma van Voss was the leader in the effort, shown in the book he edited with Juliette Roding.²³ The thirty essays, which grew out of a conference, explored a broad range of aspects of topics from architecture to painting to music to drama to engineering to religion and piety to migration to philosophy to trade as well as commerce and business practices. Ranging from 1550 to 1800 the writers relied on different kinds of sources, in some cases concentrating on specific time periods and geographical areas and in some taking on larger questions of the cultural unity or disunity of the lands around the North Sea. The authors agreed on the primacy of economic relations in creating the common features they identified. Among them there was little if any discussion of the mechanisms which translated economic contacts into common cultural features. The strong relationship was not questioned. That volume continued a pattern established in earlier works of seeing the area around the North and Baltic seas as a region with common characteristics. In the papers in both a 1988 festschrift for professor J. A. Faber²⁴ and a 1990 collection from the Institute of Northern and Eastern European Studies at the University of Nijmegen²⁵ many different authors pointed to aspects of contact, economic, social and cultural, and the results of those contacts. While it seems more than a coincidence that the organization of research and the publication of findings was centred in the Netherlands, interest in the phenomenon of a common culture around the northern seas of Europe extended to scholars from different countries as shown in the periodic publications of the International Society for the History of the Northern

²² J.A. GALLOWAY, *One Market or Many?*, cit., p. 42.

²³ *The North Sea and Culture (1550-1800): Proceedings of the International Conference held at Leiden 21-22 April 1995*, L. HEERMA VAN VOSS, J. RODING eds., Hilversum 1996.

²⁴ *From Dunkirk to Danzig. Shipping and Trade in the North Sea and the Baltic, 1350-1850. Essays in Honour of J. A. Faber on the Occasion of his Retirement as Professor of Economic and Social History at the University of Amsterdam*, W.G. HEERES, L.M.J.B. HESP, L. NOORDEGRAAF, R.C.W. VAN DER VOORT eds., Hilversum 1988.

²⁵ *Baltic Affairs Relations between the Netherlands and North-Eastern Europe 1500-1800*, J.P.S. LEMMINK., J.S.A.M. VAN KONINGSBRUGGE eds., Nijmegen 1990.

Seas of Europe.²⁶

For all those examining exchange in early modern northwest Europe defining what might be meant by a cultural unity in the region is a daunting if not impossible task. The concept is elusive because of its scope and the potential variety. While common characteristics may be easy to find in a region or area it is difficult to measure their depth or extent or to set levels of such characteristics which might serve as tests or measures for a cultural unity. In various categories, in religion, language, demography, art, sensitivity of various sorts, social policy many similarities emerged over time. For that there is general agreement and extensive documentation. Those similarities are most obvious for the seventeenth century and for areas close to the sea. The signs of integration of Amsterdam and Gdansk grain markets at exactly the time of the emergence of more practices in common in the Netherlands and along the south coast of the Baltic supports the argument for the economic roots of cultural exchange, and more specifically roots in trade in goods.

Communication is one way in which a cultural unity can emerge and merchants were the logical agents of communication in the late Middle Ages and the Renaissance. They travelled widely and many took up permanent residence in foreign lands. Dealing with people in those unfamiliar environments, they had to develop a common language to exchange information. Literacy and education were a by-product of commerce in medieval and early modern Europe with only migration proving a stronger force for the transmission, merging or imposition of other cultures on existing ones. Resident Dutch merchants, for example, in Baltic ports like Gdansk carried on a regular correspondence with merchants and family back in the Netherlands, among other things reporting on conditions economic and political.²⁷ Many examples of such exchanges or of exposure to the culture of others with merchants as agents fill the volumes on relations of the Netherlands with lands to the east published in the 1980s and 1990s. The same, to a lesser degree, is true of essays in a volume dealing with commercial and cultural contacts between Britain and Poland from the Middle Ages to the late eighteenth century.²⁸ Similarly there was extensive diffusion of technology through networks in northwestern Europe. The best known and documented case was in the adoption of northwestern European practices forced on Russia to the degree possible by Tsar Peter the Great around 1700. It was exceptional. Voluntary imitation of techniques was much more common.²⁹

The connections around the North and Baltic Seas, the emerging common features, suggest that it was the networks that grew up out of trade in the region which

²⁶ The organization, a product of the Cold War, lost its principal function of bringing together scholars from both sides of the Iron Curtain and has gradually faded in importance. See also more generally D.G. KIRBY, MERJA-LIISA HINKKANEN-LIEVONEN, *The Baltic and the North Seas*, London-New York 2000.

²⁷ H.E. VAN GELDER, *Zestiende-eeuwsche koopmansbrieven*, in "Economisch-Historisch Jaarboek", V, 1919, pp. 136-191.

²⁸ *Britain and Poland-Lithuania: Contact and Comparison from the Middle Ages to 1795*, ed. R.W. UNGER, Leiden; Boston 2008.

²⁹ C.A. DAVIDS, *The Rise and Decline of Dutch Technological Leadership: Technology, Economy and Culture in the Netherlands, 1350-1800*, Leiden-Boston 2008, pp. 269-364.

were the starting point for the integration of more than just markets. Commercial exchange became cultural exchange. The connections among the lands on the shores of the North Sea varied in intensity and in direction over the years from the fourteenth through the seventeenth centuries so the progression of cultural influence has not been unidirectional nor was it universal. The growing power of governments and their commitment starting in the early nineteenth century to create unified national states should not, however, obscure the ease with which people, ideas and daily practices moved in the wake of trade before 1800. Two obvious cases, with the potential for many more examples, illustrate the possible relationship between commerce and culture.

EXAMPLES OF CULTURAL INFLUENCE: THE HANSEATIC LEAGUE

The most obvious sign of a late medieval network created by commerce and concomitant political interests was the Hanseatic League. It started as another group of cities seeking to identify common interests and to use their limited political and military power to defend those interests, mostly to do with trade. They could do that in north Germany because the early thirteenth century ruler, Holy Roman Emperor Frederick II, had freed the towns from his grip to create political allies. He needed support for his ultimately unsuccessful struggle against leagues of Italian towns. Commercial networks overlapped with social networks in Hansa towns, the two being closely linked.³⁰ The expansion in trade coincided with improvements in shipbuilding technology in north German towns in the thirteenth and fourteenth centuries. Technical change in ships contributed to falling transport costs. The cog appeared as a long-distance carrier, probably originating in southern Denmark, around 1200.³¹ It proved to be very efficient at carrying bulky goods and since larger versions proved seaworthy it afforded scale economies.³² The use of the cog as well as a growing variety of ship types, in some cases related to the cog, on longer-distance voyages suggest that there were some improvements in navigation.³³ Dangers at sea were also reduced to some degree by an increase in political

³⁰ U.C. EWERT, S. SELZER, *Social Networks*, in *A Companion to the Hanseatic League*, ed. D.J. HARRELD, Leiden 2015, pp. 162-193, 166-193.

³¹ O. CRUMLIN-PEDERSEN, *To Be or Not to Be a Cog: The Bremen Cog in Perspective*, in "International Journal of Nautical Archaeology", 29, 2000, n. 2, pp. 230-246. IDEM, *Die Bremer Kogge - Ein Schlüssel Zur Geschichte Des Schiffbaus Im Mittelalter*, in *Die Kogge Sternstunde Der Deutschen Schiffsarchäologie*, G. HOFFMANN, U. SCHNALL eds., Hamburg 2003, (Schriften Des Deutschen Schifffahrtsmuseums), pp. 256-271. C. JAHNKE, *Zur Interpretation Der Ersten Lübecker Schiffsiegel*, in "Zeitschrift des Vereins für Lübeckische Geschichte und Altertumskunde", 88, 2008, pp. 9-24. IDEM, *Und Kein Ende Anmerkungen Zu Den Thesen Von Reinhard Paulsen Und Detlev Ellmers*, in "Zeitschrift für Lübeckische Geschichte und Altertumskunde", 91, 2011, pp. 305-320.

³² J. LUCASSEN, R.W. UNGER, *Shipping, Productivity and Economic Growth*, in *Shipping and Economic Growth, 1350-1850*, ed. R.W. UNGER, Leiden-Boston 2011, pp. 12-17.

³³ D. ELLMERS, *The Cog as Cargo Carrier*, in *Cogs, Caravels and Galleons: The Sailing Ship, 1000-1650 Conway's History of the Ship*, R. GARDINER, R.W. UNGER eds., London 1994, pp. 29-46, 40-43. A. SAUER, *Das "Seebuch": Das Älteste Erhaltene Seehandbuch Und Die Spätmittelalterliche Navigation in Nordwesteuropa*, Hamburg 1996.

stability, at least relatively, and that trend would continue over time thanks in part to the actions of the confederation of towns.

The League did have sporadic meetings of representatives from member cities though attendance varied, membership was loosely defined and joint action depended on the willingness of each town to participate. The institution is best known for its political activity where it enjoyed considerable success in the second half of the fourteenth century. The confederation of cities did gain concessions from monarchs. At four trading posts in Bruges, London, Bergen and Novgorod merchants from member towns enjoyed tax privileges along with extraterritorial legal rights. The status of the four factories made possible channelling trade through them, creating in the process islands of north German practice and culture around northern Europe. With commercial connections came influence which left its mark on life in the region. Merchants from north German towns settled in ports around the Baltic and North Seas. That Hansa diaspora brought with them their own cultural practices in everything from language to architectural styles to eating habits, each having an impact on life in their newly adopted locations.³⁴ Just one of many examples was the late fifteenth century experimentation in England with using tile stoves for heating rooms, something novel in the island kingdom. The practice came from the Rhineland with traders being the source both of the idea and of the tiles themselves, the latter being part of a growing trade in higher quality ceramics. The pattern in England was typical of the Baltic as well where stoneware from the Rhineland and the technology of Hansa towns in the production of stove tiles came to predominate. People in the northeast used vessels for meals which were not only in design but also in style and decoration the same as those used in the major centres of the League. The topics of the stove tiles even changed in the Baltic with the Reformation as they did in places like Lübeck and Cologne.³⁵ Tiles were not the only cultural markers of Hanseatic influence. The use of bricks and the design of buildings made with bricks was another contribution throughout northern Europe of the commercial connections of the merchants from League towns.³⁶

While the League saw its solidarity wane through the end of the Middle Ages, thanks to a considerable degree to the ability of monarchs to increase their authority over towns within their realms, a new challenge for the organization, not so much to its commercial but its cultural role, emerged after 1517. The overwhelming majority of the north German towns which played the central role in the League,

³⁴ M. NAUM, *Migration, Identity and Material Culture: Hanseatic Translocality in the Medieval Baltic Sea*, in *Comparative Perspectives on Past Colonisation, Maritime Interaction and Cultural Integration*, A.L. MELHEIM, H. GLØSTAD, Z. TSIGARIDAS GLØSTAD eds., Sheffield, UK; Bristol, CT 2016, pp. 129-148.

³⁵ D.R.M. GAIMSTER, *Cross-Channel Ceramic Trade in the Late Middle Ages: Archaeological Evidence for the Spread of Hanseatic Culture to Britain*, in *Archäologie Des Mittelalters Und Bauforschung Im Hanseraum: Eine Festschrift Für Günther Fehring*, G.P. FEHRING, M. GLÄSER, D. MÜHRENBURG, W. MÜNS, O. PELC eds., Rostock 1993, pp. 252-260, 256-258. IDEM, *The Baltic Ceramic Market 1200-1600: Measuring Hanseatic Cultural Transfer and Resistance*, in *Cultural Exchange in Early Modern Europe Forging European Identities, 1400-1700*, R. MUCHEMBLED, E.W. MONTER, H. ROODENBURG eds., Cambridge 2007, 32-55. Gaimster did find resistance to the adoption of Hansa ceramics and Hansa habits of eating in Novgorod, the furthest east of the outposts of the League, 55-58.

³⁶ B. AYERS, *The German Ocean: Medieval Europe around the North Sea*, Sheffield 2016, pp 99-107.

joined in the Lutheran Reformation.³⁷ While that proved no barrier in Russia where there was already a religious distinction with the prevailing orthodox Christianity nor in Scandinavia where the kings reformed their churches, it did create problems in western Europe where the Roman church remained the dominant religious authority. Lutheran merchants from League towns living in England and the Low Countries found themselves at odds with local religious practice. The early sixteenth century Low Countries ruler, the Habsburg Charles V, in his role as the Holy Roman Emperor was engaged in wars in Germany to suppress Lutheranism. He also wanted to make the lands he ruled in the Netherlands into examples of adherence to the established church. That implied stamping out any Reformation tendencies. At the same time the merchants from League cities were an integral part of the commercial networks of Antwerp, the most populous and prosperous town in his lands on the North Sea coast. Those traders were potential purveyors of the Lutheran contagion.³⁸ The emperor, while displeased with having resident potential agents of reform with the possibility of influencing religious practice in his lands, did not pursue a policy of expelling Protestant merchants. Maintaining commercial networks proved more important than religious or political considerations. Similarly in England Henry VIII suspected and even took action against Hansards resident in the London Steelyard, the League trading post, for disseminating Protestant works. It seems all but certain that in fact the merchants did do exactly that. Certainly the men, and they were all men in the factory, did have Lutheran works in their possession for their own use. That such works would find their way outside the confines of the Hansa factory suggests that the residents had previously proven a source of material with a potential to influence English culture. Any possible friction over religion disappeared when the English king decided, for reasons of state, to reform the church in his British lands which meant the source of conflict with Lutheran Hansards disappeared.³⁹ In 1598 his daughter, Queen Elizabeth I, would withdraw the privileges the Steelyard enjoyed, that for commercial and not cultural reasons.⁴⁰

The network of Hanseatic League towns was a source of significant cultural influence which grew out of and at the same time was part of commercial connections.⁴¹ An outstanding example of such effects is the development of hopped beer brewing in northern Europe from the thirteenth through the seventeenth century. The ability of brewers in first Bremen, then Hamburg and then a number of other towns along the north German coasts of both the North and Baltic seas to produce a reliable drink flavoured with hops created an export good which found markets, starting in around 1200, in the Low Countries and England and Scandinavia. Major

³⁷ P. DOLLINGER, *The German Hansa*, Stanford, CA, 1970, pp. 320-323.

³⁸ For example, P. GEYL, *The Revolt of the Netherlands, 1555-1609*, second ed., London 1958, pp. 53-58.

³⁹ J.D. FUDGE, *Commerce and Print in the Early Reformation*, Leiden ; Boston, 2007.

⁴⁰ On Anglo-Hanseatic relations in the second half of the sixteenth century see M. NORTH, *The Hanseatic League in the Early Modern Period*, in *A Companion to the Hanseatic League*, ed. D.J. HARRELD, Leiden 2015, pp. 101-124, 106-115.

⁴¹ On the general impact of resident merchants and their practices around the North Sea in the fourteenth, fifteenth and sixteenth centuries as seen through the prism of archaeological evidence see B. AYERS, *The German Ocean*, cit., pp 147-193.

exporters were Bremen and then Hamburg for western markets, Wismar for northern ones and Gdansk for eastern ones. The beer that went to the Hansa factory in Bergen had to be more heavily hopped to survive the voyage and remain palatable for long periods of storage. The practice led to a still-surviving preference in southwestern Norway for beers with a more bitter taste. The quantities shipped, for example to Amsterdam from Hamburg, were in the millions of litres annually in the late fourteenth century.⁴² Not only did the north German towns export beer but they also exported the methods of making hopped beer. Brewers in the Low Countries, England, many other parts of Germany and in lands further east imitated the style of beer that came from the Hansa towns. The beer that was the norm for Hamburg brewers became the norm for all beer makers by the seventeenth century from Ireland to Russia and from Bohemia to Sweden.⁴³

The Hanseatic League faded in importance in the sixteenth century and all but disappeared in the seventeenth. The rising power of Renaissance states and the hostility of monarchs like Charles V and Elizabeth I certainly contributed to its demise. So too did the development, or rather adoption, of business practices from the Mediterranean. The use of correspondents or agents in other ports from the sixteenth century on decreased the need to travel. The combination of greater standardization of legal practices and growing public authority meant there were more reliable methods of enforcing agreements. A common or almost common legal regime for shipping, was taking shape already in the thirteenth century. Governments beyond those of cities took on the role of protector of their merchants, though admittedly often to the detriment of foreign merchants. There was over time easier access to capital and, copied from southern Europe, maritime insurance to protect capital. From 1609 the Amsterdam exchange bank, to be followed by similar ones elsewhere in the north, offered ways to transfer funds from one merchant to another safely and consistently. All those improvements in business methods and changes in the political landscape made possible and promoted the potential for success of networks of individual merchants or families of merchants. They also decreased the need for a league of cities to support those merchants.

EXAMPLES OF CULTURAL INFLUENCE: THE CULTURAL CONSEQUENCES OF THE DUTCH

A second example of integration, the emergence of networks across northern Europe and of resulting cultural influence comes from the northern Netherlands. Again it was seaborne transport which contributed to commercial success. Dutch shipbuilders created a hybrid form of construction which brought together the de-

⁴² R.W. UNGER, *Beer in the Middle Ages and the Renaissance*, Philadelphia 2004, pp. 60-61. IDEM, *A History of Brewing in Holland, 900-1900: Economy, Technology, and the State*. Leiden; Boston 2001, pp. 31, 131, 253. IDEM, *The Trade in Beer to Medieval Scandinavia*, in "Deutsches Schifffahrtsarchiv", 11, 1988, pp. 249-258.

⁴³ R.W. UNGER, *Technical Change in the Brewing Industry in Germany, the Low Countries, and England in the Late Middle Ages*, in "The Journal of European Economic History", 21, 1992, pp. 281-313.

sign features of the cog and Mediterranean vessels.⁴⁴ The former helped to create a spacious hold for more cargo for each metre of length and the latter made building and repairs simpler while lessening the need to reinforce the hull. While the relatively long fluyt gained the most notoriety the design was one of a number that offered Dutch shippers a range of options of vessels suited to specific trades and so more efficient in carrying goods.⁴⁵ The advantages offered were most obvious in trade to the Baltic but applied as well to an expanding range of trades where the Dutch participated or came to dominate in northern waters and beyond.

The late sixteenth century boom in shipping through the Sound, carrying French and Portuguese salt and Dutch herring to the Baltic in exchange for grain, brought Dutch cultural and political influence. Well before that expansion in those trades Low Countries merchants and traders had carried on extensive exchange around the North Sea. Commerce between the Netherlands and the kingdom of Norway-Denmark led to Dutch participation in capital markets there and to influence on wages and prices, on migration patterns and on internal politics.⁴⁶ The Dutch were consumers of Scottish coal. In part it was the tax regime which led them to prefer sources in the Firth of Forth. The architecture of villages there such as Culross and Alloa show Dutch influence.⁴⁷ The seventeenth century brandy industry of the lower Loire valley depended on Dutch capital and consumers for its existence and durability.⁴⁸ Dutch trade and prosperity was the envy of other states in northwestern Europe in the seventeenth century. The efforts of Cromwell's England and Louis XIV's France, under the guidance of finance minister Jean-Baptiste Colbert, to undermine the dominance of the Republic through political, military and economic policies are clear signs of both resentment and admiration. The reactions came in the wake of the rapid rise of Dutch trade in the first half of the seventeenth century and, with that boom, the development of a thriving network of merchants and traders spread across northern Europe. The Dutch guilder was, if not the common currency, at least the standard by which all others were measured. The influence of the Dutch in technology came along with Dutch investment in a broad range of enterprises throughout the region. Often investment went to developing resources in countries like Sweden and Norway to supply the Dutch market. Funding went to potential competitors for Dutch firms, as with putting money into the English and Swedish East India Companies, where the goal was simply profit. Influence extended to art. Dutch architects and artists brought their skills and styles to other countries.⁴⁹ The extent of Dutch influence led to Am-

⁴⁴ T.J. MAARLEVELD, *Double Dutch Solutions in Flush-Planked Shipbuilding*, in *Crossroads in Ancient Shipbuilding: Proceedings of the Sixth International Symposium on Boat and Ship Archaeology, Roskilde, 1991*, ISBSA 6, ed. C. WESTERDAHL, Oxford 1994, pp. 153-63.

⁴⁵ A. WEGENER SLEESWYK, *De Gouden Eeuw Van Het Fluitschip*, Franeker 2003.

⁴⁶ C. VAN BOCHOVE, *The economic consequences of the Dutch*, cit., pp. 83-87, 101-106, 210-218 and *passim*.

⁴⁷ R.W. UNGER, *The Dutch Coal Trade in the 17th and 18th Centuries*, in "Mededelingen van de Nederlandse Vereniging voor Zeegechiedenis", 43, 1981, pp. 6-14, 10-12.

⁴⁸ H. DE BRUYN KOPS, *A Spirited Exchange: The Wine and Brandy Trade between France and the Dutch Republic in Its Atlantic Framework, 1600-1650*, Leiden; Boston 2007.

⁴⁹ A classic case is reported in J. RODING, B. NOLDUS, *Pieter Isaacs (1568-1625): Court Painter, Art*

sterdam's dominance of the art market in northern Europe until it was supplanted by London after 1660.⁵⁰ It is highly unlikely that any of those cultural effects would have emerged without the presence of Dutch merchant networks.

CONCLUSIONS

The Dutch in the seventeenth century were the extreme case of deep cultural influence that grew out of networks created among merchants which in turn grew out of integration of markets through trade. There were small and often fleeting indications of what could happen in the early Middle Ages. In the years before 1300 the role of governments and religious institutions, often the same thing in the period, was more obvious than they would be later. The political and environmental instability of the early Middle Ages meant connections were intermittent. Growth in trade in the thirteenth century, when a more benign climate combined with more efficient shipping, indicated what might be possible. The recovery in the total size of the economy, even if slow, after the dramatic decline in population in the second half of the fourteenth century opened the doors to a greater number of and more intense commercial connections. What had been underway in the high Middle Ages became the norm in the sixteenth and even more in the seventeenth century. The impact of those trading connections and of the people involved in them proved to have many and varied ramifications. The scale of the influence of commercial connections on life in early modern northwestern Europe is all too easy to underestimate. Simple day-to-day matters like the use of words common in the region depended on exposure to others living around the North Sea.⁵¹ At the other extreme the complex interaction of states, their political alliances, their internal political struggles and even their religious practices depended on what was known of others in the region, the information brought embodied in the goods and individuals moving around the northern seas of Europe.

Over time smaller political units got subsumed in larger duchies and kingdoms. In 1200 there were many local strong men, lords whose power was geographically circumscribed. Trade was also limited with exchange beyond regions being unusual. That isolation and insularity broke down gradually because of the integration, first, of regional markets through the close of the Middle Ages and, second, the integration of those regional units as they in turn became part of markets covering not only more of northern Europe but also covering parts of distant continents. The creation of closer commercial ties in regions along the Rhine and Main, in the Low Countries and across the English Channel and North Sea laid the foundation for cultural exchange within limited geographical areas. The expansion of commerce after 1500 led to the integration of those regional markets with each other and so to

Dealer and Spy, Turnhout 2007.

⁵⁰ D. ORMROD, *The Origins of the London Art Market, 1660-1730*, in *Art Markets in Europe, 1400-1800*, M. NORTH, D. ORMROD eds., London 1999, pp. 167-186.

⁵¹ L. HEERMA VAN VOSS, *North Sea Culture, 1500-1800*, in *The North Sea and Culture (1550-1800): Proceedings of the International Conference Held at Leiden 21-22 April 1995*, J. RODING, L. HEERMA VAN VOSS eds., Hilversum 1996, pp. 21-40, 22-28.

greater exchange of a varied range of cultural markers.

Local strong men still remained powerful at the end of the seventeenth century. Regional loyalties remained strong. Even the most prominent example of a centralizing minister of an absolutist monarch, Colbert, still had to go begging to regional assemblies to get badly needed tax income to support his monarch's policies. The process of integration and unification was not complete by any means even in 1700. By then, however, maritime exchange had led to significant changes in the character of society and the structure of political institutions. The process toward unification in language, culture, politics was haltingly underway in the fourteenth century and by the seventeenth it was moving forward dramatically, a result of the activities of merchants and the networks they created based on trade across seas. When the Lejonkulan Theatre, next to the royal palace, the second theatre in Stockholm, opened in 1667 it was a sign of increasing sophistication and propriety, of the kingdom joining into the culture of Europe. The players on the new stage spoke a language the audience could easily understand: Dutch.⁵²

⁵² B. ALBACH, *Langs Kermissen en Hoven ontstaan en kroniek van een nederlands toneelgezelschap in de 17de eeuw*, Zutphen 1977, P. 151.