Landscape, agency and enclosure: transformations in the rural landscape of north-east England

O’DONNELL, RONAN, PETER

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Abstract

Five Northumberland townships were subjected to map-regression in order to identify and date changes in their landscapes resulting from enclosure and agricultural improvement during the post-medieval period (1500-1900). The townships examined were selected for the presence of documentary resources, and to include a wide range of environmental and tenurial conditions. The changes identified can be grouped into five categories: enclosure, farm consolidation, changes to land-use patterns, settlement dispersal and improvement. The examination of enclosure revealed that the most formal types, such as Parliamentary Enclosure, were only used in particularly contentious situations or where specific circumstances required them. Farm consolidation occurred throughout the period, though ring-fence farms were not created in every case. Importantly, the consolidation of farms rarely resulted directly from enclosure but from a piecemeal process which straddled enclosure. It was also found that the pre-enclosure pattern of land use, one of arable core and pastoral periphery, broke down following enclosure, though this was also by a piecemeal process. This thesis has also revealed the importance of settlement dispersal without village desertion, which has been neglected by previous studies. Again settlement dynamics have been shown to be locally contingent. Finally, agricultural improvement was found to be strongly correlated with changes in farm ownership and occupation, though the people involved acted as mediators of global trends in fashion and economics. The contingency of these events upon specific local circumstances means that none can be said to be determined by any one factor such as economy, environment, human agency or enclosure itself. None the less ‘global’ or large-scale factors including fashion and economics can be seen to be important in many of the events. Consequently, it was necessary to employ an Actor-Network approach in order to describe the ways in which different agencies were mediated locally.
Landscape, agency and enclosure: transformations in the rural landscape of north-east England

Ronan Peter O’Donnell

PhD. Thesis

Volume 1 of 2

University of Durham, Department of Archaeology

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Declaration

No part of this thesis has been submitted for a degree at the University of Durham or any other university.

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Chapter 1

Introduction

This thesis examines aspects of enclosure and improvement in Northumberland between 1500 and 1900AD. It seeks to determine how such changes came about at a local scale, and which people and things were involved in them. Specifically, it takes a ‘landscape’ approach to tell the story of this process and applies a novel theoretical perspective to some of the most significant events in English landscape history. Enclosure has been described as “the single biggest change in the character of the landscape since the clearance of the ubiquitous wildwood in prehistoric times” (Frodsham 2004, 119), while improvement has often been seen as a necessary precursor of the Industrial Revolution (Chambers and Mingay 1966).

The specific aims are as follows.

1. To demonstrate the complexity of local manifestations of particular landscape changes, and to determine exactly what the process of Parliamentary Enclosure entailed.
2. To identify the human and non-human actors involved in landscape changes in a number of case-study townships
3. To explore the importance of specifically local factors, such as family ties in relation to national or global factors such as the economy.
4. To reveal the way in which these factors were assembled and mediated locally in order to bring about enclosure and its related processes.

This final aim applies a new theoretical paradigm, namely Actor-Network Theory, and reveals enclosure and improvement to be complex and contingent processes, using closely analysed case-studies to demonstrate that present accounts are limited and overlook the multiple agencies involved.

Introducing enclosure

The relationship between enclosure and other contemporary landscape changes is complex, and can only be understood if all elements are clearly defined. Enclosure is
essentially the abolition of common rights over particular pieces of land (Thirsk 1967, 200). It was achieved through a variety of means of which the simplest was unity of possession. To achieve this one person needed to own all the holdings with rights over a particular piece of land, usually a township; meaning that the rights effectively ceased to exist (Yelling 1977, 7). This method is often associated with the pre-seventeenth creation of sheep pasture, and with village desertion in the Midlands and Yorkshire (Beresford 1983, 137-216). Piecemeal enclosure was also practiced in the early-modern period. This enclosed small parts of open-fields. It required one landowner or tenant to either purchase or swap open-field strips so as to consolidate his or her holdings in one place. This could then be fenced. Land could also be enclosed by an agreement between all the rights holders. These agreements had various levels of formality (Chapman and Seeliger 2001, 25): some were probably unwritten, while others specified a process for allotting land and may have required the agreement or Award to be enrolled in a court of record. Agreements became popular in the seventeenth-century as enclosure began to be used to create mixed farming systems rather than just pasture (Beresford 1983, 141). Finally, enclosure could be achieved by private Act of Parliament. This was initiated when a group of landowners prepared a Bill and petitioned Parliament to read it (Tate 1978, 23). Typically, this required the consent of the owners of two thirds of the land (Hammond and Hammond 1995, 49). The Act appointed commissioners to make allotments of the land in question. There were usually three of these though early Acts occasionally appointed more (Tate 1978, 35). They proceeded by holding meetings in which the commoners and landowners would make their claims to land in the township. They would then draw up an Award, and usually a plan, of the allotments which was frequently enrolled in Quarter Sessions and deposited in the parish chest (Tate 1978, 40). This method became popular from around 1760, though many earlier examples exist (Tate 1978, Kain et al. 2004). It grew rapidly in popularity during the Napoleonic Wars when grain prices were high and interest rates low (Turner 1980, 106-134). The method then continued to be used throughout the nineteenth-century. Parliamentary Enclosure was used for both arable and pasture land, though Chapman (1987, 30) has shown that it was principally used for pasture.
Enclosure is often associated with other processes, though none is a necessary result of enclosure nor exclusively associated with it. The most obvious of these is the construction of fences, hedges or walls in a formerly open environment. In nearly all cases this resulted from enclosure, though some enclosure agreements abolish rights over closes (Chapman and Seeliger 2001). This has rarely been examined archaeologically, though the use of ecological survey at Shapwick in order to identify phases of enclosure is a notable exception (Hill 2007, 323-31). Enclosure is also associated with the creation of ring-fence farms, indeed Mingay (1997; 36-7) thought that this was one of its main benefits in the eighteenth- and nineteenth centuries. The process is linked to enclosure because it abolished the divided holdings of the open-fields, as they depended on common rights over fallow and after harvest. These holdings were often grouped together at the enclosure of open fields, which may well have been the main reason behind many enclosures. On the other hand, there were multiple instances in which enclosure did not create ring-fence farms. This is especially true when open-fields disappeared gradually through piecemeal enclosure. It was also possible for Parliamentary Enclosures to award divided holdings where other concerns were more important. Finally, the enclosure of common waste did not consolidate divided holdings and so did not contribute to the creation of ring-fence farms. Enclosure is often also associated with a change in land-use patterns. Jones (1960) thought that much piecemeal enclosure was intended to convert pasture to arable, while Beresford (1983) concluded that many fifteenth and sixteenth-century enclosures were for pasture but that by the seventeenth-century enclosure was done to create mixed farming systems. Turner (1980, 106-134) showed that Parliamentary Enclosure of the period 1760-90 was mostly intended to put arable land down to pasture. Finally, Grigg (1966, 66-81), who studied Lincolnshire, suggested that Parliamentary Enclosure during the Napoleonic Wars was often undertaken to allow wastes to be ploughed up for arable. Each of these types of landscape change, fencing, consolidation, and changing land-use patterns have been thought to be integral parts of enclosure, but none occurs in every enclosure. The reasons for this will be explored below. It will be demonstrated that the occurrence of any of them was contingent upon a large number of local circumstances.
Other types of landscape change are associated with enclosure without being thought an essential element of it. Settlement dispersal and desertion is a prominent example. Beresford (1983) was one of the earliest historians to make this connection, suggesting that deserted villages were often a result of enclosure by unity of possession during the fifteenth and sixteenth centuries. This was done to create sheep pastures as the price of wool was high at the start of the early-modern period. Dixon (1984) and Wrathmell (1980) also suggests that in Northumberland, enclosure and improvement carried out by seventeenth-century landlords could result in village desertion as farms were moved out of the village into dispersed farmsteads. None of these authors attempt to examine cases where improvement led to dispersal without desertion. Some cases have been examined by other archaeologists, for example, Brown (1999a) has shown that farmsteads were built on Parliamentary Enclosure allotments on Salisbury Plain, while Gerrard (2007, 1009) found the same process operating in eighteenth-century Shapwick. This thesis reveals that there are examples of enclosures which did not cause any change to settlement patterns. This means that causes of settlement dispersal still need to be examined in more detail, as the reasons why some enclosures did not produce settlement desertion or dispersal must be investigated.

Improvement of husbandry is also thought to result from enclosure (Williamson 2002). Improvement is itself a very complex phenomenon. It can simply be an umbrella term for a number of farming techniques introduced from the sixteenth-century onwards. These include the use of lime, legumes, turnips (and other fodder crops), under-draining, convertible husbandry, the seed drill, and artificial fertilisers. These types of improvement are associated with the ‘traditional’ Agricultural Revolution of the mid-eighteenth- and nineteenth centuries (Prothero 1961). Certain historians believe that improvement began in the sixteenth-century (Thirsk 1967, Allen 1992, Kerridge 1967), stressing the importance of convertible husbandry and water meadows. Some of these writers have suggested that these were responsible for the increase in food production in the post-medieval period (Kerridge 1967). However, many of the improvements introduced in this period may not have been adopted as widely as contemporary authors suggest. In addition to this their uptake was probably not geographically uniform (Woodward 1990, 252). These two principal difficulties have led to criticism of the early
Agricultural Revolution and led many counter-revisionists to place the Revolution in the traditional period of 1750-1850. Archaeology may shed light on this problem, for instance Williamson (1999) has suggested that there is abundant evidence for pre-nineteenth-century under-draining, while Williamson and Cook (2007, 134) have suggested that the origin of water meadows is an important topic for field archaeology. Improvement continued into the eighteenth- and nineteenth centuries when the ‘classic’ Agricultural Revolution occurred. This is characterised by the use of fodder crops like turnips to increase manure output, allowing fallows to be eliminated (Williamson 2002, 62-67, Chambers and Mingay 1967, 54). Finally, improvement went through a period known as high-farming in the mid-nineteenth-century in which farming practice was thought of as scientific and in which high inputs of manure, especially imported guano, were used to produce increased outputs (Thompson 1968).

‘Improvement’ is, however, also a contemporary term. It was used in eighteenth- and nineteenth-century agricultural books and journals as shorthand for progressive farming incorporating the techniques above. Some historians and archaeologists have suggested that it represented an ideology which made the project of advancing agricultural method a moral priority, since agricultural efficiency was seen as a mark of civilisation (Tarlow 2007). This ideology was in turn applied to other walks of life such as urban planning and architecture. Other than in the work of Tarlow improvement is usually discussed in terms of its effect on production and productivity (e.g. John 1960, Jones 1960, Chambers and Mingay 1966, Kerridge 1967, Allen 1992, Overton 1996b); as the post-medieval period saw a dramatic rise in population with little increase in food imports, agricultural output must have increased. The population increase is associated with the beginning of the Industrial Revolution and so has attracted vibrant debate. Improvement does, however, have a major landscape impact, and is thus archaeologically, as well as historically, interesting. The best understood examples are the use of draining to allow the cultivation of heavy clays (Sturgess 1966, though see Philips 1989, 254) and the use of lime to reclaim wetlands (e.g. Harrison 2009, 7-8), both of which strongly altered the visual properties and character of the landscape.

Improvement did not happen steadily throughout the post-medieval period, but was subject to economic trends which either increased or reduced the amount of capital
available for investment. One of the most significant of these is the rise in grain prices during the Napoleonic Wars (1798-1815). This is thought to have provided an incentive for much enclosure and other improvements (Turner 1980, 106-134). Following this period there was a depression lasting into the 1830s as grain prices fell rapidly after the war. There was then a boom during the 1840s and 50s, which coincided with, and probably provided much of the motivation and capital for, high-farming. Finally, increasing competition from the USA and Canada led to a deep Agricultural Depression from 1873 to 1914.

It is difficult to define a specifically archaeological approach to any of these processes. Most archaeological discussion adopts historical explanations. For instance, Taylor (1975) and Crossley (1990) both cited population growth as the engine for agricultural change in this period. None the less, archaeology and landscape studies are well situated to shed light on these debates. Williamson (1999), for instance, has argued that drainage was more common in the early-modern period than historical sources imply. Similarly, the Shapwick project was able to define different enclosure phases using botanical data from hedgerows (Hill 2007, 323-31). Such phases are often difficult to locate spatially from historical documents, and indeed are often undocumented. Furthermore, such studies allow determination of the landscape impact of enclosure and its associated processes. Certainly, the differences in hedgerow composition identified at Shapwick form an important part of landscape character. Aston (1985) has also suggested that some types of enclosure are more likely to preserve ancient landscape features than others, and thus contribute to landscape differentiation. Crossley (1990, 9, 19) suggested that local studies such as those presented here should be carried out in order to examine such problems.

Enclosure in Northumberland

These processes: enclosure, farm consolidation, settlement dispersal, land use pattern change and improvement were manifested in particular ways in Northumberland. The county is an attractive subject for the study of enclosure for a number of reasons. Firstly, it contrasts with counties and regions in which similar research has been carried out. Early work on enclosure has mainly focused on the Midlands (Beresford 1948, Thirsk
1967), creating a strong bias in our understanding. Recent research has addressed this to an extent through studies of the south coast (Chapman and Seeliger 2001), East Anglia (Williamson 2005, Wittering 2013) and the North-West (Straughton 2008, Whyte 2003, 2006). Thus, the agricultural landscapes of Northumberland are archaeologically neglected (Petts and Gerrard 2006, 90, 178), though some studies of the North of England or the whole country do offer limited discussion (Williamson 2002, Winchester 2000). It is certainly a very different region to those which have been examined. It differs from much of the south of England in having extensive upland wastes, exploited through shielings and long-distance droving. These are all present in the North-West, though this region lacks the large landed-estates which dominate Northumberland (Petts and Gerrard 2006). Consequently, the county presents a unique combination of circumstances which have yet to be studied archaeologically. In addition, Northumberland is likely to have had a particularly interesting history of improvement, as it is the home of several noted improvers, including the Culley brothers and John and George Grey of Milfield. Finally, there are good documentary resources, especially those in the Howard of Naworth Papers and the Estate Records of the Earls Grey and Lords Howick, are held by Durham University Library.

Northumberland has four main agricultural regions: the uplands which are mostly fit for sheep pasture (Colbeck 1847, 422); the coast which is reasonably fertile grain land; the midland plain which is also good for grain though quite heavy in parts (Colbeck 1847, 422, Butlin 1973, 109); and Tweedside which is very fine turnip land (Grey 1841, 156, Butlin 1973, 109 Bailey and Culley 1813, 4) (Fig. 1.1). There appear to have been extensive commons before enclosure in both the uplands and lowlands (Brassley 1985, 93), while arable land was usually arranged in two or more open fields, akin to a Midland field system (Butlin 1973, 111). The commons may have been periodically cultivated in a form of infield-outfield system. Social conditions also vary spatially. Those townships in the uplands are more often open, while closed townships dominate the central plain and coast. Northumberland land holding is dominated by a large number of estates of more than 3000 acres (Petts and Gerrard 2006). Of these the most well-known are the Alnwick estate of the Percys and the Howick estate of the Greys. Other important estates include Blackett, Trevelyan, Carr and Collingwood. In addition to these, the Earls of Carlisle held
certain lands in Northumberland, though their principal estates were in Yorkshire and Cumberland. The Howick Estate is of the greatest importance to the present study, and consisted of two separate blocks: one near the coast centred on Howick itself and another in Tweedside. The Ordes, Blakes and Earls of Carlisle also held lands in the case-study townships.

Northumberland is often thought of as agriculturally backward, following years of warfare, before the union of the crowns in 1603. After this, improvement did not begin in earnest until about 1610 (Watts 1975, 159). As well as retarding agriculture warfare gave rise to military tenures and ‘tenant right’. This was essentially tenure at ancient rents and with an absolute right of inheritance by the widow and eldest son. It may also have been possible for such tenants to alienate their property (Hughes 1952, 117). These tenures were secure and quite good for the tenant. As a result landlords were often unable to improve. Watts (1975, 165-167) thought that these tenures prevented much enclosure, and William Howard led a successful attempt to have them abolished in 1620. The tenants without tenant right were in a much worse position as they usually held from the lord’s gift.

None the less, the seventeenth-century appears to have seen much enclosure of open fields (Hodgson 1979). Brassley (1985, 94) noted that this often occurred in two phases, and suggested that most townfields were enclosed in this period. Enclosure was fuelled by migration into the county as coal production increased, and by the transfer of people from agriculture to industry within the county. This led to increasing tenant prosperity (Brassley 1985, 172). Brassley (1985, 174) stressed that wealth alone would not have caused enclosure, and thought that landlord pressure was necessary. The landlords, in turn, needed to increase their incomes to fund mortgages. Some were unable to do this and sold their lands to businessmen from Newcastle who often took a more professional attitude to their estates (Brassley 1975, 174, Newton 1972, 120). In addition to the enclosure of open fields, the seventeenth-century included much encroachment on common waste, and the introduction of leases on many estates. In the eighteenth-century there was yet more improvement, as several contemporary writers praised Northumberland agriculture. Bailey and Culley (1813, 23) thought that the previous forty years had been particularly good, as did Young (1771a, 92-3) on the basis
of evidence gathered during his six months tour, though the latter thought that there was still much work to be done in the uplands. There is abundant of evidence that the large estates which dominate Northumberland were strongly involved in this improvement (Newton 1972, 120). Brassley (1985, 174) thought that estate pressure was necessary to make the tenant framers improve, though recent discussions of the role of landlords in improvement nationally have suggested that this is simplistic (e.g. Wade-Martins and Williamson 1998). Very few Acts of Parliament were passed to enclose Northumberland townships, those which were mainly covered waste (Newton 1972, 126, Tate 1978, 200-3). Hughes (1952, 125), however concluded that there was still substantial encroachment on the commons in the eighteenth-century, and suggested that the Orwins (1938) were wrong to think of Durham as mainly early enclosed. This is in agreement with recent research into the importance of Parliamentary Enclosure, which has found that other methods remained important (Chapman and Seeliger 2001). Improvement continued into the nineteenth-century. In 1847 Colbeck (1847, 424) noted that recently there had been substantial investment in draining and building, and that many advanced tools had been introduced. He also observed that most farms had a threshing machine and steam engine. Grey (1841, 151), writing in 1841, also thought that agriculture had advanced rapidly. He suggested that the fact that the fertility of the soil was unexhausted, and that there were no inconvenient old enclosures, by which he presumably means piecemeal enclosures, had helped to advance it. He did, however, think that agriculture was not scientific enough. Thus, Northumberland’s post-medieval agricultural landscapes provide a unique and neglected subject for archaeological research, a neglect which this thesis aims to address.

Northumberland Case studies

It would be impossible to study the whole county in sufficient detail to fulfil the proposed aims. Consequently, five case-study townships were chosen for close analysis. These were selected for the availability of the necessary documentary resources, as the map regression employed here would have been impossible without large chronological ranges of manuscript plans. In order to detect suitable townships a GIS database was constructed including data on maps and documents associated with enclosure taken from the catalogues of the Northumberland County Record Office and the Durham University
Special Collections. This exercise produced a list of townships in which analysis was possible (Appendix A). From this list five townships were selected, namely: Learmouth, Milfield, Howick, Longhorsley and Elsdon. These were chosen to include all four regions, as Learmouth and Milfield are in Tweedside, Longhorsley on the central plain, Howick on the coast, and Elsdon in the uplands. They were also chosen to reflect a range of social conditions as Howick is a closed township with a resident manorial lord, Elsdon is open, Learmouth is closed but has an absentee landlord while Longhorsley and Milfield are intermediate between open and closed. They also represent a range of different estates as Howick Learmouth and part of Milfield were within the Howick estate, while Longhorsley was the property of the Earls of Carlisle. The remainder of the Milfield was owned by the Blakes of Twizel and Ordes of Nunnikirk. Thus, the case studies are as representative as possible within the constraints of the methods used.

*Learmouth*

Learmouth is a township of around 2500 acres situated in the North-west of the county immediately south of Wark and Cornhill, on the good turnip land of Tweedside. It is currently entirely enclosed and has four clusters of settlement; East and West Learmouth Farms, the Hagg and Tithe Hill. It appears to have been enclosed around 1799 without an Act of Parliament or formal agreement.\(^1\) The township was originally part of the Barony of Roos and descended with Wark until the late seventeenth-century when Ford Lord Grey left it to his brother Ralph. In 1705 Ralph died without issue, leaving his Northumberland estate, including Learmouth, to Henry Neville, on the condition that he took the name Grey (Vickers 1922, 44). When this Henry Grey also died childless, in around 1740, the estate came to Sir Henry Grey of Howick, Baronet. It then remained with the Greys of Howick throughout the eighteenth and nineteenth centuries (Vickers, 1922, 111).

Papers concerning Learmouth from the time of Henry Grey/Neville onward have survived in the Estate Papers of the Earls Grey and Lords Howick deposited in Durham University’s Special Collection (Durham University Library 2009a). The earliest surviving

\(^1\) Durham University Special Collection [DUSC] GRE/X/P181 hedging account.
map is of 1793 and shows the township shortly before enclosure. It was planned again in 1843 for the Tithe Commutation, and 1865 by the Ordnance Survey. Other documents survive in the Grey papers. These include a series of leases executed from 1712 onwards which identify the tenants and shed light on a period of early-eighteenth-century engrossment. The tenants are also recorded in a series of rentals from 1708 to the end of the nineteenth-century. Learmouth is also described in the Howick Estate Building and Draining Books which show how money was invested by the Estate in the leasehold farms during the second half of the nineteenth-century. The crops grown in the late nineteenth-century were recorded in the cultivation returns which survive in nearly complete sequence from 1860. Finally, Learmouth appears several times in the nineteenth-century Howick Estate correspondence.

**Milfield**

Milfield is a township in Tweedside, four miles south-west of Learmouth. It is immediately north of Lanton, and appears to have intercommoned with the tenants of that township. Its enclosure and tenurial histories are more complex than those of Learmouth, though the complexity of the former does not entirely result from that of the latter. Enclosure appears to have occurred in two phases, both by formal agreements.

For much of the eighteenth and nineteenth centuries Milfield contained three principle farms; Milfield Demesne, owned by the Ordes of Morpeth, Milfield Ninths, owned by the Blakes of Twizel, and Milfield Hill owned by the Greys of Howick. Unfortunately no documents survive for Milfield Ninths, and very few for Milfield Demesne. The Grey papers are however, extensive allowing detailed analysis of Milfield Hill Farm (Durham University Library 2009a). The earliest plan of the area is of 1777 and

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2 DUSC.GRE/X/P276 1793 plan of Learmouth.
3 Northumberland Record Office [NRO] DT 286M Learmouth Tithe Plan.
4 First Edition Ordnance Survey (http://digimap.edina.ac.uk/historicdownloader/downloader;jsessionid=58687A18BE1F83F10AA3ED16E5A62A5C?execution=e1s1 12/03/2012).
5 DUSC.GRE/X/P72 1712 lease of Learmouth.
6 DUSC.GRE/X/P81 rentals 1803-1843, GRE/X/P80 eighteenth century rentals.
7 DUSC.GRE/X/V101 building book, DUSC.GRE/X/V102-3 drainage books.
8 DUSC.GRE/X/P222, DUSC.GRE/X/P270-272 Cultivation returns.
9 DUSC.GRE/X/P130-179 Howick estate correspondence 1872-1930, DUSC.GRE/B2/7/1-382 Howick estate correspondence 1806-1833.
10 NRO.DT322S Milfield tithe.
shows part of Milfield Hill Farm shortly before the first phase of enclosure. The other two farms were mapped separately in 1821, while the whole township was mapped in 1842 for the Tithe Commutation. Finally, it was planned in 1866 by the Ordnance Survey. Leases of Milfield Hill Farm survive for 1735, 1757, 1783, 1803 and 1815. The enclosure of approximately half the township is described by an award and some legal opinions of 1789 and 1782 respectively. Finally, a number of letters in the Orde manuscripts mention their land at Milfield.

Howick

Howick is on the north Northumberland coast, five miles north-east of Alnwick. The township is the seat of the Greys of Howick who rose to prominence from the sixteenth-century onwards (Bateson 1895, 349-50). Edward Grey was the first of the Greys to settle there after purchasing a tower and some closes in 1593. The estate then passed through the family until it came to Henry Grey in 1750 who built the hall. He left no issue and so passed the estate to his nephew Charles Grey in 1808. Charles left the property to his son Henry in 1841. He appears to have left the management of the home farm to his brother Frederick William Grey, as the estate correspondence is mostly addressed to him. After Henry Grey’s death the estate passed to Albert Grey who owned it at the end of the nineteenth-century.

In 1866 Howick contained a small village, which, as will be shown below, is a planned estate village, the hall and park of the Greys, three isolated farmsteads, each with cottages, and several isolated houses (Fig. 1.2). Its enclosure appears to be early, and was certainly completed by 1759 when the oldest surviving plan was made, as a
result very little can be said from documentary evidence concerning the pre-enclosure landscape. Dating the enclosure more precisely is challenging; there is a 1607 enclosure agreement, but this only deals with a small part of the township, and so is part of a longer more complex enclosure history. It will be suggested below that enclosure was complete before 1635 (Chapter 3).

Howick is very well documented in the Grey manuscripts. Most of the township was mapped in 1759. The southern part of the township was planned in around 1782, and again in 1791.\(^{20}\) Seahouses Farm on the coast was planned in 1793 and 1844.\(^{21}\) The Tithe Plan is of 1839 and the Ordnance Survey of 1866.\(^{22}\) From the beginning of the nineteenth-century a number of documents provide data on the cultivation of the home farm. Chief among these are the Farm Returns which record the activities of each labourer every day on a fortnightly basis.\(^{23}\) They also record the Number of stock and quantity of grain on the farm, and what each had been used for. These were replaced by the Returns of Corn and Stock in 1864 which omitted the data on the use of labour.\(^{24}\) Seahouses Farm was a leasehold property, as was Redstead during the early-nineteenth-century, and so was not described in the Returns. It is however described in the Building and Draining Books and rentals which were used for Learmouth.\(^{25}\)

**Longhorsley**

Longhorsley is a village in the east of Northumberland, situated on the central plain between Morpeth and Alnwick (Fig. 1.1). It is in a very different environment to the Tweedside and upland locations of Milfield, Learmouth and Elsdon, but is more comparable to the coastal situation of Howick. Also like Howick, enclosure appears to have been completed early, ending with an agreement to enclose the remaining land.

\(^{20}\) DUSC.GRE/X/P276 1759 plan of Howick by D. Hastings, DUSC.GRE/X/P276 1791 plan of the Howick Estate, DUSC.GRE/X/P276 undated plan of Howick.

\(^{21}\) DUSC.GRE/X/P279 1793 plan of Sea Houses Farm, DUSC.GRE/X/P279 1844 Plan of Howick Sea Houses Farm.

\(^{22}\) NRO.DT264M Howick tithe plan and apportionment, First Edition Ordnance Survey http://digimap.edina.ac.uk/historicdownloader/downloader;jsessionid=5B687A18BE1F83F10AA3ED16E5A62A5C?execution=e1s1 12/03/2012).

\(^{23}\) DUSC.GRE/X/P7-12 farm returns.

\(^{24}\) DUSC.GRE/X/P260 1864-1883, DUSC.GRE/X/P236 1883-1890, DUSC.GRE/X/P211 1891-1899 crop and stock returns.

\(^{25}\) DUSC.GRE/X/P81 rentals 1803-1843, GRE/X/P80 eighteenth century rentals, DUSC.GRE/X/V101 building book, DUSC.GRE/X/V102-3 drainage books.
One of the most striking features of Longhorsley is the complexity of its township boundaries. By at least by 1866 the area was divided into three townships and a common, though this seems to have been of quite late origin. The townships were called Bigge’s Quarter, Riddle’s Quarter and Freeholder’s Quarter. Bigge’s and Riddle’s Quarters were mostly owned by single large landowners, with only one farm in Riddle’s Quarter and a few closes in Bigge’s Quarter being owned by other people. Both also have detached pieces. In Bigge’s Quarter the main ones are called Hayclose and Gibb’s Close and are to the south of Riddle’s Quarter (Fig. 1.3). In Riddle’s Quarter they are called North and South Bricks, and are to the north of Bigge’s Quarter (Fig.1.3). Both also have detached closes and crofts around the village (Fig. 1.3), though these are not discussed here as the development of the village plan falls outside the scope of this thesis. Freeholder’s Quarter was owned by several smaller landowners. The manor was divided between the principal owners of Riddle’s and Bigge’s Quarters, with the manorial rights to Freeholder’s Quarter belonging to the owner of the latter.

From the earliest documents, of the sixteenth-century, until 1807 Bigge’s Quarter was owned by the Earls of Carlisle. The earliest recorded owner was William Howard the father of the first Earl of Carlisle. The estate appears to have passed from father to son until it was sold in 1807 to Ralph Carr and Charles William Bigge. Bigge and Carr divided the lands between them along the north-south road. The western half with the exception of closes called Ox Pasture and the addition of ‘Further Close’ and a moiety of the mill and its lands went to Carr, and the eastern half and the manorial rights

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26 NRO.358/21/10 Enclosure Agreement 1664. This survives as a nineteenth century transcript probably made as part of a legal dispute concerning the remaining common.

27 First edition Ordnance Survey 1:10,560 1866 downloaded from http://digimap.edina.ac.uk/historicdownloader/downloader;jsessionid=5B687A18BE1F83F10AA3ED16E5A62A5C?execution=e1s1 12/03/2012.

28 NRO.DT43M Bigge’s Quarter Tithe Apportionment 1842, NRO.DT391M Riddle’s Quarter Tithe Apportionment 1846.

29 NRO.358/21/10 Enclosure Agreement 1664.

30 The earliest to record Howard ownership is DUSC.N12/2 a lease of common grazing of 14th December 1634 between Lord William Howard of Naworth and William Ratcliffe.

31 The descent of the manor is recorded in DUSC.N13/11, an abstract of title dated 5th June 1747 and deeds recited in the 1808 draft conveyance; DUSC.N13/15.
of Freeholders Quarter went to Bigge. The rest of the manor, the school house and the unenclosed grounds, by this time just the area around the road to the east of the village were to be held by them as tenants in common.\textsuperscript{32} Carr must have left sometime after 1819,\textsuperscript{33} as C.W. Bigge is the sole owner of the property in the 1842 Tithe Survey.\textsuperscript{34} The records of this land under the Howard’s ownership are preserved in the Howard of Naworth papers in the Durham University Special Collections (Durham University Library 2009b). They include rentals in an incomplete sequence from 1665 to 1807. Until 1698 these only give the total rent collected from the manor. From that year they give a complete list of tenants, and are thus of greater utility.\textsuperscript{35} From 1739 to the end of the sequence, they contain accounts of expenditure on each farm, apparently in the year following the date of the rental, though things omitted from earlier accounts seem to be added to later ones making them a quite confusing source.\textsuperscript{36} In addition to these there are leases from 1677 onwards.\textsuperscript{37} Finally, the Howard of Naworth papers contain two plans of Longhorsley. The earliest is of 1719 and is part of a volume of plans of the Howard’s Northumberland estates.\textsuperscript{38} It shows the area around the village, but does not depict either the northern half of the township, known as Hedleywood, or the detached part called Hayclose. These two places were administered as a separate manor,\textsuperscript{39} despite legally being part of Longhorsley manor. The other plan, dated 1773, shows the whole area of Bigge’s Quarter and appears to be a draft as it contains several amendments and is quite rough.\textsuperscript{40}

The descent of Riddle’s Quarter is more complicated. It passed by inheritance for the whole period for which records survive but was subject to several failures of male
issue. The earliest document which records an owner of Riddle’s Quarter is a deed poll of the 9\textsuperscript{th} May 1612 in which Isabel Horsley renounced her interest in her father’s lands in several places including Longhorsley. There is then a gap in the records until the 1664 enclosure agreement which allotted land to Thomas Horsely. He left a will dated 1684 in which he bequeathed his estate to Edward Widdrington, his grandson by one of his daughters, on the condition that he take the name Horsley. Edward Horsley Widdrington left it to his daughter, who married a man called Thomas Riddle. They left it to their son Edward Horsley Widdrington Riddle in 1792. He died intestate and without male issue so the lands went to his brother Thomas Riddle. Thomas left it to his son Ralph in 1798. Finally, Ralph Riddle left it to his son Thomas Riddle in 1833. Thomas still held most of Riddle’s Quarter in 1842. There is no complete set of estate papers for the Horsleys, Widdringtons or Riddles, though isolated documents do survive in the Northumberland County Record Office. These include a set of plans dated 1777. These are currently twelve separate plans each showing a different farm, though they appear to have once been joined together. These and the tithe plan in 1846 provide most of the available data on Riddle’s Quarter. Little is known of the descent of any of the properties in Freeholder’s Quarter. Most of the available data is from the tithe plan of 1842. The County Record Office also holds seven relevant deeds which provide some limited information.

At least by 1842 most of the farms in all three quarters were tenanted. The only exceptions according to the tithe plan are Muckley Farm in Freeholder’s Quarter which was owned by Robert Clerk and a close, also in Freeholder’s Quarter which was owned by

\footnotesize

\begin{itemize}
\item \textsuperscript{41} NRO.358a/33 Case as to the Title of Thomas Riddle to Todburn and Todstead September 1835.
\item \textsuperscript{42} NRO.358/7/3 Deed Poll 9\textsuperscript{th} May 1612 deed poll.
\item \textsuperscript{43} NRO.358/21/10 Enclosure Agreement 1664.
\item \textsuperscript{44} NRO.358a/33 Case as to the Title of Thomas Riddle to Todburn and Todstead September 1835.
\item \textsuperscript{45} NRO.358a/33 Case as to the Title of Thomas Riddle to Todburn and Todstead September 1835.
\item \textsuperscript{46} NRO.358a/33 Case as to the Title of Thomas Riddle to Todburn and Todstead September 1835.
\item \textsuperscript{47} NRO.DT391M Riddle’s Quarter Tithe Apportionment 1846.
\item \textsuperscript{48} NRO.DT192M Freeholder’s Quarter Tithe Plan and Apportionment 1842.
\item \textsuperscript{49} NRO.DT391M Riddle’s Quarter Tithe Plan 1846
\item \textsuperscript{50} NRO.DT192M Freeholder’s Quarter Tithe Plan and Apportionment 1842.
\item \textsuperscript{51} NRO1682, NRO.530/17/18, NRO.530/17/18, NRO.530/17/18, NRO.530/17/18, NRO.530/17/18, NRO.4603/2.
\end{itemize}
The house and park at Bigge’s Quarter was also owner-occupied, though this does not appear to include agricultural land. There may have been owner occupied farms either before or after 1842, but the Carlisle rentals show that the farms in Bigge’s Quarter were all tenanted up to 1807, while a lease of 1818 survives for Freeholder’s Quarter.

Elsdon

Elsdon is situated in the south-west of Northumberland, on the edge of the modern National Park. It differs from other townships studied here in several important respects. Firstly, the number of farms, and thus of landowners and tenants, is much higher than elsewhere, with eighty-eight separate properties listed in the Tithe Apportionment. This meant that there was a range of landholders of different social statuses, from the aristocracy including the Dukes of Northumberland to those who only owned a few acres. Such differences led to different uses of the land.

A further difference is that the land is much poorer than any of the other case studies. It is Grades Four and Five on the Agricultural Land Classification, which are the poorest grades in this national survey. This led to a mainly pastoral economy; most land being under grass where records are available. The wills of tenants at Elsdon often bequeath cows and dairy equipment suggesting that dairying was significant. This may have discouraged tenants interested in improved farming, as fewer elements of this seem to have been used at Elsdon.

Perhaps because of these differences, Elsdon had a much more irregular enclosure history than Milfield or Learmouth. Enclosure here happened by two processes. The

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52 NRO.DT192M Freeholder’s Quarter Tithe Plan and Apportionment 1842.
53 NRO.DT43M Bigge’s Quarter Tithe Apportionment 1842.
54 Rentals DUSC.N111 1665-1698, DUSC.N75 1719-1725, DUSC.N112 1730-1735, DUSC.N113 1736-1742, DUSC.N114 1742-1746, DUSC.N115 1746-1750, DUSC.N116 1751-1755, DUSC.N117 1755-1757, DUSC.N101 1801-1807 (after which the estate was sold).
55 NRO.530/17/18 Lease 28th February 1818.
56 NRO.DT164M 1840 Tithe Apportionment.
58 DUSC.NRO.ZBS/25/1 Leases: Batt 29th March 1894, various lands 1st March 1809, Hill Head and Bitchpool 25th Nov 1868 and 12th May 1877, NRO.ZHE/14/13 1868 Valuation of Elsdon Ridges.
common was enclosed in 1731 by Act of Parliament. The open fields were enclosed over a much longer period of time, beginning before the 1731 Act and still incomplete by 1908. This seems to have included both small scale agreements and piecemeal enclosure.

Elsdon is poorly documented. The earliest plan of the whole township is that which accompanies the 1731 Enclosure Award. It was mapped again in 1839 for the Tithe Commutation, and 1866 for the Ordnance Survey. In addition to these there are several plans of parts of the township. Two, drawn in 1838 by the local surveyor Thomas Arkle, of lands belonging to Thomas Thornton, survive in the papers of the Morpeth solicitors Brumell and Sample. There are also two of Hudspeth, a hamlet to the North of Elsdon, one of 1831 and the other undated. Finally, a collection of plans made by the Bell family of land surveyors contain several maps of Elsdon. These include two plans of a farm called the Flatt; one of 1837 and one undated, and two of a farm called Dunshield; one undated and the other of 1831. This collection also contains many undated sketch plans and annotated tracings of the Ordnance Survey. These plans provide a particularly good basis for map regression, however, other documents are much sparser for Elsdon. The Brumell and Sample papers contain collections of deeds and miscellaneous documents relating to the lands of the Orde and Thornton families, while the Bell collection contains some correspondence concerned with estates which they surveyed.

These case studies reappear throughout the thesis, and provide examples of the local complexity of the five processes under consideration here. The fine detail provided by the sources allows a new approach to post-medieval landscape dynamics.

Explaining enclosure and improvement

Models which seek to explain enclosure or improvement tend to do one of two things: they either list the benefits of enclosure and improvement and assume that, as a
result, enclosure was performed wherever possible; or they identify one or more global causative factors. Mingay’s *Parliamentary Enclosure in England* (1997, 32-54) is an example of the former. He suggests that enclosure was not always done for agricultural reasons, but that road improvement, tithe commutation, access to minerals and urban development were important objectives. He also hypothesises that enclosure was carried out to introduce improvements which were not possible in the open-fields. He cites the opinions of contemporaries to support this, but recognises that there were also many additional advantages (Mingay 1997 37, 39-41). Chief among these was the need for a more flexible division between arable and pasture (Mingay 1997 40). It is likely that these factors were considered by people involved in particular enclosures. However, on their own they do not offer a full explanation, as each would be desirable at any time. Consequently, they do not explain why enclosure occurred when it did (Tarlow 2007, 40).

In answer to this Mingay (1997, 21) comments that the growth of markets, changes in transport costs or encroachment on commons may have forced enclosure at particular times. He does not attempt to offer a full investigation of these ideas, preferring to speculate on the gains which individual enclosers may have hoped to achieve.

Several authors have examined the timing of enclosure, usually by reference to external factors. This means that particular events are understood as the local manifestation of a global phenomenon. Searl (1993), for example, suggested that when people began to drive stock through Cumberland to southern markets, unsustainable pressure was put on the commons. This resulted from a breach of the principal of ‘levancy and couchancy’, which was that no commoner should depasture more stock than could be wintered on his or her holding. Conflict resulted and was resolved through enclosure. Searl’s work is specific to Cumberland, which had a unique social structure. Some historians have, however, offered explanations which apply to the entire country. McCloskey (1976), for example, suggested that the removal of obstacles to the free-market made enclosure preferable to open-field agriculture. Others have suggested that increasing grain prices during the Napoleonic Wars made enclosure more desirable (Chambers and Mingay 1966; 52), or that declining interest rates allowed it to be funded more cheaply (Ashton 1955). Turner (1980; 106-134) tested a number of these factors, including the price of grain and the rate of interest, by regressing them on the number of
Acts passed in each year between 1755 and 1819. He was able to find positive correlations with both, after defining early and late periods, and lagging the factors. The strongest correlation he found was with interest rates. This analysis is open to criticism in light of recent observations that Parliamentary Enclosure is less significant in the eighteenth and nineteenth centuries than previously thought (Chapman and Seeliger 2001). Archaeology supports this as Crossley (1990; 7-10) has demonstrated that there is more evidence of consolidation and piecemeal enclosure in the seventeenth and eighteenth centuries than might be expected. This means that the total number of Acts passed only represents a small proportion of enclosure activity. None the less, it is possible that the rate of Parliamentary Enclosure is roughly proportional to that of enclosure in general, so Turner’s (1980) conclusions cannot be dismissed on these grounds alone.

Archaeology is uniquely placed to address some aspects of enclosure and improvement as it may provide evidence for subjects on which documents are silent. For instance, as described above, archaeological evidence shows that there was more piecemeal enclosure than may be expected (Crossley 1990, 7). Similarly, Williamson (1999) has suggested that field drainage may have been more common in the seventeenth and eighteenth centuries than documents suggest. The archaeological record also shows that piecemeal enclosure and consolidation continued later than most historical accounts imply (Crossley 1990, 7). Crossley (1990, 9, 19) called for further local studies of piecemeal enclosure and specific types of improvement to gather similar data. Archaeologists are also better placed to comment on the landscape impact of enclosure and improvement than are historians whose data is often only vaguely located on the ground. For example, Aston (1985, 131) observed that piecemeal enclosure was much more likely to preserve ancient landscape forms than was Parliamentary Enclosure. He also showed that eighteenth and nineteenth-century enclosures tended to be connected with new farmsteads, as occurred at Shapwick where enclosed pieces of moor contain eighteenth-century brick farmsteads (Gerrard 2007, 1009).

None the less, few uniquely archaeological explanations of enclosure and improvement have been put forward by traditional landscape archaeologists. Where archaeologists have given explanations for enclosure and improvement they have
generally drawn on the historical accounts described above. For instance, Taylor (1975, 118) suggested that enclosure occurred as a result of population increase and the Agricultural Revolution. Crossley (1990, 8) also acknowledged the importance of population growth, but suggested that there were a number of regionally specific responses. He observed that common grazing survived where commoners’ rights were strong, and that old enclosures were kept where smallholders were powerful, but was unable to expand on these given the state of knowledge at the time he was writing. Instead he called for more local studies which would throw light on regional variation.

The post-processual school has, however, sought new explanations for enclosure and improvement, and offers some serious challenges to economic models. Tarlow (2007; 40), for instance, has pointed out that economic determinism assumes that the people carrying out an enclosure or improvement responded rationally to price movements and were fully aware of market trends. She suggests that this may not have been true, and describes many cases in which enclosure was not economically successful (Tarlow 2007; 34-66). One such failed scheme was the 1840s improvement of Lytham Moss which provided a negative return. It is, of course, possible, that the people carrying out the enclosure or improvement were misguided. In addition, the popularity of paintings of prizewinning animals demonstrates that improved breeds had aesthetic value beyond their economic worth. In a similar critique Johnson (1996; 45) suggests that observing an environmental background does not imply a particular cultural response, and that we should not look for strict cause and effect relationships but looser explanations. He also noted that no treatise on enclosure has been able to view the entire period as a single process, most instead focus on one sub-period such as Parliamentary Enclosure (Johnson 1996; 66), whereas, as described above, enclosure, in fact, consisted of many different processes. These amount to an acknowledgement that correlations between the incidence of enclosure or improvement and external factors do not explain the full extent of local variation.

These authors, therefore, offer alternative models in response to the shortcomings of strictly determinist explanations. Tarlow (2007) suggests that improvement was seen as a moral imperative and linked with ideas of patriotism. She observed that contemporary writers often used the term ‘improvement’ to cover a wide
range of agricultural and non-agricultural activities, and linked it with any type of progress (Tarlow 2007; 35). In the period after the Enlightenment progress was valued as an end in itself, and so improvement became virtuous. It was also considered to be an index of national social advancement, and consequently a patriotic duty (Tarlow 2007). Improvers were therefore responding not to a desire for profit or efficiency but to their consciences. Similarly, Johnson (1996; 75-6) proposes that enclosure resulted from a change in the way in which people understood the world. He suggests that the medieval landscape was inscribed with meaning, so that the boundaries of open-fields represented social relationships. During the eighteenth-century, especially in the Enlightenment, this became a much less obvious way to organise the landscape, as the ‘social’, ‘political’ and ‘economic’ began to be understood as separate domains. This led to the creation of landscapes which no longer inscribed social relationships on the ground. These explanations are still problematic as they have really just replaced the economy with society as the explanatory force and are therefore still at a loss to explain all local variation. Instead of correlating landscape change with price trends they correlate it with changes in worldview such as the Enlightenment.

Actor-Network Theory (ANT), a part of a wider school called Non-Representational Theory (NRT), offers a way forward. It provides a different approach to the relationship between the local and the global. ANT suggests that instead of the global being hierarchically above the local, different localities are connected to one another, allowing some agencies to be transported between local interactions (Latour 2007; 173-190). Those which are frequently transported are global. They are only global because the sites at which they are created are well connected to other places (Latour 2007 190-218). This means that the global is found within the local, an approach which Law referred to as Baroque Geography (Law 2004). Events emerge as agencies are brought to a site and assembled. These can be the forces of traditional and post-processual archaeologies, such as markets and ideas, or less obvious agents of landscape change such as sibling rivalry. The way in which agencies from other times and places are assembled in one locale is therefore the proper focus of scholarly attention. Latour (2007) sees this as being done by mediators: actors which transport agency. This makes the mediators actors themselves, as anything which has an affect can be seen as an actor: in NRT to
produce an ‘affect’ is to act. This means that many mediators are non-human, which is not to say that non-human agents have intentionality, simply that they make a difference to an event. They also do not need to determine action in order to have an effect, and so the theory does not return to economic determinism. Johnson (1996; 66) approached the idea of non-human agency when he criticised previous explanations of enclosure by suggesting that they saw material culture as passive, but differs from the Non-Representational approach by viewing non-human agency from a phenomenological perspective in which ‘things’ only have agency by altering human experience. In ANT the assemblage of agencies brought into play by mediators forces an actor to act, and an event can be said to emerge from the assemblage of agencies, or, to put it another way, that the event is ‘performed’ by the assemblage.

ANT, in common with other Non-Representational Theories, uses an ontology which is dependent on practice, and so does not see anything as existing if it does not act, i.e. if it has no ‘affect’. This means that, because action emerges from the assemblage, things are constituted by their relationship to other agents. This is in contrast to post-processualism which sees the material world as constituted by the attribution of meaning by human subjects (Hodder 2001, 121-55). The result of this ontology is that the performance of an event or agency is different each time, as it emerges from a particular assemblage (Hinchcliffe 2010). Thus, there are multiple enclosures: one each time enclosure is performed. This means that each enclosure should be understood as emerging from a unique assemblage, which includes both global and local actors, none of which are more important than the others. If the explanation were to assume that all enclosures were fundamentally similar it would necessarily assume that global factors were superior to local ones in their explanatory power: a position rejected by ANT (Latour 2007; 165-72). The network which assembles agency is constantly changing, and has been described by Mol and Law (2001) as fluid-like in that things change incrementally as they move in the network. They saw this as a type of space, in contrast to Cartesian or network space, but it may be more a product of the constant change in relationships in a network (Latour 2007, 65). This raises the question of how things are made durable. Latour (2007, 78) addressed this with an appeal to non-human agencies, but Mol and Law’s (1994) suggestion that continuity may be performed because change is only
incremental is more in keeping with Non-Representational Theory’s post-humanist position.

To summarise, ANT proposes that actors are forced to act by an assemblage of agencies. The agencies are transported to a particular event and altered by mediators. This means that no two instances of an agency are the same, though the changes are incremental. All of this happens in local interactions, the global simply being the relationships between them through which the agencies are transported. In order to reach an explanation of an action it is necessary to follow the actors through their relationships. This is in contrast to either post-processual or determinist approaches which began by favouring a particular explanation. It is important to realise that this is essentially a descriptive exercise, as the distinction between explanation and description is seen as a false dichotomy (Latour 2007, 137). It is also impossible to give a complete account of the network; as making one thing visible or present necessarily makes others invisible or absent (Law 2003). It is possible to see some traditional accounts of enclosure as essentially tracing actors, for example Yelling (1977; 46-70) described many factors which influenced the course of enclosure in three case-study regions without choosing one as an explanation. However, such accounts are rarely offered as an alternative to determinist explanations such as those described above. A number of archaeologists have worked with Non-Representational Theory, but few have attempted a full application of Actor-Network Theory to the archaeological record as presented here. Most use NRT to stress the importance of non-human actors, particularly Hicks and Beaudry (2010, 10) who question the importance of human intentionality, or Knappett (2005) who stressed the intermingling of human and non-human. While it is important to reinstate non-human objects in archaeological discourse such studies run the risk of underplaying the equality of agency between human and non-human. Webmoor and Witmoor’s (Webmoor 2007, Witmore 2007, Webmoor and Witmore 2008, Olsen 2007) ‘symmetrical’ archaeology is essentially an archaeological manifesto for ANT, and as such fully dissolves the division between human and non-human as attempted by this thesis. This has yet to be applied to the understanding of archaeological data as will be attempted below. A number of archaeologists have used the relational ontology of NRT to discuss the archaeological creation of facts or the role of material remains in creating
archaeologists (Van Reybrouck and Jacobs 2006, Witmoor 2004, Shanks 2007, 2012). While such studies offer valuable theoretical contributions, they do not negate the possibility of using ANT to understand archaeological remains and past events so long as the mutual constitution of archaeologist and data is born in mind. Thus, Non-Representational and Actor-Network Theories offer an intriguing possibility for the development of archaeological thought, one which will be tested in this thesis.

Format

Following this brief introduction to the study area, case studies and theoretical perspectives, the remaining eight chapters are divided as follows. Chapter Two will detail the methods and sources used, and their limitations. Chapters Three to Seven will describe the five different types of landscape change examined here. Chapter Three will explore the extinction of common rights, which constitutes enclosure, and the methods used to achieve it. Chapter Four covers the consolidation of ring-fence farms from open-field holdings or dispersed closes. Chapter Five reveals a change in the pattern of land use from an arable core, near each village, and pastoral periphery at the township boundary, to one in which land uses were interspersed with one another. Chapter Six discussed the creation of dispersed farms, its relationship to village depopulation, and the occasional desertion of those isolated farms. Chapter Seven deals with agricultural improvement, particularly the ways in which certain improvements were adopted locally. Chapter Eight is a discussion chapter in which specific types of actor which occur in all of the processes are discussed individually. Chapter Nine concludes, and explores ways to develop Non-Representational Theory as an archaeological approach.
Chapter 2
Methodology

The five case studies introduced in Chapter One each cover an entire Northumberland township, with the exception of Longhorsely where a group of three closely connected townships were examined. Case-studies of this size were selected for a number of practical reasons. Firstly they are of a convenient size for analysis, as they small enough for analysis to be completed in the time available but usually contain more than one farm allowing comparison between different ownerships and occupations. Secondly, documents relating to one township are easy to locate in archives as the township name is usually used in cataloguing. Finally, they at least typically formed the agricultural unit before enclosure meaning that they are to some extent coherent. This approach does not allow holdings which were not located in one township to be analysed, however it was felt that this would not have been possible in the time available. Changes to the landscapes of each identified using map regression, and further detail was added from documentary sources. The townships were selected to include a variety of environmental, tenurial and legal conditions, ensuring some level of representativeness, though no claim is made that the case studies are in some way typical. As a result comparison with some county-scale studies from other parts of the country is difficult (e.g. Chapman and Seeliger 2001). These problems were, however, considered to be outweighed by the unique opportunity to examine the processes of landscape development both in detail, at the level of individual people, farms, buildings and field boundaries, and in the *longue durée* which is an important aspect of the approach taken here. As we shall see, it was also necessary to be able to understand the context of each enclosure event in as much detail as possible in order to fulfil the aim of describing Actor-Networks, outlined in Chapter One. This contrasts with most studies of enclosure which usually focus on a single type, or very few types, of document over a wide area such as a county or region. For example, Chapman and Seeliger’s (2001) study of four southern English counties has revealed much about the extent of different forms of enclosure during the eighteenth and nineteenth centuries, something that is not possible to do with the local case studies used here. They were, however, unable to comment on the motives behind individual enclosure events, since such a geographically broad study could
not reveal much of the contextual detail of particular enclosure events. Though studies of individual townships do exist they rarely attempt comparison between several case studies. Thus, most fail to cover many of the processes implicated in enclosure, for example Hoskins’ (1965) study of Wigston Magna in Leicestershire, discusses enclosure in detail but does not examine the use of formal agreements as these were not employed at Wigston.

The selection of the case-study townships was strongly determined by the choice of map regression as the principal method; this required multiple manuscript plans of a range of dates for each area. In order to identify suitable targets a GIS database was created describing as many large-scale, pre-twentieth-century plans of Northumbrian townships as possible. Collections of plans in both Durham University Special Collections and the Northumberland County Record Office (NRO) were entered into in this database (Appendix B). All catalogued pre-nineteenth-century maps were recorded. As a result almost all of the plans in these two archives were included, though the possibility remains, especially in the case of the NRO, that further plans exist in uncatalogued collections. A representative sample of plans in the Alnwick Castle archives was also added to the database, but it was not possible, due to the state of cataloguing and restricted opening hours of the archive, to include all plans in their collection. This database aided assessment of the potential of all Northumbrian townships for map regression, and allowed a long list of suitable townships to be created (Appendix A). Five case studies were subsequently selected from this list.

The townships were selected in order to represent a wide range of the environmental and social conditions prevailing in Northumberland at the time of enclosure (Fig. 1.1). Two, Milfield and Learmouth, are in the north of the county which has a harsher climate than the coast, but particularly fertile soils. During the Agricultural Revolution this area was considered good turnip land (Bailey and Culley 1813, 4), meaning that farms focused on stock production using turnips as a fodder crop and impermanent pasture within arable rotations. The townships differ from each other however, as Learmouth was a completely ‘closed village’, in that it was owned entirely by the Howick estate, while Milfield was split between the Howick estate, the Ordes of Nunnikirk and the Blakes of Twizel. Elsdon by contrast is on the edge of the Cheviots, in much more
marginal conditions for arable husbandry. It was also very ‘open’ with many landowners of greatly differing status. Finally, Longhorsley and Howick are in the central plain and on the coast respectively. Howick is a closed township, while Longhorsley has several freeholders in addition to a large area controlled by the Carlisle Estate. This means that a range of owners are represented in the case studies. Howick also differs from the other four case studies in that it was the seat of the Greys, a nationally important family (Raine 1852), and consequently was the base for their home farm.

Map regression

Each of the five townships was subjected to map regression. Regressive or retrogressive analysis has been widely used in geography and archaeology (e.g. Petrie 1878, Yates 1960, Tolan-Smith 1997, Aston 2009). Its defining feature is the production of plans of different ages working backwards, usually from the landscape depicted on the first edition Ordnance Survey (Tolan-Smith 1997; 71). In many cases the dates for which maps are produced are chosen for their historical significance. For example, Tolan-Smith, (1997) produced plans of Horsley and Harlow Hill townships for the late eighteenth, thirteenth, and second centuries AD, in order to examine the relationship between the Romano-British and medieval landscapes. Similarly, Cunliffe (1973) described the landscape of Chalton, Hampshire at between 5500 and 500 year intervals from early prehistory to the present. Neither of these studies, however, have sufficient chronological resolution to link observed changes to particular tenants or landowners, as is required in this study. This necessitates a sub-century resolution. Both Cunliffe and Tolan-Smith depended on the archaeological dating of boundary features which is often imprecise limiting the chronological resolution of their analysis. As a result it was decided that this thesis would produce plans of the areas at the dates at which they had been mapped. This restricted the analysis to townships which had large numbers of maps of a range of ages, but with gaps between consecutive maps of less than a century. It was not possible to perform the large amounts of fieldwork on which both Cunliffe’s (1973) and Tolan-Smith’s (1997) work depended, as it would have been impossible to examine enough townships in the time available. This also limited my study to those periods in which map evidence was available, though this was not a serious setback as map evidence exists for much of the period under examination. The technique adopted here
also differs from some regressive analyses as it does not subtract landscape features from maps to create an earlier plan (e.g. Williamson 1987, Drury and Rodwell 1980). This was unnecessary because map evidence was available for the entire period, in contrast to studies which use regressive analysis to examine late-prehistory (e.g. Williamson 1987, Tolan-Smith 1997, Drury and Rodwell 1980). Such a method was also undesirable because it was necessary to provide absolute dates for changes in order to link them with manuscript sources. The technique used here is thus a relatively simple form of map regression which only seeks to re-draw manuscript plans to aid comparability. The method is most similar to that used by the Shapwick Project (Aston 2007) only differing in that the maps were drawn in a GIS environment. This was found to be more convenient than drawing by hand as it minimised time spent in archives. Advances in computer technology since the beginning of the Shapwick Project have now negated the problems with large file sizes and computing power suggested by Aston (2007), while, in the process used here, transcription of the plan is manual so time is still spent carefully examining the map. Comparison of the plans could also be made much more easily by placing digital layers over one another, rather than paper plans being placed side by side.

In detail, the method involved downloading the first edition Ordnance Survey of the township in question from Edina Digimap as georeferenced JPEGs, and adding it to a GIS database. This was then traced in polyline files to produce a digital version of the Ordnance Survey. Different files were used for each type of feature in order make it easier to change their colour for presentation. The manuscript plans were then added to the GIS database as photographs or scanned digital images. These were georeferenced using the tracing of the Ordnance Survey. This allowed very easy comparison between the Ordnance Survey and each manuscript plan. The lines present on both the Ordnance Survey and the manuscript plan were copied and pasted into another polyline file to create a plan of the area at the date of the manuscript, but which was identical to the Ordnance Survey tracing in terms of scale, conventions, and planimetric accuracy. Where a feature was present on a manuscript plan but not the Ordnance Survey it was drawn manually: such features could be copied between tracings of different manuscript plans if they appeared on several of them. The resulting maps were directly comparable and could be compared easily by changing the colour and thickness of the lines and overlaying...
the tracings. This ensured that every landscape change between a pair of plans was noted quickly and easily. The method is, however, only as good as the plans themselves. In some cases features may have been omitted despite being present at the date at which a plan was surveyed, either by error or because the surveyor never intended to record them. For example, the first edition Ordnance Survey plan of Elsdon shows a blank area to the east of the village in which open-field strips had been marked on the 1839 Tithe plan. From this it may have been thought that the strips had been enclosed, however they still appear in later sale particulars, and indeed 1940s aerial photographs. The reason that they had been omitted from the Ordnance Survey is that they had not been marked by a fence or hedge, and as such only existed as private property boundaries, which the Ordnance Survey did not attempt to survey or convey (Oliver 1993; 48). Unfortunately, no systematic method for identifying these has been found. In some cases it was also difficult to be certain whether a line on a manuscript plan was exactly the same as that shown on the Ordnance Survey. For example, a manuscript plan may show a stream as a wavy line without attempting to show the actual details of its course as the Ordnance Survey does. In such a case it would be possible that the route of the stream had changed between the date of the manuscript plan and the Ordnance Survey without the alteration being detectable. In other cases, it appears that field boundaries on some manuscript plans are straighter than they actually were on the ground. Thus, in many cases, unless there is a very dramatic change, or other areas of the manuscript plan appear to be drawn accurately, it is not possible to use the method to determine minor changes to features; only their presence or absence. However, the technique has proven effective in identifying landscape change in the case studies.

**Documents**

To investigate the processes behind these changes, the actors involved, and their motivations, documents relating to our townships were examined. These were located through the catalogues of the estate and parish papers relating to the areas by searching for the names of the townships. The card and online catalogues of the NRO were also consulted. These were especially important for Elsdon which has never been controlled by a large estate, and thus is not covered by any one set of estate papers. For Learmouth,
Milfield, Longhorsley and Howick volumes and series of documents, such as rentals, in the Howard of Narworth and Grey papers (Durham University Library 2009a, Durham University Library 2009b) were also examined. This approach will not have uncovered all surviving documents relating to the five townships as many will be uncatalogued or not catalogued with the names of the townships. Others may be in archives outside the North-East. It is likely that this method has proven most successful for Learmouth and Howick which were owned entirely by one estate, leaving the majority of their documentation in one set of estate papers. Elsdon’s records were much more dispersed, as it was not controlled by a single landowner. This means it is more likely that documents have been missed. It also may have resulted in a reduced rate of survival as small landowners did not usually create estate papers. Consequently, the records for Elsdon are much less complete than those of the other townships, mostly consisting of deeds deposited in the NRO among the papers of the Morpeth solicitors Brumell and Sample.66

This search produced a wide variety of classes of documents, the originals of which were examined in the archives, providing data on many different aspects of the five townships. Each of these sources has particular characteristics which must be taken into account during analysis. The most important classes of documents used were those resulting from enclosure itself. By definition these are only available for formal enclosures (Chapman and Seeliger 2001; 40-6), and so only provide information on particular cases. Informal methods must be inferred from other sources. The most abundant enclosure records were those relating to Parliamentary Enclosure, of which the most important are the Acts and Awards. Two Acts were relevant to the case studies used here: those for Elsdon and Wark Commons, the latter of which included an allotment for Learmouth.67 The Acts provided the authority for the enclosure, and as such provide a detailed description of how the process should have been carried out. They are, however, mostly formulaic in their content, much of the text being taken from earlier Acts (Tate 1978; 29). In addition, they often give vague descriptions of the land to be enclosed due to legal caution: it did not matter if a type of land were mentioned in the

66 NRO.ZBS/14, NRO.ZBS/25, NRO.ZBS/26.
67 Cambridge University Library OP.3.01/90 Wark enclosure Act, NRO.QRD3 Elsdon enclosure Act.
Act and not present on the ground, but if a type of land use had been omitted this could cast doubt on the validity of the Act. Consequently, they are of limited use for local studies of the kind presented here. The Elsdon Act, of 1729 provides a list of petitioners, which appears to be complete, aiding discussion of the people who desired enclosure. The Wark Act of 1798 was less detailed in this respect as later Acts tended to be (Tate 1978, 24). The Acts also provided the names of the commissioners who were to carry out the enclosure, though in many cases these were changed between the passing of the Act and the completion of the Award (Chapman and Seeliger 2001; 33-4).

Awards provided more detailed information (see also Chapter 3). They usually begin with a recital of the Act and the actions of the commissioners, in order to show that the enclosure was carried out according to the Act (Chapman and Seeliger 2001; 36). These parts provide little detail which is not known from the Act; however they do name the commissioners so it can be determined whether they had changed since the Act was passed. After this they describe how the land was divided between the proprietors, usually by metes and bounds (Chapman and Seeliger 2001; 36). By the mid-eighteenth-century it had become standard practice to include a plan of the allotments to accompany the Award (Chapman and Seeliger 2001; 37), these have been used in the map regression described above. They are generally accurate, though they often do not include features which were irrelevant to the enclosure. The copies of Awards and plans examined here are those which were deposited with the Clerk of the Peace, and have since been transferred to the NRO. Finally, the House of Lords and House of Commons Journals were used to examine the progress of the Bill through Parliament, though in neither case was this unusual in any way (see Tate 1978; 23-8). These were examined in Cambridge University Library. In addition to the sources associated with Parliamentary Enclosures, several of the case-study townships had enclosure agreements of varying levels of formality. The agreement for Milfield, survives only as an Award. It is quite late in date; the Award having been made in 1789. It mimicked the Parliamentary Enclosure process, and is thus similar to the Parliamentary Awards in its content and reliability. It was also enrolled with the Clerk of the Peace ensuring its survival. It differs from

68 NRO.QRD3 Elsdon Award, NRO.QRA63/1 Wark enclosure award.
69 NRO1888/6 Milfield, NRO358/21/10 Longhorsley, DUSC.GRE/X/P276 Howick.
70 NRO1888/6 Milfield enclosure award.
Parliamentary Awards in that it lacks a plan, presumably because the Award was quite simple and to survey the area would have added to the cost of the enclosure. The remaining agreements, covering Howick and Longhorsley, provide less detail, and are much earlier, though in both cases they only survive as eighteenth-century copies (Fig. 2.1). 71 Both give very vague descriptions of the land awarded to each proprietor, and neither includes a plan. It was not possible to reconstruct the exact distribution of the allotments from these, though some indication can be determined from comparing the Award and the Tithe Plan.

Tithe Plans are another important source (principally utilised in Chapter 4). They were created from the 1830s to the 1850s under the Tithe Commutation Act of 1836 in order to determine the rate at which tithes should be commuted (Kain and Prince 1985; 56). Though they were not drawn for every parish in England they are present for all five case studies as copies enrolled with the Clerk of the Peace. 72 They consist of a plan and an Apportionment which lists the owners of each parcel of land shown on the plan and the value of its tithes. The accuracy of the plans was disputed at the time. Ordnance Survey officials, among others, criticised them, while many land agents and solicitors, who used the plans in their work, found them acceptable (Kain and Prince 1985; 131). The information in the Awards is generally accurate. In some cases the stated landowners may be trustees or mortgagees rather than the actual owner, though it was the intention of the survey to record the receiver of the profits (Kain and Prince 1985; 147). This is unlikely to have caused problems for the analysis provided here as the ownership of farms is often known from other sources. Unfortunately, the plans and apportionments available for the case-study townships are less detailed than usual (Fig. 2.2). For example, none records information on land-use or field names which are often considered to be the most archaeologically important information in the tithe surveys. The plans also omitted internal divisions of farms, and thus only represented ownership boundaries. This limits their utility for map regression as many features which may or may not have changed between an earlier map and the tithe plan are not shown. It did,

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71 NRO358/21/10 Enclosure Agreement 1664, GRE/X/P112 eighteenth Century copy of an arbitration award for the division of Howick, July 1607.  
72 NRO.DT164M Elsdon, NRO.DT264M Howick, NRO.DT286M Learmouth, NRO.DT43M, NRO.DT391M and NRO.DT192M Longhorsley, and NRO.DT322S Milfield.
however, make the identification of farm boundaries simpler than it would otherwise have been (see Kain and Prince 1985 for a description of the usual process). This information was important as the tithe survey was often the only record of farm boundaries, since the Ordnance Survey did not record ownership divisions, while estate maps often only cover one farm. This provided a starting point for the reconstruction of earlier farm boundaries. The farm boundary information from the tithe was often useful in identifying which areas of the landscape were affected by particular deeds, leases or other documents that gave textual descriptions of the land to which they applied.

One such source is title deeds (Fig. 2.3, used throughout but primarily in Chapters 3 and 4). These documents were produced when a property was sold in order to prove title. They are generally accurate in the information they contain as they had to be defensible in court (Alcock 2001; 10). Their most important function in this study was to pinpoint when pieces of land were sold and to whom, in order to identify which individuals were associated with particular landscape changes identified by map regression. Deeds also usually include a recital of previous deeds, in order to demonstrate the seller’s title (Alcock 2001; 43), a feature which is particularly useful where other deeds have not survived. They also furnish a description of the land in question, which was, in some cases, useful in showing whether a farm was enclosed or unenclosed, or held pasture rights on a particular common. This must, however, be treated with care as the main function of this description was to link the current deed to earlier ones, and thus may not have been kept up to date and was often copied from one deed to another (Alcock 2001; 46). Major changes like enclosure, however, often changed ownership patterns so drastically as to create entirely new farms with new sets of deeds. The description may also contain information on the identity of the tenant, though this is not always included and may be incomplete. Finally, they also provide information on the buyer and seller. Most basically, this will show where they lived and describe either their status (e.g. ‘esquire’) or occupation. The information on where they lived is useful in identifying absentee landlords and owner-occupiers. It may go on to describe their relationships to the previous owners if the land had been inherited, in order to demonstrate title (Alcock 2001; 9).
In addition to the landowners, who can be identified from deeds, tenants were responsible for landscape changes. They are identified from leases and rentals. Rentals were produced by estate offices in order to monitor the arrears owed by each tenant. They are generally only available for the large estates, meaning that there is much less evidence concerning the tenants of smaller properties like those at Elsdon. They were usually produced at each bi-annual rent day. This gives a very fine chronological resolution to the data which they provide. They differ in their content between estates, but usually list each farm and tenant, the value of arrears from the previous rent day, the quantity of rent due, the amount paid and the arrears outstanding. They may also include allowances for taxes paid by the landlord or for improvements, and in these cases give some information on improved farming carried out by tenants which is rare in other sources. They have survived best for the Howard of Naworth and Grey estates. The main sequence of Grey rentals is from 1803-1843, with outliers of 1708, 1756, 1757, 1759, 1763, 1765 and 1766. From 1867 to the twentieth-century the same data is recorded in volumes called tenants ledgers. The series in the Howard of Narworth papers runs from 1665-1811, after which time Longhorsley had been sold. Until 1698 only the total rent from each manor is given. Both sequences are incomplete, though this did not greatly affect the types of analysis preformed. From these documents it was possible to reconstruct who held farms at particular times and when tenants changed. The arrears also show when a particular tenant was struggling to make a living from their farm. They also reveal when farms were joined together or broken up, but not the details of the boundary changes associated with this. This can usually be supported with information on the rental value, as a farm’s rent will typically increase when parts of other farms are joined to it.

Leases also provide data on the tenants (Fig. 2.4, used principally in Chapters 3, 4 and 5). In the absence of rental data they can be used to reconstruct changes in occupation, though the sequences are often not sufficiently complete to show every change. Incompleteness is more important for leases than do rentals, as the absence of a

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73 DUSC.GRE/X/P81 rentals 1803-1843, GRE/X/P80 eighteenth century rentals.
74 DUSC.GRE/X/V25-27.
75 DUSC.N13/15 draft conveyance of Longhorsley 1808.
76 DUSC.N111 1698 rental.
single lease can mean that no evidence of a particular tenant survives, while this would not be the case if a single rental were missing. When they are available however they give a more precise date for the arrival of the tenant than rentals. They are particularly useful for such reconstructions where the previous tenant is named in the description of the farm, though if the incoming tenant had taken possession before the lease was drawn up this information may not be included. Leases are a type of deed and as such have similar content to other deeds, including descriptions of the people and land involved (Alcock 2001; 39). They also often give conditions prescribing particular methods of husbandry. Wade-Martins and Williamson (1998; 129) have shown that in Norfolk these conditions only became common from the eighteenth-century onwards: earlier leases only giving vague conditions if any at all. At first glance these appear to be an attempt by an educated aristocracy to impose improved farming on the tenantry. However, Wade-Martins and Williamson (1998; 132) have demonstrated that improved farming occurred in places where leases were vague, and that the courses of husbandry prescribed by the lease were sometimes deviated from with the landlord’s consent. They also find evidence for monitoring of tenants’ rotations, but it was unclear how common or effective this was (Wade-Martins and Williamson 1998; 132). Similar evidence is found in the Grey papers, as cultivation returns were made annually by each tenant between 1845 and 1912, showing the crop grown in each field, as with Wade-Martins and Williamson’s (1998) Norfolk examples these show considerable deviation from leases’ conditions. The clauses in the leases should not, therefore, be used as evidence for the type of husbandry actually practiced on leasehold farms. They do, however, show the level of importance placed on improved farming on the part of the estate, which inserted the clauses into the leases in order to impose a minimum level of husbandry. Another source of evidence for this is the use of leases for a fixed term, such as twenty-one years. This was considered at the time to be particularly enlightened, giving the tenant security of tenure in which he or she could invest in improvements (Wade-Martins and Williamson 1998; 128). These longer leases became more common, over time as improved farming became a greater priority for the large estates. A final limitation of the leases is that many farms were let by word of mouth, without any written document. This is particularly common where the farm was part of a very small estate like those at Elsdon, or in the part of Longhorsley which
was not controlled by the Howards. In these cases there is much less evidence for the sequence of changes in tenants.

Further information concerning husbandry, estate management and many other subjects survives in correspondence. They are considerably more miscellaneous in their content than any of the sources discussed above. They do however often include details which are not present in the other documents, including personal opinions on farms, husbandry and other people. The most useful type is the ‘estate correspondence’ made between the landowner and the land agent informing the landowner of the estate management and asking permission for particular courses of action. The best sequence of these examined here are those in the Grey papers, which are extant for most of the nineteenth-century.\[77\] There is, however, some correspondence in the Orde papers, which contains information pertaining to Milfield.\[78\] Letters between other professionals involved in the running of the farms, such as surveyors, tenants and solicitors, also exist. Many are held in the NRO, especially among the papers of Brumell and Sample, a firm of solicitors.\[79\]

Other details of the farming of the five townships were gained from farm surveys (principally used in Chapters 4 and 5). As with many types of document these were most abundant on the larger estates, especially Howick (Durham University Library 2009a). These sources can be quite miscellaneous in their content. Most give a list of the fields in one farm together with their area, thus allowing a reconstruction of the farm boundaries if the locations of the field names are known. Often, the state of cultivation is given, providing information on husbandry practice, while others give professional opinions on the state of the farm and its improvement. In some cases surveys were produced for particular reasons. For example, a dispute arose between the third Earl Grey and William Lumsden, the tenant of Learmouth, in which Grey claimed that Lumsden had practiced poor husbandry and damaged the farm, while Lumsden claimed that Grey should compensate him for unused improvements.\[80\] Both had surveys made to support their

\[77\] DUSC.GRE/X/P130-179 Howick estate correspondence 1872-1930, DUSC.GRE/B2/7/1-382 Howick estate correspondence 1806-1833.
\[78\] NRO.1356/C Orde estate correspondence.
\[79\] NRO.ZBS/25-6 Brumell and Sample papers.
\[80\] DUSC.GRE/X/P57 survey, DUSC.GRE/X/P96 report by James Turnbull and Adam Calder.
arguments. In most other cases surveys were made at the transfer of the estate between owners.  

A large number of other classes of document were used to a more limited extent than those described above. These include estate accounts, particularly those of the Howick Estate, which were searched for items of expenditure relating to improved husbandry (these were mostly used in Chapter 6). No attempt has been made here to analyse the expenditure of the estate in detail, as it is only indirectly related to landscape development and thus falls outside the scope of the thesis. Glebe terriers were also used. They show how the contents and tenants of glebe farms changed over time. They have not been used to study enclosure as they were by Beresford (1948), as the sequences available were both too late and too short. Sale particulars were also examined, and provide a wealth of detail on particular farms. These were created as an advertisement of land for sale at auction and usually date to the second half of the nineteenth-century. They include a description of the farm, covering its agricultural potential, current leases and encumbrances. They also state whether the land was open or enclosed, and almost always include a plan of the farm, providing a further source for farm boundaries. As they were advertisements it must be born in mind that they attempted to show the farm in its best light, so some information may be omitted. They have patchy survival, as they were of little use after the sale, and so are only available for a few of the farms examined.

Advertisements for properties to let were also extant for the Learmouth farms, apparently as drafts to be sent to local newspapers. These are mostly quite brief, but similar in content to the sale particulars. A very limited use of wills and probate inventories was also made. They were mostly used to determine the descent of particular properties, where this was not available in deeds or abstracts of title. They also give some information on occupations, wealth and relationships. At Elsdon probate inventories were also used to give some indication of the types of husbandry being

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81 DUSC.GRE/X/P81 22\textsuperscript{nd} January 1805 Survey of Howick Farm, DUSC.GRE/X/P111 18\textsuperscript{th} June 1808 Survey and valuation of Howick Pasture House Farm and DUSC.GRE/X/P81 15\textsuperscript{th} September 1808 survey of Howick South Farm.
82 DUSC.GRE/X/V1-43 Howick account books and ledgers 1801-1934.
83 NRO.DN/E/9/1/36 Elsdon glebe terrier, NRO.DN/E/9/1/103 Alwinton and Holystone (part of the glebe of this parish was in Elsdon).
84 NRO.90421/3 Sale Particulars of the Linden Estate 1861 (Longhorsley), NRO.ZBS/25/1 1908 Sale Particulars of lands at Elsdon, NRO.1356/14/1 1849 sale particulars.
85 DUSC.GRE/X/P123 and DUSC.GRE/X/P233.
practiced as tools were included in them.\textsuperscript{86} The Elsdon parish registers were used in a very limited way to identify the occupiers of certain farms and to indicate the date at which the name of a particular farm first appeared in documents, as each person mentioned is usually described as of a particular place (Stephens 1903). No attempt has been made here to perform a demographic analysis of the parish registers (e.g. Wrigley and Schofield 1981), as this is considered to fall outside the scope of the thesis. Finally, two legal opinions survive concerning the enclosure of Milfield, and these add detail to the information from the enclosure agreement.\textsuperscript{87}

There are also several volumes and series of documents peculiar to the Howick Estate, which include information on Howick, Learmouth and Milfield Hill (principally used in Chapter 6). The latter occurred least frequently, as it was tenanted by the Third and Fourth Earls Grey’s land agents, who appear to have been allowed to farm as they wished. The most important of these documents were the ‘cultivation returns’, which were filled in by each tenant once a year to report which crop had been planted in each field (Fig. 2.5). They appear to have been requested between 1845 and 1912. They survive either as paper forms or copied into volumes, but are rarely in complete sequence.\textsuperscript{88} Each consists of a list of field names, usually on a printed form, with a handwritten list of the crops in each. They may thus be used to examine rotation where the sequence is complete enough to allow this. Changes to the list of field names may also show alterations to the arrangement of field boundaries. Unfortunately, of the farms examined here, crop returns only survive for those at Learmouth, (Durham University Library 2009a). The tenanted farms are also covered by the ‘Building Book’, which is an account of expenditure on the buildings of leasehold properties. It was maintained between 1841 and 1858, and appears to include information for all tenanted farms other than Milfield Hill.\textsuperscript{89} The ‘Draining Books’ are similar; containing accounts of expenditure on draining on tenanted farms between 1840 and 1886.\textsuperscript{90} As with the Building Books, Milfield Hill is omitted. Much of this draining work was carried out using loans provided by the Lands Improvements Company, which itself created particular classes of

\textsuperscript{86} DUSC.DPRI/1/1680/H1/1 Probate inventory Michael Hall 5\textsuperscript{th} July 1680.
\textsuperscript{87} NRO.1356/M.5 1782 Milfield Division papers.
\textsuperscript{88} DUSC.GRE/X/P222, DUSC.GRE/X/P270-272 Cultivation returns.
\textsuperscript{89} DUSC.GRE/X/V101 building book.
\textsuperscript{90} DUSC.GRE/X/V102-3 drainage books.
documents. The most important of these are the tables which were used to show how much had been spent on draining each farm.\textsuperscript{91} Each table covered one township and gave for each farm the name of the tenant and the fields drained. It then gave large amounts of detail on the drainage of each field including the diameter and number of pipes used, the depth of drains, their distance apart, and the date at which the work was completed. These documents have not been fully exploited in the analysis presented here, and have mainly been used to show that drainage occurred on particular farms at particular times, but they clearly have further archaeological potential. Finally, there are some insurance policies for tenanted farms,\textsuperscript{92} as it was a condition of some leases that farm buildings were insured either by the tenant or the landlord and tenant jointly.\textsuperscript{93} These often include a detailed list of buildings, which can show that certain types of husbandry were being employed, or may indicate that buildings associated with particular technological advancements were present at certain farms.\textsuperscript{94}

There are also some series of documents which relate to the home farm at Howick. Of these the most important are the ‘Farm Returns’ (1803-1853, Fig. 2.6, principally used in Chapter 6)\textsuperscript{95} and the ‘Returns of Corn and Stock’ (from 1864 to the twentieth-century),\textsuperscript{96} which summarise most of the activity carried out on the farm on a fortnightly or monthly basis. The farm returns were produced every fortnight. They give the number of each type of animal on the farm at the beginning of the period, and how they were used or acquired. They report the quantity of threshed wheat, oats, peas/beans and barley on the farm, and the amount threshed since the last return. They then set out how much of each of these was used for particular purposes under the headings: ‘Howick House’, ‘Poultry’, ‘Pigs’, ‘Gardens’, ‘Saddle Horses’, ‘Farm Horses’, ‘Gamekeeper’, ‘Servants’, ‘Sold’, ‘Sown’ and ‘Waste’. Other activities, particularly feeding to sheep and cattle, or charitable donations are occasionally noted in addition to these. Finally, the Farm Returns contain a table giving the activities each labourer or hind performed each day and, for the labourers, their fortnightly pay. An account of

\textsuperscript{91} DUSC.GRE/X/P343 Particulars of drainage carried out under Lands Improvements Company Loans.
\textsuperscript{92} DUSC.GRE/X/P254 26th December 1856 fire insurance policy, DUSC.GRE/X/P254 Christmas 1854-6 insurance policy for stock, farm implements etc.
\textsuperscript{93} E.g. DUSC.GRE/X/P60 1891 lease of Howick Star Farm.
\textsuperscript{94} DUSC.GRE/X/P254, DUSC.GRE/X/P106 Fire insurance policies.
\textsuperscript{95} DUSC.GRE/X/P7-12.
\textsuperscript{96} DUSC.GRE/X/P260 1864-1883, DUSC.GRE/X/P236 1883-1890, DUSC.GRE/X/P211 1891-1899.
contingents purchased was also given. One form was filled each fortnight until 1847 when separate returns were made for Redstead and Pasture House. They begin in 1803, though only three survive from this year. From 1804 the sequence is more complete though many years have some returns missing, and no returns survive between 1845 and 1847. The corn and stock returns give similar data to the farm returns for stock and corn, though the headings for the uses of corn are: ‘Horses’, ‘Cattle’, ‘Sheep’, ‘Pigs’, ‘Poultry’, ‘Servants’, ‘Sown’, ‘Howick House’, ‘Saddle Horses’, ‘Gardener’s’, ‘Game-keeper’s’, ‘Howick Buildings’, ‘Sold’ and ‘Waste’. They do not, however, give any data on the activities carried out by the labourers. No quantified analysis of the labourers’ activities was carried out; however this data was examined for references to improvements and periods of building work or draining. Quantified analyses were performed on the corn and stock data. These were carried out on a sample of nine years; 1804, 1814, 1823, 1833, 1848, 1865, 1875, 1885 and 1895. These were selected to be as close to ten years apart as possible but to avoid incomplete years. It was important to omit incomplete years as much of the data varies seasonally so the absence of data on particular seasons would have skewed the results. In order to assess the importance of each grain the total amount of grain sown in each year was calculated. This functions as a proxy as it must reflect a decision to sow a certain quantity. To determine how each grain was employed the uses of the grains were grouped into the categories: ‘domestic’ (Saddle Horses, Gardener’s, Game-keeper’s and Howick Buildings in the Corn and Stock Returns and Howick House, Gardens, Saddle Horses, and Gamekeeper in the Farm Returns), ‘farm’ (Horses, Cattle, Sheep, Pigs, Poultry, Servants and Sown in the corn and stock returns and Poultry, Pigs, Farm Horses, Servants and Sown in the farm returns), and ‘sold’. Waste was almost never filled in; where it was it was put in a separate category: ‘other’. The total amount, in bushels, in each category was calculated for each year. The percentage of each grain used for each purpose was then calculated from this. To find out how the numbers of each type of stock varied from year to year the number of cattle, sheep, farm horses and pigs on the farm was calculated annually. The percentage of cattle, sheep and pigs which were either consumed by the house or sold was also determined for each year. These analyses are very basic and are not intended to use the data exhaustively.

97 Servants in both cases almost certainly refers to the hinds, i.e. farm servants.
They only aim to give a very crude picture of changes on the farm, especially those which are related to landscape development.

In addition to these two series, there are several other classes of document relating solely to Howick. These include records of how the cattle were fed in the form of the ‘Cattle Journals’ which run from 1845-1905. Another set of documents contains notes on cattle feeding on other farms taken from information provided by neighbours. Yet more documents give details of manuring experiments carried out on the farm. All three series give information on improvement on the Howick Estate. Finally, particulars of the Howick corn crops were kept. The earliest series of these records were drawn up between 1802 and 1829. These are recorded on individual sheets of paper, one for each year, and record the number of thraves of each crop taken from each field, and the quantity of grain each produced. There is then a gap in the record until 1851 when the practice was recommenced. Three notebooks survive from this period, one covering 1851-1854, another 1862-1869 and a third 1890-1904. These record the same information as the earlier series of particulars.

While these documents are in themselves quite limited, taken together they furnish much detailed information on each of the townships. The use of many different documents also increases the reliability of the data extracted as incorrect or potentially misleading content in one type of document was often clarified by another. The data extracted is, however, far from complete and particular areas, such as the freehold farms at Longhorsley and Elsdon, are underrepresented in comparison to the farms which comprised the larger estates. None the less, information on such farms was available in a reasonable number of cases allowing some confidence that the results presented below are not entirely biased towards one social class.

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98 DUSC.GRE/X/V114-5 cattle journals.
99 DUSC.GRE/X/P125/10 details of cattle feeding.
100 DUSC.GRE/X/P261 28th July 1845 memorandum of application of manures of different kinds used for turnips in the middle pasture field, DUSC.GRE/X/P200/5 September 16th 1846 Quantity of Corn & thrives Crop of 1846 Howick South Farm and DUSC.GRE/X/P232 letters 20th April and 1st May 1893 Dr Somerville to A. Grey.
101 DUSC.GRE/X/P111 Particulars of the crops.
102 DUSC.GRE/X/P197 Particulars of the Howick corn crops 1851-1854, DUSC.GRE/X/P126 Particulars of the Howick corn crops 1862-1869, DUSC.GRE/X/P282 particulars of grain crops on Howick Farms 1890-1904.
Finally, several of the documents, especially estate plans and surveys, contain field names (Fig. 2.7). These were used to identify areas of former common; as such places usually have names containing the element ‘Moor’. No other attempt was made to use field names as there is no recent publication on Northumberland minor place names and the extensive research required in its absence falls outside the scope of a doctoral thesis. Such an examination is also prevented by the absence of medieval sources of place names in any township. On the whole the field names of the case studies were, however, Modern English and mostly referred to crop plants or the physical shape of the field.

**Aerial photographs**

In addition to historical sources aerial photographs were used to locate areas of ancient arable cultivation and improvement. These areas were identified through the presence of ridge-and-furrow. The photographs held in the Historic Environment Record and National Monuments Record were used. These principally consisted of 1940s ’50s and 60s RAF photographs and Ordnance Survey image of the second half of the twentieth-century and early part of the twenty-first (Appendix C). Two types of ridge-and-furrow were identified. The first is wide and curved, and in some cases is in reversed-S curves (Fig. 2.8). It does not usually conform to modern field boundaries except where they result from piecemeal enclosure. As Eyre (1955) identified the reversed-S shape as an indicator of open-field cultivation it is likely that this type is the product of open-field systems. The second type is narrow and straight (Fig. 2.8). It often conforms to modern field boundaries, including those created by Parliamentary Enclosure (Fig. 2.9). This shows that it post-dates Parliamentary Enclosure, in at least some cases. Carter et al. (1997) have shown, through fieldwork in southern Scotland, that such ridge-and-furrow may have been used for pasture improvement in some cases. It is, however, likely that it was used for arable in addition to this. This type is very common in the case studies. This is in contrast to the Midlands where most ridge-and-furrow research has been carried out (e.g. Beresford 1984, Hall 1995). In such areas open-field ridge-and-furrow, the first type, is much more common. This difference has prevented open-field reconstruction of the type undertaken by Hall (1995) being performed in the study area. The two types do, however, allow some comment to be made on the location of arable farming and improvement before and after enclosure. It is important to realise that
neither of these two types represents the full extent of cultivation in either period. This is for two reasons. Firstly, much ridge-and-furrow has been destroyed by later agriculture. It survives best at Elsdon where post-medieval agriculture was pastoral. In contrast Milfield has barely any and Learmouth has none. Both of these are in a fertile area (Bailey and Culley 1813, 2-3), and have been ploughed intensively. Similarly, very little survives at Howick, which was also reasonably fertile. The best preservation at Howick is on The Heugh and The Flatt, an area of pasture from at least the beginning of the nineteenth-century (Fig. 2.10). The second reason to doubt that ridge-and-furrow represents the full extent of arable cultivation is that nineteenth-century ridge-and-furrow was probably only created when necessary for drainage. This was the opinion of contemporary writers (e.g. Wilson 1849, 53-4, Kerridge 1951, 21).

Overall, the wide range of sources examined in the subsequent chapters provides a detailed overview of the processes and actors which created these five post-medieval landscapes. There are, of course, certain limitations of this dataset. As with any historical examination it is skewed towards larger landowners and estates. This is however not damning as, in many cases less wealthy farmers do appear allowing some discussion of their practices, especially at Elsdon. Their actions were also discerned through the map regression. It has also failed to reveal the agency of labourers, a subject which would benefit from the attention of later studies. On the whole however the analysis performed here provides a much more detailed account of landscape changes at a local scale than achieved by previous works. The next chapter will utilise this in order to understand the methods by which common rights were abolished.

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103 DUSC.GRE/X/P81 22nd January 1805 Survey of Howick Farm, DUSC.GRE/X/P111 18th June 1808 Survey and valuation of Howick Pasture House Farm and DUSC.GRE/X/P81 15th September 1808 survey of Howick South Farm.
Chapter 3

Enclosure

The landscape changes discussed in Chapter One may be discussed individually, but before they are considered the subject of enclosure itself must be discussed as it has serious effects on landscape development. Enclosure is defined here as the abolition of common rights either over waste or harvest shack. It was achieved by a number of different methods which were used under particular circumstances.

Enclosure of commons and open fields occurred over a long period of time and by many different methods (Yelling 1977; 1-10 Chapman and Seeliger 2001; 13-30). None the less very few works discuss the entire period. Most focus on the period either before or after 1750 (e.g. Turner 1980, 1984, Mingay 1997, Chapman and Seeliger 2001, Thirsk 1967, Beresford 1948, notable exceptions include Wordie 1983, Yelling 1977 and Tate 1967). Works which discuss the post-1750 period often focus on Parliamentary Enclosure, implying, or explicitly arguing, that this became the dominant process. For example, Turner (1984, 33) argued that an estimate by Kerridge (1967, 24) that one quarter of England had been enclosed by 1700 did not leave much room for non-Parliamentary enclosure during this time. This, plus the fact that there was now renewed faith in the returns of inquisitions on enclosure, suggested, Turner argued, that high estimates of non-Parliamentary enclosure post-1750 must be misguided. Similarly Mingay (1997; 11) suggested that Parliamentary Enclosure accounted for most land enclosed between 1750 and 1830, but that agreements may have been significant at least in some parts of the country. This view is the traditional one and has often been assumed to be correct, (e.g. Wordie 1983, 486-488). On the other hand, more recent work by Chapman and Seeliger (1995a, 2001) has found that non-Parliamentary methods continued to be important in the four counties that they examined. For example, in Hampshire they found that there were nearly as many agreements as there were Acts of Parliament after 1700 (Chapman and Seeliger 1995a, 38). Sussex was similarly dependant on non-Parliamentary means, (Chapman and Seeliger 2001; 92-110) while in Dorset informal enclosure was often possible due to the dominance of large estates (Chapman and Seeliger 2001; 51, 66); Wiltshire was the only one of the four to have seen had a high
proportion of enclosures by Act of Parliament but still had much non-Parliamentary Enclosure (Chapman and Seeliger 2001, 133). Chapman and Seeliger (1995a, 43) suggested that the significance of non-Parliamentary Enclosure was probably true in other areas particularly across northern England. More recently still, French (2011, 152) has discussed the loss of the townfields of Litchfield to piecemeal enclosure in the early-eighteenth-century. Similarly, in north-west England Silvester (2004) has found many instances of encroachment, and intakes of commons in eighteenth and nineteenth-century court leet records. Whyte (2003, 22) also examined four private agreements in eighteenth and nineteenth-century Westmorland, showing that it was not only piecemeal enclosure which continued after the beginning of the Parliamentary Enclosure period.

If non-parliamentary means of enclosure continued to be significant after 1750 the traditional division of enclosure into two periods is called into question. This allows comparison of enclosures of all eras. It also forces us to ask why different methods were used, as we can no longer simply see one method replacing another (e.g. Wordie (1983, 487-488) who suggested that Parliamentary Enclosure increased as the only areas left to be enclosed by this period were those which could not be enclosed informally). Chapman and Seeliger (1995, 37) suggested that Parliamentary Enclosure was only used where necessary due to its high cost. This is likely as Parliamentary Enclosure is known to have been expensive (e.g. Whyte 2006 and Turner 1973). Indeed, Chapman and Seeliger (1995, 37) found examples of alternatives to Parliamentary Enclosure being sought. This may have changed after the General Enclosure Acts of 1801, 1836, 1840 and 1845 reduced the cost of Parliamentary Enclosure significantly (Straughton 2008, 41-2). The time taken to complete such an enclosure may also have been considered. Parton (1985, 52) found that this could cause problems for landowners if the enclosure took so long that their financial situation changed during the time taken. Chapman (1987; 30) found that Parliamentary Enclosures were used for common pasture more frequently than agreements, because it is much more difficult to determine and value the rights to a common than to an arable open-field. Indeed many well-known enclosure disputes of this period, such as Croston in Lancashire (see Rogers 1993) and Otmoor in Oxford (Eastwood 1996), concerned commons rather than open fields. Yelling (1977; 46-70), examining a much longer period of time, found that the means of enclosure was
determined by the intended land use and the pattern of landholding in the township. These factors varied over time causing changes in the method used in any one place (Yelling 1977; 46-70). Shannon (2011, 191-2) has also demonstrated a preference for informal enclosures in early-modern Lancashire, showing that approvement and intakes, both types of assarting in the classification used here, were most common. There were only modest amounts of encroachment, agreements and partition, the latter two of which are formal enclosures.

Both Yelling (1977; 6-10) and Chapman and Seeliger (2001; 13-48) have proposed classifications for enclosure methods. Chapman and Seeliger (2001; 13-48) divided them into Parliamentary Acts, formal agreements and informal methods. The first of these categories is self-explanatory. Informal methods included unity of possession, piecemeal enclosure and some bilateral agreements between farmers, though Chapman and Seeliger (2001, 25) assume that the latter was rare. Formal agreements were written. They may have simply formalised the results of piecemeal enclosure, but more often laid out the fields anew and involved arbitration (Chapman and Seeliger 2001, 25). At their most complex they could closely follow the processes of Parliamentary Enclosure (Chapman and Seeliger2001, 13). Yelling’s (1977; 6-10) classification is similar but principally divides the methods into piecemeal and general; the former comprising only piecemeal enclosure and the latter, unity of possession, formal agreement and Acts of Parliament. General enclosure could be partial, though this was thought to be uncommon (Yelling 1977; 80). This system has the advantage of being able to contextualise Parliamentary Enclosure as a general enclosure. As Chapman and Seeliger’s (2001) classification was intended principally to allow them to compare the levels of Parliamentary and non-Parliamentary Enclosure it was necessary to divide the two. However, Yelling’s (1977) system does disguise the similarity of piecemeal enclosure and unity of possession in terms of cost and formality.

The five case studies described in Chapter One will be used to examine in detail the situations in which certain types of enclosure were used. Each township has a different enclosure history and each was enclosed at a different time, from the seventeenth to the nineteenth centuries. However, it appears that throughout this time the least formal method was preferred. More formal methods were reserved for
situations where agreement would have been hard to reach, or where legal ambiguity would have resulted from an informal enclosure. This is an extension of Chapman and Seeliger’s (1995a, 37) finding that formal agreements were used in preference to Parliamentary Enclosure. It allows enclosure methods to be understood as a hierarchy from formal to informal, with Parliamentary Enclosure at the top, agreements of various levels of formality in between and piecemeal enclosure and unity of possession at the bottom. The further down the hierarchy the more preferred the method (see Chapman and Seeliger 2001; 13).

**Types of enclosure**

No attempt has been made here to estimate a total acreage of land enclosed by different means in Northumberland, as similar estimates of the extent of Parliamentary Enclosure have proven ambiguous (e.g. Chapman 1987, Walton 1991, Chapman 1991), and would require a larger sample of townships. In this paper detailed study of a small number of townships is used in order to examine formal and informal methods of enclosure in more detail, and with more small scale spatial awareness, than has previously proved possible (e.g. Chapman and Seeliger 2001).

The case studies do give an impression of widespread informal enclosure from at least the seventeenth to nineteenth centuries. The clearest example is Longhorsley. Here, field boundaries show that piecemeal enclosure occurred at least in the area near the village, as there are long thin fields with reversed-S and C-shaped boundaries (Fig. 3.1). This is most obvious in Freeholder’s Quarter (Fig. 3.1 area b). There is, however, evidence in both of the other townships as reversed-S shaped boundaries are present in the north-east of Riddle’s Quarter (Fig. 3.1 area c), and a 1719 plan of part of Bigge’s Quarter shows that long thin fields had been present near the village. There is some limited evidence for encroachment on commons. In the south-east of Bigge’s Quarter there are fields named *Low Moor, West Moor* and *East Moor* (Fig. 3.2). These fields cut into an area which is depicted as boggy on both the 1773 and Ordnance Survey plans. Therefore the ‘moor’ fields were probably encroachments onto a piece of common.

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104 DUSC.N190/97 Plan of Longhorsley and Hayclose 1773.
105 DUSC.N190/97 Plan of Longhorsley and Hayclose 1773 and First edition Ordnance Survey 1:10,560 1866 downloaded from
Another example can be found in the south where a small common survived enclosure and exists today (Fig. 3.3). Here the field names North Moor, High Moor and Low Moor indicate that there was some encroachment from the east (Fig. 3.3). There are also fields called Part of the Intake and West Moor to the north of the common in Riddle’s Quarter suggesting encroachment from this direction as well (Fig. 3.3).

This piecemeal enclosure must have occurred before 1664, as an agreement of that year enclosed the remaining lands. It is clear that this is the final piece of enclosure in the township as it intended “that there should be a partition and division made as well of the Inne-Grounds as of all and every the Commons and Common of Pasture”, and says that its parties were “now seized to them and their heirs and hold in common and undivided all and every the lands ten[emen]ts and hered[i]t[ament]s of and within the said manor of Longhorsley excepting one farmhold there belonging to James Ogle Esquire and the Glebe lands”. This, however, only dealt with 961 acres and 11 perches of the 6205 acre area, meaning that the remainder had been enclosed before 1664. Some of this was by the piecemeal enclosure and encroachment described above, but the area of the township with evidence for these types of enclosure is relatively small. In contrast there are quite extensive areas of apparently planned, rectilinear fields, with particularly straight boundaries (Fig. 3.4). Some of this must be the land enclosed by the 1664 agreement, but as the regular field systems cover more than 961a-0r-11p some must have been formed by other means. It is possible that areas enclosed piecemeal before 1664 had been reorganised to create more regular field systems, but this would have been a needless expense. Alternatively, these areas may have been enclosed by one or more less formal agreements documentation for which has either not survived or was never produced. Thus, it appears that most of the land was enclosed by informal or semi-formal means with the most formal agreement used only to complete the process.

http://digimap.edina.ac.uk/historicdownloader/downloader;jsessionid=5B687A18BE1F83F10AA3ED16E5A62A5C?execution=e1s1 12/03/1012.
106 DUSC.N190/97 Plan of Longhorsley and Hayclose 1773.
107 NRO.358/21/10 Enclosure Agreement 1664.
108 NRO.358/21/10 Enclosure Agreement 1664. The farm of James Ogle remained unenclosed until it was purchased by John Bullman, one of the freeholders party to the 1664 agreement. In 1688 he sold the strips in Riddle’s Quarter to Edward Horsley Widdrington, who held the rest of Riddle’s Quarter, consolidating all of the lands (NRO.335/21/1 conveyance 4th April 1688).
Informal enclosure, in this case unity of possession rather than piecemeal, also seems to have been used to enclose much of Howick. This was achieved by through the purchase of open field holdings by Edward Grey of Morpeth. This began in 1593 with the purchase of a tower and three acres of meadow from his brothers Roger and Arthur Grey of Chillingham.\textsuperscript{109} From this time onwards Grey took advantage of the decline of Howick’s principal family, the Herrings (Bateson 1895; 349), in order to acquire their lands. In 1596 he bought holdings called Green End and Tower Farmholds from Robert Herring,\textsuperscript{110} and also procured the mill from William Herring before 1601.\textsuperscript{111} In 1603 he obtained a farmhold from Jeffery Herring.\textsuperscript{112} This must have been a tenanted farm as it was in the occupation of John Craster. On February 20\textsuperscript{th} 1607 Edward Grey bought a tenement from Henry and Elizabeth Swinnow,\textsuperscript{113} and another holding from a man called Cuthbert Lockewood in 1623,\textsuperscript{114} who appears to have inherited it from his father, Oswey.\textsuperscript{115} This 1623 deed clearly describes an open-field holding as it mentions a “Cottage howse and garth ten butts and fower roods”.\textsuperscript{116} Shortly afterwards however, a 1635 rental mentions lands called \textit{The Heugh} and \textit{The Flatt} and \textit{Butterlaw &c.}\textsuperscript{117} These are both closes named on a 1759 plan,\textsuperscript{118} suggesting that at least some enclosure had happened by this time. It is possible that parts of Howick remained unenclosed in 1635, but it is likely that most was enclosed, as the straight field boundaries suggest a planned enclosure (Fig. 3.5). This is consistent with unity of possession. A 1691 deed adds \textit{Pilferlands} and \textit{Little Blackley} to the closes mentioned in 1635.\textsuperscript{119} \textit{Pilferlands} is marked on the 1759 plan, while \textit{Little Blackley} may be an alternative rendering of \textit{Black Law} which is also named in 1759.\textsuperscript{120} This shows that an even greater extent of the enclosed landscape existed during the seventeenth-century. A, probably small, piece of common must have remained in 1659

\textsuperscript{109} DUSC.GRE/X/P43 2\textsuperscript{nd} September 35 Elizabeth I bargain and sale.
\textsuperscript{110} DUSC.GRE/X/P43 10 May 39 Elizabeth I feofment of tenements and lands in Howick.
\textsuperscript{111} DUSC.GRE/X/P43 Michas Term 43 Elizabeth I indentures of a fine.
\textsuperscript{112} DUSC.GRE/X/P43 8 January 45 Elizabeth I bargain and sale.
\textsuperscript{113} DUSC.GRE/X/P43 20\textsuperscript{th} February 1607 bargain and sale.
\textsuperscript{114} DUSC.GRE/X/P43 18\textsuperscript{th} August 1623 bargain and sale.
\textsuperscript{115} DUSC.GRE/X/P43 2\textsuperscript{nd} September 35 Elizabeth I bargain and sale.
\textsuperscript{116} DUSC.GRE/X/P43 18\textsuperscript{th} August 1623 bargain and sale.
\textsuperscript{117} DUSC.GRE/X/P94 'The yearly rents of Howick estate as it was lett at Whitsunday 1635'.
\textsuperscript{118} DUSC.GRE/X/P276 1759 plan of Howick by D. Hastings.
\textsuperscript{119} DUSC.GRE/X/P43 25\textsuperscript{th} March 3 William and Mary deed to lead the uses of a recovery.
\textsuperscript{120} DUSC.GRE/X/P43 25\textsuperscript{th} March 3 William and Mary deed to lead the uses of a recovery and DUSC.GRE/X/P276 1759 plan of Howick by D. Hastings.
as it was mentioned in a deed,\textsuperscript{121} but had been enclosed by 1759. It appears, then, that Grey had enclosed most of the township by unity of possession between 1623 and 1635. Certainly, most of the enclosed landscape existed by 1691. A small waste seems to have survived slightly later than the rest of the common land but even this had gone by 1759.

Despite achieving most of this enclosure by informal means an agreement was required for a small area in the north of the township. This divided the lands of Edward Grey and John Craster and was made in July 1607.\textsuperscript{122} It only awarded 169 ¼ acres. It did so by awarding all of Craster’s lands to Grey then compensating Craster by allotting lands in a block in the north of the township.\textsuperscript{123} It is likely that Craster, who is described as ‘of Craster’, farmed these lands as part of a larger holding in Craster which Grey could not, or did not wish to, purchase in full simply to achieve unity of possession in Howick. So here Grey used an agreement only where necessary, preferring to complete the majority of the enclosure informally.

Similarly, Learmouth seems to have been enclosed by unity of possession, but with some small formal agreements used to deal with more difficult pieces of land. This property had been owned by the Greys for centuries before enclosure (Vickers 1922; 74-77) so the only engrossment required to achieve unity of possession was that of the tenanted farms. The earliest document which describes the township’s occupation, a rental of 1708, shows it divided between six farms.\textsuperscript{124} Of these, two; ‘Learmouth & Cornhillhaugh’ and ‘Hurch Law & Mill Land’ were rented by a man called John Hall.\textsuperscript{125} Three other farms were held by John and William Crawford, Widow Crawford, Lionel Bolton and Ralph Archibald. In addition to these there was a malt barn and kiln (held by Thomas Tebbit), a mill (held by William and Thomas Bolton) and a cottage (held by Stephen Elliot and John Murdy).\textsuperscript{126} In 1712 the farms of John and William Crawford and Lionel Bolton, and the malt barn and kiln were engrossed by a Thomas Gregson of Sunnilaws. The lease describes this property as “those six ffarmes com[m]only called the

\textsuperscript{121} DUSC.GRE/X/P43 1\textsuperscript{st} March 1659 lease of Howick Heugh.
\textsuperscript{122} DUSC.GRE/X/P112 eighteenth Century copy of an arbitration award for the division of Howick, July 1607.
\textsuperscript{123} DUSC.GRE/X/P112 eighteenth Century copy of an arbitration award for the division of Howick, July 1607.
\textsuperscript{124} DUSC.GRE/X/P80 1708 rental.
\textsuperscript{125} DUSC.GRE/X/P80 1708 rental.
\textsuperscript{126} DUSC.GRE/X/P80 1708 rental.
West side of Learmouth\(^{127}\), which suggests that Bolton and the Crawfords also had taken part in engrossing. From 1719 a man called Anthony Compton of Berwick began to acquire leasehold land in Learmouth.\(^{128}\) In that year he took the lease of the farm called Hurch Law and Mill Land, which was probably one of the farms held by John Hall.\(^{129}\) Later he took the farms of Ralph Archibald and Widow Crawford, and in 1724 acquired John Hall’s other farm at Cornhillhaugh.\(^{130}\) He entered the mill in 1729,\(^{131}\) and finally acquired Thomas Gregson’s farm 1733, bringing all of the land in the township, other than the glebe, into his possession.\(^{132}\) It is interesting to note that though Compton only acquired lands at Learmouth in 1719 he appears to have acted as estate steward.\(^{133}\) This allowed him to become familiar with the property, and put him in a position of power over its tenants.

There is no evidence that Anthony Compton sought to enclose Learmouth, but his engrossment created the conditions by which the township was enclosed later in the century. The glebe, however, remained a barrier to enclosure. The problem was solved by an agreement of 1778 in which all the glebe of Learmouth, amounting to thirty acres, the tithes of Corn and Grain, and Hay of Hagg and Mindurm alone, and the tithe of lambs of Mindrum were granted to Henry Grey and Ralph Compton, the great-nephew of Anthony Compton and heir to the estate.\(^{134}\) According to a note on a 1793 plan of Learmouth, Grey gave Ralph lands in lieu of his part of the tithe and glebe, probably creating Tithe Hill Farm in the south of the township (Fig. 3.6).\(^{135}\) This enclosed the glebe lands, as well as others in lieu of tithe, bringing all the unenclosed land into the hands of Ralph Compton. Essentially extinguishing all rights of common within the township, which is, by some definitions, an enclosure. None the less, the land remained unfenced into the 1790s, as depicted on a plan on 1793 (Fig. 3.6). The enclosure actually happened in 1799 as an account records hedging in Learmouth, and other farms on the Grey’s

\(^{127}\) DUSC.GRE/X/P72 1712 lease.
\(^{128}\) DUSC.GRE/X/P73 1719 lease.
\(^{129}\) DUSC.GRE/X/P80 1708 rental.
\(^{130}\) DUSC.GRE/X/P73 1724 lease Cornhill and Learmouth.
\(^{131}\) DUSC.GRE/X/P73 1729 mill lease.
\(^{132}\) DUSC.GRE/X/P74 1733 lease Learmouth Westside.
\(^{133}\) He drew up and signed the 1708 rental (DUSC.GRE/X/P80).
\(^{134}\) DUSC.GRE/X/P29 1778 lease.
\(^{135}\) DUSC.GRE/X/P276 1793 plan of Learmouth.
Tweedside estates, at this time. It is in the same year that Wark Common, on which the tenants of Learmouth had grazing rights, was enclosed by Act of Parliament. It appears, then, that Learmouth was enclosed by unity of possession having been brought under one tenant and owner, thereby simplifying the legal situation. Its final enclosure was part of an estate wide policy timed to coincide with that of Wark Common.

At Elsdon informal methods seem to have been used to enclose most of the arable land, while the common was enclosed by Act of Parliament. The plan accompanying the 1731 enclosure Award depicts a large amount of ‘ancient land’ some of which was already enclosed (Fig. 3.7). This land is best understood as three elements: the West Field, the East Field, and the lands of the various outlying farmsteads and hamlets. The lands to the west of the village appear to have been enclosed before the 1731 map as several boundaries shown there in 1731 are depicted on the first edition Ordnance Survey plan (Fig. 3.8). In addition there was little change to the tracks in this area between 1731 and 1866. There is evidence that at least some of this enclosure was piecemeal, as many of the field boundaries respect the shapes of surviving ridge-and-furrow (Fig. 3.9). The land to the east of the village appears to have been unenclosed in 1731 as very few boundaries are shown on the enclosure plan (Fig. 3.10). It was probably in the process of becoming more consolidated, as most had been enclosed by 1840, and much of the remaining unenclosed land condensed into Landshot Farm and Low Mote, leaving only a few isolated strips (Fig. 3.11). The 1866 first edition Ordnance Survey suggests piecemeal enclosure, as there are some long thin fields (Fig. 3.12). A few unenclosed strips remained and are shown on sketch plans, a 1908 set of sale particulars, and aerial photographs of the 1940s (Fig. 3.13). Some very small scale attempts at piecemeal enclosure occurred during the latter half of the nineteenth-century. One example is an 1871 purchase, by Robert Thornton, of a strip of land next to one which he already owned. Another, which actually failed, was carried out by a man called Mr Gow. He

136 DUSC.GRE/X/P181 1799-1801 accounts.
137 NRO.QRA 63/1 Wark enclosure award.
138 NRO.QRD3 Elsdon Enclosure Plan.
139 See Appendix C
140 NRO.DT164M 1840 Tithe Apportionment.
141 NRO.ZBS/25/1 1908 Sale Particulars of lands at Elsdon, NRO.ZHE/14/3 c.1873 Ordnance Survey tracing, NRO.ZHE/14/4 undated Ordnance Survey tracing.
142 NRO.ZBS/26/3 25th January 1871 Conveyance of Dunsdale.
purchased a strip of land from the Duke of Northumberland around 1874, next to a strip of land belonging to Alwinton glebe. He then bid successfully for the Alwinton glebe strip in an auction later that year. It appears that the sale was prevented, probably by the legal difficulties in alienating glebe, as the strip appears in an 1895 glebe terrier. These strips had previously been joined in practice as a man called John Davidson who had sold the strip to the Duke of Northumberland had also been the tenant of the rector of Alwinton. These are however isolated cases, and it appears that piecemeal enclosure was infrequent during this period.

The lands of the outlying farms and hamlets may have been separate from these East and West Fields in certain cases. This is clearest at Hudspeth which appears to have had its own open field system. The evidence for this comes from the 1731 enclosure Award and plan. This describes many properties as in Hudspeth township, suggesting that it was a separate agricultural unit. It also marks the East and West Fields (Fig. 3.14). This seems to have been unenclosed in 1731 as few boundaries are marked within it (Fig. 3.14). The 1731 plan also shows a different set of tracks to an 1826 plan in which the area is enclosed. Finally, holdings are often described as ‘in the East and West Fields’ in the enclosure Award. Thus, it appears to have been enclosed between 1731 and 1826, probably by agreement as this area has quite straight field boundaries. As Hudspeth was only held by four people, in both 1731 and 1839, this agreement was only on a small scale and may have been quite informal. The lands of East and West Todles, Whitlees, Whiskershield and East Nook to the east of the township have much straighter boundaries than the rest of the ancient land (Fig. 3.15). This suggests that they were made by encroachments on the common. Some of this may have taken place in the medieval or very early post-medieval period. Whitlees farmstead contains a bastle and must therefore have early origins (Fig. 3.16). In addition the element *shield* in Whiskershield may indicate that it was initially a medieval seasonal settlement or ‘shieling’. Sadly, the modern farmstead does not appear to contain any pre-eighteenth-

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143 NRO.ZHE/14/3 correspondence J. Snowball to C.S. Bell 14\textsuperscript{th} April 1874.
144 NRO.ZHE/14/3 correspondence between C.S. Bell and A. Proctor 4\textsuperscript{th} October 1873 – 14\textsuperscript{th} April 1874.
145 NRO.DN/E/9/1/103 Alwinton and Holystone terrier 20\textsuperscript{th} March 1895.
146 NRO.DT164M Tithe Apportionment.
147 NRO.QRD3 Elsdon enclosure plan and award.
148 NRO.QRD3 Elsdon enclosure plan and award, NRO/1356/P/20 1826 plan of Hudspeth.
century features (Fig. 3.17). Similar encroachment occurred to the north of the village. Here North and South Bowershield are likely to have been established at shielings, and appear to contain the remains of a medieval or early post-medieval bastle (Fig. 3.18). To the East of these three farms called ‘Ridding’ are probably also encroachments on the common. Both of these areas of encroachment contain pre-enclosure ridge-and-furrow (Fig. 5.1). This may suggest that some assarts initially created open-fields, as Fox found on Dartmoor (Fox 1994, 152), however it may also imply the periodic cultivation of the common, as was noted by Butlin (1973, 140-141) elsewhere in Northumberland. It is not possible to determine between these two explanations with the present data. It is likely, however, that at least some assart did enclose common waste in the strict since. The remainder of the extensive common lands of Elsdon was enclosed in 1731 under a 1729 Act.

Milfield is exceptional among the case studies chosen for this thesis as it had had little informal enclosure. It appears to have been enclosed in two phases. The first phase dealt with its eastern half (Fig. 3.19). This enclosure is undocumented but anciently enclosed lands are mentioned in the 1789 Award.\footnote{NRO.QRD6 Milfield or Lanton Common enclosure award 24th December 1789.} Part of this area is depicted as unenclosed in a plan of 1777 (Fig. 3.20).\footnote{NRO/1356/P26a 1777 plan of Milfield.} This means that enclosure occurred between 1777 and 1789. It is likely that it happened shortly after 1777. The 1777 map is entitled ‘copy of a plan of That Part of Milfield Belonging to S[j]r Henry Grey Bar[rone]t survey[e]d in the year 1777 By Dav[i]d Hastings’, the words ‘copy of’ appearing in a different hand to the rest which seem to be traced from the original.\footnote{NRO/1356/P26a 1777 plan of Milfield.} It does not make sense to describe a piece of unenclosed land as belonging to one person so it is likely that the map in fact depicts the allotment made to Henry Grey at enclosure. This half of the township is on higher quality and lower relief land than that enclosed by the 1789 Award (Fig. 3.21), and so was probably the arable.\footnote{Agricultural land classification http://magic.defra.gov.uk/datadoc/metadata.asp?dataset=2 retrieved 15/08/2012.} The second enclosure covered lands called Milfield or Lanton Common, in both Milfield and Lanton townships (Fig. 3.19), and probably enclosed only common grazing. It was made by an agreement which mimicked the procedure of a Parliamentary Enclosure by appointing three commissioners, whose actions were
governed by its terms, and who made an Award having surveyed and valued the lands.\textsuperscript{153} This was preceded by several years of negotiation which began around 1782 when two legal opinions were given on the rights of the Earl of Tankerville to the soil of the common and the legality of some encroachments.\textsuperscript{154} One opinion was that the Earl was in fact the lord of the manor and that the encroachments were illegal, whereas the other suggested that the soil was owned by the commoners and that the enclosures were therefore legal.\textsuperscript{155} Meetings between the parties to the Award are recorded in some correspondence in 1788,\textsuperscript{156} and on 31\textsuperscript{st} October that year the agreement was signed. The Award was issued in the following year.\textsuperscript{157} As this allotted land to the Earl of Tankerville for his rights to the soil it is likely that the encroachments were deemed illegal and swept away,\textsuperscript{158} explaining the absence of any morphological evidence for them (Fig. 3.19). Thus, though the enclosure of Milfield seems to have occurred entirely by formal means there may have been a difference in the degree of formality between the two as the survival of the second relied on its enrolment in Quarter Sessions something which was not done with the first.

It appears, then, that informal enclosure was important in most cases examined here. There also seem to have been differing levels of formality with some of the smaller scale agreements probably never being written down, and others perhaps not enrolled. This means that those which survive are the most formal. Thus there were many options available to those seeking to enclose, the choice of which may also be explored through our case studies.

How were different types of enclosure used?

Different types of enclosure appear to have been used selectively with the most formal only deployed where necessary. Acts of Parliament are the most formal, but were of course only available from the eighteenth-century. The two instances examined here are the most complex enclosures for a number of reasons. At Elsdon the area enclosed

\textsuperscript{153} NRO.1356/P26a 1777 plan of Milfield.
\textsuperscript{154} NRO.1356/M.5 1782 Milfield Division papers.
\textsuperscript{155} NRO.1356/M.5 1782 Milfield Division papers.
\textsuperscript{156} NRO.ZCU/16 18\textsuperscript{th} September 1788 correspondence Richard Richardson to George Culley.
\textsuperscript{157} NRO.1356/P26a 1777 plan of Milfield.
\textsuperscript{158} NRO.1356/P26a 1777 plan of Milfield.
was particularly large and was divided between 77 proprietors. This alone would have increased the likelihood of conflict. Other writers have noted that common pasture was more difficult to enclose than open field arable, because whereas in open fields the proprietors share was clearly determined by the amount of land they held as strips, the owners of rights of common grazing were much more difficult to define, and their rights more difficult to prove (Chapman and Seeliger 1995; 40). The social effect of commons enclosure is still hotly debated (e.g. Neeson 1993, Shaw-Taylor 2001, French 2003), though it clearly could cause conflict (e.g. Eastwood 1996, Rogers 1993). In this particular case there is evidence that the common continued to be valued as common grazing because two pieces were allotted as such in the Award.\footnote{NRO.QRD3 Elsdon enclosure plan and award.} Elsdon’s enclosure also involved glebe land, which, as has been noted above, was often legally problematic (Chapman and Seeliger 2001; 18). Finally, the fact that the land was intercommoned between Elsdon, East and West Hatherwick and Fairnecleugh may have added yet another challenge (Chapman and Seeliger 2001; 69). The other example of Parliamentary Enclosure from our case studies is Wark Common. This had many of the same problems that were experienced at Elsdon. It was large and intercommoned between Sprouston, Linton, Sunnilaws, Learmouth and Presson, and probably Shedlaw, Haddon and Lempitlaw.\footnote{NRO.QRA 63/1 Wark enclosure award.} As at Elsdon the common here appears to have retained its value as common pasture, as a small piece was allotted as a stinted pasture.\footnote{NRO.QRA 63/1 Wark enclosure award.} In addition to these obvious problems the fact that the common straddled the border of England and Scotland meant that the enclosure implicitly created a section of it (Kain \textit{et al.} 2004, 104), something perhaps best done by statute rather than by private agreement.

Agreements were used in less complex situations, and their level of formality is roughly proportional to that complexity. Of the agreements examined here the most formal is that of Milfield or Lanton Common, which copied the Parliamentary Enclosure procedure, and was enrolled with the Clerk of the Peace.\footnote{NRO.QRD6 Milfield or Lanton Common enclosure award 24\textsuperscript{th} December 1789.} Again this dealt with intercommoned land, though only between two townships. It also involved fewer proprietors than either Wark or Elsdon Commons, with only eight allotments being
Finally, it contained no glebe. However, as noted above, common pasture seems to have retained value as rough grazing into the eighteenth-century. Thus, its enclosure could lead to conflict. This happened at Milfield both before and after enclosure. The legal opinions sought by the Earl of Tankerville before enclosure suggest that he wanted to oppose some encroachments, at least to recover his share of them at the division. It also implies that some aspects of the common’s ownership was subject to dispute. A further conflict arose after the enclosure when a man called Thomas Lowry approached William Orde, who had received a share, demanding one hundred guineas on the grounds that he had not been awarded land. He clearly felt that he was entitled to part of Orde’s allotment. To resolve this Orde wrote to one of the enclosure commissioners, in April 1790, asking him to make out a parcel of land to Lowry from Orde’s allotment as Orde was not prepared to pay Lowry without him making any assurance of Orde’s title to the land. Clearly there was high potential for conflict arising from the enclosure of Milfield or Lanton Common.

The next most formal enclosure is that of part of Longhorsley in 1664, as its procedure was specified in the agreement. This agreement was made in 1657. It specified that the quality and quantity of the lands should both be considered and that Sir Thomas Horsley should divide the grounds into parcels. The Earl of Carlisle was to take his part first, followed by the remaining freeholders. Thomas Horsley was to have the remainder. At some point after 1657 it was decided that the division of the common would be left to the arbitration of Robert Lisle of Weldon, Robert Widdrington of Hauxley, and Richard Wilson and Robert Lawson of Ulgham. This dealt with a smaller number of proprietors and a smaller area than any of the enclosures described above, as only seven allotments were made. There was also no glebe, and while it did enclose some common pasture there was no intercommoning. It may have been the presence of common which required the level of formality used here, as a piece was retained by the Award and remains so to the present (Fig. 3.3). The common was also treated more formally than

163 NRO.QRD6 Milfield or Lanton Common enclosure award 24th December 1789.
164 NRO.1356/M.5 1782 Milfield Division papers.
165 NRO.ZCU/16 22nd April 1791 correspondence William Orde to George Culley.
166 NRO.ZCU/16 22nd April 1791 correspondence William Orde to George Culley.
167 NRO.358/21/10 Enclosure Agreement 1664.
168 NRO.358/21/10 Enclosure Agreement 1664.
169 NRO.358/21/10 Enclosure Agreement 1664.
the rest of the land in the agreement: being put to arbitration. There was some very
minor opposition to this agreement, as a man named James Ogle was not party to the
Award.\textsuperscript{170} His lands were omitted from the enclosure, and were not enclosed until they
were bought by Mr Bulman and their strips exchanged with Sir Thomas Horsley.\textsuperscript{171} Many
of the differences between the Longhorsley and the Milfield agreements may be due to
the fact that enclosure procedures had changed between the mid-seventeenth and late
eighteenth centuries, as the procedure of Parliamentary Enclosure provided a model for
private agreements. Certainly, Milfield’s enclosure is only slightly more formal than that
of Longhorsley. There is, however, some reason to see Longhorsley’s enclosure
agreement as less formal, as it was not enrolled in Quarter Sessions as Milfield’s was. The
practice of enrolling enclosure agreements was certainly not new in the eighteenth-
century and was commonly done in the seventeenth (Thirsk 1967; 238).

The 1607 agreement for part of Howick, and probably the 1778 agreement for
part of Learmouth, come next in order of formality because they were written. The
agreement for part of Howick was the result of arbitration, and was only between Edward
Grey and John Craster. It first awarded Grey all of Craster’s lands in Howick and then
awarded land in the north of the township to Craster in lieu. This land was not described
on a plan or by its bounds, but by beginning at the northern boundary of the township
and continuing towards the town until the necessary area had been awarded. It covered
both arable and pasture. The agreement made arrangements for Craster to be
compensated if part of the allotment included land which did not belong to Grey.\textsuperscript{172} This
is a very short agreement, partly because it awards a small amount of land to a small
number of people, but also because it only gives a very general description of the
allotment itself, leaving the boundary to be decided between Grey and Craster.
Learmouth’s agreement does not survive, and is only recorded as a note on a 1793
plan.\textsuperscript{173} It appears to have involved the land which now comprises Tithe Hill Farm. This
was exchanged for the glebe and some of the tithes.\textsuperscript{174} It is unknown whether it included
any common pasture. In both cases the agreements were made for particular reasons.

\textsuperscript{170} NRO.358/21/10 Enclosure Agreement 1664.
\textsuperscript{171} NRO.335/21/1 conveyance 4\textsuperscript{th} April 1688.
\textsuperscript{172} DUSC.GRE/X/P112 eighteenth Century copy of an arbitration award for the division of Howick, July 1607.
\textsuperscript{173} DUSC.GRE/X/P276 1793 plan of Learmouth.
\textsuperscript{174} DUSC.GRE/X/P276 1793 plan of Learmouth.
At Howick an exchange of land was made, probably because Craster did not wish to divide a farm which included in land in Craster and Howick, while Grey probably did not wish to buy land in Craster in order to have unity of possession at Howick. The best solution to this was an exchange of land which is a relatively unusual procedure and so would require an unusual method of proving title. In the case of Learmouth the glebe would have been subject to the same legal ambiguity that all glebe was so it was important to have written proof of title. The inferred agreement to enclose the land in the east of Milfield was probably approximately of this level of formality, though without the agreement itself it is hard to tell. It was probably only between three people, as only Francis Blake, William Orde and Henry Grey, held ancient land in 1789. As suggested above it probably only enclosed arable land. A much less formal agreement was inferred for the enclosure of the open-fields of Hudspeth in Elsdon. Again this does not survive and is only inferred from the straightness of the field boundaries in this area. It is very small, and was probably also only held by around four people as this was the number here in 1731.

At the bottom of the hierarchy of formality are the informal methods. These include unity of possession, assarting and piecemeal enclosure. The latter two are common throughout the period. Both could happen without much controversy as no single case would cause the extinction of common rights, though they could add up to a substantial landscape change as occurred in Elsdon West Field. At Milfield assarting did cause some conflict, perhaps showing the remaining value of common grazing in this period. This was unusual, however, with many assarts at Elsdon apparently going unchallenged. It is possible that at Milfield the assarters came up against the greater administrative and legal power of the Tankerville estate while at Elsdon the much smaller landowners lacked the means to oppose such small prejudices to their interests. Neither of these, however, enclosed a large area or the entire township, and so compare poorly to the methods discussed above. Unity of possession, as took place at both Howick and Learmouth, is a better comparison. It is likely that this was carried out where possible, but was only possible in particular circumstances. The process of engrossment which had already occurred at Learmouth, as well as Anthony Compton’s existing wealth, and power

175 NRO.QRD6 Milfield or Lanton Common enclosure award 24th December 1789.
176 NRO.QRD3 Elsdon enclosure award.
as the land agent allowed this. At Howick a similar disparity of wealth occurred between
the small freeholders and Sir Edward Grey. Unity of possession also depended on
opportunities to purchase freehold estates provided by the death of the occupants and
inheritance by heirs who did not wish to continue farming. Only where these sorts of
situations pertained could it be achieved.

**Conclusions**

This chapter has shown that a variety of enclosure methods were used throughout
the period from the beginning of the seventeenth to the end of the nineteenth centuries.
It was in fact normal for one township to be enclosed by several methods over a long
period of time. Formal methods, both agreements and Acts of Parliament seem to have
been used only when necessary to deal with a legally complex situation or where a
specific problem existed. Examples of such problems observed here, have included; the
need to enclose glebe, which the rector was technically unable to alienate; a large
number of proprietors, which would make conflict likely; the need to enclose a large
amount of land, as it is probable that differences in land quality existed; and extensive
common grazing, which seems to have continued to be valuable and was certainly more
difficult to enclose as rights to it were more ambiguous than those to arable (Chapman
and Seeliger 1995; 40). Other more specifically local problems were also dealt with using
formal agreements. For example, at Milfield tenure seems to have been particularly
poorly understood creating the potential for dispute. Similarly, at Howick a formal
agreement to exchange land was used as a means of gaining unity of possession without
Edward Grey having to purchase as much land as would otherwise have been necessary.
It may be that the application of different enclosure methods to different situations
caused the frequent chronological separation of pasture and arable enclosure, and may
explain the high proportion of common pasture enclosed by Act of Parliament observed
elsewhere in the country (Chapman 1987; 30).

It has been suggested that in very general terms the formality of the method can
be seen to reduce with the complexity of the problem. The scale runs from Parliamentary
Acts at the top to informal and perhaps unwritten agreements at the bottom. This
should not be applied too rigidly. Formality is of course subjective and so any comparison
of formality between two different enclosures is bound to be ambiguous. This concept does, however, highlight one aspect of the decision-making process at enclosure. It also confirms the findings of Chapman and Seeliger (1995; 37) that enclosure Acts and formal agreements were only used where necessary. It is important to remember that each person who decided on a particular approach to enclosure worked from their own set of knowledge and experience, and so some would be more pedantic about the legality of the procedure. Each would also have had different means, so some could not afford a complex legal procedure while others could. Opportunity also played its part in the choice of enclosure method. As has been demonstrated above the process of obtaining unity of possession was often opportunistic, and involved the would-be engrosser waiting for a lease to fall in or for the right moment to purchase a freehold property. It could thus take many years and indeed may not have been successful for many people. In some places, such as Elsdon, with a very high number of freeholders, unity of control would have been practically impossible no matter how determined the engrosser. Thus, the context of each particular enclosure event, the number of landowners their wealth and status, their knowledge of enclosure, the type of land to be enclosed and the details of its tenure, are highly significant to the way in which the process was actually played out.

It may be argued that this view of the differences between enclosure events understates the variability in enclosure methods over time. For example, Yelling (1977; 17, 52-53) found a much higher level of enclosure by unity of possession in the sixteenth-century than later. This almost certainly had to do with changes in the economic and social situation over this period (Yelling 1977, 53). The North-East has often been regarded as unusual in this respect with a very low level of enclosures by unity of possession and a high level of enclosure by agreement for mixed husbandry in the seventeenth-century, probably fuelled by the growth of population at the North-East coalfield (Butlin 1979; 74-75). This seems to hold true for the examples studied here as both Howick and Longhorsley were enclosed in this period, though the amount enclosed at each is perhaps smaller than might be expected. This of course means that the results may differ in important respects from other parts of the country, and their apparent homogeneity over time in comparison to the differences between individual places may
be an aspect of this. None the less a great deal of chronological homogeneity has been observed. For example, piecemeal enclosure occurred at Longhorsely in the seventeenth-century, but was still continuing at Elsdon in the nineteenth and probably twentieth centuries; apparently informal agreements occurred at both Elsdon in the eighteenth-century, and Longhorsley in the seventeenth; and at the beginning of the seventeenth-century an agreement was used to enclose a difficult part of Howick, while the same method was used at Learmouth at the end of the eighteenth. In all these cases similar procedures were used to deal with the same obstacles. The only major change is the introduction of the Parliamentary Enclosure process which added a level of formality at the upper end of the scale. It may be that this arose because there was a need to enclose more legally difficult land from the eighteenth-century as there was a reduction in the amount of land which could be easily enclosed (Wordie 1983; 487-488). However, this should not be overstated: there clearly remained much unenclosed land which could be enclosed without the need for Parliamentary Enclosure. Further work is required to determine whether the changes to Parliamentary Enclosure procedure after the General Acts changed the way in which it was used, as no such enclosure has come to light in the case studies examined here.

The choice of a particular method was determined by the specific problems faced and the complexity of the legal situation within the particular township. While new methods were developed over time, the problems remained similar, at least in our case studies. The method used however, while important, was not the only consideration for the enclosers and did not alone determine the exact form the enclosed field system and settlement pattern would take. Other factors and processes, some taking place in the long term, also worked to create the post-enclosure landscape. The process by which enclosure was achieved guided many later and contemporary changes, which will be discussed below. Its effect will be shown to be contingent upon the particular circumstances in each case, but is still significant. These changes will form the subjects of the following four chapters.
Chapter 4

Farm Consolidation

In the previous chapter we examined the methods by which enclosure was achieved. Now we will consider how these enclosures altered the landscape by creating ring-fence farms from open-field systems and common pasture. One of the most striking aspects of open-field systems was the fragmentation of holdings into many dispersed strips. This feature has received attention from scholars who seek to explain the origins and form of open-field systems, such as McCloskey (1976) who saw dispersed strips as a method for spreading risk. In contrast, the processes by which these holdings were consolidated into ring-fence farms are less well studied. General works on enclosure usually only comment on the benefits of ring-fence farms and the inconvenience of holding land in fragmented parcels. For example, Mingay (1997; 33-7) discussed the contemporary writing, including the preambles of enclosure Acts, in which fragmented holdings are criticised, and thus saw consolidation as a principal motive for enclosure. Certainly, such polemics against open-fields were common, for example in the seventeenth-century Cressey Dymock advocated a regimented pattern of square leasehold farms connected by roads and drains, and arranged around the demesne farm (Yelling 1977; 121). More realistic understandings, which took local considerations into account, developed during the eighteenth-century, as William Marshall suggested that farms should be made to fit the land (Yelling 1977, 123). The convenience of ring fence farms is also assumed in accounts of the outcome of enclosure. For example, Mingay (1997; 83) listed it as a major advantage to the occupiers of newly enclosed land. He did recognise that in many cases it was not possible, for example, commissioners may have thought that two allotments should be made where proprietors owned both grazing rights and field land. Similarly, many writers have suggested that certain improvements, particularly drainage, can only be accomplished in enclosed land (e.g. Williamson 2002; 14). As will be shown below, consolidation was not necessarily the outcome of enclosure and could be brought about by other processes.

The creation of ring-fence farms has also been seen as an unproblematic aspect of the origin of capitalistic agriculture. Brenner’s (1976; 63) work is the most prominent
example, as he implied that the three-tier system of landlord, tenant and labourer, which he believed was created through the disenfranchisement of smaller landowners, was based on ring-fenced farms. He suggested that the expulsion of tenants during engrossment was part of the means by which the three-tier model of agrarian capitalism was established (Brenner 1976, 225, 305). His model has been criticised on the grounds that it oversimplified three centuries of agrarian development, and for ignoring the agency of the peasantry by seeing it as purely the product of elite oppression (Croot and Parker 1987; 79, Hoyle 1990; 2). None the less, even this critique has not led to a full airing of the issues surrounding the creation of ring-fence farms.

It is true that ring-fence farms were advantageous, as much for landlords as for tenants; drainage, for example, was probably nearly impossible to achieve in the open-fields. However, the assumption that it may be seen as an unproblematic and necessary outcome of either enclosure or the rise of capitalistic property relations oversimplifies the actual process by which it occurred. This complexity arises from the variety of factors involved which include the competing interests of landlords and tenants, existing patterns of ownership, different systems of farming, and the different methods of enclosure which were outlined in Chapter Three.

Studies which have treated the process incidentally hint at some of this complexity by illustrating different mechanisms by which consolidation occurred. For example, Hoskins (1965, 232-4) discusses pre-enclosure consolidation of open field strips by tenants, which could have led to the creation of ring-fence farms had it not been interrupted by later Parliamentary Enclosure. Others have found cases of elite involvement in consolidation. For example, Clay (1985; 178-9) suggests that if the elite bought land at all during the period 1640-1750 they did so in order to consolidate their estate. He concludes that this was as much for non-functional concerns, such as power or personal satisfaction, as for financial reasons. None the less, it could be profitable if it allowed improvements such as enclosure through unity of possession. This has been observed by English (2000; 146-8) in East Yorkshire landlords who often took a long-term view of their estates and were prepared to wait for the best opportunity to acquire a particular piece of land. Moore-Colyer (1997; 150) recorded a slightly different type of elite involvement in consolidation at Great Oakley in Northamptonshire where the lord of
the manor made a book detailing his plans for the enclosure. This included the creation of three ring-fence farms, though in the event five were actually made. He also intended to provide closes for labourers to rent for small-scale operations. This type of landlord reorganisation is common, though for it to be documented so explicitly is unusual. Yelling (1977; 132-4) recorded a similar case of nineteenth-century reorganisation of an irregular field pattern produced by an early-modern enclosure agreement at Deenethorpe in Northamptonshire. This occurred after a particular family had risen to prominence. Williamson (2005; 91-3) also suggested that post-enclosure reorganisation in the Sandlings area of Suffolk may be the reason for the lack of piecemeal enclosure type field boundaries in the modern landscape despite their seeming ubiquity on seventeenth-century plans.

All these cases of the creation of ring-fence farms occur under very different circumstances. Some are the work of the elite; others appear to have been carried out by tenants or peasants. The elite both consolidated their own demesne farms and those of their tenants. Some consolidation is planned, but some others appear to be piecemeal. Finally, consolidation seems to have happened both before, after and during enclosure. No study has systematically examined the full range of circumstances in which ring-fence farms were created, though Yelling’s (1977; 120-45) work on the effect of enclosure on consolidation is probably closest. Several points from this should be noted before the evidence from the five Northumberland townships is considered.

Yelling (1977) began his discussion with piecemeal enclosure. In many cases this led to dispersed patterns of landownership. Yelling (1977, 125) suggested that piecemeal enclosure separated consolidation from the extinction of common rights, in contrast to other forms which combined them. Piecemeal enclosure could aid in the creation of ring-fence farms by the larger proprietors because the extinction of common rights removed an obstacle to the rearrangement of land. Almost by definition, enclosure by unity of possession created ring-fence farms. These areas were often left in large open pastures, and division may not have occurred until later. Formal agreements differed drastically from piecemeal enclosure and often produced compact patterns of landholding (1977, 127-131). Finally, Parliamentary Enclosure did not always make perfect ring-fence farms. This was a result of the requirement of most enclosure Acts for the commissioners to
place allotments with regard to convenience. This was usually interpreted as a need to place them as close as possible to the proprietor’s existing farm, usually with the smallest proprietors being given priority because the larger owners could afford to build a new farmhouse. Such considerations mean that even the enclosure of commons, which made up a large proportion of Parliamentary Enclosure (Chapman 1987), did produce dispersed ownership patterns, though in many cases it did produce ring-fence farms, as in seventeenth-century Bernwood (Broad and Hoyle 1997; 77) and eighteenth-century Salisbury Plain (Brown 1999a). The last of these may have been easier because new farms were created on the allotments.

Yelling’s (1977; 120-45) work comes closest to recognising the full complexity of consolidation. However, because of its focus on enclosure it only covers a small range of the circumstances in which ring-fence farms were created. It is necessary to examine the full range of circumstances in which consolidation occurred, including pre- and post-enclosure cases as well as those which were the outcome of enclosure. This can be done using our case studies.

The circumstances of consolidation

The five case studies may be used to show the variability of consolidation processes, and to identify some of the types of people involved. They may not, however, be used to determine the relative proportions by which different means of consolidation were used, either nationally or within the county, as this would require an unfeasibly large sample. Of the case studies only Learmouth, Longhorsley (though only the two townships called Riddle’s and Bigge’s Quarters), Howick and Milfield had the majority of their area in ring-fence farms by 1900. Elsdon and Freeholder’s Quarter are exceptional as they appear never to have had ring-fence farms. The four places with ring-fence farms show that the process is, in fact, very complex. They demonstrate that consolidation was the result of pre- and post-enclosure processes as well as enclosure itself and involved a large variety of agencies.

Bigge’s and Riddle’s Quarters are particularly good examples. Here a process of piecemeal enclosure, which was completed by a relatively minor agreement in 1664 (Chapter 3) had begun the process of consolidation but left a very fragmented pattern of
ownership. Part of this is depicted on a plan of 1719 (Fig. 4.1).\textsuperscript{177} Both enclosures involved consolidation, as the piecemeal enclosure must have joined strips while the agreement awarded land in blocks, some of which survived in Freeholder’s Quarter (Fig. 4.2). Enclosure was then the first step towards consolidation, but further action was required. Ring-fence farms are first depicted on a plan of Bigge’s Quarter in 1773, though some closes remained near the village and survived until at least 1866 (Figs. 4.3). The process by which this was achieved is best understood in Bigge’s Quarter, because it is better documented. The creation of ring-fence farms here was the result of the amalgamation by, or the division of farms between, tenants. This may have been due to the landlord’s agents altering the boundaries prior to finding a tenant, or a tenant negotiating for more or less land. This process is not described explicitly in any document but may be determined through the use of the 1773 plan and a series of rentals.\textsuperscript{178} The 1773 plan gives the names of the tenants of each, which are also listed in rentals. Working back through the rentals allows the sequence of tenants prior to 1773 to be determined back to 1719 when the farms were fragmented. This sequence sometimes reveals that farms were joined by one tenant replacing two or more other tenants. It also shows that some farms were split on the arrival of a new tenant, where two tenants replace one old one. Both these changes are usually confirmed by increases or decreases in the rent. Where a tenant leaves and is not replaced increases in the rents of existing farms usually show that the farm was divided between sitting tenants.

Comparison of the 1719 and 1773 plans shows the effect that changes in tenants had on farm boundaries.\textsuperscript{179} An example of this is the area in the west of the township which is marked as Henry Kirsop’s, Widow Hume’s, Young’s, Carnaby’s and Town’s Farms on the 1773 plan (Fig. 4.4). The boundaries of these seem to result from a series of events which occurred between 1740 and 1743. In 1740 the farms in this area were held by William Grey, William Bell and Margaret Leighton, widow of William Leighton, Ralph

\textsuperscript{177} DUSC.HNP1967/Lambert Plans ff.6v-fd 1719 plan of Bigge’s Quarter.
\textsuperscript{178} DUSC.N190/97 Plan of Longhorsley and Hayclose 1773, the rentals are as follows: DUSC.N111 1665-1698, DUSC.N75 1719-1725, DUSC.N112 1730-1735, DUSC.N113 1736-1742, DUSC.N114 1742-1746, DUSC.N115 1746-1750, DUSC.N116 1751-1755, DUSC.N117 1755-1757, DUSC.N101 1801-1807.
\textsuperscript{179} DUSC.HNP1967/Lambert Plans ff.6v-fd 1719 Plan of Longhorsley and N190/97 Plan of Longhorsley and Hayclose 1773.
Young and Ralph Carnaby held farms in Todburn bordering this area.\textsuperscript{180} It is not possible to determine exactly which parts were held by each tenant without the missing book accompanying the 1719 plan. This plan shows a small parcel in the south-west, which is probably that belonging to William Grey (Fig. 4.4).\textsuperscript{181} On the east of this is a much larger area stretching from the north to the south edges of the map. Further to the east is an area in which some or all field boundaries may be depicted, which from the descriptions in some 1719 leases must have been divided between at least two farms.\textsuperscript{182} In 1740 a man called Thomas Pinkney took both William Bell’s and William Grey’s farms uniting most of the land in this area.\textsuperscript{183} At the same time George Leighton inherited his mother’s farm.\textsuperscript{184} The opportunity seems to have been taken to rearrange the boundaries of the farms in this area creating the east-west boundary between widow Hume’s and Henry Kirsop’s farms on the 1773 plan (Fig. 4.4).\textsuperscript{185} Further changes occurred in the following year when Pinkney left. Part of his lands were let to Thomas Hume and Edward Towns as partners and the rest to Ralph Carnaby and Henry Young who were also partners.\textsuperscript{186} The fact that Carnaby and Young only paid £24 per annum in rent suggests that they were enlarging their own or, in the case of Henry Young, their relatives’ farms in neighbouring Todburn.\textsuperscript{187} This seems to be confirmed by the 1773 plan which disguises the tenurially complex situation showing the Longhorsely land simply as extensions of their separate farms in Todburn and drawing a boundary straight through the Longhorsley farms which were still a single farm in the rentals (Fig. 4.4).\textsuperscript{188} The 1741 changes, then, created the northern boundary of Hume’s Farm and the boundary between Carnaby’s and Young’s farms, which seems to simply be an extension of the boundary of their earlier farms. The final change to the boundaries in this area was the division of the jointly held farm belonging Town and Hume in 1743 creating the final boundary of the 1773 plan (Fig.

\textsuperscript{180} DUSC.N113 Rental 1740.
\textsuperscript{181} DUSC HNP1967/Lambert Plans ff.6v-fd 1719 Plan of Longhorsley.
\textsuperscript{182} DUSC.N12/29-34 and DUSC.N31/2 29\textsuperscript{th} April 1719.
\textsuperscript{183} DUSC.N113 Rental 1740. The analysis carried out here required examination of the whole sequence of rentals, this makes directing the reader to a single rental for a piece of information difficult. Where particular rentals are cited here they are the rental following the change referred to in the text.
\textsuperscript{184} DUSC.N113 Rental 1740.
\textsuperscript{185} DUSC.N190/97 Plan of Longhorsley and Hayclose 1773.
\textsuperscript{186} DUSC.N113 Rental 1741.
\textsuperscript{187} DUSC.N113 Rental 1741.
\textsuperscript{188} DUSC.N190/97 Plan of Longhorsley and Hayclose 1773.
Kirsop later replaced Leighton before the 1773 plan was made. It seems likely that many of the boundaries which were created utilised pre-existing field boundaries, and indeed almost all of the 1719 farm boundaries were retained as field boundaries in 1773 despite having lost their tenuial function (Figs. 4.4).

In the eastern half of the township there was a similar degree of consolidation of leasehold farms including the amalgamation of several of the small strips which had originated through piecemeal enclosure (Figs. 4.5). On the 1719 plan the strips are in two groups with an east-west finger of land between them, possibly an area of common grazing around a track and almost certainly a former headland (Fig. 4.5). The strips to the north of this were added to a piece of land taken from George Dobson the younger’s farm to the North and some land to the west to create Pile’s farm. Robert Pile was the tenant of this in 1773, but had only come to it through his marriage to Ann Dobson. She had, in turn, inherited it from her first husband William who had it from his grandfather William. This William split a large farm between three sons one of whom was the younger William’s father John. The farms from which land had been taken to create the 1773 Pile’s Farm were probably those of George Dobson, who still held his farm in 1773 and James Dobson, which having been rented by William Grey had mostly become Town’s and Hume’s farms through the changes described above. Both James and George were also sons of William Dobson senior. While the boundaries of Pile’s Farm cannot have been created by the division of William Dobson’s land between his sons in 1699 it may be that the tenenting of these farms by close relatives aided the quite complex alterations which were carried out. None the less, such alterations could not have been carried out without at least the consent of the landlord, and may have been entirely his decision.

The group of strips to the south of this were also amalgamated to form Robert Swan’s farm along with the headland between the two groups of strips and some of the

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189 DUSC.N114 Rental 1743.
190 DUSC.HNP1967/Lambert Plans ff.6v-fd 1719 Plan of Longhorsley.
191 DUSC.N116 Rental 1755.
192 DUSC.N108/12 p. 84 Lease 13th September 1700 DUSC.N113 Rental 1739.
193 DUSC.N112-7 Rentals.
block of land to the north-east of this (Fig. 4.5).\textsuperscript{194} It was actually divided between George Dobson’s farm and Robert Swann’s farm though it is not possible to show whose it had been before this time. This led to the removal of several of the boundaries between the strips in order to create large fields, one of the few definite examples of physical change to boundaries in Longhorsley after 1719 (Figs. 4.5).\textsuperscript{195} These alterations are more difficult to connect to the tenants of the farm. Robert Swan’s predecessor in the rentals is another George Dobson,\textsuperscript{196} who held the farm until 1748. There is no evidence for either he or Swann dividing this farm joining it to others. It is possible that the two George Dobson’s were related, though clearly not directly, and that such blood ties may have helped negotiation. An alternative possibility is that the farm was created for Robert Swann, which may explain why the rent was increased by £1 on his arrival.\textsuperscript{197} In this case it could be that Carlisle’s agents created a new farm when George Dobson left in order to make it easier to let. Finally, the 1773 farm may be a combination of both changes made by George Dobson the elder and those made for Robert Swann’s arrival. The process is less clear at Riddle’s Quarter due to lack of either documentary or map evidence.

However the tithe plan shows that Riddle’s Quarter was comprised mostly of ring-fence farms other than a few closes near the village, and so may have had a similar history to Bigge’s Quarter.

The creation of ring-fence farms at Longhorsley appears to be a much longer and more complex process than might have been expected. It was firstly affected by the types of enclosure used as the enclosure agreement created a much more consolidated ownership pattern than piecemeal enclosure. This was not set in stone, however, as later adjustments consolidated farms at both Bigge’s Quarter and Riddle’s Quarter. These changes were usually piecemeal, and occurred when a tenant took the lease of adjoining fields. Consequently, the process was often dependant on specific events in the lives of the tenants, for example when the inheritance of a farm by George Leighton was used as an opportunity for amalgamation. It is rare for such events to be recorded, so they are probably present in many more cases. Consolidation may have been at the instigation of

\textsuperscript{194} DUSC.HNP1967/Lambert Plans ff.6v-fd 1719 Plan of Longhorsley.
\textsuperscript{195} DUSC.HNP1967/Lambert Plans ff.6v-fd 1719 Plan of Longhorsley.
\textsuperscript{196} DUSC.N115 Rental 1748.
\textsuperscript{197} DUSC.N111 Rental 1774.
either the landlord or tenant. Such complexity is not only a feature of Longhorsely and can be seen in all other case studies.

At Learmouth, the process of consolidation was quite different to that at Longhorsely, as pre-enclosure tenants engrossed property from the early-eighteenth-century up to 1733. This lead to unity of control followed by the enclosure of an already ring-fence farm. The process began before the earliest documents, but can be picked up in its early stages in a rental of 1708.\(^{198}\) This lists eleven tenants at Learmouth. Of these, six: John Hall, John, William and Widow Crawford, Lionel Bolton and Ralph Archibald, held farms. The remaining tenants held a malt barn and kiln (Thomas Tebbit), a mill (William and Thomas Bolton) and a cottage (Stephen Elliot and John Murdy). The evidence of engrossment is limited but present as John Hall held two separate farms, one called Learmouth and Cornhillhaugh, and another called Hurtch Law and Mill Land. In 1712 two of the farms of the 1708 rental, those of John and William Crawford and Lionel Bolton, and the Malt barn and kiln held by Thomas Tebbitt were engrossed by a Thomas Gregson of Sunnilaws. The lease describes this property as “those six ffarmes com[m]only called the West side of Learmouth”\(^{199}\), which suggests that Bolton and the Crawfords had also engrossed farms. This was the beginning of a sequence of events which ultimately led to the whole of Learmouth coming into the tenure of one man called Anthony Compton.

In 1719 Anthony Compton of Berwick began to acquire land in Learmouth. This is recorded in a 1719 lease of a farm called Hurch Law and Mill Land.\(^{200}\) The rent of £22-7s-0d is close to either the farm of Widow Crawford that of or John Hall in the 1708 rental. Unfortunately the 1719 lease records Anthony Compton as the occupier so it is not possible to determine which. Compton’s acquisition of this property must have occurred after the 1708 rental, though this was not his first contact with Learmouth. He was employed as the Grey’s land agent, and actually wrote the 1708 rental. As agent he could control the leasing of the Learmouth farms to ensure that they came to him. By 11\(^{\text{th}}\) June 1724 a lease shows that he had also acquired a farm called Cornhillhaugh and Learmouth. The rent of this is the same as that of the holding of John Hall (£110) so they are probably

\(^{198}\) DUSC.GRE/X/P80 rental.
\(^{199}\) DUSC.GRE/X/P72 1712 lease.
\(^{200}\) DUSC.GRE/X/P73 lease 1719.
the same farm, though as before Compton was already in possession by a lease of the previous 22\textsuperscript{nd} of June. Following the occupation of Cornhillhaugh and Learmouth Compton surrendered his 1719 lease,\textsuperscript{201} presumably so that it would expire in the same year as that for Cornhillhaugh. This was described as six farms, and was let for £72 per annum. It must represent a larger farm than in the 1719 lease of Mill lands and Hurch Law and probably shows that Compton had taken one or both of the farms of Ralph Archibald and Widow Crawford. In 1729 Compton acquired the mill from John Gregson.

It appears that by 1729 the whole township was in the hands of two people; Compton and Gregson. Compton completed his acquisition of the township in 1733 when Gregson surrendered his lease of Learmouth Westside.\textsuperscript{202} Compton then surrendered his leases of Learmouth eastside, Mill lands and Hurch Law and Cornhillhaugh, and replaced them with new leases. The final act of consolidation was an agreement made to enclose the glebe between 1778 and 1793.\textsuperscript{203} The exact details of this are unknown but Ralph Compton; at length the heir of Anthony Compton, and Sir Henry Grey, the owner of the Learmouth farms, had jointly acquired the glebe and most of the tithes in 1778.\textsuperscript{204} Grey then allotted lands to Compton in exchange for his portion of the glebe and some tithes.\textsuperscript{205} This essentially enclosed the glebe, thus dividing the whole of Learmouth into two ring-fence farms, one Tithe Hill, owned outright by Ralph Compton and the other, much larger, farm rented by him from Grey (Fig. 4.6). This predated the physical enclosure by several years as this only occurred in 1799 (see above Chapter 3).

The process of consolidation at Learmouth differs from that at Longhorsely because it occurred before the physical enclosure of the township. It is possible that Anthony Compton did not intend to create a ring-fence farm, as his main concern may have been to collect all common rights in order to enclose. Unfortunately it is not possible to confirm this without further evidence. It does, however, show some similarities to Longhorsely. Firstly, the agency of the tenant is important, perhaps even more so than at Longhorsely. Again, however, the landlord must at least have been

\textsuperscript{201} DUSC.GRE/X/P73 lease of Mill lands and Hurch Law.
\textsuperscript{202} DUSC.GRE/X/P74 lease Learmouth Westside 1733.
\textsuperscript{203} DUSC.GRE/X/P276 1793 map with a note concerning the tithes and glebe.
\textsuperscript{204} DUSC.GRE/X/P29 28 October 1778-Lease for a year of Learmouth Glebe and certain tithes.
\textsuperscript{205} DUSC.GRE/X/P276 1793 map with a note concerning the tithes and glebe.
complicit in the engrossment. Secondly, the process is contingent upon specific events in
the lives of the tenants, which would have made farms available to Compton. Compton’s
own situation was also important as his wealth and position would have given him an
advantage; a wealthy tenant would be preferred, while as land agent he could make sure
leases came to him.

The process of consolidation is different again at Howick, though the sequence of
events is less clear. Like Learmouth, Howick was almost entirely owned by the Greys of
Howick. They had come to own it through a long process of engrossment, carried out by
Edward Grey of Morpeth, beginning in 1593 and probably ending at around 1623. This
has been discussed in detail above (Chapter 3). Edward Grey allowed the process to take
a long time, and appears to have waited for properties to come on the market at the right
price. A good example is the farm which he bought from Cuthbert Lockewood. This was
formerly the property of an Oswey Lockewood, probably the father of Cuthbert.\(^{206}\) It
appears that Cuthbert sold it upon inheritance, being less interested in farming than his
father, providing Grey with the opportunity to buy it.\(^{207}\) Similarly, the heirs of Robert
Herring also disposed of their inheritance by selling out to Edward Grey in 1596 and
1601.\(^{208}\) Enclosure probably occurred around 1635. However, this did not necessarily
create a ring-fence farm, as some of the land in the township was leased to tenants, at
least from 1708.\(^{209}\) Unfortunately, there are no plans of the farm boundaries of Howick
until the tithe plan of 1837,\(^{210}\) by which time the situation had changed significantly,
meaning that any conclusions concerning the farm consolidation at Howick are
speculative. There is some evidence that the early-eighteenth-century Howick leasehold
farms were not ring-fence in the strict sense. This comes from a series of leases dated
between 1712 and 1728.\(^{211}\) These name several farms, for example one of the 1712 lets

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\(^{206}\) DUSC.GRE/X/P43 12\(^{th}\) November 30 Elizabeth bargain and sale.
\(^{207}\) DUSC.GRE/X/P43 18\(^{th}\) August 1623 bargain and sale.
\(^{208}\) DUSC.GRE/X/P43 10 May 39 Elizabeth I feofment of tenements and lands in Howick, DUSC.GRE/X/P43
Michas Term 43 Elizabeth I indentures of a fine.
\(^{209}\) DUSC.GRE/X/P80 1708 rental.
\(^{210}\) NRO.DT264M Howick tithe plan and appportionment.
\(^{211}\) DUSC.GRE/X/P72 1\(^{st}\) June 1712 lease of Howick Low Flatt, South Farm, Lowfield Farm and North Moor,
DUSC.GRE/X/P72 9\(^{th}\) March 1712 lease of Howick High Flatts, Butterlaw and Pilferlands, DUSC.GRE/X/P72 1\(^{st}\)
June 1712 lease of Howick Southfield Farm, DUSC.GRE/X/P72 1\(^{st}\) June 1712 lease of Howick Pasture Farm,
DUSC.GRE/X/P72 9\(^{th}\) March 1712 lease of Howick Heugh and Low Farm, DUSC.GRE/X/P72 2\(^{nd}\) September
1717 lease of Howick South Farm, DUSC.GRE/X/P72 2\(^{nd}\) September 1717 lease of Butterlaw, High Damms,
Southfield Farm to Reynold Spoor while another lets Pasture Farm to William Baxter and Ralph Dixon. There is no evidence as to whether these farms were ring-fence or not. These leases do, however, mention some closes which appear to have been let separately from the farms themselves. In 1712 two leases were made out to Alexander Young. These let closes called Low Flatt, North Moor, High Flatt, Butterlaw and Pilferlands, in addition to two farms called Lowfield Farm and South Farm. At the same time a close called the Heugh was let to a man called Alexander Marshall. In 1717 Butterlaw, High Flatt and Pilferlands and South Farm were let to a man called Thomas Nesbitt along with two closes called High Damms and Black Law, which were not named in any 1712 lease. In 1722 Alexander Marshall, who probably still held the Heugh, took a lease of property called the two Flatts and East Farm. Finally in 1728 a man called Thomas Neal took a lease of The Heugh and the two Flatts. It is clear, then, that the closes could be moved quite freely between different farms. It is also possible that the seeming disappearance of some of the earliest farms and the appearance of new farms and closes in later leases may represent the breaking up of old farms and the redistribution of closes to form new farms. This implies that, rather than being let as fixed ring-fence farms, the land at Howick was treated more as a series of separate closes the consolidation, of which was left to the tenants. This situation seems to have persisted until a gap in the series of leases after 1728. Leases are only available again from 1772 onwards, though as the tenants of these leases are named in rentals from 1766 onwards they may represent an earlier situation. The 1772 leases only name three farms, specifically Redstead, Pasture House and Sea Houses, and do not name any closes. Sea Houses is known to have

Pilferlands, Blacklaw and High Flatt, DUSC.GRE/X/P72 1st November 1722 lease of Howick East Farm and the Flatts, DUSC.GRE/X/P73 1st November 1728 lease of Howick Heugh and the 2 Flatts. DUSC.GRE/X/P72 1st June 1712 lease of Howick Southfield Farm, DUSC.GRE/X/P72 1st June 1712 lease of Howick Pasture Farm. DUSC.GRE/X/P72 1st June 1712 lease of Howick Low Flatt, South Farm, Lowfield Farm and North Moor, DUSC.GRE/X/P72 9th March 1712 lease of Howick High Flatts, Butterlaw and Pilferlands. DUSC.GRE/X/P72 9th March 1712 lease of Howick Heugh and Low Farm. DUSC.GRE/X/P72 2nd September 1717 lease of Butterlaw, High Damms, Pilferlands, Blacklaw and High Flatt. DUSC.GRE/X/P72 1st November 1722 lease of Howick East Farm and the Flatts. DUSC.GRE/X/P73 1st November 1728 lease of Howick Heugh and the 2 Flatts. DUSC.GRE/X/P81 1766 rental. DUSC.GRE/X/P76 3rd June 1772 lease of Howick Pasture House, 3rd June 1772 lease of Redstead or South Farm, and 3rd June 1772 lease of Howick Sea Houses.
been a ring-fence farm in 1793 when a plan depicts it as such.\textsuperscript{220} It is less clear whether the other two were ring-fence. They are described as ring-fence in surveys of 1808, but this is only after both had been in hand.\textsuperscript{221} This may well have led to major changes to their boundaries when they were let again after 1807. On balance, however, it is more likely that they ring-fence when they were named in the 1772.

It is difficult to draw any firm conclusions from such evidence. However, until the late eighteenth-century Howick certainly did not have standard ring-fence farms. It is possible that the tenants always took the fields next to the rest of their land, thus creating ring-fence farms in practice. Certainly where, their locations are known, fields from one lease tend to be in one area (Fig. 4.7). This would have left the creation of ring-fence farms up to the tenant. The landlord could easily have created a system in which ring-fence farms were ensured by reorganising the estate. Unfortunately, with so little documentation in the crucial period it is not possible to determine whether the end of this system was the result of landlord or tenant action. However, the creation of ring-fence farms is post-enclosure.

Much less still can be said of Milfield, as its documentation is very sparse. It appears that much of Milfield’s consolidation was achieved through enclosure. Half of Milfield was enclosed around 1777 or shortly thereafter (Chapter 3). It is unclear whether this enclosure produced ring-fence farms or not. By the time the second half was enclosed in 1789, however, these were certainly ring-fence farms as their locations can be determined from a comparison of the text of the Enclosure Award and the Tithe Plan (Fig. 3.16).\textsuperscript{222} The documentation for the second enclosure is fairly good so some comment may be made concerning the creation of ring-fence farms. By comparing the Award made by the commissioners to the Tithe Plan it has been possible to determine the locations of the allotments. Most were laid out next to the ancient lands of the owner, thus ensuring consolidation (Fig. 3.16). This was true even where the ancient lands lay outside the township, as in the case of Francis Blake where one allotment was placed next to his estate at Crookhouse.\textsuperscript{223} There were however two instances in which the commissioners

\textsuperscript{220} DUCG.GRE/X/P279 1793 plan of Sea Houses Farm.
\textsuperscript{221} DUCG.GRE/X/P81 1803-8 rentals.
\textsuperscript{222} NRI DT322S Milfield tithe.
\textsuperscript{223} NRO.00309/M/33 plan of the Crookhouse estates.
did not create as compact farms as they could have. The first is in the allotment to the Earl of Tankerville as the lord of the manor. It was put in quite a marginal location and awarded in two pieces separated by a road (Fig. 3.16). This was probably because he had no ancient lands to place his allotments next to. The other example is an allotment made to George Grey for lands at Sandy House, which is in a separate township to Milfield. It was placed next to George Grey’s holding at Sandy House but could have been placed near to his much more substantial leasehold farm at Milfield Hill, which was the property of the Earl Grey. It is possible that the commissioners did not want to do so because it could have created inconvenience in the future if the tenancy had gone to a different person. Alternatively, they may have felt that allotments for lands in a particular township should be made in that township so as not to create detached portions. In addition to the allotments made in the original Award an amendment was made to this pattern by the creation of an extra one for a Mr Lowry out of part of the Award to William Orde (see above Chapter 3). This could not be placed next to Lowry’s exiting holdings as they consisted of houses and gardens in the village and did not border the common. This suggests that the commissioners faced constraints from the existing pattern of land holding, but on the whole appear to have attempted to create ring-fence farms.

A very small amount of post-enclosure consolidation occurred at Milfield. One instance occurred when Lowry sold his allotment to the Greys effectively joining it to their farm at Milfield Hill. The only other case is when the Earl of Tankerville leased his allotments to the tenants of Francis Blake against whose farm they abutted. In this case lands were amalgamated to form a ring-fence farm in practice by joining lands of different tenures under one occupier. This is dissimilar to the classic model of tenanted ring-fence farms and gives the tenant agency in their consolidation.

Milfield is the only example in the five case studies in which ring-fence farms resulted mostly from enclosure. Even here the commissioners were unable to create perfect ring-fence farms, as other considerations, arising from the pre-existing pattern of ancient properties, carried greater weight. The only way in which perfect ring-fence

224 NRO.QRD6 Milfield enclosure award.
225 NRO.ZCU/16 correspondence April 22d 1791 William Orde to Mr Laidler.
226 NRO.DT322S Milfield tithe apportionment.
farms could have been created would have been by redistributing all land in the
township. On the whole, however, the commissioners seem to have intended to create
ring-fence farms, even taking into account holdings which lay outside the township. The
cases in which land was not allotted as ring-fence farms were solved by later actions,
including both purchase and rental.

At these four places the landscape was generally reorganised into ring-fence farms
during the post-medieval period. However, the process is much more complex and
heterogeneous than expected. Ring-fence farms were not created through a single type
of action, such as enclosure or engrossment, but in very different ways in each case.
Enclosure appears to have formed ring-fence farms at Milfield, though without the high-
quality documentation available at the other townships it is not possible to comment on
pre-enclosure processes which may have contributed. Even here post-enclosure events
played a part. Enclosure was an important part of the process at Longhorsley, where the
enclosure agreement probably allotted land in large blocks in at least in Freeholder’s
Quarter, but this did not create ring-fence farms without subsequent piecemeal
rearrangement of boundaries by landlords and tenants. The Learmouth agreement
created a very small ring-fence farm, but the majority of the land in this township was
consolidated into a ring-fence farm long before it was physically enclosed. At Howick the
farms appear to have gone through a period of quite lively boundary change in the early-
eighteenth-century, before being made into true ring-fence farms at its close. During this
time it is possible that tenants used their leases to build up ring-fence farms, but this has
been impossible to prove.

It is also important to realise that neither landlord nor tenant was the prime-
mover in the creation of ring-fence farms. In all townships both seem to have
consolidated land. At Learmouth the engrossment was of leasehold properties, and thus
carried out by a tenant. It must, however, have at least been done with the landlord’s
consent. This joint role is even clearer at Longhorsley. Here the arrival and departure of
tenants provided the opportunity to create ring-fence farms. It is unclear whether this
was done by the landlord or the incoming tenant. Finally, at Milfield, John and James
Grey, who were tenants, consolidated lands belonging to Francis Blake and the Earl of
Tankerville. These last cases were definitely examples of purely tenant agency as they join the lands of different owners.

The fact that the names of the individuals who carried out the consolidation are known, allows some analysis of their status. In some cases they were particularly wealthy, for example Alexander Compton, who engrossed Learmouth was an alderman of Berwick-upon-Tweed.\footnote{DUSC.GRE/X/P73 lease 1719.} He was also in a position of influence regarding the assigning of the leases, as he was the land agent of the Howick estate, of which Learmouth was a part.\footnote{DUSC.GRE/X/P80 Rental 1708.} He could certainly have used this position to make sure that the leases came to him. The fact that consolidation is linked to particular individuals also means that it is sometimes related to particular events in their lives. A good example of this is the opportunity for consolidation provided by the inheritance by George Leighton of his mother’s farm. The death of his mother did not necessarily coincide with economic or social conditions prompting consolidation, but was none the less the trigger for the event.

This paints a very complex and contingent picture of the consolidation of farms even in those cases which fit most closely with what might be expected. Further complexity can be seen where the expectation that ring-fence farms would be created is not fulfilled. Several such cases may be observed in the four townships already examined.

**The retention and creation of fragmented holdings**

In the four case studies discussed above there are some rare instances of the retention or creation of fragmented holdings. The fluidity of the early-eighteenth-century farm boundaries at Howick is one example. Unfortunately without being able to map the locations of the fields named it is difficult to comment in detail. It is possible that at this time Howick consisted of some small ring-fence farms and a series of closes which were let individually. The system remained despite the opportunity provided by enclosure to create ring-fence farms. This suggests that there was a demand among tenants for closes in addition to their ring-fence farms. As discussed above, the township was converted into ring-fence farms by the end of the eighteenth-century. A similar situation to this
operated at Longhorsley into the nineteenth-century and possibly beyond. It is recorded on the tithe plan and apportionment.\(^{229}\) The closes here are mostly former crofts of the houses in the village, but by the 1840s were being let as individual parcels. In Bigge’s Quarter in 1842 most were let to people who did not hold other farms, and so were not part of ring-fence farms.\(^{230}\) In Riddle’s Quarter all were let to tenants of other farms in the village, except one which was glebe and one which was let to a priest who may have been the incumbent of the Neighbouring Catholic church.\(^{231}\) Despite this none were also held by the tenants of neighbouring farms so they were not part of ring-fence farms. It may be significant that many of these closes were detached pieces of Riddle’s Quarter and Bigge’s Quarter, as the boundaries of these were also ownership boundaries. This means that purchases would be required in order to join them to the farms on either side. This would make consolidation difficult though not impossible. This does not, however, explain why the tenants did not attempt to join the closes onto ring-fence farms, and implies demand for closes. Similar examples are described in published literature as Moore-Colyer (1997; 150) for example found that the landlord of Great Oakely, Northamptonshire, tried to create closes.

Longhorsley has one case in which a farm which was once ring-fence became more fragmented. This occurred when the farms shown on the 1773 plan of Bigge’s Quarter, Longhorsley, were rearranged between 1773 and 1842 (Fig. 4.8).\(^{232}\) This almost certainly occurred shortly after the property was sold by the Howards of Naworth to Charles William Bigge, because there is very little change to the Howard rentals between the 1770s and the sale at the beginning of the nineteenth-century. Most of the alterations made at this time straightened farm boundaries and amalgamated farms, and so are consistent with the idea of creating neat, rational farm layouts (Fig. 4.8). The exception, and the point of interest for the discussion here, is that two closes of Hill Head Farm became detached from it (Fig. 4.8). These had both been parts of Pyle’s Farm, which had been completely consolidated in 1773,\(^{233}\) but was broken up in the rearrangement and merged with its neighbours (Figs. 4.8). It is not clear why these two

\(^{229}\) NRO.DT43M tithe plan of Bigge’s Quarter, NRO.DT391M tithe plan of Riddle’s Quarter.
\(^{230}\) NRO.DT43M tithe plan and apportionment of Bigge’s Quarter.
\(^{231}\) NRO.DT391M tithe plan and apportionment of Riddle’s Quarter.
\(^{232}\) NRO.DT43M tithe plan of Bigge’s Quarter DUSC.N190/97 Plan of Longhorsley and Hayclose 1773.
\(^{233}\) DUSC.N190/97 Plan of Longhorsley and Hayclose 1773.
closes should have been made part of Hill Head as they could have been added to other farms to avoid fragmentation. It is possible that Hill Head, which is the smallest farm in Bigge’s Quarter, was considered too small on its own so these fields, which were very close and thus reasonably convenient, were added to make it larger. The small size of this farm resulted from its location at a very narrow part of the township, which also contained the landscape park (Fig. 4.8).

It is clear that there were cases in which dispersed patterns of landownership were considered desirable or at least satisfactory. There certainly appears to have been a need for detached closes at both Longhorsley and Howick, though their exact purpose is unclear. The case of Hill Head Farm also suggests that the shape of the township may have led to a need for dispersed ownership. In these townships however such situations were rare and the norm was the ring-fence farm. There are, however, two townships in which ring-fence farms never became normal.

**Townships dominated by non-ring-fence farms**

Ring-fence farms were rare at both Freeholder’s Quarter and Elsdon. The tithe plans of both show that ownership and occupation and were highly fragmented, despite the trends in this period towards consolidation.

Freeholder’s Quarter is less well documented than Elsdon but provides a clear example of the type of landholding pattern to be discussed. Nearly all the farms in Freeholder’s Quarter comprise a group of small closes near the village, usually including a house, and in most cases a block of land further out in the west of the township (Fig. 4.2). This pattern probably resulted from piecemeal enclosure of lands near the village followed by the enclosure of more peripheral lands by agreement. It is likely that the peripheral lands to the west were at least partly former common as one is called the Freehold Moor (Fig. 4.9). Very few of the closes of any one farm lie next to one another, suggesting that little attempt had been made at consolidation. The only exception is Blackpool farm which is entirely consolidated apart from one house in the village (Fig. 4.2). In 1600 this farm was described as “in the several occupations of s[ai]d John Bolton yeoman, William Dobson and others” and as “All that...[farm]... commonly called by the

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234 NRO.DT192M tithe plan of Freeholder’s Quarter.
name of Blackpool ...and also one house or tenement with the appurtenances and Two ridges of Land adjoining to the same situate lying and being in Longhorsley aforesaid and also one other House or tenement with its appurtenances and one ridge of land boundering as therein mentioned which said ridge or parcel of Ground was lying in a Close belonging to the Earl of Carlisle called the Common Close and also one of the house or tenement with a Smith’s Shop with their appurtenances and a close or parcel of ground adjoining to the said house situate in the town of Longhorsley aforesaid and boundered as therein mentioned...” in 1732.\textsuperscript{235} The latter description is consistent with the property depicted on the tithe plan, so it is possible, though not certain, that the farm was made into its nineteenth-century form between 1600 and 1732. During part of this time it was probably occupied by George Bolton, as another George Bolton, likely his son, occupied it in 1732.\textsuperscript{236} The elder George Bolton received one of the larger allotments at enclosure and so was probably wealthy. The difference between Freeholder’s Quarter and the other two Longhorsley townships may be because Freeholder’s Quarter contained several freehold farms, whereas the other two townships were almost entirely owned by one person each. This means that the boundaries shown on the tithe map of Freeholder’s Quarter are ownership boundaries as well as occupation boundaries. As a result, for parcels in Freeholder’s Quarter to be amalgamated actual purchases, requiring large amounts of capital, were necessary rather than just the renegotiation of leases as in the other two townships. This is probably why the only Freeholder’s Quarter farm to approach consolidation was owned by wealthy people. This in turn suggests that there may have been no lack of willingness on the part of the owners of Freeholder’s Quarter to create ring-fence farms, simply a lack of the capital to do so.

A similarly dispersed pattern of ownership can be seen at Elsdon (Figs. 4.10 and 4.11). This may also have resulted in part from a fragmented ownership pattern as has been suggested at Freeholder’s Quarter. Elsdon is better documented, so it is possible to observe some of the forces which worked against consolidation. It is clear that there were also cases in which people were prepared to put other concerns above the desire

\textsuperscript{235} ZBS/28/1 Abstract of title.
\textsuperscript{236} ZBS/28/1 Abstract of title.
for ring-fence farms, and that some fragmentation of ownership was the unavoidable outcome of pre-existing patterns of landownership.

The role of enclosure processes in the fragmentation of ownership at Elsdon is an example of the latter. Some of the dispersal resulted from the piecemeal enclosure of parts of the open fields, followed by a very complex Parliamentary Enclosure of the common (Chapter 3). The fact that piecemeal enclosure led to dispersed landholding is unsurprising, as this was often the case (see Yelling 1977; 125-7). The emergence of dispersed landholding from Parliamentary Enclosure is more unexpected and requires further examination. The enclosure commissioners fragmented holdings by awarding lands in more than one piece. In most cases this was to provide at least some land next to the original tenement, and it is thus most common near the villages and hamlets. For example, three of the Hatherwick allotments were divided in two, with one piece near the village and another further north (Fig. 4.12). Bartholomew Hedley’s allotment for Landshot was also split into three pieces, one next to the original tenement, one further east on the common proper, and the third on a small piece of common called East Fair Moor in the middle of the ancient land (Fig. 4.13). This detached piece of land was probably comparatively good quality, and so would have caused dispute if made the allotment for a single farm. Knightside and Spartishaw are also good examples. In these cases if the whole of Spartishaw allotment had been put next to the farm it would have surrounded Knightside, so a small piece was placed near to Spartishaw itself and the rest further south, splitting the Knightside allotment (Fig. 4.14). Finally, many allotments for tenements in Elsdon village were dealt with in this way. For these a small block of land south of the village was divided into allotments to provide part of each. The remainder was placed near the southern township boundary (Fig. 4.15). Among these were the allotments for Elsdon Townfoot; Burnstones, which was further complicated by the fact that the ancient lands were not yet enclosed meaning that there was no tenement for the allotment to be put next to; and Yate Cheek, though in this case the allotment to the south was combined with the allotments for other properties. Stichells also received two allotments because the remainder of a small detached piece of common, called West Fair Moor, needed to be allotted but was not sufficient to provide the whole of Stichells allotment (Fig. 4.15). These could be considered unavoidable and are certainly the
outcome of the pre-existing pattern of landownership. They do however result just as much from factors such as proximity to the ancient holding or land quality, being considered more important than compactness. Finally, it would have been possible for the owners of the lands involved to allow the creation of ring-fence farms by making the entire township subject to the Enclosure Act.

Clearly the enclosure commissioners, and to some extent the owners, were prepared to create fragmented holdings when they encountered more pressing needs, and were sometimes forced to do so by pre-existing landholding arrangements. This also seems to have been true of purchasers of lands after enclosure. There are cases of people purchasing lands which are separate from one another. The best example of this is Thomas Thornton. He came from Harwood, to the south of Elsdon and purchased several farms between 1810 and 1825.237 The first was Scotch Arms, which was purchased jointly with his father, Robert, from William Apedail on the 12th May 1810 (see Fig. 4.16 for the locations of all these properties).238 Robert and Thomas also jointly owned Mill Lands, so this was probably bought under a similar arrangement.239 Thomas later came to own half of the farm owned by his father.240 He also bought Townfoot from Eleanor and Robert Blakey on the 25th March 1816. Following this he bought Burnstones in two parts from Francis and Thomas Pearson in 1820 and 1825.241 Finally, Thomas Thornton bought Low Mote from Alexander Hall on the 11th May 1824.242 Few of these purchases join pieces of land (Fig. 4.16), so it is unlikely that Thornton intended to create a ring fence estate. It might be noted, however, that they are concentrated in the centre of the township, apart from some outlying pieces which were bought in the same transactions as more central lands (Fig. 4.16). It may be significant that, though Thornton was a farmer, he did not farm his lands in Elsdon but let them to tenants. Many of these tenants did join pieces of land together to make near ring-fence farms. There are however cases of tenants taking detached pieces of land.

237 E.g. NRO.ZBS/26/2 29th February 1820 release of a moiety of Burnstones.  
238 NRO.ZBS/26/2 12th May 1810 Release of Scotch Arms lands.  
239 NRO.ZBS/26/1 29th October 1814 Will of Robert Thornton.  
240 NRO.ZBS/26/2 3rd January 1832 release of premises in the parish of Elsdon Mr Henry Thornton to Mr Thomas Thornton.  
241 NRO.ZBS/26/2 28th and 29th February 1820 lease and release of a moiety of Burnstones, NRO.ZBS/26/2 17th and 18th May 1825 lease and release of a moiety of Burnstones.  
242 NRO.ZBS/26/2 11th May 1824 Conveyance of Low Moat.
Such tenants were prepared to create farms of dispersed closes by renting fields individually. One example is James Brown who was tenant of the Flatt and Moat Hills from the Duke of Northumberland, and part of Scotch Arms from Thomas Thornton. Some notes made by the surveyor Thomas Bell record that James Brown rented the Flatt in 1839. Before 1847 he acquired Moat Hills, which is directly opposite the Flatt but separated from it by a road (Fig. 4.17). A James Brown is recorded as the tenant of the fields belonging to Scotch Arms in the 1848 will of Thomas Thornton; Brown was dead by 1848 but this is only around a year afterwards and such descriptions of farms can be out of date. These fields did not join to Brown’s other tenements (Fig. 4.17), so by taking this lease he only increased the size of his holding and did not make a ring-fence farm. Moat Hills, due to its small size, was often joined to other property by tenants. For example Archdeacon Singleton, whose rectory is opposite Moat Hills but separated from it by a road, rented it in 1825. Andrew Amos at least tried to rent it, as he wrote a letter expressing his interest in 1848. In this letter he says that one of his reasons for wanting it is that he already held the Haugh. So he appears to be attempting to build up a farm in Elsdon, though again, the Haugh does not physically join to Moat Hills (Fig. 4.17). Amos also held the enclosure allotments for Burnstones and Townfoot and a house in Red Hall field from Thomas Thornton. Robert Fail, who was tenant of Low Mote, Burnstones, the Flatt Fell and Dunshiel, is a further example. He also tried to purchase freehold land at Cheek Gate and Bainshaw Bog in the 1870s, and was to become the tenant of these in 1896 according to an 1895 glebe terrier. Ephraim Harle is another example. He was the tenant of Cheek Gate from the Reverend Aislabie Proctor, and of Dunsdale, Sandy Bra, St. Mary’s Well and Four Riggs from Thomas Hall-Laidler. A final example is Robert Keith. He was the tenant of Knightside and Spartishaw from William Orde in

243 NRO.ZHE/14/13 Valuation of Flatt and Moat Hills 1852.
244 DUSC.DRPI/1/1848/T12/1-2 14th January 1848 Will of Thomas Thornton.
245 NRO.ZHE/14/13 Valuation of Flatt and Moat Hills 1852.
246 NRO.ZHE/14/13 1852 valuation of Moat Hills.
247 NRO.ZHE/14/13 22nd January 1848 correspondence A. Amos to T. Tate.
248 NRO.ZHE/14/13 22nd January 1848 correspondence A. Amos to T. Tate.
249 DUSC.DRPI/1/1848/T12/1-2 14th January 1848 Will of Thomas Thornton.
250 DUSC.DRPI/1/1848/T12/1-2 14th January 1848 Will of Thomas Thornton ZHE/14/13 1852 Survey of Flatt Fell. It is possible that he held these consecutively rather than at the same time.
251 NRO.DN/E/9/1/103 Alwinton and Holystone terrier 20th March 1895.
252 NRO.ZBS/25/1 12th May 1854 lease of lands at Elsdon, NRO.ZHE/14/3 correspondence A. Proctor to C.S. Bell 6th October 1873.
1848, and also took the lease of Townhead from Thomas Hall-Laidler on the 25th September 1872. On the 21st July 1881 he added the Batt Field to his holdings but lost the lease of this in 1894 following a dispute with the landlord over the repair of buildings.

It appears, then, that some people were prepared to create fragmented holdings. This was done by both tenants and landowners, but as will be shown below was more likely to be done by owners, while tenants often consolidated farms.

Although the evidence presented above shows that in many cases people at Elsdon were prepared to create fragmented holdings, there is perhaps more evidence for consolidation. This failed to create true ring-fence farms as in the other case studies. Often consolidation was carried out by the occupiers of the land rather than the owners, as can be seen in Figures 4.10 and 4.11, which show the pattern of landholding as it was in 1839. It is important to note that many occupiers of land in Elsdon were owner-occupiers of part of their holding and tenants on another, so a strict division between landlord and tenant is inappropriate. Figure 4.10 shows that the pattern of landownershipt was very fragmented, as a result of the activities discussed above. It is interesting that the fragmentation is greatest near the village on the former open fields. This may be because it was higher quality land for which there was more competition. Consequently, buying neighbouring plots was more expensive here than further out. It was also more fragmented as a result of piecemeal enclosure. Figure 4.11, however, shows that the pattern of occupation was much more compact, though it is very rare for a farm to be truly ring-fence. This suggests that the tenants were attempting to create ring-fence farms, but never fully succeeded. There are many documented examples of tenants taking the leases of adjacent properties. One such is the farm called Bainshaw Bog. This was formed from part of an allotment for Stichells, which was divided between Lowick and Alwinton glebe (Fig. 4.18). At the time of the tithe commutation Bainshaw Bog was let to Andrew Brown who was also the tenant of the neighbouring

253 NRO.ZBS/14/1 1852 Orde Rental.
254 NRO.ZBS/25/1 25th September 1872 Lease of Townhead, ZBS/25/1 1897 account.
255 NRO.ZBS/25/1 21st July 1881 Lease of the Batt, ZBS/25/1 correspondence M. Hall to J. Cooper 6th January 1887.
256 NRO.QRD3 Elsdon Enclosure Award.
257 NRO.DT164M Tithe Apportionment.
Pearson’s House. By 1864 this had been let to Michael and Thomas Thornton who also owned Pearson’s house. From the lack of field boundaries shown on the 1866 Ordnance Survey it appears that the Thorntons simply ran stock across the whole area (Fig. 4.18). The Flatt Fell is similar and appears always to have been let to the tenant of Dunshield. At the time of the tithe commutation this was Edward Charlton, who first took the property in 1826. By 1848 both had been let to Robert Fail. The Flatt Fell became so closely associated with Dunshield that the boundaries between the two were allowed to fall into disrepair. In both these cases the properties in question were commonly let together, and were thus, very close to the idea of a ring-fence farm albeit one owned by two different people. This joining of property through leases was probably the most important force working to consolidate the Elsdon farms, but there are others.

Firstly, in a few cases the enclosure commissioners did attempt to make compact allotments, possibly at the instruction of the landowners. This was difficult because the large number of proprietors meant that some allotments could not be placed next to the appropriate ancient holdings. There were, however, some strategies which the commissioners used to overcome this. The most common was to treat several farms owned by the same person as one. A certain area of land was allotted in proportion to the total area of the farms, which was then divided between each of the farms as convenient. This meant that each could be of the most suitable size for the space in which it was to be put. For example, part of the allotment to Matthew Reed for Shittleheugh was placed with his allotment for Killhouse on the other side of the township. In this case the Award specifies that this was at his direction, and it seems likely that this was only possible with the owner’s permission. The same was done with Edward Laing’s allotments for Hillflex Rigg, Walls and Coxon’s Field, and for the allotments made to unnamed owners at South Riding and North Bower Shields, and Landshot and

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258 NRO.ZHE/14/31864 12th May Lease of Bainshaw Bog, NRO.ZBS/26/1 29th October 1814 Will of Robert Thornton.
259 NRO.DT164M 1840 Tithe Apportionment, NRO.ZHE/14/4 rough notes probably by John Bell.
260 DUSC.DRPI/1/1848/T12/1-2 14th January 1848 Will of Thomas Thornton NRO.ZHE/14/13 1852 Survey of Flatt Fell.
261 NRO.ZHE/14/13 1868 Valuation of lands at Elsdon.
262 NRO.QRD3 Elsdon Enclosure Plan.
263 NRO.QRD3 Elsdon Enclosure Award.
Hudspeth East Field. Finally, Charles Francis Howard’s properties at Hiershouse and High Carrick were treated in this way but not his tenement at East Hatherwick, showing that this was not automatically done in cases of a proprietor owning several properties. Nor was it done for High Mote and Low Mote, which were both owned by Matthew and Elizabeth Hall. It may be that this was because the ownership of Low Mote was particularly complex. An agreement of 1729 devised the land to Elizabeth Hall, and her second husband Matthew Hall, for life. After this it was to go to Elizabeth’s daughter, by her first marriage, Catherine, and her husband Jeremiah Bayles. This altered the result of the will of Elizabeth’s first husband, Robert Elsdon, who must have left it to her while she remained his widow. It is likely that Matthew Hall owned Low Mote as it was certainly the property of his son Alexander, and other occupiers were often Halls (Stephens 1903 114, 141, 143, 164, 168, 171, 217, 221, 235). It is possible that this meant that no-one had the authority to direct the tenements to be joined together. None the less, the situation was taken into account in the positioning of the tenements as the allotment for Low Mote was put next to that for High Mote (Fig. 4.19).

Another way in which ring-fence farms were created was by the construction of a new farm building on a detached allotment. This lead to the creation of East and West Hill Head, on the allotments for Townhead and William Charlton’s tenement respectively (Figs. 4.20). Similarly, a farm called ‘Colsters’ was created on one of the allotments for Landshot. A ruined farm building is shown on the allotment for Elsdon Glebe on the 1866 map suggesting that it was created and abandoned between 1761 and 1866. Pearson’s House will be discussed at length below (Chapter 6), and provides a particularly good example. The farmhouse was probably built between 1766 and 1820, as Thomas Pearson purchased the land from Alexander Hall in 1766 and his son Thomas Pearson sold a moiety of it to Thomas Thornton in 1820. Again, Thomas Pearson was wealthy, deriving his fortune from a quarry at Walbottle. It is likely that the elder Thomas Pearson built the house, but his sons also had independent incomes; Thomas was

264 NRO.QRD3 Elsdon Enclosure Plan.
265 NRO.QRD3 Elsdon Enclosure Plan.
266 NRO.ZBS/26/2 21st May 1729 Deed of Covenants to Declare the uses of a Fine.
267 NRO.ZBS/26/2 4th December 1755 Conveyance of Low Moat.
268 NRO.ZBS/26/2 28th and 29th February 1820 lease and release of a moiety of Burnstones.
269 NRO.ZBS/26/2 30th May 1773 Will of Thomas Pearson.
described as a gentleman, and Francis (his younger brother) was a ship’s captain. The allotment for Ralph Anderson’s lands was also turned into a separate farm, called Loning House (Fig. 4.20). The farm was probably built before 1799 as a deed of that year describes the common allotment as let to Gabriel Hall whereas the rest of the property was occupied by Anthony Potts. This property had been owned by two different people between enclosure and 1799, both of whom probably had the capital and desire to build the house. The first was George Davidson who bought the tenement on 7th May 1720. Interestingly, though he lived in Newbiggin when he bought the land, he later moved to Elsdon, suggesting that it was a significant purchase for him. He is described as a gentleman, and so was probably wealthy. His heir sold the farm, including the allotment, to William Goldburn on the 30th January 1773. Goldburn was a butcher from Newcastle, so he was also a businessman. Again, the creation of ring-fence farms depended on the arrival of a wealthy owner. The approach of building a new farmhouse to create a ring-fence farm would not have been possible in all cases as it required a detached allotment large enough to support a farm in its own right. This would have been exacerbated by the fact that the former common was probably marginal for cultivation. It was also an expensive project, and it is probably no coincidence that the construction of Pearson’s House and Loning House were not attempted until the arrival of wealthy investors.

Consolidation could also be achieved by the purchase of neighbouring parcels of land in order to build up a ring-fence farm, though this was unusual. Piecemeal enclosure is an example of this and has already been discussed in detail. Its outcome can be seen at Landshot, which is within the unenclosed open-field area but is consolidated, this is depicted on the Tithe Plan (Fig. 4.21). Knightside and Spartishaw are a post-enclosure example. By 1840, the ancient land of these two farms had been joined together to form

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270 NRO.ZBS/26/2 28th and 29th February 1820 lease and release of a moiety of Burnstones, NRO.ZBS/26/2 17th and 18th May 1825 lease and release of a moiety of Burnstones.
271 1866 First Edition Ordnance Survey downloaded from http://digimap.edina.ac.uk/historicdownloader/downloader;jsessionid=3C1F1AA4428D5F01C55A50A7F2C7D7?execution=e1s1 03/04/2011.
272 NRO.ZBS/26/2 7th May 1720 conveyance of lands at Elsdon.
273 NRO.ZBS/26/2 7th May 1720 conveyance of lands at Elsdon.
274 NRO.ZBS/26/2 16th December 1734 Will of George Davidson.
275 NRO.ZBS/26/2 7th May 1720 conveyance of lands at Elsdon.
276 ZBS/26/2 30th January 1773 release of lands at Elsdon.
Knightside and Spartishaw, while the enclosure allotment had been joined to the neighbouring Redshaw (Fig. 4.22). A similar process happened at East Nook, where all the allotments for East Nook and two for Landshot were joined together. By 1840 they were owned by William Orde (Fig. 4.23), who, perhaps significantly, was also the owner of Knightside and Spartishaw. This may indicate that one of the Ordes was particularly involved in joining farms together. Dunshield and Low Carrick were also joined between 1731 and 1831. This probably led to the abandonment of Low Carrick farm, though it is impossible to determine exactly when this happened as the farm, though now in ruins, is marked as a complete building even on modern Ordnance Survey maps. The allotments for Low and High Mote were also joined by 1840. As discussed above these were, in practice, owned by the same person in 1731. This led to the separation of the allotment from the ancient farm which was sold separately in 1824. Finally, three very small allotments in a detached piece of common called East Fair Moor had been joined by 1840 (Fig. 4.24). One of these allotments was made to Thomas Hedley who also owned a farm at Hudspeth. By 1840 the three allotments had become part of Hedley’s Hudspeth farm, suggesting that he or one of his successors had joined them. An alternative possibility is that the consolidation happened through inheritance as all three allotments were made to people called Hedley. If they had all been closely related and two died without issue the lands may have come to one person. If so this is an example of consolidation occurring through chance events in the lives of the people involved. The amalgamation of farms, like the building of new farms was an expensive process, meaning that in many cases it also required a landowner with large capital resources, like William Orde who was a member of an established Northumberland family.

277 NRO.DT164M 1840 Tithe Apportionment.
278 NRO.DT164M 1840 Tithe Apportionment.
279 NRO.QRD3 1731 Elsdon Enclosure Award and Plan, NRO.ZHE/48/6 1831 Plan of Dunshield and Low Carrick.
281 NRO.DT164M Tithe Plan.
282 NRO.ZBS/26/2 11th May 1824 Release of Low Moat.
283 NRO.QRD3 Elsdon Enclosure Plan, DT164M Tithe Plan.
284 NRO.QRD3 Elsdon Enclosure Award.
285 NRO.DT164M Elsdon tithe plan.
286 NRO.QRD3 Elsdon Enclosure Award.
It appears, then, that many of the people involved in farming Elsdon made attempts to consolidate land. Despite this few farms became truly ring-fence. This was probably because there were so many different landowners that it would have been impossible to make the number of purchases required to create a ring-fence farm. The small closes which remained were still useful, even if not for improved farming, so some tenants were able to make a living from renting these. Finally, it is important to note that it was the occupiers, rather than absentee landlords, who consolidated most at Elsdon. These were usually owner-occupiers on part of their estate to which they joined pieces of leasehold land.

A comparison of the first four townships with Elsdon and Freeholder’s Quarter reveals an important factor which is probably the main reason for the difference in landholding patterns. In Howick, Learmouth, Milfield, and Bigge’s and Riddle’s Quarters, ownership had been consolidated into the hands of one, or in the case of Milfield very few, people. This happened at neither Freeholder’s Quarter nor Elsdon where ownership remained divided. This situation presented a practical barrier to consolidation, as in order to join permanently two pieces of land it was necessary for the owner of one to purchase the other. This would have required capital expenditure and would only have been possible where the purchaser was wealthy. This is confirmed by Blackpool Farm in Freeholder’s Quarter, which was owned by a number of wealthy people, and Orde’s consolidation of several Elsdon farms. This was not such an obstacle in cases where ownership was consolidated as all that was required for a tenant to join fields together was to take the lease of both properties. This would require that the tenant had the capital to stock the enlarged property and that he or she would be able to pay the increased rent, but as there were advantages to owning a ring-fence farm this was probably possible in most cases. In short the differences between these two cases and the others is a result of pre-existing landownership patterns.

Conclusions

The creation of ring-fence farms has been shown to be more complicated than might be expected from published literature. It cannot be thought of as a single process with the same causes or outcomes in each case. Like enclosure, it usually occurred over a
long period of time and was never the certain outcome of many of the processes which lead to it.

Some consolidation which paved the way for the creation of ring-fence farms was achieved through enclosure. Piecemeal enclosure which occurred at Elsdon and Learmouth is a process of consolidation, even though it often leaves a comparatively fragmented pattern of ownership (see Yelling 1977; 125). The results of this are most clearly seen at Landshot Farm in Elsdon which came to comprise most of the open field area. Unfortunately, in the cases examined here, piecemeal enclosure is poorly documented so few conclusions may be drawn. In contrast, enclosure agreements and Parliamentary Enclosures are well documented. They are often associated with the creation of ring-fence farms (e.g. Yelling 1799; 134-8, Min gay 1997; 34-7 and 83). Their examination here has shown that they often attempted to allot consolidated parcels of land but in many cases sacrificed this to other priorities. As a result, no enclosure agreement or Award studied, other than the very small one carried out at Learmouth, was able to create completely ring-fence farms. This means that pre- and post-enclosure processes are just as important. These are very variable and contain many agencies. In the cases investigated here they have often proven to be piecemeal, though planned rearrangements have been reported elsewhere (e.g. Yelling 1977; 132-4).

The agencies involved in the whole process are very numerous. Firstly, many different types of people were involved. In some cases landowners were clearly active in the creation of ring-fence farms, as William Orde was in the consolidation of land at Elsdon. Similarly, the construction of isolated farms on detached holdings at Elsdon must have been the work of the owners. It is also likely that the landlords at Howick and Bigge’s Quarter had a greater influence on the process than appears at first sight as they would at least have had to consent to proposed changes to the boundaries of leasehold farms. It is possible that they even created the ring-fence farms entirely on their own, taking the opportunities of farms falling vacant rather than making a single rearrangement of the township.

On the whole, however, the occupiers seem to have been more important. This is clear at Elsdon and Milfield where the property of different people was often joined by a
common tenant. In many of these cases the occupier was an owner-occupier on one part of the farm and a tenant on the others. The importance of tenants and owner-occupiers is perhaps to be expected, as they would have received the direct benefits of increased efficiency from ring-fence or more compact farms.

The importance of several non-human agencies has also been revealed. The effect of the pre-existing landscape has been shown to be particularly important. For example, the enclosure commissioners at Elsdon were often unable to create ring-fence farms because of the already fragmented pattern of ancient closes and a desire to place the allotments as near as possible to the holding for which they were allotted. In some cases the landscape prevented consolidation. This is clearest at Freeholder’s Quarter, where the fact that the boundaries of the farms were also the boundaries of freehold properties made consolidation more expensive than in Riddle’s and Bigge’s Quarters where the boundaries were only those of leasehold farms. A similar situation probably maintained the fragmentation at Elsdon. Money was another important agent for both landlords and tenants. Several types of consolidation were very expensive and often did not happen until a wealthy owner or tenant arrived. A good example of this is the consolidation of Blackpool farm in Freeholder’s Quarter. This was the only farm to approach a ring-fence layout in the township and was owned by several wealthy people. Similarly, the most consolidated freehold properties at Elsdon were those of William Orde a member of a prominent Northumberland family. The construction of new farm houses to create ring-fence farms was also usually carried out by wealthy individuals, for example Thomas Pearson who built a farm at Elsdon was the owner of a quarry from which he had made money to invest in his farm. Money was also necessary, though perhaps slightly less so, in order for a tenant to take a large farm as he or she would require capital to stock it. This probably explains why Learmouth was consolidated rapidly under Anthony Compton who was an alderman of Berwick.

The case of Anthony Compton also shows the importance of chance occurrences in the creation of ring-fence farms, and on the status of the person involved. Not only did Anthony Compton probably wait until circumstance caused holdings to fall vacant, he also almost certainly used his position as land agent to make sure the farms came to him. Other chance occurrences include inheritance of farms, which may have been an occasion
for reorganisation or may have caused a farm to be sold allowing consolidation with its neighbours. The latter is illustrated by the sales of Howick property to Edward Grey by the heirs of Robert Herring and Oswey Lockewood. They were probably uninterested in their estates at Howick, which provided Grey with the opportunity to purchase them eventually allowing engrossment of the whole of Howick township.

Finally, it is important to note that the creation of ring-fence farms was often a lower priority than other considerations. This was seen in the Elsdon enclosure, where proximity to the ancient holdings and the quality of the land were both more important. In this case some owners clearly asked for ring-fence holdings suggesting that the ranking of these priorities was specific to particular people. This calls into question Mingay’s (1997; 83) suggestion that the consolidation of farms was an important outcome of enclosure. With this in mind it is important to realise that there were always ways to consolidate farms if the will to do so was great enough. For example, the proprietors could have had the ancient closes thrown together in any of the enclosures discussed above. Similarly, Charles William Bigge and the owners of Riddle’s Quarter could have purchased the isolated closes and joined them into their farms. The creation of ring-fence farms only became a priority under particular circumstances.

The large variety of agencies, some of which would not immediately be thought to be connected to consolidation, shows that in each case it was contingent upon the coincidence of a unique combination of circumstances. As we shall see, other landscape developments often associated with enclosure are similarly dependant on a variety of factors which happened to coincide. Changes to land use patterns are one such development and will be discussed in the following chapter.
Chapter 5

Changing Land-Use Patterns

In Chapter Four we examined farm consolidation which is often thought to be part of enclosure (Mingay 1997, 36-37). It was shown that the local reality of the process was usually more complicated than this, as it often relied on a particular combination of circumstances, and occurred both before and after enclosure. Similarly, changes to patterns of land-use have often been unproblematically attributed to enclosure (e.g. Yelling 1977, 49-50; Beresford 1983, 11-17).

Such changes have typically been discussed on a national or regional scale. Prince (1989), for instance, suggests that lowland heaths tended to become arable, that turnip rotations were adopted on limestone and chalk downs in the late eighteenth and early-nineteenth-century; and that much heavy clay land was put down to pasture after the Napoleonic Wars (Prince 1989 48-51). John (1960; 145-9) finds that, between 1660 and 1760, pasture was converted to arable, while clay areas were put down to grass in East Anglia in response to price fluctuations. Similarly, Williamson (2002) has demonstrated a drift towards pasture on the Midland clays (Williamson 2002, 51), while East Anglian heaths and fens were reclaimed for tillage (Williamson 2002, 71, 83). Some models of the Agricultural Revolution emphasise such changes, because they allowed land to be used in the most appropriate way. For example, Addy (1972; 17) sees the introduction of ley farming on heavy soils and the Norfolk system on light ones as the main breakthroughs of the period. Sturgess (1966) suggests that drainage of clay lands and their conversion to arable was also significant in increasing mid-nineteenth-century production, though this has recently been rejected by Philips (1989; 245). More, recently Williamson (2002) saw regional specialisation, allowed by changing land-use, as the main driving force behind increasing productivity.

Enclosure is often thought of as an intentional conversion of land-use. For example, Jones (1960) suggested that much piecemeal enclosure was carried out in order to create pasture. Similarly, Yelling (1977; 49-50) proposed that much enclosure between 1550 and 1650 created pasture in traditionally arable areas. Turner (1980, 135-51) found that a great deal of Parliamentary Enclosure between 1760 and 1790 was also meant to
create pasture. Enclosure also created arable land from common waste. In Lincolnshire Grigg (1966) found that heaths were often ploughed up shortly after enclosure, especially during the Napoleonic Wars. On the other hand, he found that clay lands were often put down to pasture after enclosure, partly because they were particularly rich grassland, but also because in Lincolnshire tithes were often paid in kind and were thus reduced if the land was kept under grass (Grigg 1966, 66-81). These examples show that changes to patterns of land-use varied both chronologically and geographically. Land-use change was not always successful. For example, the Lincolnshire heaths ploughed up during the Napoleonic Wars became exhausted very rapidly (Grigg 1966; 67). Mingay (1997; 87-88) found that certain types of land were more likely to be improved following enclosure than others. Clays frequently produced failure, as they did not attract rich tenants who could invest in their improvement, and so deteriorated as little was done to maintain their fertility (Mingay 1997, 88). Similarly, Parton (1985; 56) found that the improvement of heaths enclosed in the 1820s in Surrey often failed, but that 1870s attempts were more successful because of the application of new technologies.

Many historians and archaeologists have emphasised the importance of technology, especially lime and marl, in the conversion of land from one use to another. Harrison (2009) and Dodghson (1978) have both shown that lime was used to improve Scottish wastes and outfields for arable cultivation. Harrison (2009; 7-8) suggested that the improvement of East Flanders Moss, Perthshire was facilitated by road improvement which eased lime import. Williamson (2002; 67-70) also proposed that marl was important for the reclamation of acid heaths in East Anglia. These cases imply that enclosure was not the only factor necessary for changes to land-use. Indeed, land-use change could occur without enclosure. Kerridge (1967), who argued for an early Agricultural Revolution, thought that pre-enclosure land-use change was important. He placed especial emphasis on convertible husbandry, in which land is put down to grass for several years then ploughed up for arable before being let go down to grass again. This has, however, faced strong criticism especially from Overton (1996b) who showed that productivity figures did not increase as significantly during the early-modern period as during the eighteenth and nineteenth-century. This may reduce the importance of
convertible husbandry in the Agricultural Revolution, but it is clear that changes to land-use patterns were occurring both before, after and as a result of enclosure.

Land conversion is an important part of post-medieval landscape dynamics and the Agricultural Revolution. None the less, while they are well understood on regional and national levels, they have rarely been studied on a local scale. This chapter will attempt to show how local patterns of land-use were altered during the post-medieval period. It will also determine whether these changes were permanent or, as other authors have suggested, whether the land often reverted from arable back to common waste. Finally, because several factors in addition to enclosure have been implicated it will explore the extent to which land-use change was a product of enclosure.

Pre-enclosure patterns of land-use

In order to understand the changes it is necessary to describe the pre-enclosure land-use patterns of Northumberland. Butlin (1973) found a major difference between the coastal plains and interior vales, and the western uplands: the former being mostly arable and the latter mainly pastoral. The lowlands show evidence of two and three field systems, but with some common waste at the margins. The uplands had a much smaller area of arable, sometimes with only one field, and extensive wastes which were exploited from shielings (Butlin 1973). Both areas show evidence for reclamation of waste, sometimes to create entire fields, and occasional abandonment of arable at the margins of the cultivated area. Butlin was, however, unable to find conclusive evidence for an infield-outfield system finding instead that the terms ‘infield’ and ‘outfield’ had more general meanings in Northumberland (Butlin 1973, 109). All the townships illustrated by Butlin appear to show a similar pattern of pre-enclosure land-use with commons at the edge and arable around the settlement.

This pattern is certainly present in our case-study townships. It is clearest at Elsdon, in the uplands, where the pattern of arable core and pastoral periphery can be seen on the 1731 enclosure plan (Fig. 5.1). Here enclosure was of the common, so the ancient land represents, at least in part, the former arable core. This arable core occupies the floor of a valley, in which the village also sits, while the common is located on both valley sides (Fig. 5.2). Parts of this had gone down to grass by the time of the
enclosure, but there is evidence in the form of ridge-and-furrow (Fig. 5.1), and the fact that some of the land was still held as unenclosed open-field strips, to show that most had been open-field arable. There are only two exceptions to the pattern of arable core and pastoral periphery. The first is a small area of common within the ancient fields called West Fair Moor (Fig. 5.1), but this is close to the edge of the ancient land. The second is a close on the common called Whitlees Sike. ‘Sike’ is usually associated with open field arable cultivation so this may have been an arable field, though it does not contain any ridge-and-furrow today.

At Howick and Longhorsley, on the coast and in the interior respectively, the pattern of arable core and pastoral periphery is less obvious but still present. At Howick there are two areas which may have been commons. The first area is a group of fields called North Moor, East Moor and Harrow Hill (Fig. 5.3). This common probably extended into Craster, where the field boundary forms suggest that it was enclosed piecemeal, though some ridge-and-furrow nearby suggests that it was of limited size (Fig. 5.3). The element ‘Moor’ in the field names here suggests poor quality land, which was likely to have been used as a common. More conclusive evidence for the use of this area as a common comes from the 1607 Enclosure Award. This instructed Edward Grey to compensate Mr Edmond Roddam for a beast gate on North Moor. Another probable common is mentioned in a lease of The Heugh dated 1659, which gave the tenants access across Whinny Common. No Whinny Common is marked on any map of Howick, however, there are two Whinny Fields on a plan of 1759: one near Sea Houses Farm and the other on the south-western township boundary, near Longhoughton. The second is more likely to be the Whinny Common mentioned in the 1659 deed, as the clause in question appears to deal with access to Longhoughton among other places. Unfortunately the document is damaged at this section so it is unclear if the route across Whinny Common was meant to allow access to Longhoughton or to another place. None the less the identification of the 1659 common with the south-western Whinny Field is still more likely
as the *Whinny Field* near Sea Houses would not allow access to anywhere other than the coast and Sea Houses Farm. The rest of the township appears to have been in arable cultivation immediately before enclosure as there is open-field ridge-and-furrow across most of it (Fig. 5.4), and arable cultivation in the Northern part of the township is mentioned in the 1607 Enclosure Award.\footnote{DUSC.GRE/X/P112 eighteenth Century copy of an arbitration award for the division of Howick, July 1607.} It is likely that the strong concentration of ridge-and-furrow near the village is due to preservation bias more than the actual distribution of open field arable, as this land was under grass for most of the post-medieval period. However, it does appear there was an open-field arable core with peripheral commons at Howick.

Longhorsley is very similar, though the evidence for peripheral commons is slighter than at Howick. In Bigge’s Quarter Township *Low Moor, West Moor and East Moor* fields are close together. Their names suggest poor quality land, and they are depicted as boggy on a 1773 plan (Fig. 5.5).\footnote{DUSC.N190/97 Plan of Longhorsley and Hayclose 1773.} There is another area of ‘Moor’ names at the western edge of Freeholder’s Quarter, where there is a *Freeholder’s Moor* and a *West Moor* (Fig. 5.5).\footnote{NRO.DT192M Freeholder’s Quarter Tithe Plan 1842.} Finally, an area of common in the south was preserved by the 1664 Enclosure Award (Fig. 5.5).\footnote{NRO.358/21/10 Enclosure Agreement 1664.} Most of the evidence for open-field arable occurs near to the village, and appears to form an arable core. This consists of ridge-and-furrow and piecemeal enclosure type field boundaries (Fig. 5.5). Neither of these are likely to show the entire open-field area, as ridge-and-furrow only survives where there has been little later ploughing. Similarly, the distribution of piecemeal enclosure is unlikely to have been random within the open-fields. However, as there is little evidence for commons near the village and abundant evidence for arable in this area there was probably an arable core and pastoral periphery.

Milfield, which is in the north of the county, also had an arable core near the village and a common further out, though in this case the common is to one side of the arable not surrounding it. In 1789 an area called Milfield or Lanton Common, which comprised roughly half the township, was enclosed (Fig. 5.6). Consequently, it is certain
that this area was common grazing in 1789.\textsuperscript{294} The fact that the township was enclosed in two parts suggests, in itself, that there were different land-uses in the two areas, implying that the land enclosed before 1789 had been arable. Further evidence for this is the higher quality of the ancient land,\textsuperscript{295} the presence of ridge-and-furrow (Fig. 5.6 and 5.7) and the field name elements ‘Rig’ and ‘Ridges’ which occur in the early enclosed land and probably refer to the ridges of ridge-and-furrow (Fig. 5.6). As at Elsdon the two land-uses occupy different topographies; the arable being low-lying and the common on a hill (Fig. 5.2). The common is also visibly poorer quality than the arable as it contains acid-loving species such as \textit{Ulex europaeus}. It appears, then, that Milfield followed the familiar pattern of arable core and pastoral periphery.

Learmouth, which is also in the north of the county, has very little evidence for pre-enclosure land-use. A 1756 lease says that one fifth of the ‘infield’ should be summer fallowed, and suggests that this was in open-field strips, as it also required that no baulks be left between the ridges.\textsuperscript{296} It also imposed a penalty for ploughing the ‘outfield’. As Butlin (1973; 63-7) concluded that the terms infield and outfield refer to an area of intensive arable and an area of less intensively cultivated waste respectively, this may imply that a similar pattern to the other townships existed at Learmouth. A plan of Learmouth in 1793 supports this interpretation as it marks \textit{Windy, East, Burn; and Clover Fields} near the village, which may form an arable core. It also shows large areas of bog containing ‘night folds’ in the south of the township which may be a common (Fig. 5.8).\textsuperscript{297} Unfortunately without better information it is not possible to draw firm conclusions about the distribution of arable and pasture at Learmouth.

From this discussion, it appears that immediately before enclosure many Northumbrian townships consisted of an arable core near their settlement, and common grazing further out. The proportion of arable to pasture varied geographically. The coastal and interior townships of Howick and Learmouth consist mostly of arable with small pockets of common at their edges, while commons in the uplands and the northern

\textsuperscript{294} NRO.QRD6 enclosure award of Milfield 1789.  
\textsuperscript{296} DUSC.GRE/X/P75 1756 lease of Learmouth.  
\textsuperscript{297} DUSC.GRE/X/P276 1793 plan of Learmouth.
valleys at Elsdon, Learmouth and Milfield were much more extensive. This is the same
distinction between upland and lowland townships noted by Butlin (1973). Butlin (1973;
109) also suggested that pieces of arable were periodically put down to grass and that
pieces of the waste were occasionally cultivated. Thus, the boundary between arable and
pasture was not firmly fixed but changed over time. This may be observed in the in the
case studies. At Elsdon parts of the common seem to have been taken into arable
cultivation. Parts of the ancient land marked on the 1731 enclosure plan seem to be
former common as they have No piecemeal enclosure type field boundaries (Fig. 5.9).
These were, therefore, pieces of common which had been ploughed up. At Milfield there
is also evidence that arable had encroached on the common, as legal opinions written in
1782 addressed the legality of some encroachments. Similar, assarts were made on
the common at Longhorsley where fields called High Moor, North Moor and Low Moor,
on the eastern edge of the common, may imply that pieces had been enclosed (Fig. 3.3).
There was probably also some encroachment from the north where an 1870 legal case
records that Thomas Horsley had enclosed part of the common following the 1664
agreement. It could be argued that this is enclosure, and thus a separate process from
the periodic ploughing of pieces of common pasture which were then allowed to revert to
waste, as Butlin suggests (1973; 109). There is however some evidence for this practice
as well, as at Elsdon, there is pre-enclosure ridge-and-furrow on areas which were
common in 1731 (Fig. 5.1), though all of these are quite close to the ancient land. It
appears to have been quite normal for pieces of waste to be cultivated, both in common
and as closes. It was probably also usual for there to be some pasture or meadow closes
near to the village, which further blurs the line between the arable core and pastoral
periphery. There is evidence for this at Howick as Edward Grey purchased some closes of
meadow in 1581. These were probably close to the village as they were sold with a
tower. Similarly, at Milfield the name Old Lea next to the village may recall a pasture
close. Finally, the case of East Fair Moor at Elsdon, described above, is a further example
of pasture within the arable area, though this time held in common.

298 NRO.1356/M.5 1782 Milfield Division papers.
299 NRO.358/21/8 25th November 1870 Case Regarding Longhorsley.
300 DUSC.GRE/X/P43 12th November 30 Elizabeth bargain and sale.
To recap, there appears to have been a broad pattern of arable core and pastoral periphery in most Northumberland townships shortly before enclosure. The proportion of arable was higher on the coast and interior vales than in the uplands. This distinction should not be drawn too strongly as there is evidence that at least the margins of these types of land-use could be converted from one to another; both through small scale enclosure and for common cultivation. There is also evidence for pockets of permanent pasture within the arable core of some of the case-study townships. This broad pattern of arable core and pastoral periphery appears to break down further during the post-medieval period, though in a very drawn-out process.

Changing patterns of land-use

There is some evidence that large areas of former arable were put down to grass during the eighteenth and nineteenth centuries. This clearest at Howick where The Heugh and The Flatt, which contain ridge-and-furrow and are next to the village site, became a pasture used by the tenants of Pasture House and South Side Farms. This is first documented in 1808, but may have originated earlier. Similarly, at Longhorsley, closes created by piecemeal enclosure appear to have been being used as pasture closes by the nineteenth-century, as they were occupied individually and would have been too small to constitute individual arable farms (Fig. 5.10). These may have been used as grazing for a long time, as pasture closes were allotted to Sir Thomas Horsley in 1664. However, enclosure was not always necessary for the conversion of arable to pasture. At Elsdon much unenclosed ancient land had been put down to grass by the nineteenth-century. An 1809 lease of open-field property called the Batt, Townhead, Dunsdale and St Mary’s Well shows that all but St. Mary’s Well were under grass, though a 1797 lease shows that the Batt had been in tillage only twelve years previously. Finally, a valuation of unenclosed ridges belonging to the Duke of Northumberland shows that they were also in grass. Some enclosed land was also down to grass. A valuation of The Flatt and Mote Hills, which were enclosed parts of the ancient land, says that they were down to grass.

301 DUSC.GRE/X/P81 15th September 1808 survey of Howick South Farm.
302 NRO.DT43M Bigge’s Quarter Tithe Apportionment 1842, NRO.DT391M Riddle’s Quarter Tithe Plan.
303 NRO.358/21/10 Enclosure Agreement 1664.
304 NRO.ZBS/25/1 Leases: Batt 29th March 1894, various lands 1st March 1809, Hill Head and Bitchpool 25th November 1868 and 12th May 1877, ZHE/14/31864 12th May Lease of Bainshaw Bog, ZBS/26/1.
305 NRO.ZHE/14/13 8th April 1868 Valuation of the ridges.
both under grass in 1852 apart from two fields of The Flatt. Some 1849 sale particulars describe Knightside and Spartishaw as “nearly all in grass” and William Orde’s farm at Hudspeth as “chiefly in grass”. Clearly parts of Elsdon’s arable core had been put down to grass by the nineteenth-century without the need for enclosure.

Evidence for the cultivation of waste is more problematic. At Longhorsley, Howick and Elsdon there are extensive areas of post-enclosure ridge-and-furrow which is mostly narrower and straighter than open-field ridge-and-furrow, and never has a reversed S-shape. Similar ridge-and-furrow in southern Scotland has been examined by Carter et al. (1997), they found that in their study area it was produced between 1836 and 1869 for the improvement of pasture. This is supported by field observations at Elsdon where some post-enclosure ridge-and-furrow has a markedly different flora to the surrounding heather moorland. This flora included species planted for improved swards such as Perianal Rye Grass (Lolium perenne) and clover (Trifolium spp.). Consequently, we cannot assume that post-enclosure ridge-and-furrow equates to arable cultivation, though the small size of the study area examined by Carter et al. (1997) does not allow us to reject the possibility that some, or even most, was indeed arable. On the other hand it does represent improvement of waste which may be seen as a land-use change. In addition to this problem some eighteenth and nineteenth-century cultivation certainly did not produce ridge-and-furrow, and some contemporaries even condemned the practice (Upex 2005). This means that ridge-and-furrow does not show the full extent of either post-enclosure arable husbandry or improved pasture.

It does, however, show that particular places were cultivated or improved. Unfortunately it is too limited at Milfield and Learmouth to draw any conclusions, but it is extensive at Howick, Longhorsley and Elsdon. In all of these post-enclosure cultivation or improvement extended to the edges of the townships and included former common (Figs. 5.4, 5.11 and 5.12). At Longhorsley the surviving common was not cultivated or improved because it was still legally protected, but ridge-and-furrow extended up to it, and former common in Freeholder’s Quarter was cultivated (Fig. 5.11). In the south of Elsdon ridge-and-furrow is concentrated around farmhouses built on the former common, suggesting

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306 NRO.ZHE/14/13 Valuation of Flatt and Moat Hills 1852.
307 NRO.1356/14/1 1849 sale particulars.
that it was part of a wider programme of improvement of former waste. These farmhouses were often built by wealthy investors, and so the conversion of land from waste to arable or improved pasture may have required wealth. The best example of this is Pearson’s House, which was probably built by Thomas Pearson, who had bought the land with money made at his quarry in Walbottle.\textsuperscript{308} The farm is surrounded by post-enclosure ridge-and-furrow, which stops at its boundary (Fig. 5.12), suggesting that the two are associated. This implies that enclosure alone did not cause land-use change. At Longhorsely, on the other hand, post-enclosure ridge-and-furrow is found in nearly all fields, suggesting that all farmers were able to practice it. The higher land quality at Longhorsley (Grades Three and Four in the five point Agricultural Land Classification) may have made improvement more worthwhile than at Elsdon (Grades Four and Five) where it is more restricted.\textsuperscript{309} This may be supported by the evidence at Howick which also has extensive post-enclosure ridge-and-furrow. Here almost all areas are covered except a large area of pasture in the middle of the township (Fig. 5.4). Some of this ridge-and-furrow was certainly arable during the nineteenth-century as documents record crops produced in these fields, though it is possible that some was improved pasture.\textsuperscript{310} The extent of ridge-and-furrow at Howick and Longhorsley probably suggests (\textit{contra}. Carter \textit{et al.} 1997) that most ridge-and-furrow was for arable as both places are in areas with strong arable economies, whereas Elsdon was mostly pastoral.

It appears that from enclosure onwards patterns of land-use changed. Much of the former pattern of arable core and pastoral periphery was destroyed; producing landscapes with no obvious land-use pattern. This occurred through both the grassing down of parts of the arable and the ploughing up or improvement of pieces of common. Some of the forces behind this have been suggested. For example, the fact that improvement of the common at Elsdon is associated with the newly constructed farmsteads of wealthy investors suggests that both enthusiasm and the availability of capital may have been important in facilitating change. On the other hand, non-human agencies may be discerned by comparing Howick and Longhorsely with Elsdon. At both of

\begin{footnotes}
\item[308] NRO.ZBS/26/2 30\textsuperscript{th} May 1773 Will of Thomas Pearson.
\item[310] Documents for Howick land-use
\end{footnotes}
these better quality land encouraged much more extensive improvement and cultivation than at Elsdon. It has also been shown that enclosure was not a completely necessary pre-requisite as much of Elsdon’s nineteenth-century open fields had been put down to grass without it. Enclosure may however have speeded the process.

Survival and re-emergence of pre-enclosure patterns

These changes were never complete. In detail, elements of the pre-enclosure pattern of land-use often survived enclosure or returned after it. At Howick for instance the common in the north of the township was still unimproved in 1759: approximately 150 years after its enclosure (Fig. 5.13). In that year a map shows it as an unfenced boggy area. It may have been divided and improved shortly after this as the boundaries which divided East Moor before the 1866 Ordnance Survey plan (Fig. 5.13) were added to the 1759 plan in pencil. Parts of the area contain post-enclosure ridge-and-furrow and much of it was in arable cultivation by 1845, though part remained under grass. If the improvement did occur shortly after 1759 it may have been done as part of the wider landscape changes which accompanied the rebuilding of the hall in 1782 (Pevsner and Richmond 1987, 194). This set of changes included the relocation of the village onto the former moor in the same area as the boundaries (Fig. 5.13). These landscape changes were made at the instigation of Sir Henry Grey (Pevsner and Richmond 1987, 194), and reflected, in the creation of a country house and landscape park, the rise of the Greys who had been created baronet a generation previously (Bateson 1895, 352). At Longhorsley, a large part of the common was retained in the 1664 Enclosure Award, and so never changed its land-use. Another area of former common, called Cold Walls, which was enclosed at least as early as 1664, remained unimproved in 1773 when a map represented it as unfenced and boggy (Fig. 5.14). This appears to have been improved by 1866 (Fig. 5.15), though it is unknown whether it was converted to arable. It was ploughed into ridges and drained with ceramic pipes as these have been recovered from

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311 DUSC.GRE/X/P270 Cultivation returns, and see Appendix C
312 DUSC.GRE/X/P276 1759 plan of Howick by D. Hastings.
313 NRO.358/21/10 Enclosure Agreement 1664.
314 DUSC.N190/97 Plan of Longhorsley and Hayclose 1773.
315 First edition Ordnance Survey 1:10,560 1866 downloaded from http://digimap.edina.ac.uk/historicdownloader/downloader;jsessionid=5B687A18BE1F83F10AA3ED16E5A62A5C?execution=e1s1 12/03/2012.
it (Fig. 5.16). The particularly imprecise dating of the event means that it is impossible to place it in a context. This was, however, a period which included two agricultural booms. Finally, at Milfield the common was still being improved in 1815, twenty-six years after its enclosure. This is described in a lease of that year in which John Grey, the tenant of Milfield Hill Farm, was instructed to divide Burn Close into three pieces, enclose thirty-five acres of ‘the allotment’, and split ‘the Outfield’ in two. All this suggests that much of the common was rough grass at the time. The lease also required John Grey to plant trees at Ewe Hill, which was one of several beech and pine plantations made on the former common after enclosure (Fig. 5.17). This suggests that the common was such poor quality that its owners, the Greys of Howick, thought it best to use it for game or timber. Indeed it remains poor quality today with large quantities of *Ulex europaeus* indicating acid soils (Fig. 5.6 and 5.17). The other two Milfield farms have no trees on their common allotments suggesting that other owners did use the former common entirely as agricultural land. These changes to the landscape coincide with two important events in the history of the township. The first is the inheritance of the Howick estate, of which Milfield is a part, by the second Earl Grey in 1808. He seems to have begun a programme of improvement which continued for several years. The changes at Milfield may be part of that programme. Certainly, the plantations must be the work of the landowner as the trees and game were his property according to the terms of the lease, and so were useless to the tenant. The other event is the coming of age of John Grey who occupied Milfield Hill Farm. John had technically been the tenant since his father’s death in c. 1803, but because of his minority the farm was held for him by trustees. His majority in 1815 appears to have been the opportunity for improvement. These improvements may have been the initiative of the landlord who requested them in the lease, or at John Grey’s suggestion who had them put in the lease to make the landlord’s consent more secure. John Grey was known as an improver, so he probably would have taken an interest in these matters (Butler 1869).

316 DUSC.GRE/X/P79 1815 lease of Milfield Hill Farm.
317 GRE/X/P79 1815 lease of Milfield Hill Farm, First edition Ordnance Survey 1:10,560 1866 downloaded from http://digimap.edina.ac.uk/historicdownloader/downloader;jsessionid=5B687A18BE1F83F10AA3ED16E5A62ASC?execution=e1s1 12/03/2012, DT3225 5th May 1842 Milfield tithe plan.
318 DUSC.GRE/X/P35 lease of Milfield Hill Farm 1803.
Old land-use patterns could also re-emerge because former wastes were more likely to go down to pasture than other areas in adverse economic conditions. At Learmouth several fields were put down to grass according to the cultivation returns, which are available for West Learmouth Farm in a nearly complete sequence from 1870 to 1890.\footnote{DUSC.GRE/X/P271 cultivation returns, while these are available for East Learmouth they are less complete and the field names here are poorly understood so the distribution of cultivation in the landscape cannot be assessed.} These show that the vast majority of fields were used for arable cultivation throughout the period, in stark contrast to the large areas of common waste shown in 1793 (Figs. 5.6 and 5.16).\footnote{DUSC.GRE/X/P276 1793 plan of Learmouth.} Only Banks and Cow Close are never mentioned and were therefore in permanent pasture throughout the period. Some other fields were present on the cultivation returns but were always filled in as pasture, suggesting that they had gone down to grass shortly before 1870. These fields were mostly in the north, though one called North Haugh and Hare Knows is not marked on any plan (Fig. 5.18).\footnote{DUSC.GRE/X/P271 cultivation returns.} Of the remaining fields several went down to pasture during the late nineteenth-century. The first were Toms Knows and The Park which went down to grass between 1873 and 1887 and 1873 and 1886 respectively before being ploughed up again (Fig. 5.18).\footnote{DUSC.GRE/X/P271 cultivation returns.} Toms Knowes is almost certainly within the ancient cultivated area and so shows that the ancient pattern of land-use did not entirely remerge in the late nineteenth-century. From 1883 onwards several fields went down to grass in the south of the township (Fig. 5.18).\footnote{DUSC.GRE/X/P271 cultivation returns.} Several of these contain the element ‘Moor’ in their names, and it is tempting to link this with ancient common waste. This seems to be confirmed by the presence of a night fold, indicating grazing, and bogs in this area on the 1793 plan (Fig. 5.8).\footnote{DUSC.GRE/X/P271 cultivation returns.} It appears then, that while parts of the ancient arable area at Learmouth were put down to pasture in the Agricultural Depression, the majority of the land put down to grass was former common. This means that the ancient land-use pattern had only been partly eradicated. It may be important that the fields begin to go down to pasture in 1873 as this is the year after William Piper Lumsden became tenant.\footnote{DUSC.GRE/X/P276 1793 plan of Learmouth.} He struggled to run the farm during the Depression and was ultimately forced to leave. It may be this struggle to
make a profit from the farm which led to the fields going down to pasture. At Longhorsley there is another instance of improved arable reverting to rough grazing. At the southern end of Smallbourne farm some fields are shown as fenced in 1777 (Fig. 5.19). They were definitely cultivated or improved as they contain post-enclosure ridge-and-furrow which conforms to the 1777 field boundaries (Fig. 5.19). By 1866 the boundaries were removed and the area had become boggy, and so was probably rough grazing (Fig. 5.19). The phenomenon is even clearer at Elsdon, where most of the former common returned to rough grazing after enclosure. Here the boundaries at Flatt Fell created following the 1731 enclosure, were removed suggesting that the area had reverted to rough grazing. This had definitely been cultivated or improved earlier as it contains ridge-and-furrow (Fig. 5.12). Mid-nineteenth-century surveys describe the Flatt Fell as rough pasture in 1852 and 1868, suggesting that it had been allowed to revert to waste by that time. It was let to the tenant of Dunshield and Low Carrick, which surrounds the Flatt Fell (Fig. 5.20). This had allowed it to be joined onto Dunshield and Low Carrick in order to create a large expanse of rough grazing. Dunshield and Low Carrick, as the name suggests, was also an amalgamation of two farms, which seems to have allowed the boundaries between their allotments to be taken down, probably indicating that they too had been made into rough pasture. Bainshaw Bog appears to have been subject to a similar process. This area was divided between the glebe of Alwinton and Lowick after its enclosure and a boundary made between the two by 1839 (Fig. 4.18). By 1866 this boundary had been partly removed and it is likely that the Thornton family, who owned the Neighbouring Pearson’s House, were using it as waste. It is described as rough pasture in an 1864 lease, and the boundaries between it and Pearson’s House had been allowed to go down (Fig. 5.21). Similarly, boundaries between allotments for properties at Landshot and East Nook went down between 1731 and 1866, creating a very large area of rough grazing (Figs. 5.12 and 4.23). These farms

326 NRO.1255/1 Plans of Farms in Riddle’s Quarter 1777.
327 First edition Ordnance Survey 1:10,560 1866 downloaded from http://digimap.edina.ac.uk/historicdownloader/downloader;jsessionid=5B687A18BE1F83F10AA3ED16E5A62A5C?execution=e1s1 12/03/1012.
328 NRO.ZHE/14/13 1853 Valuation of Flatt Fell.
329 NRO.ZHE/14/13 1852 Survey of Flatt Fell.
330 NRO.DT164M Tithe Apportionment.
331 NRO.ZHE/14/31864 12th May Lease of Bainshaw Bog, NRO.ZBS/26/1 29th October 1814 Will of Robert Thornton.
were owned by the Ordes of Nunnikirk in 1839. Orde properties were also joined together to create a large, open farm out of the enclosure allotments for Redshaw, Knightside and John’s Croft between 1731 and 1839 (Fig. 4.22).\textsuperscript{332} By 1866 this area was completely unfenced, and thus probably rough grazing. It had also been enlarged by the addition of the allotment for William Charlton’s Croft (Fig. 4.22).\textsuperscript{333} The fact that both of these were owned by the Orde family in 1839 may suggest that one of the Ordes allowed all the farms to revert to waste, though the Ordes were not the owners in 1731 so this is not certain. All this suggests that large areas of the common were allowed to become rough pasture during the nineteenth-century despite some having been improved, or even cultivated, shortly before as they all contain post-enclosure ridge-and-furrow (Fig. 5.12). Unfortunately, the imprecise dating of these events at Elsdon and Longhorsley do not allow them to be put in context as well as the events elsewhere. The period in which they occur does however contain two agricultural depressions, one after the Napoleonic Wars and another in the late nineteenth-century, which may have caused some of them.

To sum up, changes patterns of land-use after enclosure were rarely complete and could be reversed. Many former commons remained waste without common grazing rights long after enclosure, awaiting the right circumstances for their improvement. At Howick the improvement of the common appears to have been delayed until the rise of the Grey family. This triggered landscape changes including the relocation of the village onto the common (Chapter 6); providing the opportunity to divide and improve other areas of it. At Longhorsely the improvement of \textit{Cold Walls} may have been allowed by the agricultural boom of the mid-nineteenth-century. The improvement of the part of Milfield Common in Milfield Hill Farm appears to have been left until two enthusiastic improvers, one the land owner and the other tenant arrived to take it on.

On the other hand, many pieces of former common which had been made into arable were allowed to go down to pasture. At Learmouth good dating evidence shows that much occurred in the 1880s and 1890s during an Agricultural Depression. At Elsdon reversion to pasture seems to have occurred before the late nineteenth-century

\textsuperscript{332} NRO.QRD3 Enclosure plan if Elsdon 1731 and NRO.DT164M Tithe Apportionment.
\textsuperscript{333} First edition Ordnance Survey 1:10,560 1866 downloaded from http://digimap.edina.ac.uk/historicdownloader/downloader;jsessionid=5B687A18BE1F83F10AA3ED16E5A62A5C?execution=e1s1 12/03/1012.
Depression, though it could have happened during the Depression following the Napoleonic Wars. Here some of the reversion of arable to waste is associated with the Orde family who may have been more active than others in allowing it to happen. The effects of the Depression at Learmouth also appear to have been mediated through particular individuals; fields began to go down to grass when William Piper Lumsden succeeded his father. Finally, it is important to note that at the same time fields which had been arable before enclosure were also going down to pasture so this was not a complete reversion to the pre-enclosure pattern of land-use.

Conclusions

It has been shown that there was a particular pattern of land-use in Northumberland townships prior to enclosure. This comprised an arable core and pastoral periphery. It differed regionally, with a higher proportion of arable in coastal and interior townships, reducing common to small pockets at the township edges. Upland townships had much more extensive commons which surrounded the arable. The pattern was not completely rigid, as it seems to have been quite normal for pieces of arable to be allowed to go down to grass and parts of the common to be ploughed up when the need arose.

This pattern began to change in the post-medieval period, with more extensive areas of the common being taken into cultivation and large areas of the arable cores being allowed to go down to grass. The latter process appears to have begun before enclosure as much of the unenclosed open-field land at Elsdon was under grass in the nineteenth-century. Enclosure may have accelerated the process as much land seems to have been improved for either pasture or arable soon after. Some areas, particularly those of former commons, however, remained unimproved long after enclosure, showing that the process did not depend on enclosure alone. There is some evidence that particular people were more involved than others in the process of improving former commons, as ridge-and-furrow at Elsdon appear to be associated with farmhouses built by wealthy investors.

The changes were not always permanent as it appears quite normal for former common to revert to rough grazing. At Learmouth this occurred during a time of
Agricultural Depression, and so economic trends had a part to play. It is however important to note that former open-field arable also went down to pasture at this time, there was no complete return to the former pattern of land-use.

It has been possible to determine some of the factors involved in both the removal and partial re-instatement of the early pattern of land-use. In some cases particular people are significant, such as William Lumsden whose arrival seems to have triggered the conversion of fields from arable to pasture. Similarly, at Elsdon the Orde family owned several areas which were put down to grass during the Nineteenth-century. The availability of money also seems to have been significant, with much reversion to pasture occurring at the Agricultural Depression of the late nineteenth-century. Thus, while William Lumsden made the decision to put fields down to grass, where others may have kept them in tillage; it was a decision which only had to be made under particular circumstances. Finally, it must be remembered that the land itself played a part, as some commons were left unimproved after enclosure, and probably became common grazing in the first place, because they were of low quality and expensive to improve. This is why some of these areas were the first to revert to pasture during difficult times.

These processes are very complex and uneven. Despite the presence of many exceptions it is apparent that the pre-enclosure pattern of arable core and pastoral, or only occasionally cultivated, periphery was removed during the post-medieval period. Such complexity and contingency is not only a feature of processes as intimately associated with enclosure as land-use change and farm consolidation, but also of processes which are more indirectly attributed to enclosure including settlement dispersal which will form the subject of the next chapter.
Chapter 6

Settlement Dispersal

The processes described in the two preceding chapters are so closely connected with enclosure in most historical literature as to be considered inseparable from it. Other types of post-medieval landscape change are often thought to be a consequence of enclosure rather than part of enclosure itself. One such change is settlement dispersal. It will be shown here that, like the processes already discussed, it is very complex and contingent; to such an extent that it defies attempts to model it.

A combination of settlement creation and desertion typically caused dispersal during the post-medieval period, (Williamson 2002; 46-7, Beresford 1971, Wrathmell 1975). Both processes have been observed in our case studies. Both processes were governed by multiple factors, and in no two cases were exactly alike despite producing the same general outcome. As a result no model, except the most general, could describe the events which occurred in all five townships. Most models of post-medieval settlement dynamics aim to explain settlement desertion (e.g. Beresford 1954, 1971, Wrathmell 1975, 1980, Parry 1975), though some cover settlement dispersal as an aspect of this process (e.g. Wrathmell 1975, Dixon 1984). This means that the occurrence of settlement dispersal without village desertion has not been sufficiently problematised. Published literature only deals with the phenomenon when it is the result of the expansion of the arable area (e.g. Brown 1999a, Bettey 2000; 44). Consequently discussion of the full range of settlement dynamics is required. This is attempted below, and demonstrates that there are similarities in the settlement dynamics of townships in which village depopulation did occur and those where it did not. Despite this, the great difference between all townships makes the creation of a single model of post-medieval settlement dynamics impossible. This examination will begin with village desertion as it has attracted most attention in published work.

Village desertion

A number of different factors have been mooted as causes of village desertion. Of these perhaps the least satisfactory is the model developed by Parry (1975, 1978, 1981),
which suggested that climatic deterioration increased the frequency of harvest failure to unsustainable levels at the most marginal settlements. Parry mapped the changes in several factors which influence the development of oats in the Lammermuir Hills in southern Scotland, finding that there were more deserted settlements and field systems in areas where the chance of harvest failure increased (Parry 1975; 9-11). This has been criticised by Tipping (1998, 2004) who found no change in levels of cereal pollen during the Little Ice Age in the North Pennines (1998; 46). Parry’s explanation also fails to account for cases where villages neighbouring a deserted settlement survived (Dyer 1989), though the fact that Parry saw the climatic change as a background to desertion rather than being the direct trigger of desertion goes some way to explaining this (Parry 1975; 11). It is also important to realise that Parry (1978, 117) did not see climate change as applicable to lowland deserted settlements, and indeed mostly focused on farmsteads. So even if this were applicable to some cases of settlement desertion there are many cases which it cannot explain.

Beresford’s pioneering studies of settlement desertion provide an alternative model (Beresford 1954, 1971). He suggested that the period 1450-1520 had a particularly high level of village desertion (Beresford 1971; 11). He did acknowledge that some depopulation probably happened in all centuries, and discussed some pre-fifteenth-century causes of desertion such as the activities of Cistercian monks (Beresford 1971; 4-8, Beresford 1954; 151-155). Fifteenth and sixteenth-century desertions were caused by enclosure for sheep pasture, which was achieved through engrossing peasant holdings (Beresford 1971; 11-17). Beresford (1971, 19) also suggested that, by the seventeenth and eighteenth centuries, enclosure was increasingly for mixed farming rather than pasture. So enclosure during that period produced shrunken rather than deserted villages. He acknowledged that Northumberland and Durham may have had a different history of depopulation than the Midlands and North Yorkshire cases on which his model was built (Beresford 1954; 150, 172-175). These counties were not examined in detail until the work of Wrathmell (1975) and Dixon (1984). Both found that Beresford’s model was not applicable to Northumberland, and criticised his suggestion that seventeenth-century enclosure only led to village shrinkage (Wrathmell 1975; 204-205, Wrathmell 1980; 113-114, Dixon 1984; 177-187). They both suggested that village desertion was
related to agricultural improvement, which was achieved through large scale reorganisation of the landscape including enclosure (Wrathmell 1980, Dixon 1984: 177, 245-258). This moved farms out of the village into dispersed farmsteads (Wrathmell 1980). Similar processes were observed by archaeologists at West Whelpington, where, during the seventeenth-century, the village was reorganised and two farms built (Jarrett and Wrathmell 1988; 155-159), as a precursor to the eighteenth-century desertion (Jarrett and Wrathmell 1988, 155-159). Where there was initially more than one freeholder such reorganisation required engrossment (Wrathmell 1975; 199). Wrathmell was able to link many reorganisations to particular individuals, especially wealthy merchants or financiers who had purchased parts of old landed estates (Wrathmell 1975; 184-190). This was also true of West Whelpington, though tenants were also influential (Jarrett and Wrathmell 1988; 149-153). This model is similar to the transformation of communities from nucleated to dispersed which Broad (2010) suggested was the cause of settlement depopulation in the seventeenth and eighteenth centuries. The final major mechanism of village desertion is emparkment (Beresford 1954; 139-141, Williamson 2010, Dixon 1984; 247-249). This was probably mainly of small settlements, and thus was often in closed townships where the lord was resident (Williamson 2010; 175-176). This has been observed archaeologically at Shapwick, where desertion appears to have been quite rapid and where the remains of the village were thoroughly removed, though in this case only part of the village was depopulated (Gerrard 2007; 1001, Gerrard and Aston 2013).

Aspects of several of these models, particularly those of Dixon (1984) and Wrathmell (1975) can be observed at Howick and Learmouth. At Howick depopulation was preceded by a long process of engrossment by Sir Edward Grey of Morpeth. He was a cadet of an established Northumbrian family (Bateson 1895; 349). He may have exercised these connections in his initial purchase of a tower and three acres of meadow from his brothers Roger and Arthur Grey of Chillingham in 1593. He then continued to buy out freeholders until 1607, when he made an enclosure agreement with John Craster.

334 DUSC.GRE/X/P43 2nd September 35 Elizabeth I bargain and sale, DUSC.GRE/X/P43 10 May 39 Elizabeth I feofment of tenements and lands in Howick, DUSC.GRE/X/P43 8 January 45 Elizabeth I bargain and sale, DUSC.GRE/X/P43 20th February 1607 bargain and sale, DUSC.GRE/X/P43 18th August 1623 bargain and sale. 335 DUSC.GRE/X/P43 2nd September 35 Elizabeth I bargain and sale.
This effectively separated the lands owned by John Craster from the open-fields, though the open-fields appear to have remained in operation in the rest of the township. Further purchases up to 1623 allowed Grey to gain unity of possession of the remaining unenclosed lands. A Plan of 1759 shows a very regular, and thus apparently planned, arrangement of field boundaries, suggesting that Edward Grey or one of his successors had reorganised and enclosed the township (Fig. 3.5). As rentals and deeds from 1635 onwards mention the names of closes marked on the 1759 plan it is likely that the enclosure of the open-fields occurred between 1623 and 1635.

Engrossment did not lead to the immediate abandonment of the village which is depicted on a 1759 plan. It did, however, move the farms out of the village, which was an important precursor to depopulation in both of Wrathmell’s (1980) examples and at West Whelpington (Jarrett and Wrathmell 1988). The 1759 plan shows five farmsteads in the surrounding fields (Fig. 3.5). One of these is marked as the steward’s house, and so may be identified as the home farm. The remaining four probably correspond to the four farms listed in a 1756 rental. The desertion of the village seems to have happened in 1782 during emparkment of the area to the south of the newly built hall (Pevsner and Richmond 1987, 194). The first evidence of the village having been deserted is a plan of 1791, while a plan of Seahouses farm to the west of Howick Hall drawn in 1793 shows roads going to the site of the new model village. Several field names in the area of the new village contain the word ‘moor’ suggesting that it was marginal land (Fig. 6.1). The depopulation was almost certainly done for aesthetic reasons as the village would have blocked views both towards and from the hall (Figs. 6.2 and 6.3). The immediately pre-depopulation village depicted in mid-eighteenth-century plans appears to have been small as was its successor which contained eleven cottages in 1801.

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336 DUSC.GRE/X/P112 18th Century copy of an arbitration award for the division of Howick, July 1607.
337 DUSC.GRE/X/P43 18th August 1623 bargain and sale.
338 DUSC.GRE/X/P43 18th August 1623 bargain and sale.
339 DUSC.GRE/X/P276 1759 plan of Howick by D. Hastings.
340 DUSC.GRE/X/P94 'The yearly rents of Howick estate as it was lett at Whitsunday 1635', DUSC.GRE/X/P43 25th March 3 William and Mary deed to lead the uses of a recovery, DUSC.GRE/X/P276 1759 plan of Howick by D. Hastings.
341 DUSC.GRE/X/P276 1759 plan of Howick by D. Hastings.
342 DUSC.GRE/X/P80 1756 rental.
343 DUSC.GRE/X/P276 1791 plan of the Howick Estate.
344 DUSC.GRE/X/P279 1793 plan of Sea Houses Farm, Howick, surveyed by Henry Taylor.
345 DUSC.GRE/X/P181 1801 rental of Howick village.
to depopulation at Howick are very similar to the model proposed by Wrathmell (1980) in which an investor purchased land and then invested in improving it, though in this case the investor was not a Newcastle businessman but a member of the Northumberland aristocracy. Nor did he purchase an entire township from a declining estate, but instead bought out a large number of small freeholders. Another way in which the observed cases depart from Wrathmell’s model, is that improvement did not immediately lead to depopulation, though it may have led to shrinkage. This would have made later desertion by emparkment possible (see Williamson 2010; 175-176).

Learmouth has a similar history of engrossment followed by landscape reorganisation. In this case, however, the reorganisation occurred some time after the removal of farms from the village, and directly resulted in depopulation. The entire township of Learmouth was owned by the Greys of Howick and their predecessors for several centuries (Vickers 1922; 75-76), so its engrossment involved joining of leasehold farms rather than the purchase of freehold properties. The engrossment of Learmouth appears to have been mainly eighteenth-century, though there is some evidence of engrossment prior to 1708 as two of the six farms listed in a rental of that year were in the hands of one man, and later leases describe two of the others as “those six ffarms com[m]only called the West side of Learmouth”. In 1712 these two farms were themselves engrossed by a man called Thomas Gregson. From 1719 a man called Anthony Compton, who was an Alderman of Berwick-upon-Tweed, began to take leases of Learmouth farms. By 1733 he had acquired all the farms in the township other than the glebe, nearly creating unity of control. In these leases he is described as ‘of Learmouth’ for the first time, indicating that he had moved there. He probably built West Learmouth farm which first appears on a plan of 1793. In 1778 further dispersal occurred when an agreement enclosed the glebe and abolished some tithes in exchange for land. This land was allotted in the south of the township on some relatively low

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346 DUSC.GRE/X/P80 1708 rental, GRE/X/P72 lease 1712.
347 DUSC.GRE/X/P72 lease 1712.
348 DUSC.GRE/X/P73 lease 1719, DUSC.GRE/X/P73 lease Cornhill and Learmouth 1724, DUSC.GRE/X/P73 1729 mill lease.
349 DUSC.GRE/X/P74 lease Learmouth Westside 1733.
350 DUSC.GRE/X/P74 lease Learmouth Westside 1733.
351 DUSC.GRE/X/P276 1793 plan of Learmouth.
352 DUSC.GRE/X/P276 1793 plan of Learmouth.
quality land, suggesting that Henry Grey (the landlord) was the more powerful party to the agreement. This created Tithe Hill Farm. By 1793 Learmouth’s settlement consisted of three dispersed farmsteads; the two described above and a third called the Hagg, whose origins are obscure but which certainly existed by 1778, and the village which contained approximately eight structures (Fig. 6.4). In 1799 the township was enclosed, along with several other farms in the Tweedside part of the Howick estate. At this time East Learmouth Farm was created by dividing the township in two. At the same time the village was depopulated and replaced with labourers’ cottages at both East and West Learmouth Farms. Later still, between 1842 and 1866 Lightpipehall was constructed, though this appears to have been a private house. Again this is similar to Wrathmell’s (1980) model, in that an investor, the elder Anthony Compton engrossed the township leading to dispersal and probably village shrinkage. In this case however the investor was a tenant not a freeholder. Again, depopulation did not occur immediately after the farms had been moved out of the village but much later under Anthony Compton’s heirs at a period of estate-wide landscape organisation.

Thus, while these two cases of settlement depopulation generally fit Wrathmell’s (1980) model for Northumberland village desertion they do differ in important respects: particularly in that settlement depopulation did not result immediately from the dispersal. This process was important in changing the social structure of the village to make its inhabitants dependent upon the residents of the farmsteads, facilitating depopulation but not immediately causing it. This last point makes it possible for settlement dispersal to occur without village desertion, which has been observed in the remaining three case studies.

Settlement dispersal without village depopulation

Settlement dispersal without village desertion has a very limited literature, though some reasons given for settlement dispersal more generally, such as a desire for privacy or efficiency (Williamson 2002; 47) probably apply in these cases. Most local or regional

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354 DUSC.GRE/X/P276 1793 plan of Learmouth.

355 DUSC.GRE/X/P181 1799-1801 accounts.
studies discuss examples caused by the expansion of the arable area, such as the farmhouses built on the newly enclosed downs of Berkshire, Wiltshire, Dorset, Hampshire and Sussex following the enclosure of wastes by Act of Parliament during the Napoleonic Wars (Bettey 2000; 42). One of the most detailed studies is that of Brown (1999a) on the Salisbury Plain Training Area. He found that new farmsteads were established there in the eighteenth and nineteenth centuries on ground which had been enclosed by Act of Parliament. They were mostly farmed by large tenant farmers and emerged more rapidly in the west where a greater proportion of open-field land had been enclosed (Brown 1999a; 123). Similar cases of farmstead construction on former common enclosed by Act of Parliament have been observed in some of the case studies. One is at Learmouth where land was allotted to Henry Grey in lieu of rights on Wark Common in 1799. As Learmouth township does not directly border Wark Common this could not be incorporated into either of the two farms there. Instead a new farmstead was built on the allotment, which was leased as a separate farm called Wark West Common. More examples are to be found at Elsdon. Here the large number of proprietors and the arrangement of the ancient land made many of allotments separate from their farms (Fig. 6.5). Many of these were made into new farms, for example East and West Hillhead were built on the allotments for Townhead and William Charlton’s tenement respectively; a farm called Colsters was built on one of the allotments for Landshot; yet another, called Loning House, was built on the allotment for William Charlton’s tenement; and a ruined building on the allotment for the Flatt suggests that this was a separate farm for a short time (Fig. 6.5). Pearson’s House is better documented. This was built on an allotment for Burnstones, probably between 1766 and 1820 and so did not immediately follow enclosure (Fig. 6.5). In 1731 Burnstones was owned by Alexander Hall, but was soon passed to his son Thomas Hall. Thomas Hall sold it to Thomas Pearson on 31st January 1766, and probably this Pearson or one of his sons is remembered in the name of the farm. Thomas Pearson was neither local nor a farmer. He, in fact, lived in Newcastle and

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356 NRO.QRA 63/1 Wark enclosure award.
357 DUSC.GRE/X/P79 Draft lease. Sir Henry Grey to James Goodfellow of Shilbottle, farmer, of land allotted to Sir Henry Grey on the division of Wark Common.
359 NRO.ZBS/26/2 extract of enclosure award.
made his fortune from a quarry at Walbottle. Thomas Pearson died in 1775 leaving the farm to his sons Francis and Thomas, to come to them when they turned twenty-one. Both shares were soon sold to Thomas Thornton of Harwood. This suggests that the farm was built between 1766 and 1820 when the first part of it was sold, probably during the life of Thomas Pearson the elder. The house itself survives as an earthwork. The house was stone-built and contained within a garth. It was very small, containing only two rooms and a byre or shed on its ground floor (Fig. 6.5). Such a small house was probably never the home of gentlemen like Pearson and so was most-likely tenanted. The fact that the Pearsons lived in Newcastle or Middlesex supports this position. This is an example of an outside investor buying land and creating dispersed settlement, though on a smaller scale than Wrathmell’s (1980) examples. Loning House is similar. It was built on the allotment for Ralph Anderson’s lands (Fig. 6.5). It is a very similar structure to Pearson’s House consisting of two rooms and a byre or shed on the ground floor (Fig. 6.5). It survives better than Pearson’s House, but it is still unclear whether or not it had a second floor. This was either built by a man called George Davidson, who bought the property in 1720, or William Goldburn who bought it in 1773. Davidson is a likely candidate as he moved to Elsdon between the purchase and his death in 1734. William Goldburn was a butcher from Newcastle, so in either case the construction of the new farm was dependent on the arrival of an outsider.

In some cases, then, detached allotments resulted in settlement dispersal. However there were many other cases of detached allotments which were not turned into separate farms. It is more accurate to say that in particular circumstances detached allotments could become new farms. In some cases this was the arrival of an outside purchaser. It is clear that expansion of the arable area was not enough on its own to
cause settlement dispersal and that other factors were needed. Where these operated in
townships where there was no expansion of the arable area dispersal could also happen.

This was the case at Milfield where Milfield Hill farmhouse was built between
1777 and 1842 (Fig. 6.6).\(^{369}\) It followed a period of engrossment by a man called William
Mills, as a 1735 lease says that it had previously been held by three other people.\(^{370}\) The
construction of the farmstead did not occur immediately after this as it is not present on
a plan of 1777.\(^{371}\) Enclosure of the area in which the farm stands happened between
1777 and 1789, and created a ring-fence holding.\(^{372}\) It is probable that the construction
followed this, though it is not possible to determine exactly how soon after enclosure.
The farmhouse seems to have been a quite fashionable dwelling, though little remains
now. It was set in a small park planted with exotic trees (Fig. 6.7). The roads leading to it
were lined with privet (Ligustrum sp.), apple (Malus sp.) and beech (Betula sp.) hedges
none of which are common hedge plants in the area (Fig. 6.8). This case of dispersal also
failed to cause village desertion. The village actually grew from only six structures to a
sizeable settlement containing a chapel, reading room, school and pub (Figs. 6.6 and 6.9),
though it may be significant that the other two farms remained in the village (Fig. 6.10).
Thus, at Milfield dispersal occurred without either expansion of the arable area or
depopulation of the village.

The evidence for dispersal is much greater at Longhorsley, but is only available for
the northern half (called Bigge’s Quarter) which was owned by the Earls of Carlisle. A
1719 plan of part of Bigge’s Quarter shows only two structures outside the village (Fig.
6.11).\(^{373}\) By 1773 there were four additional farms in the area shown on the 1719 plan as
well as five dispersed sites outside it (Fig. 6.12).\(^{374}\) Enclosure occurred before 1664, so
the dispersed farms were not its direct result. Between 1719 and 1773 ring fence farms
were created as leases fell in, probably with a significant amount tenant influence

\(^{369}\) NRO.1356/P26a 1777 plan of Milfield, DT322S 5th May 1842 Milfield tithe plan.
\(^{370}\) DUSC.GRE/X/P75 1735 lease of Milfield Hill.
\(^{371}\) NRO.1356/P26a 1777 plan of Milfield.
\(^{372}\) The 1777 plan shows the area unenclosed but the 1789 award for the enclosure of the common
describes this area as ancienley enclosed. It is possible that the 1777 plan shows the allotment to Henry
Grey at an enclosure of around this date as the title says that it is the land belonging to Grey which would
not make sense as a description of an unenclosed area.
\(^{373}\) DUSC.HNP1967/Lambert Plans ff.6v-fd 1719 plan of Longhorsley.
\(^{374}\) DUSC.N190/97 plan of Longhorsley and Hayclose 1773.
(Chapter 4). Many of these had farmsteads constructed on them. Two farms shown in Figure 6.11 however did not have farm houses. One was almost certainly farmed from the village as it is next to it. The other may have been farmed with another holding in Brinkburn Township to the north. The southern half, called Riddle’s Quarter, has a similar settlement pattern to that shown in 1773 (Fig. 6.13), though as there is no plan earlier than 1777 it is not possible to determine their dates. Interestingly, Freeholder’s Quarter has only two isolated farmsteads depicted on the Tithe Plan. One of these seems to be on an area of former common called West Moor, and so is similar in origin to some of the Elsdon farms and Wark West Common. The other is Blackpool Farm this was owned by a Mr John Ogle in 1600. He sold it to John Bolton on the 28th July 1600, after which it passed through several generations of the Bolton family until Charles William Bigge purchased it in 1823. As described above (Chapter 4) it is unclear when this became a ring-fence farm but it was owned by several wealthy proprietors or enthusiastic improvers. Charles William Bigge’s improvement of Bigge’s Quarter has already been discussed. George Bolton, who probably owned the farm in 1664, was on or Longhorsley’s more substantial freeholders. Finally, John Ogle, while no improver (he opposed the 1664 enclosure), was a substantial man. Any one of these characters may have built the farmstead, but it is probably no coincidence that one of the few dispersed farmsteads at Freeholder’s Quarter was owned by such people. Unfortunately the current farmstead is nineteenth-century and so does not provide evidence to determine which actually built it (Fig. 14). It is a substantial farm and has decorative aspects as its hedgerows contain sycamores which are unknown elsewhere in Longhorsley (Fig. 15). The other farms in Freeholder’s Quarter were farmed from the village. This is probably because it has a much more fragmented ownership than either of the other two Longhorsley townships. This meant that the creation of ring-fenced farms required the purchase of a block of adjacent fields rather than simply waiting for leases to fall in as happened at Bigge’s Quarter and probably at Riddle’s Quarter (see above Chapter 4).

The creation of dispersed settlement, at this date, appears to be a very varied process. Some were the result of expansion of the arable area, particularly after Parliamentary Enclosure, though in at least some cases these were neither its direct nor

375 NRO.DT192M 1842 Freeholder’s Quarter Tithe Plan.
necessary result. Of these some were built on the arrival of a wealthy investor. Others were made after the formation of ring-fence farms, as at Longhorsley and Milfield, or indeed Howick and Learmouth. This required enclosure but did not necessarily result directly from it. Some of these farmsteads are also associated with the arrival of new owners by purchase or inheritance. Others may be the result of estate policy, as at East Learmouth, and perhaps Bigge’s Quarter, in order to attract the ‘right’ sort of tenant (see Williamson 2002; 16). They could also result from a desire for privacy or the efficiency of being nearer to the fields. Clearly then the same outcome, as far as the archaeological record is concerned, could result from a variety of different circumstances. Enclosure, engrossing and the creation of ring-fence farms are all necessary for settlement dispersal to occur, as a person must be the outright owner of a substantial block of land in order to build on it. However, only in a few cases was the construction of a farm the immediate or necessary outcome of these processes, and was often delayed until later circumstances caused its creation. Thus, the tendency towards dispersed settlement in this period does not appear overwhelming, and in some cases was even reversed.

The desertion of farmsteads

In all cases other than Learmouth and Milfield dispersed settlements were deserted during the eighteenth and nineteenth centuries. At Howick one of the five dispersed farmsteads created at the seventeenth-century reorganisation was abandoned between 1759 and 1791. This seems to be connected with a reduction in the number of farms from five, including the home farm, in the 1770s, to two at the beginning of the nineteenth-century, though in 1810 another tenanted farm was created bringing the total to three. This may have been connected with a reorganisation of the estate at inheritance by the second Earl Grey. This in turn may have been because he was unable to find tenants for such small farms. The reduction in the number of farmsteads however is not as great as the reduction in the number of tenants as some were converted to other uses. The home farm seems to have been moved to Pasture House, and the former

376 DUSC.GRE/X/P276 1759 plan of Howick by D. Hastings, DUSC.GRE/X/P276 1791 plan of the Howick Estate.
377 DUSC.GRE/X/P81 1811 rental.
steward’s house let as a private dwelling.\textsuperscript{378} Even when Redstead came back in hand in 1818, as a result of the post-Napoleonic War depression,\textsuperscript{379} it was kept as a second home farm, and later converted into a model farm.\textsuperscript{380}

At Elsdon a more dispersed settlement pattern allowed greater levels of farmstead desertion. Leehouses farm was shown on the 1731 enclosure plan but not on the 1839 Tithe Map. The enclosure plan represents it as two structures suggesting that it was let as two farms, so it is perhaps more a small hamlet than a farmstead. The allotment for it was awarded to one man, John Ratcliffe Lord Derwentwater, along with allotments for the neighbouring East and West Whitlees (Fig. 6.16). The fact that all three settlements were owned by one individual would make it possible for them to be united by one tenant causing desertion of all but one of the farmsteads. This appears to have happened to West Whitlees before 1731 as the ancient land of this farm does not have a farmhouse (Fig. 6.16).\textsuperscript{381} The remains of Leehouses are quite slight, while East Whitlees is substantial and contains a bastle (Fig. 6.16), this may mean that the largest of the farms was kept. High Field House, which was a single farmstead in 1731, was also abandoned before the Tithe Plan was drawn (Figs. 6.17).\textsuperscript{382} Despite being marked on the plan it is not mentioned in the Enclosure Award but it is likely to have been part of a farm called Stitchells, which was glebe belonging to Alwinton parish.\textsuperscript{383} It appears that a privately owned farm called Yate Cheek was joined to it after 1731.\textsuperscript{384} If so the farmhouse of Yate Cheek may have been retained in preference to High Field House. South Riding was similarly abandoned through engrossment. It was marked on the 1731 plan, but not on the Tithe Plan (Fig. 6.18).\textsuperscript{385} The Apportionment shows that it was in the possession of Fenwick Hedley, who also held Middle Riding next to it (Fig. 6.18). He was tenant under John and Thomas Hedley, so in this case the engrossment was carried out by a tenant

\textsuperscript{378} DUSC.GRE/X/P253 28 December 1893 Lease of Howick Grange, DUSC.GRE/X/P12 farm returns 1848-1853.

\textsuperscript{379} DUSC.GRE/X/P81 1818 and 1819 rentals. Between 1814 and 1819 the farm passed between a series of tenants, each of whom built up arrears before leaving (DUSC.GRE/X/P81 1814-1819 rentals).

\textsuperscript{380} DUSC.GRE/X/P12 farm returns 1848-1853.

\textsuperscript{381} NRO.QRD3 1731 Elsdon Enclosure plan.

\textsuperscript{382} NRO.QRD3 1731 Elsdon Enclosure plan, NRO.DT164M Tithe Plan.

\textsuperscript{383} NRO.QRD3 1731 Elsdon Enclosure award.

\textsuperscript{384} NRO.QRD3 1731 Elsdon Enclosure plan, NRO.ZHE/14/3 correspondence between C.S. Bell and A. Proctor 4th October 1873 – 14th April 1874.

\textsuperscript{385} NRO.QRD3 1731 Elsdon Enclosure plan, NRO.DT164M Tithe Plan.
not a landlord, though given that they all have the same names the arrangement may have been an informal one between relatives. Colsters was also abandoned. It had been built on one of the detached allotments to William Hedley for a tenement in Landshot between 1731 and 1839. By 1839 however, it had already been joined to East Nook and so was probably abandoned shortly afterwards. It had certainly been deserted by 1866, when the Ordnance Survey marks a small close and a ruined structure. Its remains today are similar to those shown in 1866 (Fig. 6.19). The structure is much too small to have been the farmhouse and may have been an outbuilding or could even be a later field barn. Finally the 1866 first edition Ordnance Survey marks a ruined building on the allotment for the Flatt, called Flatt Fell (Fig. 6.20). This structure is also mentioned in surveys of the estate of the late nineteenth-century. It is not marked on the enclosure plan so it must have been built and abandoned after enclosure but before 1866. The tithe is no use in this case as it is unlikely to have marked a ruined structure so its absence could mean that it was either un-built or already ruined. Sadly no archaeological traces survive to confirm this. By 1839 the Flatt Fell had been let to the Joseph Patterson who was also the tenant of neighbouring Dunshield, so again this in an example of engrossing by tenants. In most cases at Elsdon farmstead abandonment seems to result from the engrossing of neighbouring holdings by tenants and smallholders.

Similar processes seem to have operated in Riddle’s Quarter at Longhorsley, but without actually causing desertion. Though, as the sources for Riddle’s Quarter are very sparse it is possible that there was an estate policy towards larger farms. Comparison of the 1777 estate plans of Riddle’s Quarter and the 1846 Tithe Plan show that Paxton Farm and Town Farm were joined together during this time (Figs. 6.21). A piece of Paxton Farm was also sold to the owner of the freehold of the neighbouring Whemleyburn Farm, which may suggest reorganisation by the landlord. This did not lead to abandonment

386 NRO.DT164M Elsdon tithe apportionment.
387 NRO.QRD3 1731 Elsdon Enclosure plan NRO.DT164M Elsdon tithe apportionment.
388 NRO.DT164M Elsdon tithe apportionment.
389 NRO.ZHE/14/4 1853 valuation of Flatt Fell.
390 NRO.DT164M Elsdon tithe apportionment.
391 Tithe plan and apportionment, NRO.ZHE/14/13 1868 Valuation of Flatt Fell.
however as Town Farm was farmed from a house in the village. At the same time North and South Smallbourne (which was a single farm) and West Smallbourne were joined (Figs. 6.22). The name of North and South Smallbourne and the presence of two farm buildings here in 1777 suggest that they had been separate farms (Fig. 6.22). Despite these amalgamations however all three farmsteads survived, until at least 1846 (Fig. 6.22). Evidence of desertion does not occur until the 1866 Ordnance Survey. This does not mark West Smallbourne at all and shows that part of North Smallbourne was ruined and part still standing (Fig. 6.23). Both have now been completely destroyed and their ruins ploughed out, so no archaeological traces remain to confirm the dating. So despite engrossment farmstead desertion did not occur immediately.

In Bigge’s Quarter farmstead desertion did occur though probably not by engrossment. Some amalgamation did happen, as leases fell in or tenants took several farms (see above Chapter 4). However, as most was before 1773 there is no evidence to show whether it caused farmstead desertion. The only certain instances of farmstead abandonment are those of Matthew and George Dobson’s farm, which was removed to create a mansion and landscape park and Widow Hume’s Farm which was replaced by View Law to its south (Fig. 6.24). In this latter case the change in location was made by amalgamating Widow Hume’s lands with those of Henry Kirsop which had previously been farmed from the village. Both of these cases seem to have been part of a major reorganisation of the farm boundaries probably carried out by Charles William Bigge. During this the number of farms was reduced from ten to five plus the mansion and landscape park, so it is interesting that the number of desertions is so few. This is

392 NRO.1255/1 Plans of Farms in Riddle’s Quarter 1777.
393 NRO.1255/1 Plans of Farms in Riddle’s Quarter 1777.
394 NRO.DT391M Riddle’s Quarter Tithe.
396 DUSC.N190/97 Plan of Longhorsley and Hayclose 1773, NRO.DT43M Bigge’s Quarter Tithe Apportionment 1842.
397 DUSC.N13/15 1808 draft conveyance.
398 DUSC.N190/97 Plan of Longhorsley and Hayclose 1773, NRO.DT43M Bigge’s Quarter Tithe Apportionment 1842.
partly because some of the 1773 farms did not have farmsteads and also because two 1773 farmsteads were retained for other purposes.\(^{399}\)

All of these desertions involve an increase in farm size, though it is also true that many increases in farm size at Howick and Longhorsley did not result in desertion. An increase in farm size is essentially engrossing, so the processes behind farmstead desertion are similar to those which cause village desertion. Several historians have argued that larger farms were desirable during this period because of their greater efficiency or ability to attract more substantial tenants, who could stock large farms and would not fall into arrears (Mingay 1962; 471-475, Williamson 2002; 16-17). There were also some contemporary authorities, notably Arthur Young, who advocated larger farms (Beckett 1983; 312). On the other hand some factors were working to balance out the increase in farm size, such as the difficulty in finding tenants who had the capital to stock large farms (Mingay 1962; 475-477). Also, while Young was advocating large farms others were of the opinion that there was an upper limit in size after which increase was counterproductive (Beckett 1983). Whether the balance of these opposing forces caused a significant change in the social structure of rural England has been controversial and lies beyond the scope of this thesis (see Ginter 1991). None the less there does appear to have been a gradual growth in farm size nationally (Williamson 2002; 16-17, Mingay 1962; 309, Grigg 1987; 181). Certain periods, such as the late seventeenth-century (Mingay 1962; 480-487) or enclosure (Hammond and Hammond 1995, 97-105) have been suggested to contain more engrossment than others, but both have been strongly criticised (see Ginter 1991). As this happened at a time when other factors were causing settlement dispersal, engrossment of dispersed farms did not have as much impact on settlement dispersal as it might have done.

Engrossing resulted from many different processes. At Howick and Longhorsley it may have been estate policy at various times, the effects of which have been observed elsewhere (e.g. Wordie 1974). On the other hand at Elsdon, without a single powerful landlord, the process was carried out by tenants and smallholders. The effect of agricultural depressions may also have caused engrossment as fewer tenants could be found. This has been observed in Sussex by Sheppard (1992), may have happened at

\(^{399}\) NRO.DT43M Bigge’s Quarter Tithe Apportionment 1842.
Riddle’s Quarter, and certainly happened at Howick when Redstead went in hand after the Napoleonic War, though in both cases the farm buildings were kept. All cases of farmhouses being kept despite being separated from their lands occur in places with strong lordship. This may be because the greater administrative apparatus of an estate was able to find new uses for these structures, such as letting them as dwellings or workshops, more easily than were the smaller landowners at Elsdon.

Conclusions

Both settlement creation and desertion were observed in all case studies other than Milfield where only creation occurred, though this was also the case-study with the least documentary evidence. Both processes occurred in a variety of circumstances and were influenced by many different processes including engrossing and enclosure.

No single model for settlement desertion fits any case-study perfectly, though none is inapplicable in all circumstances. The creation of settlement on marginal land as at Learmouth, Howick and perhaps Elsdon, seems to go against climatic models of settlement contraction in this period, such as those of Parry (1975). Wrathmell’s (1980) model seems to be the most satisfactory in Northumberland. It is limited as it only seeks to explain village depopulation, and thereby neglects farmstead desertion. Also, while this model touches on settlement dispersal it does not seek to explain it, and thus only describes dispersal where it is implicated in village desertion. More local and regional studies of settlement dispersal as a whole are required to determine the factors involved. Finally, while Wrathmell’s (1980) model is broadly supported by the processes at Howick and Learmouth they do differ in important respects. Significantly, village desertion did not follow immediately after reorganisation and dispersal. These events also involved a wider variety of people, including tenants and members of the established aristocracy not just the newly wealthy merchants discussed by Wrathmell (1980). It is possible that a factor allowing reorganisation was the availability of capital and thus those who could afford to buy land were those who were also most able to invest in its improvement. It appears, then, that local factors are perhaps more significant than any prime-mover, which negates the possibility of a general model being created. Consequently, settlement dynamics can only be understood either in the most general terms or case by case.
It is interesting that the archaeological evidence: the number and distribution of settlements and structures in the landscape, only indirectly mirrors social change. The desertion of villages often happened some time after the reduction of their populations to wage labourers, and the creation of dispersed farmsteads was often several years after expansion of the arable area or the creation of a ring-fence farm. This means that what might be thought of as the archaeological signature of a social change was often not its necessary outcome and thus, again, the archaeological representation of a social change is mediated by local factors. As with farm consolidation and land-use change, which are often thought to be a part of enclosure, settlement dispersal is a complex and contingent process. Agricultural improvement is also thought to be a result of enclosure, and as will be demonstrated in the following chapter is just as complicated as settlement dispersal.
Chapter 7

Improvement

Modern historians often view improvement as a result of enclosure (Prothero 1961, 154-7; Overton 1996a, 1996b, 19, Williamson 2002, 14). This was also the opinion of many contemporary authors, such as Arthur Young (1771a, 92-3, 1771b; 187-9). Enclosure of open field systems is thought to have allowed farmers to follow their own course of husbandry, as well as encouraging marling and draining. Additionally, enclosure of common pasture extended intensive husbandry (Williamson 2002; 14). Recently historians have disagreed, particularly Allen (1992), who argued that most of the increase in output, which comprises the Agricultural Revolution, was brought about by improvement within these field systems. Certainly, open-field systems were subject to more improvement than contemporaries, and some modern historians, gave them credit for (e.g. Young 1771b, 189-90, Prothero 1961, 154-7), though it is difficult to see how certain improvements, such as thorough drainage, could have been carried out within open-field systems (Williamson 2002, 14). Conversely, enclosure did not always lead to improvement, for example, Williamson (2002, 79) has observed that some enclosed heaths were allowed to revert to waste following the Napoleonic Wars. In some instances this may have been because unsuitable land was enclosed for reasons of fashion not profit (Williamson 2002). There is, then, no simple link between enclosure and improvement. Therefore, the circumstances in which improvements were adopted need to be understood. Such an understanding is important for wider debates on the Agricultural Revolution as many traditional accounts of the period associate the increases in yields, farm output or productivity, which constituted the Revolution, with particular technological improvements (Prothero 1961, 148-206, Overton 1996b; 63-132, Kerridge 1967).

The association between the Agricultural Revolution and particular improvements began with work of Prothero (1961, 148-206). He sees the revolution as an increase of production which allowed rapid population growth from the mid-eighteenth to the nineteenth centuries (Prothero 1961, 148). He believes that this was the work of a small group of improvers, specifically Jethro Tull, Robert Bakewell, Thomas Coke Earl of
Leicester, Charles ‘Turnip’ Townshend and Arthur Young. These five individuals were responsible for the invention and popularisation of particular husbandry techniques (Prothero 1961, 148-206). Jones (1965) and John (1965) disagree with Prothero’s dating of the Agricultural Revolution, placing it between 1660 and 1740. Jones (1965, 2-7) presented evidence for many improved methods being introduced in this period, but was only able to show that they were used at this time, not the extent to which they had been adopted. Jones and John conclude that the Revolution resulted primarily from the introduction of fodder crops, which allowed farmers to adjust costs to prices better at a time of falling grain prices (John 1960; 152). This has been subject to recent critique, as Overton (1984; 124-5) suggested that farmers would not have realised that the introduction of fodder crops would result in increased grain yields, and probably introduced them in order to increase livestock densities. Kerridge (1967) also disagrees with Prothero’s dating placing the revolution even earlier than that of Jones (1965) and John (1960); in the period 1560 and 1673 (Kerridge 1967). This meant that he rejected the importance of some improvements, such as the Norfolk four-course rotation, while pushing the origins of others, such as improved fertilisers and new fodder crops further back in time (Kerridge 1967; 181-325). The revolution which he outlines centred on the adoption of convertible husbandry, with prominent roles for water meadows, fertilisers and new crops and stock (Kerridge 1967; 181-325). Chambers and Mingay (1966) return to a later dating of the Agricultural Revolution, placing it between 1750 and 1880, but recognising that there were earlier antecedents to many of the improvements implicated in it. They see the Norfolk four-course as the most significant factor. Other improvements like tools and livestock breeding were important but secondary to the new rotation (Chambers and Mingay 1966, 54). Overton (1996b) also dated the Agricultural Revolution to this period, having made a detailed study of changes in national farm productivity which shows a sharp increase in productivity from the mid-eighteenth-century, though Overton’s figures have since been disputed (Jackson 1985, Allen 1999). Overton (1996b) lists a number of improvements which may have been involved in this revolution without identifying one as the driving factor. Like Chambers and Mingay (1966, 54) and Prothero (1961, 174) Overton sees the Norfolk four-course as an important improvement, and argues that while Kerridge (1967, 181-325), Jones (1965) and John (1960) had all identified the cultivation of roots before the mid-eighteenth-
century, they were not used in a full Norfolk four-course rotation until that time. He also suggested that ploughing of permanent pasture was a possible factor in rising productivity, as this would have a higher nitrogen content than land which had been cropped before. He also considers greater regional specialisation, new breeds and increasing livestock densities, the replacement of rye with potatoes, new manures, and drainage as probable causes of increased land productivity. In addition to these, new tools, like the scythe and the Rotherham plough, increased labour productivity. As well as technical change Overton (1996b; 128, 133-192) sees institutional developments, like enclosure and the replacement of yearly contracting of farm servants with daily or weekly hiring, as an important cause of the Agricultural Revolution. Few of these improvements, however, fit closely with Overton’s dating of the Agricultural Revolution, most arguably having earlier antecedents. This is not necessarily a major problem for Overton’s argument as it is possible that they were not widely adopted until the mid-eighteenth-century despite being invented long before. Finally, Williamson (2002) has argued that the traditional Agricultural Revolution, of the mid-eighteenth to nineteenth centuries, was the result of greater regional specialisation alone. This means that particular innovations like the Norfolk four-course and underdraining were important in particular areas, to allow cultivation of suitable crops for local conditions, but none is nationally significant.

In many of these works the same or very similar improvements are given as the cause of Agricultural Revolutions of very different dates. No historian has been able to show a clear correspondence between the date of introduction of an improvement, or suite of improvements and an increase in yield, output or productivity. It is likely that this is because many improvements only became widely used long after they were first discovered. Many arguments, particularly those of Kerridge (1967), Chambers and Mingay (1966) and Prothero (1961), rely on contemporary published descriptions of agriculture to show that particular improvements were in use. In most cases these sources can only show the presence or absence of a particular improvement in a specific place and time. They can thus be misleading, for example Woodward (1990; 258) suggests that extraneous manures were used less commonly than published sources imply. Most writers were also likely to focus on unusual practices, rather than the
commonplace, as they generally sought to discover and publicise useful improvements (Woodward 1990, 252). In addition, published sources only offer a terminus ante quem for the introduction of improvements, which could have been in use long before they were recorded. For example, Thirsk (1985; 533-4) has suggested that many improvements of the period 1500-1640 were only widely publicised in the period 1640-1750. Some studies which have attempted to understand the uptake of improvements on a regional scale have shown less improvement that might have been expected. For example, in Essex, Hunt and Pam (1995; 161) have found continuity of husbandry practice during the period 1850-70, which is usually thought to have been a period of prosperity, investment and experimentation. The investment which was carried out was made by grain farmers who were forced to invest as increasing local meat prices drove rents up (Hunt and Pam 1995, 166). None the less, levels of uptake of government drainage loans were low, and the change in farm implements, shown by sale inventories, only ‘incremental’ (Hunt and Pam 1995, 169). Similarly Fieldhouse (1980; 192) demonstrated very low levels of improvement in Wensleydale before the nineteenth-century. The only significant improvements of the seventeenth and eighteenth centuries were increased manuring and liming of pastures (Fieldhouse 1980, 193). Mechanisation was also slow, most machines only being introduced in the later nineteenth-century (Fieldhouse 1980, 193). On the whole, however, it is very difficult to determine the rate at which any particular improvement spread through the farming community, either nationally or regionally. Perhaps the only way to observe the process directly is through small scale case studies like the ones presented here. In order to use these to give an impression of the diffusion of improvements, however, a very large number would be required, many more than is practical in a single piece of research.

Case studies may however be used to establish the mechanisms by which improvements were introduced to individual farms, and the factors which encouraged or prevented it. Some have been discussed at a national or regional scale. Agricultural product prices have commonly been thought to be influential. Jones (1965), for instance, argues that falling grain prices relative to meat in the late seventeenth and early-eighteenth centuries encouraged those farmers who could not switch to livestock to adopt improvements to offset falling prices with increased production. This interpretation
has been criticised by Overton (1984) who suggests that farmers were unlikely to realise that fodder crops would increase grain production. He also demonstrates that there was no increase in livestock numbers meaning that manure supplies did not increase. Similarly, Hunt and Pam (1995) argued that, in Essex, increasing rents as a result of a rising meat price led arable farmers to improve. Johnstone (2009; 43-44) has also linked increasing grain rents, imposed as a result of rising grain prices, to increased improvement, including new crops and rotations, and extension of the cultivated area. Others (e.g. Prince 1989; 30) have observed links between rising grain prices during the Napoleonic Wars and agricultural improvements such as the conversion of pasture to arable.

Post-processual archaeologists have criticised such deterministic explanations. Tarlow (2007; 40) has suggested that because most historians think that improvement was ‘common sense’ they have tended to ask why it did not happen earlier rather than why it happened at a particular time. She has observed that in some instances inappropriate improvements were used, and thus caused a loss to the farmer (Tarlow 2007, 52-4), though she is unable to assess the frequency with which this occurred. She argues that this was because improvements had a symbolic value beyond their monetary worth, as they demonstrated subscription to the belief in the moral imperative to farm land efficiently (Tarlow 2007, 35). It is difficult to compare the strength of this belief to the strength of the desire for profit, as improvements carried out for symbolic reasons could lead to profit by chance. Similarly, cases where the improvement failed could be the result of poor judgement rather than disregard for profit. Finally, it is unlikely that such views were universally held and may not have had much influence on poorer smallholders, who could not afford to spend money on display. None the less, status display and fashion probably did have some effect, particularly as farms were often visited by people interested in agricultural improvement (e.g. Wykes 2004; 47). This provided an obvious forum for display. It is also notable that the moral imperatives which Tarlow discusses are clearly present in contemporary literature (e.g. Young 1772; ix).

A further important question is whether the aristocracy or the yeomanry was more involved in improvements, regardless of whether they were for prestige or money. This could influence the regional uptake of improvements, as land tenure varies
Prothero (1961, 161) thought the revolution was aristocratic, following contemporary writers in representing small framers as backward. This is perhaps oversimplified, but landlords could encourage the uptake of improvements on their tenants’ farms through two methods. Firstly, they could lead by example. There has been much criticism of the influence of aristocratic farming, as some of the advice given by aristocratic improvers was impractical or simply wrong (Overton 1996b; 4). However, recent work has suggested that a genuine effort on the part of some aristocrats created an atmosphere for improvement in their local area (Brown, 1999b). Brown (1999b; 195) has pointed out that Oxfordshire, which lacked a major improving landlord, lagged behind other counties in agricultural technology. Landlords could also use leases to encourage improvements. The use of clauses specifying improved farming; the introduction of leases for fourteen or twenty-one years, thus giving the tenant the security to carry out improvements; or the increase of rent gradually to put an increasing demand on the tenant might have had some effect (Johnstone 2009; 38). All were considered to be beneficial by contemporaries (Johnstone 2009; 38). Some modern historians agree, for example Colyer (1981; 80) believed that the introduction of printed leases to Cardiganshire in the late nineteenth-century was an attempt to improve a traditionally backward part of the country. On the other hand Dodgshon (1978; 5) believed that fixed term leases may have discouraged marling, as its effects were slow, and thus would not be completed until after the tenant had left. Wade-Martins and Williamson (1998), in a detailed study of Norfolk leases, showed that in some cases improvement occurred on farms which had vague agreements, or preceded the introduction of strict husbandry clauses (Wade-Martins and Williamson, 132-3). This suggests that at least some tenants took it upon themselves to improve their farms. Allen (1992) has gone so far as to argue that the Agricultural Revolution occurred on small farms in open-field systems, and was later appropriated by the aristocracy through enclosure.

These factors; prices, fashion, estate policies and landlords’ attitudes, tenants efforts, and probably many others, influenced the uptake of improvements on particular farms. As argued above, a better understanding of their adoption by individual farms would aid in identifying the actual causes of productivity increase. The case studies presented here are unable to provide a picture of the rate of diffusion of specific
improvement in Northumberland, as this would require an unrealistically large sample; however they do allow direct observation of the interplay of the factors outlined above. This allows the development of a much more subtle and complex understanding of individual improvement events. It will be shown that improvement only occurred when a large number of factors came together. These were however never exactly the same factors in any two cases. As a result it is not possible to identify a set of factors which necessarily led to improvement. This is best understood by considering one case-study at a time.

Howick

The high quality documentation available for Howick, particularly those parts of it which comprised the Grey’s home farm, allows detailed examination of the way in which improvements were introduced. This shows that improvement occurred in bursts of intensive activity encompassing many different types separated by periods of reduced innovation. The leasehold farms show similar bursts of activity, but are less well documented than the home farm. These periods of improvement occurred for a variety of reasons, and embodied the factors discussed above and many others. They were usually associated with the arrival of a new owner or tenant.

The eighteenth-century

Little can be said about eighteenth-century improvement at Howick. However, the fact that several leases were granted in 1712,\(^{400}\) may imply that the estate was reorganised at around this time. If so this was probably because of Sir Henry Grey’s inheritance of Howick in 1710 (Bateson 1895; 352). He may have had different ideas about estate management than his forebears. As discussed above, the leases may have had an effect on the diffusion of improvements by imposing modes of husbandry, and by giving greater security to the tenants through longer terms (but see Wade-Martins and Williamson 1998). More formal control over the estate, through the use of written leases, could be seen as an improvement in itself. Another form of eighteenth-century

\(^{400}\)DUSC.GRE/X/P72 1\(^{st}\) June 1712 lease of Howick Low Flatt, South Farm, Lowfield Farm and North Moor, DUSC.GRE/X/P72 9\(^{th}\) March 1712 lease of Howick High Flatts, Butterlaw and Pilferlands, DUSC.GRE/X/P72 1\(^{st}\) June 1712 lease of Howick Southfield Farm, DUSC.GRE/X/P72 1\(^{st}\) June 1712 lease of Howick Pasture Farm and DUSCS GRE/X/P72 9\(^{th}\) March 1712 lease of Howick Heugh and Low Farm.
improvement is recorded in a passage in Culley’s *Observations on Livestock* which was copied by someone in the estate office during the nineteenth-century.\(^\text{401}\) The extract describes two cows which were bred and fattened in 1787 by Sir Henry Grey, son of the Henry Grey who introduced the leases.\(^\text{402}\) This suggests that Henry Grey was using the farm to demonstrate his knowledge of agriculture to his peers and thus following fashion.

*The early-nineteenth-century*

From 1804 there seems to have been a great deal of change in most areas of farm activity. Some of these were to the administration of the farm. Several documents, filled out on a regular basis, were introduced for the information of Charles Grey, to whom the estates had passed. Of these the most numerous are the rentals and the farm returns. The former give the amount of rent due from, and paid by each tenant every six months. The latter were filled out fortnightly, and give details of the purchase and sale of stock, use of different types of grain, and the labour performed by each worker on each day.\(^\text{403}\) This represents a greater amount of attention paid to farm and estate management. The development was either at the instigation of Charles Grey himself or his land agent Robert Anderson who filled out the forms. In addition to being an improvement in themselves, they provide a source for tracking improvement at Howick from this time on. According to the farm returns there was a large amount of building work between 1804 and 1808.\(^\text{404}\) This is mostly represented by records of labourers and hinds leading or breaking stones. Some may relate to drainage or field boundary construction; on the other hand some activities are certainly connected with the construction of farm buildings such as thatching, and assisting the mason.\(^\text{405}\)

Some of this work may be connected with the division of the farm into two halves to allow part of it to be let to a tenant. From the beginning of the nineteenth-century

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\(^\text{401}\) DUSC.GRE/X/P81 January 1\(^\text{st}\) 1789 An account of stock upon the Farm of Howick Belonging to Sir Henry Grey Bart. and DUSC.GRE/X/P302/100 Particulars of the weight and value of 2 oxen bred and fed by Sir Henry Grey, Bart., of Howick and killed in March 1787. (Copied from Cully’s *Observations on Live Stock*.).

\(^\text{402}\) DUSC.GRE/X/P302/100 Particulars of the weight and value of 2 oxen bred and fed by Sir Henry Grey, Bart., of Howick and killed in March 1787. (Copied from Cully’s *Observations on Live Stock*.).

\(^\text{403}\) DUSC.GRE/X/P81 rentals 1803-1843 and DUSC.GRE/X/P7-12 farm returns 1803-1843.

\(^\text{404}\) DUSC.GRE/X/P7 farm returns.

\(^\text{405}\) E.g. DUSC.GRE/X/P7 27\(^\text{th}\) June 1804 farm return and DUSC.GRE/X/P7 27\(^\text{th}\) September 1804 farm return respectively.
until 1807 the home farm was a single unit. In 1808 surveys were made which divided the farm into Pasture House and South Side, with The Heugh and The Flatt used for grazing by both. This reused the farm houses and names of two of the eighteenth-century farms. This was probably to allow South Side to be let, as it was by 1810, to people called Messrs Thompson for £1050 per annum. It is likely that some of the building work was the refurbishment of the farm house to modernise it for the new tenant. It may also have included the refurbishment of Pasture House so that it could be used as the demesne farm, as the eighteenth-century steward’s house was within South Side’s lands. This change included the rearrangement of fields east of Pasture House, shown on plans of 1759 and 1866 (Fig. 7.1). This date can be narrowed down as an 1805 survey lists Great and Little Butterlaw, which were probably removed by the reorganisation, while an 1808 survey lists South Moor which was created by it.

Other changes to agricultural practice occur at this time. Drainage is mentioned many times in farm returns between 1804 and 1808 but less so afterwards. Some innovation and experimentation in crop and animal husbandry also happened in the early-nineteenth-century. For example, a threshing machine was used from 1804, harrowing is also mentioned in the same year, and lime was common during this period. Lime is ancient and its use is unsurprising, though it may have become more common during the Agricultural Revolution (Havinden 1974). Similarly, it is possible that the other two techniques had been in use before the 1804 return, though the threshing machine was a recent innovation (Harvey 1970; 93). A type of hoe called a skuffler was

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406 E.g. DUSC.GRE/X/P81 22nd January 1805 Survey of Howick Farm or DUSC.GRE/X/P81 1807 Particulars of tillage land.
407 DUSC.GRE/X/P111 18th June 1808 Survey and valuation of Howick Pasture House Farm and DUSC.GRE/X/P81 15th September 1808 survey of Howick South Farm.
408 DUSC.GRE/X/P81 1811 rental.
409 DUSC.GRE/X/P276 1759 plan of Howick by D. Hastings.
410 DUSC.GRE/X/P276 1759 plan of Howick by D. Hastings and 1866 1st edition Ordnance Survey http://digimap.edina.ac.uk/historicdownloader/downloader?javaxsessionid=876F0BBEC797212BF40AFCB8FA97execution=e1x1 retrieved 6/6/2011.
411 DUSC.GRE/X/P81 22nd January 1805 Survey of Howick Farm and DUSC.GRE/X/P111 18th June 1808 Survey and valuation of Howick Pasture House Farm.
412 DUSC.GRE/X/P7 farm returns.
413 DUSC.GRE/X/P7 farm returns 23rd March 1804, 6th April 1804, June 19th 1804.
used from 1807.\textsuperscript{414} Ashes and charcoal are also mentioned in returns of this period,\textsuperscript{415} both could have been used as fertilisers though they may have been related to other activities. Farm horses, which were beginning to replace oxen for traction in improved agriculture increased from 1803 to 1814 (Fig. 7.2).\textsuperscript{416} Experimentation with crops is also revealed, as some varieties are only mentioned once and only occupy a small amount of labour. The earliest example is cabbage mentioned in the 5\textsuperscript{th} April 1805 return.\textsuperscript{417} Buckwheat is also mentioned in this year, and again in 1809, but only occupied one person for one day in each case.\textsuperscript{418} Similarly, mangold wurzel was experimented with in the 28\textsuperscript{th} November 1828 return.\textsuperscript{419} A clearer case of experimentation occurred in 1814, as a document of 24\textsuperscript{th} December gives the results of an experiment in growing different types of turnips.\textsuperscript{420} ‘Swedish’, ‘white’ and ‘red top’ turnips were all tried, four perches of each being planted. White gave the greatest overall yield but produced fewer tops than the other two. Of these red top produced both greater root and top yields than Swedish.\textsuperscript{421} Innovation seems to have continued into the 1820s, with seed drills first mentioned in 1814,\textsuperscript{422} and ribbing in 1820.\textsuperscript{423} Seaweed was tried as a fertiliser in 1827,\textsuperscript{424} but must have been rejected as it was not mentioned again until 1837 and did not become common until 1843.\textsuperscript{425} Some changes to the crops sown and stock kept on the farm were also made from 1814 to 1833. During this time the quantities of wheat and barley planted increase, as do the numbers of sheep and cattle (Figs. 7.3, 7.4, 7.5 and 7.6).\textsuperscript{426} At the same time the proportion of wheat and barley sold (as opposed to being used on the farm or in the house) grew (Figs. 7.7 and 7.8),\textsuperscript{427} while cattle and sheep were

\begin{itemize}
\item \textsuperscript{414} DUSC.GRE/X/P7 August 7\textsuperscript{th} 1807.
\item \textsuperscript{415} E.g. DUSC.GRE/X/P7 March 23\textsuperscript{rd} (though ashes is common throughout).
\item \textsuperscript{416} DUSC.GRE/X/P7 1803 farm returns and DUSC.GRE/X/P8 1814 farm returns.
\item \textsuperscript{417} DUSC.GRE/X/P7 5\textsuperscript{th} April 1805.
\item \textsuperscript{418} DUSC.GRE/X/P7 1805 and 12\textsuperscript{th} Mary 1809 farm returns.
\item \textsuperscript{419} DUSC.GRE/X/P7 28\textsuperscript{th} November 1828 farm return.
\item \textsuperscript{420} DUSC.GRE/X/P111 24\textsuperscript{th} December 1814 Comparative weight of an acre of Swedish white and red turnips growing on Pilferlands at Howick.
\item \textsuperscript{421} DUSC.GRE/X/P111 24\textsuperscript{th} December 1814 Comparative weight of an acre of Swedish white and red turnips growing on Pilferlands at Howick.
\item \textsuperscript{422} DUSC.GRE/X/P8 12\textsuperscript{th} August 1814 farm return, in this case used for turnips.
\item \textsuperscript{423} DUSC.GRE/X/P9 3\textsuperscript{rd} March 1920 farm return.
\item \textsuperscript{424} DUSC.GRE/X/P9 14\textsuperscript{th} December 1827 farm return.
\item \textsuperscript{425} DUSC.GRE/X/P10 13\textsuperscript{th} January and 29\textsuperscript{th} December 1837 farm returns and DUSC.GRE/X/P11 15\textsuperscript{th} September 1843 farm return.
\item \textsuperscript{426} DSUC GRE/X/P7-9 1814, 1823 and 1833 farm returns.
\item \textsuperscript{427} DUSC.GRE/X/P7-9 1814, 1823 and 1833 farm returns.
\end{itemize}
always mostly sold (Figs. 7.9 and 7.10). This all suggests an attempt to maximise the farm’s profitability.

There appears therefore to have been a major period of improvement in the early decades of the nineteenth-century. This comprised the rearrangement of the township and enlargement of the demesne farm, investment in building and drainage, experimentation, new crops and new machines. It coincides with the inheritance of the estate by Charles Grey (later the Second Earl) in 1808 (Bateson 1895, 352), as he had probably begun to manage the estate during his uncle’s, Henry Grey’s, old-age (Smith 1990, 136). The earliest changes are also contemporary to the rise of grain prices due to the Napoleonic Wars, though experimentation and the increase in barley, wheat and stock continued well after the depression following their end.

There was much less activity during the 1830s, which may be attributable to Grey’s term as Prime Minister (Smith 1990; 258), or the economic downturn following the end of the Napoleonic Wars. From this time innovation slackens off with the only new introductions being mechanical grubbing in 1835 and the use of oil cake for cattle fattening in 1832. Activities associated with building and draining occur at a much lower level than during the first decade of the nineteenth-century. In this case the reduction in improvement activity seems to involve both personal and economic factors.

This first phase of improvement appears to be strongly connected with the life of Charles Grey. It does, however, involve many other factors. For example, the increase in improvement occurs at the same time as a rise in prices at the start of the Napoleonic Wars, which may have provided capital for some improvements. None the less improvement did continue after the end of the war in 1815. It may also be related to the growing fashion for agricultural improvement in this period, though this was more associated with Tories that Whigs (Gent 2010). Finally, it fits in with national trends in farming technology.

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428 DUSC.GRE/X/P7-9 1814, 1823 and 1833 farm returns.
429 DUSC.GRE/X/P9 3rd July 1835 farm return and DUSC.GRE/X/P9 17th February 1832 farm return.
430 DUSC.GRE/X/P9 1830-1839 farm returns.
The 1840s and 1850s

Nationally, and at Howick, the 1840s mark a period of renewed investment and innovation (Williamson 2002; 140). The improvements carried out at Howick were probably mostly on the initiative of Frederick William Grey, the third son of Charles Grey, who seems to have run the estate on the behalf of his brother Henry 3rd Earl Grey. As before administration became more complex, and a large number of documents date to this period. These include the ‘Building’ and ‘Draining Books’, which record investment in the leasehold farms, and the ‘Cultivation Returns’ which report the crops grown by each tenant. At the same time the farm returns began to be filled in separately for Redstead and Pasture House, and the crops harvested from each field of the home farm recorded in notebooks.

The earliest agricultural improvement was the rebuilding of many of the village cottages. Plans of these, drawn in around 1841, survive as do most of the buildings. These structures are quite grand and ornate which reflects the increasing importance of the estate village as a status symbol in the mid-nineteenth-century (Williamson 2002; 162-181). One of the buildings bears the Grey arms (Fig. 7.11). They are well equipped with piggeries, privies and ashpits in yards behind them (Fig. 7.12). The importance of the visual impact of the village is rendered by tenancy agreements which survive from 1846. These required that no rubbish was left in the streets, that the gardens were kept neat, and that the windows were repaired and kept clean. They also sought to control the tenants morally: requiring that the sexes were separated in the bedrooms on

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431 This is demonstrated by the fact that many letters in the estate correspondence are signed by or addressed to him e.g. DUSC.GRE/X/P125/10 in which William Burn, steward at Redstead, informs Grey of the methods of cattle feeding being used and the fact that he is running out of linseed and asks FW Grey’s approval for changes to the labourers’ wages.
432 E.g. DUSC.GRE/X/V101building book, DSUC GRE/X/V102-3 drainage books.
433 DUSC.GRE/X/V101building book, DSUC GRE/X/V102-3 drainage books.
434 Cultivation returns
435 DUSC.GRE/X/P7-12 farm returns, DUSC.GRE/X/V111 1845-1881 crop book.
436 DUSC.GRE/X/P277 1841 plans of cottages to be erected at Howick.
437 DUSC.GRE/X/P277 1841 plans of cottages to be erected at Howick.
438 DUSC.GRE/X/P69 1846 conditions of letting the cottages at Howick.
439 DUSC.GRE/X/P69 1846 conditions of letting the cottages at Howick.
the upper floors, and that no lodgers or dogs were kept.\textsuperscript{440} The prohibition against dogs was probably intended to prevent poaching.

The village cottages were not the only construction work performed at Howick during this time. From 1846 to around 1858 accounts and other documents show that building work was carried out at several farms on the Grey estates. This appears to have been an estate wide programme,\textsuperscript{441} but included both Howick farms. Much work was done at Redstead which may have been almost completely reconstructed and appears much larger on the 1866 Ordnance Survey than on earlier plans (Fig. 7.12). Various different types of building are recorded as either being built or refurbished during this time. The cattle lodge, offices and cottages are mentioned in 1846,\textsuperscript{442} and in 1847 the liquid manure tanks and stables were repaired or built and a weighing machine and turnip cutter were installed at the cattle lodge. In the same year a Wilkin and Dickman machine was set up at the farm offices.\textsuperscript{443} In 1855 the piggeries, manure shed, turnip shed, cattle lodge and offices all received attention.\textsuperscript{444} At least some of this was the restoration of existing buildings as a list of new and restored cottages on the estate mentions that four cottages were restored at Redstead in addition to three newly built, two storied, cottages.\textsuperscript{445} Work was also carried out at Pasture House though this seems to have been on a smaller scale, as it does not have entire documents devoted to it. This may be because the buildings at Pasture House more recent than those at Redstead, having probably been built in the 1830s.\textsuperscript{446} However it appears that Redstead was being developed into a ‘model farm’ to be used for display and experimentation rather than

\textsuperscript{440} DUSC.GRE/X/P69 1846 conditions of letting the cottages at Howick.
\textsuperscript{441} E.g. DUSC.GRE/X/P182 Farm Cottages (account of expenditure).
\textsuperscript{442} DUSC.GRE/X/P233 7th October 1846 Summary of Expenses in erecting Red Stead Buildings.
\textsuperscript{443} DUSC.GRE/X/P233 30th November 1847 Analysis of the Cost of Erecting Red Stead Buildings.
\textsuperscript{444} DUSC.GRE/X/P182 1845-1855 Accounts of expenditure on various farm buildings on the Howick estate.
\textsuperscript{445} DUSC.GRE/X/P182 13th October 1858 List of Cottages New & Restored.
\textsuperscript{446} Pasture House farm was rebuilt on a site to the south of its eighteenth century position, as shown on the 1866 Ordnance Survey (http://digimap.edina.ac.uk/historicdownloader/downloader;jsessionid=5B687A18BE1F83F10AA3ED16E5A62A5C?execution=e1s1 retrieved 12/03/2012) (Fig. 7.1 DUSC.GRE/X/P276 1759 plan of Howick). This must have occurred after 1829 as a list of fields from this period includes fields which were removed during reorganisation of the field system related to the relocation of the farm (DUSC.GRE/X/P81 7th November 1829 ‘A particular description of the crop of corn of the pasture house and Southside farms together with the Longhorton tithe’), while there are/No other periods of intensive buildings activity recorded in the farm returns until the 1840s. It is unlikely to have occurred after 1840 as there are much more detailed building accounts from this period onwards which would reveal the complete rebuilding of a farm if it had occurred, though this is of course an argument from silence (DUSC.GRE/X/V101-103 buildings books 1841-1846).
strictly profitable agriculture. An insurance policy of 1856 describes the farms towards the end of this phase of building revealing the difference between them. At Pasture house it lists four cottages, a large stable with hay house, two turnip houses, one slaughter house, one cow byre, one loose house, a corn barn, two hovels, a granary over the stable, a cart shed, piggeries, a poultry house and a steam engine and boiler house. While at Redstead there was the farmhouse and granary, four cottages, two stables with a hay house and harness room, a cart shed, a granary, a large feeding house, a steaming house, a fodder house with machinery lofts, two implement houses, a liquid manure pump, a saw mill shed with an engine house and three cottages detached from the main building.\footnote{DUSC.GRE/X/P254 26th December 1856 fire insurance policy.} This shows that not only did Redstead have more buildings overall, it also had a greater variety of specialist buildings suggesting a more modern farm. This was undoubtedly a result of the recent building work there, and probably part of the creation of a model farm. Further evidence that it was a model farm is that the fields around it were rearranged to create a neater pattern, and several plantations made to enhance its aesthetic qualities (Fig. 7.13).

In addition to building, investment was made in draining. The farm returns record a high level of drainage related activities from the 15\textsuperscript{th} April 1842 onwards.\footnote{DUSC.GRE/X/P11 1842-1845 farm returns.} The first references to drainage tiles occur during this time, as the 10\textsuperscript{th} June 1842 and 27\textsuperscript{th} October 1843 returns mention ‘leading pipes from ship’ and ‘leading tiles from the Rapid’ respectively.\footnote{DUSC.GRE/X/P11 10\textsuperscript{th} June 1842 and 27\textsuperscript{th} October 1843 farm returns.} Both of these are ambiguous though ‘laying down tiles at middle pasture field’ which occurs in the 8\textsuperscript{th} December 1843 return is not.\footnote{DUSC.GRE/X/P11 8\textsuperscript{th} December 1843 farm return.} The greater bureaucracy at this time means that there are other sources for drainage. The Draining Books recorded all draining on the Grey estates include entries for Howick from 1840 to 1886. Other farms also feature showing that, like building, improvement of drainage was an estate wide policy.\footnote{DUSC.GRE/X/V102-3 1840-1886 drainage books.} These books record that both arable and pasture were drained at Redstead and Pasture House, and that approximately half the fields of both were drained. The total expenditure on these farms was £904-8-10.\footnote{DUSC.GRE/X/V102 1840-1867 drainage book.} A table drawn up to show
Expenditure on drainage at the Howick farms shows that it was continuous between 1843 and 1855. Until 1853 expenditure was between £133-19-10 and £291-10-4, but decreased to £30-16-0 in 1854 and £9-4-0 in 1855 as the project drew to a close. \(^{453}\) After 1855 the table shows no expenditure until 1858. \(^{454}\) At this time a loan of £1487-15-7 was acquired from the Lands Improvement Company to allow further draining across the whole estate. \(^{455}\) This expenditure had ended by 1860. \(^{456}\)

Experimentation with new crops, husbandry practices and manures also recommenced in the mid-nineteenth-century. The first indications of this are records of bone dust and nitrate of soda in a farm return of 27\(^{th}\) May 1842. \(^{457}\) Bone later became common, but the nitrate of soda appears to have been an experiment. Sea weed, which had been tried and rejected early in the nineteenth-century, became common from 1843, \(^{458}\) and guano, which was first mentioned in a report on an experiment of 1845, \(^{459}\) became common from 1847. \(^{460}\) Finally, liquid manure is first mentioned in the 25\(^{th}\) February 1848 farm return and was frequently used later. \(^{461}\) New machines were bought to apply these manures and are recorded in inventories from 1851. These include a guano sower, a bone sowing machine and a liquid manure cart. \(^{462}\) Experiments were conducted to test different types of fertiliser and application methods. The earliest of these is recorded in a document of 28\(^{th}\) July 1845. \(^{463}\) Eight different manures were applied to turnips all of which were combinations of bone dust, dung and guano, occasionally the bone was dissolved in sulphuric acid. Unfortunately the results of the test were not given. Another experiment was carried out in 1846, this time on a grain crop. Bones acid and charcoal, guano lime and soil, charcoal dust, and Muspratt’s were

\(^{453}\) DUSC.GRE/X/P273 1845-1862 expenditure on draining.
\(^{454}\) DUSC.GRE/X/P273 1845-1862 expenditure on draining.
\(^{455}\) DUSC.GRE/X/P343 1\(^{st}\) September 1857 particulars of drainage executed under Lands Improvement company.
\(^{456}\) DUSC.GRE/X/P273 1845-1862 Expenditure on draining.
\(^{457}\) DUSC.GRE/X/P11 27\(^{th}\) May 1842 farm return.
\(^{458}\) DUSC.GRE/X/P11 1843 farm returns.
\(^{459}\) DUSC.GRE/X/P261 28\(^{th}\) July 1845 memorandum of application of manures of different kinds used for turnips in the middle pasture field.
\(^{460}\) DUSC.GRE/X/P12 1847 farm returns.
\(^{461}\) DUSC.GRE/X/P12 25\(^{th}\) February 1847 farm return.
\(^{462}\) DUSC.GRE/X/P236 1851 valuation of stock and implements.
\(^{463}\) DUSC.GRE/X/P261 28\(^{th}\) July 1845 memorandum of application of manures of different kinds used for turnips in the middle pasture field.
all tested. Muspratt’s contents are unknown but is must have been a creation of a Liverpool chemical manufacturer of the same name. In this experiment a control, on which no manure was applied was also used. The highest yielding was guano, and the lowest the control, though none of the differences between them were great. Finally, another experiment tested dung, guano, bones in acid with charcoal, and a mixture of dung and guano on barley in Bolt Hill Field. In this dung was the most successful, which seems to have surprised the author of the report as a note was made next to the results emphasising that the experiment had been “tried with great care and may be relied on – though the result is rather different from what we expected”.

New crops were also introduced during this period. These include the Swedish turnip which was first mentioned in the 28th February 1845 farm return, though as noted above it had been tried unsuccessfully in an 1814 experiment. In 1847 rape and artichokes were introduced. New techniques and machines are also recorded during this period. For example, subsoil ploughing was first mentioned in 1844, and the cultivator in November of the same year. Steam power seems to have been introduced in 1847, as a steam engine appears in a March 1847 endorsement to a fire insurance policy. Finally, a clod-crusher is listed at Redstead in an 1851 inventory. This inventory shows other types of equipment adopted during this period of improvement, including several different types of harrow; Ransoms, Finch and Vicarson ploughs; a turnip sower and a sowing machine. These are all at Redstead while at Pasture House only a Ribbing plough is recorded, further suggesting that the former was a model farm. An 1852 valuation of Redstead adds a dressing machine, a bean sower, a machine

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464 DUSC.GRE/X/P200/5 September 16th 1846 Quantity of Corn & thrives Crop of 1846 Howick South Farm (details of the experiment are given at the bottom of the document).
465 DUSC.GRE/X/P200/5 Result of Experiment with different descriptions of Manure on the Crop of Barley in the Bolt Hill Field Howick 1847.
466 DUSC.GRE/X/P11 28th Feb 1845 farm return.
467 DUSC.GRE/X/P111 24th December 1814 Comparative weight of an acre of Swedish white and red turnips growing on Pilferlands at Howick.
468 DUSC.GRE/X/P12 3rd December 1847 farm return.
469 DUSC.GRE/X/P11 29th March 1844.
470 DUSC.GRE/X/P11 22nd November 1844 farm return, this may be the same as Uley’s cultivator mentioned in an 1851 inventory (GRE/X/P236).
471 DUSC.GRE/X/P254 Christmas 1854-6 insurance policy for stock, farm implements etc. (indorsed 11th March 1847).
472 DUSC.GRE/X/P236 2nd June 1851 valuation of stock and implements.
473 DUSC.GRE/X/P236 2nd June 1851 valuation of stock and implements.
for planting grass seeds, a corn sower and a portable railway. There is also some evidence for pasture improvement as a list of grasses, clovers and tares to be included in a mix for permanent pasture, though undated, was filed with other documents of 1847-8. The farm returns also refer to tares in 1847 and Italian Rye Grass in 1849, both of which may have been used to improve pasture.

Innovations were also made in cattle feeding from the 1840s onwards. Little evidence is available for cattle feeding before this time other than references to mangold wurzel and cattle cake in the farm returns of the 1820s and 1830s. From the 1840s there is a huge increase in information as cattle feeding became a much more scientific practice. The earliest indication is a group of documents of 1846 which had been filed together. Three documents are descriptions of cattle feeding on farms owned by Lord Prudhoe written by Mr Marshall, Mr Walker and Mr Thomas who appear to be bailiffs or stewards. This shows Grey and his employees seeking out new methods of cattle feeding. There is also a description of cattle feeding at Howick which is as follows. A linseed compound was made three times a day. To do this the linseed was crushed and boiled for fifteen to twenty minutes with ground corn until it became a jelly. Then one and a half gallons of water were added for each four pounds of linseed and ground corn. This was then poured onto cut hay and straw at seven pounds of straw for every four pounds of mixture. It was worked with prongs and rammers, until the chaff was saturated, taken out of the mixing trough and spread onto a cooling bed. This was fed in a daily routine which consisted of one feed of the compound at 6am, a second at 9am, a third at 1pm and a fourth at 4:30pm. At 8pm the beasts were looked through and given a small quantity of straw and hay of which they ate little. The accounts from the other farms were similar but used different quantities and times. This procedure is quite complex and shows the amount of attention paid to improved agriculture at Howick during this period. There is a covering letter enclosed signed by William Burn who was steward of Redstead. He wrote that he was running out of linseed and that Grey should buy some if he could get a good price. He also mentions lentils which Grey had wanted to try.

474 DUSC.GRE/X/P83 9th June 1852 valuation of stock and implements.
475 DUSC.GRE/X/P200/5 two lists of grass seeds for permanent grass.
476 DUSC.GRE/X/P12 13th August 1847 farm return and GRE/X/P12 19th October 1849 farm return.
477 DUSC.GRE/X/P125/10 details of cattle feeding.
478 DUSC.GRE/X/P125/10 letter 16th November 1846 W. Burn to F.W. Grey.
suggesting more experimentation. Several documents list feeding stuffs and show that a wide variety was tried including corn meal which was used between 1846 and 1851, clover which was fed in 1849 and 1851, crushed oats employed in 1852 and 1853, and Indian corn used between 1846 and 1848. Again, implements for processing each are recorded in inventories; both the 1851 and 1852 inventories include crushers for oil cake and linseed, and feeding boxes at Redstead. F.W. Grey appears to have been keen to share knowledge gained from experiments, as he responded to a questionnaire on cattle and sheep feeding sent to him in 1852. In this he mentions, among other things, that he had had success with feeding in boxes, but that he preferred stalls for collecting manure, and that experiments had been carried out with a variety of foodstuffs in 1847 and 1848, in which it was found that there was no advantage in cooking food. Cooking was dispensed with from that time on as a result.

Some changes were also made in management of the labourers. Particularly from May 1847 when the farm returns begin to be submitted separately for Pasture House and Redstead. This seems to be partially because many more labourers were employed and would no longer fit on one form. In contrast to the previous system few worked every day in any particular week, so that the amount of labour done was probably much the same. Also from this time women began to be employed. Christmas Day was established as a holiday during this period. The first indication is that in 1844 one labourer was recorded as ‘Christmas Day leading own turnips.’ From 1845 they seem to get a half day, and from 1850 the Redstead labourers had the whole of Christmas Day off, with the exception of two who were employed feeding the cattle. In 1849 the Redstead labourers had the 13th November off as a holy-day, though it is not clear which one. These holidays, however, do not seem to have applied to workers at Pasture

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479 DUSC.GRE/X/P186 enclosures within cattle journal.  
480 DUSC.GRE/X/P186 enclosures within cattle journal.  
481 DUSC.GRE/X/P236 2nd June 1851 valuation of stock and implements DUSC.GRE/X/P283 6th June 1852 valuation of stock and implements.  
482 DUSC.GRE/X/P186 cattle feeding questionnaire and responses.  
483 DUSC.GRE/X/P186 cattle feeding questionnaire and responses.  
484 DUSC.GRE/X/P12 7th May 1847 farm return.  
485 DUSC.GRE/X/P12 7th May 1847 farm return.  
486 DUSC.GRE/X/P11 5th January 1844 farm return.  
487 DUSC.GRE/X/P11 3rd January 1845 farm return.  
488 DUSC.GRE/X/P12 28th December 1850 farm return.  
489 DUSC.GRE/X/P12 16th November 1849 farm return.  

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House. A final change in the organisation of labour was the use of itinerant labour at Pasture House during harvest from 1851.

There is some evidence of communication between F.W. Grey and the stewards or land agent on improvements which he had read or heard about. One folder of papers contains cuttings from agricultural journals which had been sent to someone in the estate office. Most of these were from the *North British Agriculturist* and included articles on ‘The Development of the Sources of Ammonia and its Extended Application as a Manure’ by Thomas Anderson, Chemist to the Highland Agricultural Society, a ‘Report on the Use of the Grubber’ by Mr James Porter, Land-Steward at Monymusk, Aberdeenshire and other cuttings where the item of interest is unclear. Interestingly a grubber is mentioned in both inventories and farm returns, which shows that the articles were chosen to be of particular relevance to the farm. There were also transcripts of an article on stable management from *The Agricultural Gazette*, dated 1852, and another of 1850 on the cultivation of mangold wurzel, as well as some Notes on a ‘cheap mode of building the walls of a poultry house’ from *Le Journal d’Agriculture Pratique*.

There are also some changes to agriculture at Howick which are not strictly improvements. The quantity of wheat, barley and oats sown, and the numbers of farm horses, sheep, cattle and pigs decline sharply by 1848 (Figs. 7.3, 7.4, 7.15, 7.2 7.5, 7.6 and 7.16). This may mark a reduction in activity, perhaps the first signs of the on-coming Depression which was to begin a little more than two decades later. Despite this four fields of permanent pasture at Pasture House were ploughed up in 1848.

The late nineteenth-century is a period of improved agriculture beginning with the inheritance of the estate by the sons of the second Earl. In this case it involved experimentation, building, drainage, more intensive administration, new methods of animal husbandry, rearrangement of the farms, and new machines. An increased volume of documentation allows an even better understanding of the factors governing the

490 DUSC.GRE/X/P12 19th September 1851 farm return.
491 DUSC.GRE/X/P182 press cuttings.
492 DUSC.GRE/X/P182 press cuttings.
493 E.g. DUSC.GRE/X/P236 2nd June 1851 valuation of stock and implements.
494 DUSC.GRE/X/P182 notes from *Agricultural Gazette* and *Journal d’Agriculture Pratique*.
495 DUSC.GRE/X/P12 1848 farm returns.
496 DUSC.GRE/X/V111 1845-1881 crop book.
introduction of the improvements to Howick farm. As before, the fact that the changes follow inheritance suggests that it was due to a new owner, Frederick W. Grey, bringing new ideas of how to run the estate. He was clearly responding to fashion as well as profit, as the architectural embellishments of the cottages, and the creation of the model farm at Redstead demonstrate. The influence of the peers to whom this display was directed is also apparent from Frederick’s correspondence with neighbours on cattle feeding and from publications, as well as his response to the questionnaire. The political views of his colleagues may also have been significant, as it has been shown that during the nineteenth-century the Whigs lost the urban associations which they had had during the time of the Second Earl, leading many to put more effort into their estates (Gent 2010).

The tenants of Sea Houses were also involved in improvement to a certain extent. There is less evidence, but this is more likely to be because of biases in the sources rather than any lack of improvement. In order to understand the context of the improvements made at Sea Houses it is necessary to describe some of their rental history. In 1830 a Mr Thompson took the lease of Sea Houses Farm for £250 per annum. Thompson began to have problems with arrears in 1834 before the Agricultural Depression, but managed to stay until his death in 1853. His executors were then allowed his debts in exchange for the awaygoing crop. From this time Grey seems to have been unable to find a tenant and kept the farm in hand until 1855. In 1855 it was let to a Mr Atchison and his son for £270 per annum. There is little evidence for improvement under Thompson, which is understandable as he was having difficulty paying his rent at all without the interest for additional improvements. None the less some draining was carried out on Middle Field in 1843, and more noted in the crop book at North Camp Hill, West Field and East Moor may also be of this period. When the farm was in hand some investment was made in the offices and house in 1854 and 1855, with the majority in
1855, presumably to prepare the house for the arrival of the new tenant.\footnote{DUSC.GRE/X/P182 1845-58 rough accounts of expenditure on the Howick estate.} The buildings book continues to record improvement by Aitcheson up to 1858, mostly on the farm offices.\footnote{DUSC.GRE/X/V101 1841-1858 buildings book.} Draining was also carried out during the Aitchesons’ tenancy, including that of *Middle Field* in 1854, *Camp Hill* in 1855, *North Dove Cot* and *North Banks* in 1856 and *Middle Moor* in 1859 (see Fig. 7.17 for locations of named fields).\footnote{DUSC.GRE/X/V103 1855-1886 drainage book.} Some of the money spent in 1859 came from the 1857 loan mentioned above.\footnote{DUSC.GRE/X/P343 14th September 1857 particulars of drainage executed under Lands Improvement company.} From 1861 the Aitchesons were allowed £30 per annum out of their rent for manures.\footnote{DUSC.GRE/X/P259 1861-1866 rentals.} Notes describing the leases show that this was a formal arrangement.\footnote{DUSC.GRE/X/P259 1861-1866 rentals.} A number of these changes are visible on plans, for example one of 1844 shows several since 1793.\footnote{DUSC.GRE/X/P279 1844 Plan of Howick Sea Houses Farm showing parts drained.} These include the division of *Camp Field* in two, and the backfilling of the quarry near the farm house (Fig. 7.18). There were also changes to the farm buildings between 1793 and 1844 as some parts of the main building and a building to the west of it were demolished, and a new range to the east built (Figs. 7.18). Some of the remaining structures to the west were joined together (Fig. 7.18), though these changes may have been carried out by predecessors of Thompson. A few other changes can be observed between 1844 and 1866 as new tracks developed along the coast, and the boundary with the glebe altered slightly.\footnote{DUSC.GRE/X/P279 1844 Plan of Howick Sea Houses Farm showing parts drained and 1st edition Ordnance Survey \url{http://digimap.edina.ac.uk/historicdownloader/downloader;jsessionid=876F0BBEC797212BF40AFCBBF5AC8A9?execution=e1s1} retrieved 6/6/2011.} These were either carried out under Thompson or Aitcheson, but most probably Aitcheson, given the documentary evidence discussed above for improvement during his tenancy.

In this case we can see that the arrival of a new tenant could cause improvement, demonstrating that tenants had some agency. The estate was involved however, through the provision of capital, and may thus have enabled improvements which tenants could not have conducted alone. It is clear, however, that economic factors were a strong influence on tenants, as those who struggled to pay their rent rarely made improvements.
Of course it could be argued that those who made a success of their farms did so because they were prepared to invest and innovate. These economic factors could be both small scale, relating to the family finances of the tenant and of much greater magnitude resulting from national and global trends.

The 1860s-1870s

Much less improvement seems to have happened during the 1860s and 1870s than during the 1840s and 1850s. While many of the fodders and manures which had been introduced earlier continued to be used there is no evidence for new types. The number of most varieties of animal and the quantity of most crops planted increased in this period but this is from their low 1848 levels (Fig. 7.2, 7.4, 7.5, 7.6, 7.15, 7.16). The only exception to this is the amount of wheat sown, which dropped to very low levels from the 1870s (Fig. 7.3). Similarly, while some expenditure on buildings is recorded during this period it is lower than before, and may have only included repairs to existing structures. It is interesting that Henry Grey strongly opposed an attempt by the Alnwick Union Rural Sanitary Authority to force him to renovate cottages at Howick. An assessment of these houses had found them to be damp in 1876, citing the ashpits and privies behind them as the cause. Grey must have refused to do anything, as further reports were sent to the estate office each with a more insistent tone than the last. In August 1879 the Authority decided to issue a formal notice on Grey, which he would have to appeal before the magistrates. Henry then wrote to the committee himself saying that they were wrong to blame the ashpits and outbuildings, and instead identifying the stone from which the houses were built (presumably an insoluble difficulty) and the dampness of the field behind which he intended to drain as the problem. He went on to say that he felt that the position of the privies close to the door was better for health and

512 E.g. DUSC.GRE/X/P107 rough particulars of cattle feeding, DUSC.GRE/X/P107 returns of cattle feeding 1877-188 and DUSC.GRE/X/P232 Howick Farm account in respect of contingents.
513 DUSC.GRE/X/P260 1875 corn and stock returns, DUSC.GRE/X/P236 1885 corn and stock returns DUSC.GRE/X/P211 1895 corn and stock returns.
514 DUSC.GRE/X/P260 1875 corn and stock returns, DUSC.GRE/X/P236 1885 corn and stock returns DUSC.GRE/X/P211 1895 corn and stock returns.
515 DUSC.GRE/X/P273 expenditure on draining and buildings and DUSC.GRE/X/P212 1877-1890 Table of expenditure of buildings.
516 DUSC.GRE/X/P222 letter 13th September 1876 G Watson to E.J. McDonald.
517 DUSC.GRE/X/P222 letters 21st July 1879-August 1879 G Watson to E.J. McDonald.
518 DUSC.GRE/X/P222 undated press cutting from Alnwick Mercury.
privacy. A letter of October 11th 1879 informed Grey that the Notice had been withdrawn. The was not quite the end of the matter as further letters between 14th January 1882 and 18th November 1885 also give unfavourable reports on the cottages and urge action on Grey’s part. It is unknown how the situation was resolved.

Grey was, however, prepared to spend some money on drainage, though much less than during the 1840s and 1850s. Some drainage was carried out between 1867 and 1868. Again this was with the aid of a Lands Improvement Company loan and was carried out at both Sea Houses and the home farms. Further expenditure on drainage is recorded between 1877 and 1886 in a table showing expenditure on drainage and buildings. In this period it appears that an economic downturn influenced the uptake of improvement at the Howick farms. It may also be significant that the Grey family was in a particularly difficult situation at this time, with high encumbrances on the estate, which may have left them financially vulnerable (Durham University Library 2009a; 2).

The 1880s and 1890s

The lack of agricultural improvement continued into the 1880s and 1890s though at least one experiment was carried out. It was performed in 1893 and was a test of nitrate of soda, superphosphate and kinate. It intended to find how much nitrogen could be profitably be used on a turnip crop, whether potash was necessary, and whether sulphate of ammonium was a good source of nitrogen. This, however, was not Grey’s initiative. A man called Dr Sommerville, professor of Agriculture at Durham College of Science, had written to Albert Grey (the heir apparent of the Third Earl, who appears to have begun running the farm during the Third Earl’s old age, before inheriting in 1894) to request that the experiment be carried out at his farm. This experiment was performed though no record of its results is present in the Howick estate papers. On the whole, however, little agricultural improvement seems to have been carried out. An

519 DUSC.GRE/X/P222 letter September 1879 from Lord Grey.
520 DUSC.GRE/X/P222 letter 11th October 1879 G. Watson to E.J. McDonald.
521 DUSC.GRE/X/P222 letters 14th January 1882-18th November 1885 G. Watson and others to E.J. McDonald
522 DUSC.GRE/X/P343 15th March 1867 particulars of drainage executed under Lands Improvement company
523 DUSC.GRE/X/P273 expenditure on draining and buildings and DUSC.GRE/X/P212 1877-1890 Table of expenditure of buildings.
524 DUSC.GRE/X/P232 letters 20th April and 1st May 1893 Dr Somerville to A. Grey.
525 DUSC.GRE/X/P232 Letter 20th April 1893.
inventory of 1896 shows a much reduced list of machinery; the only pieces out of the ordinary being the threshing machine, and a Massey Harris reaper and cultivator. The last two items must have been quite new as Massey Harris was only established in 1891 (Farnworth 1997). The quantities sown of all crops were much lower in the 1890s than in previous decades, apart from wheat which was already low. Also, the numbers of stock kept seem to have been reduced in all cases except pigs, between the 1880s and 1890s, probably as a result of the Agricultural Depression which was still on-going (Figs. 7.2, 7.3, 7.4, 7.5, 7.6 7.15,7.16). One innovation was made as the grazing of both the rotation grass and permanent pasture was let on an annual basis. Catalogues survive for 1893, 1895 and 1899 which have the names of the tenants and their rents marked next to their fields. This appears to have been quite profitable. For example, in 1893, the only year in which the total rents were given, fields were let for between £22-5-5 and £159-15-7. This may have been an exceptional year as the rents per acre were between 29/- and 67/- in comparison to 19/- to 62/- and 18/6 to 60/- in 1895 and 1898 respectively. Many of the tenants came back from year to year, probably incorporating this facility into their farming strategy, though there are new arrivals in both 1895 and 1898. Most of the tenants were local; many were from Alnwick and other places near to Howick, though there were some from further afield, for example Tosson, Yetlington, Rothbury, Lilburn and Fawdon. The conditions for renting the pasture survive from 1899 and show how the system operated. The grazing was let until the 30th September if in seeds, the 30th November if in rotation grass, and the 31st December if permanent pasture. Many of the other conditions were concerned with protecting the land, for example no horses, bulls or

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526 DUSC.GRE/X/P115 1st June 1896 valuation of stock and implements.
527 DUSC.GRE/X/P260 1875 corn and stock returns, DUSC.GRE/X/P236 1885 corn and stock returns, DUSC.GRE/X/P211 1895 corn and stock returns.
528 DUSC.GRE/X/P56 Printed particulars and plan of Howick grass parks to be let by auction 20th April 1893 and DUSC.GRE/X/P112 Howick Grass Parks: catalogue of fields to be let by public auction and plan 24th April 1895 and 22nd April 1898.
529 DUSC.GRE/X/P56 Printed particulars and plan of Howick grass parks to be let by auction 20th April 1893 and DUSC.GRE/X/P112 Howick Grass Parks: catalogue of fields to be let by public auction and plan 24th April 1895 and 22nd April 1898.
530 DUSC.GRE/X/P56 Printed particulars and plan of Howick grass parks to be let by auction 20th April 1893 and DUSC.GRE/X/P112 Howick Grass Parks: catalogue of fields to be let by public auction and plan 24th April 1895 and 22nd April 1898.
531 DUSC.GRE/X/P56 Printed particulars and plan of Howick grass parks to be let by auction 20th April 1893 and DUSC.GRE/X/P112 Howick Grass Parks: catalogue of fields to be let by public auction and plan 24th April 1895 and 22nd April 1898.
532 DUSC.GRE/X/P56 Printed particulars and plan of Howick grass parks to be let by auction 20th April 1893 and DUSC.GRE/X/P112 Howick Grass Parks: catalogue of fields to be let by public auction and plan 24th April 1895 and 22nd April 1898.
other ‘unruly’ animals were to be kept; the bailiff having power to refuse entry. It is revealing however that Grey was to pay taxes and fees, provide a shepherd, destroy vermin and weeds, and mend fences, as this shows that the tenants did very little of the farming themselves.\footnote{DUSC.GRE/X/P59 14\textsuperscript{th} April 1899 Conditions on which West Moor is let.} It may be that this, together with the reductions in sowing and stocking, was intended to turn an unprofitable model farm, designed for experimentation and display, into a money-making enterprise.

One aspect of the estate which did interest Albert Grey and his family was the welfare of the labourers in Howick village. Between 1886 and 1892 Albert Grey experimented with several different methods for improving the conditions of the workers at his farms at Howick and Learmouth. One means which was attempted was a profit sharing scheme. In order to do this Low Stead, which is to the south of Howick Township, was joined to Pasture House, Redstead and Sea Houses to make a united farm of 1603 acres; 733 in permanent pasture and 870 in tillage.\footnote{DUSC.GRE/X/P180 papers concerning profit sharing scheme.} The average expenditure 1866-1886 (specifically £1180) was taken, £400 added for the rent for Low Stead, and a further £320 as interest at 4% on a nominal capital of £8000; the actual value of the stock being £8275 on the first of June.\footnote{DUSC.GRE/X/P180 papers concerning profit sharing scheme.} In other words the farm was to pay £1900 rent and interest. The surplus would be divided between the workers for the next five or six years.\footnote{DUSC.GRE/X/P180 papers concerning profit sharing scheme.} They found that there was an improvement of profits 1886-1892 compared with 1866-1886, despite a decrease in prices of produce. The farm managed to pay three bonuses of 6d in the pound. However, they still made an average of £9 less than the rents, but explained that this was due to rabbit damage.\footnote{DUSC.GRE/X/P180 papers concerning profit sharing scheme.} Judging from its formal style and detail this document seems to have been prepared for publication, or circulation, so there was an element of self-promotion behind the scheme on the part of either Grey or his agent. To assess the success of the exercise, questionnaires were sent to the labourers.\footnote{DUSC.GRE/X/P180 questionnaires concerning profit sharing scheme.} In addition to profit sharing, these discuss a cow keeping scheme, in which a cow could be kept for three shillings per week; and a summer half holiday.\footnote{DUSC.GRE/X/P180 questionnaires concerning profit sharing scheme.} In general the labourers were in favour of these ideas though some felt that the profit sharing scheme had had
little effect on their enthusiasm to work. This often seems to have been intended to imply that they would have worked hard anyway. In some cases they suggested that a cow would be too much work for single men or women, though they generally believed that it would be an advantage for families.\textsuperscript{541} In addition to these experimental schemes, a lecture hall called Copley Hall was constructed in Howick village. This was built in 1883 as a memorandum of this date records that Miss Copley was to finance it, in part, by foregoing an annuity owed to her by Henry Grey.\textsuperscript{542} Miss Copley was the sister in law of Henry Grey, and was a noted philanthropist, motivated by religious concerns (Durham University Library 2009c, 1). By 1895 this building included a shop and a reading room and was being enlarged to include a Dairy School, perhaps related to the cow keeping scheme.\textsuperscript{543}

The nature of improvement in this period may reflect the declining fashion for agriculture and perhaps its decreasing profitability, but the personal interest of the Forth Earl was also very significant. He was clearly motivated by a sense of moral duty towards his labourers. This represents changes in politics, as, at this time, the Whig Party was subsumed into the Liberal Party through an alliance with the Radicals (Searl 1992, 16-28), as such a sentiment would not have been held by Whig politicians of the Second Earl’s era.

From this discussion it appears that many factors were involved in causing improvement at Howick. These include economics, as both phases of improvement coincide with periods of agricultural prosperity, the first during the Napoleonic Wars and the second the agricultural boom of the mid-nineteenth-century. In addition to these, fashion clearly played a role, most obviously in the creation of the model farm and the rebuilding of the estate village, as both grew in popularity in the middle of the nineteenth-century. At the same time, it became more acceptable for Whig politicians to be involved in agriculture. In addition, to these influences there are the agencies of both landlords and tenants; most obviously in the relationship between periods of change and the arrival of new landowners or tenants. This means that factors which are specific to

\textsuperscript{541} DUSC.GRE/X/P180 questionnaires concerning profit sharing scheme.
\textsuperscript{542} DUSC.GRE/X/P263 21 May 1883-Memorandum by 3rd Earl Grey on the method by which Miss Copley is to pay for the intended new cottage and lecture room at Howick.
\textsuperscript{543} DUSC.GRE/X/P224 List of cottages at Howick with names of the occupiers.
these people also have a role to play; for example, the burden of Charles Grey’s Prime Ministerial duties seems to have reduced the effort he put into running his estate.

**Longhorsley**

At Longhorsley there is less evidence for improvement than at Howick. This is because estate papers only exist for Bigge’s Quarter which was owned by the Howards of Naworth, Earls of Carlisle. Even these only go up to 1807 when the Howards sold their Longhorsley estates.\(^{544}\) The remainder of the township was owned by smaller estates or owner-occupiers who have not left detailed estate papers. As a result, discussion of these parts is restricted to comparison with Bigge’s Quarter. It is also significant that there was no demesne farm at Longhorsley as there was at Howick. This means that certain improvements, such as the introduction of new crops, which were the choice of the tenant, often remain unrecorded. None the less it is possible make some comments regarding improvement at Longhorsley. Due to differences in the source material it is convenient to divide the discussion into the periods before and after the purchase of the estate by Charles William Bigge.

**Howard ownership: pre-1807**

At Longhorsley there was increasing interest in improvement during the seventeenth and eighteenth centuries, at least on the Earl of Carlisle’s estates. The conditions of leases between 1677 and 1754 show a realisation of the importance of improved agriculture, though it cannot be shown whether the conditions were enforced in normal circumstances. The terms of leases in any one year are always the same suggesting that they were set by the land agent, or another person acting on behalf of the Earl, rather than by negotiation with the tenants. The earliest leases, those of 1677 and 1687, contain very few conditions; only specifying that the tenant should maintain the buildings, but would be allowed timber for this; that the Earl would pay all taxes apart from the county keeping tax and that the tenant was to be allowed an awaygoing crop, but leave the straw on the premises for his or her successor.\(^{545}\) This already shows an understanding of manuring as the straw was left to keep nutrients on the farm. By 1698

\(^{544}\) DUSC.N13/15 1808 draft conveyance.

\(^{545}\) DUSC.N12/6-14 2\(^{nd}\) January 1677 lease, DUSC.N12/18 15\(^{th}\) June 1687 lease.
another clause had been added preventing the tenant from ploughing up the pasture or meadow in the last three years of the term. The leases remained the same until 1719, when more detailed clauses on hedge maintenance were added. These specified the length to be maintained per year, particular maintenance for newly planted hedges, and that closes separated by a hedge should not be thrown together. The 1719 leases also contained one clause requiring the tenants to spread lime and specifying an amount for each farm, another preventing them selling hay and straw, and one requiring them to allow an incoming tenant to scale and dress the meadow. The next set of leases, of 1731, saw equally major changes. These were the first to include a clause requiring that a proportion of the arable, either a third or a quarter, be fallowed each year, and that this be stirred either three or four times. They also included a requirement that the tenant would not depasture an unusually large number of animals in the final three years of the term and would fence the pasture from Ladyday before the end of the term, another which prevented the tenant from ploughing up land or putting land down to grass. These were also the first leases to introduce monetary penalties for failure to comply with the conditions. The final additions to be made to the surviving sequence of leases appear in 1752 and include requirements that all dung produced be used on the premises, that potatoes may not be planted, and that the tenant would be at half the cost of any hedge planting. They also contained a clause requiring that land should only be put down to pasture after one corn crop, and that lime and manure should be spread first. The only leases to survive after this are of 1753 and 1754 and are identical to the 1752 leases.

These leases appear to show that the Carlisle estate, either because of instructions from Howard himself, or at the instigation of one of the land agents, took an increasing interest in improvement. However it is not possible to show that these terms were actually enforced. It is also impossible to determine whether they were doing so because of a belief in the ‘doctrine’ of improvement or simply in order to protect their

546 DUSC.N12/19-23 10th September 1700 lease.
547 DUSC.N12/29-34 and DUSC.N31/2 29th April 1719 leases.
548 DUSC.N12/29-34 and DUSC.N31/2 29th April 1719 leases.
549 DUSC.N12/39-40 1st April 1731 leases.
550 DUSC.N12/39-40 1st April 1731 leases.
551 DUSC.N13/2-5 19th October 1753 leases.
552 DUSC.N13/2-5 19th October 1753 leases.
553 DUSC.N13/2-5 19th October 1753 leases and DUSC.N13/6-9 1754 leases.
assets. In addition, the leases do not allow us to assess the extent to which tenants were involved in innovation. This may be determined through examination of improvements which were actually carried out.

At Bigge’s Quarter there is some documentary evidence for improvement of farm buildings in rental accounts between 1739 and 1741. Few of the entries show what was being built as, for instance, references to thatching, bricks, nails and masons work, could represent the construction of almost any building. In a few cases specific types of building are mentioned. These include cottages, stables, barns, byres and milkhouses. The last two are especially common, suggesting that dairy farming was important and may have been increasingly so at this time. It has been shown that the price of dairy products was increasing relative to the price of corn (John 1960; 152). There seems to have been more building activity at the beginning of the sequence than at the end which may be due to the arrival of several new tenants. Certainly, much of the work carried out between 1739 and 1741 was on Thomas Pinkeney’s farm. Pinkney first appears in rentals in 1740, at which time he combined two farms. This may imply that he thought he could profit from farming and may have needed certain improvements to carry out his plans. When his venture failed in 1741 he was replaced by Thomas Hume and Edward Towns. They both had work carried out, which may have completed that begun for Pinkney and also included a milkhouse, barn and byre. Interestingly they appear form 1740, which suggests that the work began before they entered the farm. There was also a lot of work done on the farms of sitting tenants including George Dobson (both elder and younger) William Dobson, Lewis Bilton, Ralph Young and Ralph Carnaby, John Dobson and William Bate between 1739 and 1742, showing that the arrival of new tenants was not the only cause of building work at this time. From 1742 onwards less work was done, perhaps reflecting the more stable tenurial situation from this time to the

554 DUSC.N113-4 Rentals 1739-1741.
555 E.g. DUSC.N113 and DUSC.N114 Rentals 1739-40.
556 DUSC.N113-4 Rentals 1739-1741.
557 DUSC.N114 Rental 1740.
558 DUSC.N114 Rental 1741.
559 DUSC.N114 Rentals 1740-1.
560 DUSC.N114 Rental1740.
561 DUSC.N113-4 rentals 1739-1742.
It is interesting, however, that Edward Towns, and to a lesser extent George Dobson and Thomas Hume continue to appear, while other tenants were having less work done. Finally, in 1747 the arrival of Robert Swann seems to have caused work to be carried out on this farm. This suggests that certain tenants were more demanding than others, and that improvements were made at the demand of particular tenants rather than at the landlord’s request. This does not mean that the landlord was without agency in these decisions, as he or she was the provider of capital, and almost certainly oversaw the improvements carried out as they would have affected the value of the farm the next time it came on the rental market.

We can therefore see that improvement under the earls of Carlisle was achieved by both landlord and tenant agency. It has also been shown that it was a response to technological change, as the changes to leases developed in step with understanding of husbandry, and not at the arrival of new landlords. These changes were, however, only introduced as the leases came due, and thus the precise timing of their introduction was a result of legal matters. Finally, if the changes to the buildings are indeed linked to differential movements in the prices of agricultural products then economic factors also have agency.

*Charles William Bigge’s ownership: post-1807*

Major changes were made to the estate following its purchase by Charles William Bigge. As at Howick these probably represent the new owner bringing in different systems of estate management and farming. Some of these are indisputably improvements, though others may have been seen by contemporaries as steps backwards.

No leases survive from the period of Charles William Bigge’s ownership, but 1861 sale particulars give some of their details. These show that the way in which the farms were let had changed, as four were let form year to year, and none for more than fifteen years. This is interesting as twenty-one year leases, which had been used by Carlisle’s

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562 DUSC.N113-7 rentals 1742-1757.
563 DUSC.N113-7 Rentals 1742-1757.
564 DUSC.N115 Rental 1747.
565 NRO.90421/3 Sale Particulars of the Linden Estate 1861.
agents from at least the seventeenth-century, were considered to be better than shorter terms, and much better than leases form year to year, as tenants were more likely to make improvements if they had a secure tenure for a longer period of time. The leases from year to year were also by word of mouth and would not have allowed conditions, to be made. As Bigge invested in improvements to boundaries it is unlikely that he made these changes due to a disregard for husbandry. It is possible that, as the leases made under Carlisle were a formality to allow Carlisle recourse in the event of a conflict, Bigge decided that he could save money by not having to produce written leases. It may be that this was possible because, as the owner of a small estate on which he lived he felt that he could monitor his tenants better than could Carlisle and his agents. It is also likely that a more personal approach, which his proximity to the estate may have made possible, made it easier for the tenants to negotiate with him.

Buildings and farm boundaries also show improvement. Unfortunately, after the sale of the estate the records which allowed pre-1807 changes to be linked to individual tenants, no longer exist. The plans, however, give evidence that change continued after 1807. Comparison of the 1773 plan and the Tithe Plan shows significant difference at most farms.\textsuperscript{566} It is impossible to prove that they were not carried out under Carlisle’s ownership, but the fact that little building work at Longhorsley is recorded after 1743 suggests that they were. Most of the changes seem to involve joining buildings to create L or C-shaped structures around a yard, probably to allow better collection of manure. Hedleywood is a good example. In 1773 it consisted of two rectangular structures next to one another which were converted to a single L-shaped structure by 1842 (Fig. 7.19). William Bate’s farm also follows the pattern, as the group of three rectangular structures were in-filled in to create a C-shape in the same period (Fig. 7.19). Finally the two rectangular buildings of Robert Swan’s farm and Fieldhead were both joined to create L-shaped farmhouses (Fig. 7.19). This is a change which occurs nationally, and was encouraged by text books on farming (Harvey 1970; 77-9). The yard allowed better collection and preservation of manure, while the buildings were arranged around it in a convenient fashion (Harvey 1970). It is difficult to speculate on Bigge’s motivation for changing the buildings, but it is likely that new buildings increased the value of his farms,

\textsuperscript{566} DUSC.N190/97 Plan of Longhorsley and Hayclose 1773 and DT43M Bigge’s Quarter Tithe Plans.
and such structures were fashionable and would reflect well on him. This may have been especially important as he was not a member of the established aristocracy, but a newly wealthy Newcastle banker. He had invested in land with money made in business rather than inheriting family estates. It is also important to remember that the improvements to the buildings may have occurred at the request of tenants, thus adding a further agency, though as the improvements occurred at all the farms on the Bigge estate it is perhaps more likely that they were made at Bigge’s instigation.

Few changes were made to Riddle’s Quarter buildings between 1777 and 1846, only a small part of Paxton Dene was demolished, which reinforces the suggestion that the change was due to Charles William Bigge’s agency. C or L-shaped buildings were only created in Riddle’s Quarter between 1846 and 1866.\(^{567}\) During this time there appears to have been complete change of both Paxton Dene and Hare Dene, where L-shaped structures were constructed (Fig. 7.20). There was also both demolition and infill at High Barns (Fig. 7.20). Similar changes occurred at Freeholder’s Quarter during this period, as there was some infill at West Moor (Fig. 7.21) and the construction of a completely new C-shaped farm at Blackpool (Fig. 7.21). Interestingly the latter was owned by Charles William Bigge.\(^{568}\)

It appears, then, that Bigge made changes to the estate after purchasing it, probably for both profit and fashion. Their precise nature was influenced by many different factors. The best example is the reduction in formality of the leases which was possible because Bigge lived in the township, and could thus keep a closer eye on the tenantry. It is probably also significant that, as a successful banker, Bigge was wealthier than the other landowners at Longhorsley.\(^{569}\)

*Undateable improvements*

Finally, there is some evidence for improvement which is not closely dateable because it comes from comparison of eighteenth-century plans with either the Tithe or

\(^{567}\) NRO.DT391M Riddle’s Quarter Tithe Plan and First edition Ordnance Survey 1:10,560 1866 downloaded from http://digimap.edina.ac.uk/historicdownloader/downloader;jsessionid=5B687A18BE1F83F10AA3ED16E5A62A5C?execution=e1s1 retrieved 12/03/1012.

\(^{568}\) NRO.DT192M Freeholder’s Quarter Tithe Plan and Apportionment 1842.

\(^{569}\) DUSC.DPRI/1/1850/B19/1-16 Will of Charles William Bigge.
Ordnance Survey maps. This means that it is too coarsely dated to be linked to particular landlords or tenants. It consists of changes to water courses which indicate draining. This was carried out at both Bigge’s Quarter and Riddle’s Quarter, while the paucity of evidence at Freeholder’s Quarter may simply result from the lack of documentary and map evidence and the fact that few watercourses are shown on the Tithe and Ordnance Survey plans. Riddle’s Quarter has the most extensive evidence. The Tithe is quite imprecise so most can only be dated to between 1777 and 1866. These included the straightening of streams at the Acres (Fig. 7.22) and the diversion of another at Hare Dene Farm (Fig. 7.23). At the same time, a stream was created at Robert Errington’s Farm and another diverted into a pit (called a Stipple on the 1777 plan) (Fig. 7.24). Some changes seem to post-date the tithe, but in other cases the evidence is ambiguous; certainly all occurred between 1777 and 1866. These include disappearance of a stream at High Barns Farm, which was probably diverted to run along the township boundary (Fig. 7.25). Two certain cases of 1846-1866 stream changes exist at Smallbourne Farm where one stream was straightened and another removed, (Fig. 7.26) and Paxton Dene Farm where streams were straightened (Fig. 7.27). Finally, a stream at Town Farm may have been straightened between 1777 and 1846 (Fig. 7.28), though as usual the Tithe Plan is ambiguous. It had, however, definitely been straightened by 1866.

The only evidence of this type in Bigge’s Quarter is the straightening of a stream at Hedleywood between 1773 and 1842 (Fig. 7.29). It is not possible to assign this to either Bigge or Carlisle, however it is known that Bigge invested money in drainage, including over £2000 from government loans. As there is so little change to the watercourses here it is likely that this was spent on under-drainage, probably using tiles from the tile works in the township. Indeed a piece of drainage pipe was found near to the stream depicted in Figure 7.29 (Fig. 5.16). Given the fact that the tile works had existed since at least 1773 it is puzzling that drainage is not mentioned in any of the accounts for Longhorsley made during the Earls of Carlisle’s ownership. As the evidence for drainage seems to coincide with the boundaries of the estates, it is likely

570 DUSC.N190/97 Plan of Longhorsley and Hayclose 1773 and NRO.DT43M Bigge’s Quarter Tithe Plans.
571 NRO.90421/3 Sale Particulars of the Linden Estate 1861.
572 DUSC.N113-7 Rentals 1739-57.
that the landlords were a major factor in instigating it, though this does not rule out the possibility that tenants had a role in requesting, and perhaps overseeing it.

The evidence from Longhorsley appears to confirm that landlords were strongly involved in improvement, both to buildings, drainage, and the administration of the estate. The improvements they carried out were effected by their proximity to the farms, fashion and economics, probably in addition to other things invisible in the sources. The tenantry also had agency in improvement, clearly requesting, or failing to request, changes to buildings during the period in which the Howards owned estates in Longhorsley. It is probable that were there better records for tenant activities their involvement in improvement at Longhorsley would appear even greater.

**Elsdon**

There is only limited evidence for improvement at Elsdon, though this cannot be taken as a conclusive demonstration of a lack of improved farming, as there is little evidence for husbandry practice in general. This situation results from the absence of a single large estate, though small parts were owned by the Alnwick estate. The documents that are available are almost all associated with the most substantial landowners, and are thus highly biased. Some comments can however, be made.

Large areas of the Ordnance Survey map have no field boundaries, which suggests that much of Elsdon Township was being used as rough grazing. It was therefore unimproved. This is particularly clear at East Nook, Dunshield and Low Carrick, and Pearson’s House (Fig. 7.30). In addition, according to the 1840 tithe, and some later maps, Bainshaw Bog was divided between the glebe of Lowick and Alwinton, however as no boundary is shown on the Ordnance Survey it is probable that it functioned like a common used by both their tenants despite being an allotment of the Enclosure Award (Fig. 4.18). In all cases these were enclosure allotments, so the enclosure of Elsdon did not cause much improvement. Several documents mention rough pasture. For instance, an 1852 report on Flatt Fell says that it was partly heath, as does one of 1868. Similarly,

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573 NRO.DT164M 1840 Tithe Plan, NRO.ZHE/14/3 c.1873 Ordnance Survey tracing.
574 NRO.QRD3 Elsdon Enclosure Award.
575 NRO.ZHE/14/13 1868 Valuation of lands at Elsdon.
an annotated tracing of the Ordnance Survey of 1873 also marks rough grass in several fields of Cheek Gate Farm. This is in contrast to the other townships examined where most enclosed land was improved. This may be a product of the poor quality of the land in general, or the lack of an overall authority to guide improvement.

On the other hand, there is some sparse evidence for improvement being carried out. The most frequent type was draining. At Cheek Gate Farm, part of the Alwinton glebe, some was performed between the mid-nineteenth-century and the 1870s using a Lands Improvement Company loan.576 A tracing of the Ordnance Survey made around 1866 is also annotated to show that £60-9-4 had been spent on draining of the south-east corner of The Flatt Fell (Fig. 7.31).577 In addition, evidence for drainage is available in the form of changes to the shape of watercourses between consecutive maps. An 1838 plan of lands belonging to Thomas Thornton shows watercourses differing from those on the 1866 Ordnance Survey (Figs. 7.32). Similarly, boundaries of several properties in this area on the Tithe plan preserve the shapes of meanders in the Monk Burn which had been straightened before 1840 (Fig. 7.32). There are also many very straight watercourses on the Ordnance Survey map which indicate drainage work before 1866, these can be seen at Bainshaw Bog, Pearson’s House and Loning House (Fig. 7.33).

Some other types of improvement were also used at Elsdon, but evidence for them is yet more restricted. These include a recommendation of C. Seymore Bell to the Duke of Northumberland to apply lime to the Flatt,578 a request from Robert Keith to be allowed to hay the Batt Field in 1899 in order to improve its pasture, and a letter from Mary Whalley in which she asks for a reduction in rent on the grounds that her leasehold property had been improved “Owing to the way I fed the cows [one word illegible] cakes, &c &c & laying on manure &c”.

In these cases both landlords and tenants can be seen to be involved in improved husbandry, with landlords providing capital and tenants requesting particular improvements or taking full responsibility for things like use of oil cake and manures. However, improved methods seem to have been used in limited circumstances in which

576 NRO.ZHE/14/3 correspondence A Proctor to C.S. Bell 24th September 1873.
577 NRO.ZHE/14/4 undated Ordnance Survey tracing.
578 NRO.ZHE/14/13 1868 Valuation of lands at Elsdon.
they were thought to be of greatest utility rather than as a matter of course as in some other villages. It is likely that many of the farms of Elsdon used one or two improved husbandry techniques, but would not have adopted the full range of improvements as contemporary commentators might have preferred.

**Milfield**

Milfield has least evidence for improvement. This is because, of the three estates which owned Milfield only the Greys left extensive papers. These have much less material pertaining to Milfield than to the rest of the estate, because, for most of the nineteenth-century, the tenant of Milfield was also the land agent, and thus was supervised much less closely than the others. Some information may, however, be gathered from map regression. On the Grey part of Milfield plantations were made in the post-enclosure period, as many plantations are shown on the 1860s Ordnance Survey, whereas the 1777 map shows an almost treeless environment. Trees on the farm remained the property of the landlord, being reserved to him in leases, so these must have been planted at the direction of either the Second or Third Earls Grey. The mechanism by which this occurred is recorded in a lease of 1815, which required that the tenant plant trees on Ewe Hill. The Earls are unlikely to have used such a remote area for hunting themselves and probably either leased the rights to the game for a period of years, or directly charged people to hunt and shoot on the estate for shorter periods. They may also have hoped to sell timber from the plantations. Neither of the other two farms saw any tree planting following enclosure, both being completely treeless on all maps. Clearly neither the Blakes nor the Ordes used their Milfield estates for hunting or timber, though letters show that other Orde estates were. Some drainage was also carried out on the Grey estates between 1777 and 1866, as a stream was straightened between these dates (Fig. 7.34). Finally, there is some evidence for improvement of buildings, as a lease of 1803 required the tenant to build a new farmhouse. In all these cases, however, the landlord seems to have led the improvements. With so little

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579 DUSC.GRE/X/P75 27th May 1735 lease, DUSC.GRE/X/79 23rd November 1815 lease, DUSC.GRE/X/P35 2nd August 1757 lease, DUSC.GRE/X/P35 4th February 1783 lease and DUSC.GRE/X/P35 5th February 1803 lease.
580 DUSC.GRE/X/79 23rd November 1815 lease.
581 NRO.1356/C.67 Orde estate correspondence.
582 DUSC.GRE/X/P35 5th February 1803 lease.
documentation this does not rule out the possibility of tenant improvement, especially since John and George Grey, who were tenants of Milfield, were occasionally described as improvers (Butler 1869; 10).

**Learmouth**

A better picture of improvement can be gained from the more substantial data available at Learmouth. There is evidence for extensive drainage at Learmouth in the period after 1793, as significant changes were made to several water courses. This included the straightening of a stream on the northern boundary, and the alteration of other streams near East and West Learmouth Farms between 1793 and 1843 (Fig. 7.35).\(^{583}\) This may have been a direct result of enclosure, though without more precise dating it is impossible to be certain. It is likely that the intention was to drain the bogs marked on the 1793 map. Certainly no bogs are shown on the Tithe Map, but their absence may be because the surveyor did not record them. By the 1865 Ordnance Survey almost all the bog had gone; only English Strother Bog and Marl Bog remained (Fig. 7.35). There were further changes to the streams to the south of East Learmouth Farm from 1843-1865 (Fig. 7.36).

The maps also reveal that many buildings were rebuilt or extended during this period. A byre was added to West Learmouth and unidentified structures were built south and north of East Learmouth. Both of the main farm buildings were significantly altered either being completely rebuilt or so drastically changed as to be unrecognisable from their plans (Fig. 7.37). There is documentary evidence for building from the 1830s to the 1850s for both farms, which probably includes much of this work. Between the 1830s and the end of the 1840s was work carried out at both farms. West Learmouth was occupied by a Mr Ralph Compton and East Learmouth by a Mr William Smith. An account from 1830 to 1847 records building expenditure at West Learmouth in 1830 and 1837, then continuously from 1840-1846. At West Learmouth it records building from 1841 to 1845.\(^{584}\) Another account describes building at East Learmouth farm house in 1846 and West Learmouth farm offices in 1845.\(^{585}\) Yet another, lists expenditure from

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\(^{583}\) DUSC.GRE/X/P276 1793 plan of Learmouth and NRO.DT 286M Learmouth Tithe Plan.

\(^{584}\) DUSC.GRE/X/P182 buildings accounts.

\(^{585}\) DUSC.GRE/X/P233 buildings accounts.
1841 to 1846 at East Learmouth, while another records building at West Learmouth farm offices and gardens in 1845. These documents are quite difficult to interpret, as most are little more than rough notes, so it is unclear whether or not they are complete; it is quite likely that some record only particular types of work. However, they do seem to show that building work was being carried out on a fairly intensive scale in the 1840s. This is probably a result of an estate-wide policy, as other Grey farms are mentioned alongside them. Their timing coincides with the inheritance of the Howick estate, of which Learmouth is a part, by the children of the Second Earl Grey in 1845 (Smith 1990; 324). In this case the estate would have acted as the provider of at least part of the capital and would have overseen the work. The very fact that the documents exist is evidence for the estate overseeing building work on its farms. It is likely, however, that the estate expected either interest or the provision of part of the capital by the tenants, as clauses to this effect exist in contemporary leases. This means that the tenant would choose which work was carried out, and, thus, explains why some farms on the Howick estate do not appear in these accounts.

The importance of the tenants is demonstrated by subsequent events. In 1848 Ralph Compton became bankrupt and had to leave East Learmouth. This may have reduced the amount of building which he was able to afford in the years before he left. A report of 1845 says that Mr Compton felt that there was a need for accommodation for pigs but that he did not want to pay the six per-cent interest necessary. Although a quote for the proposed work was obtained, it is not clear if it was carried out. It may also be significant that work at East Learmouth ceased in 1846. After Compton left the farm, William Smith surrendered his lease of West Learmouth and appears to have moved to East Learmouth in 1849, as this was occupied by a man of the same name. West Learmouth then went on hand between 1850 and 1851. It was taken by a Mr John

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586 DUSC.GRE/X/P182 buildings accounts.
587 DUSC.GRE/X/P182 buildings accounts.
588 DUSC.GRE/X/P182 buildings accounts, DUSC.GRE/X/P182 buildings accounts.
589 E.g. DUSC.GRE/X/P253 1851 lease, DUSC.GRE/X/P221 1865 lease.
590 DUSC.GRE/X/P233 Letter Ralph Compton to G.A. Grey May 1st 1848.
591 DUSC.GRE/X/P68 1845 building report.
592 DUSC.GRE/X/P123 building estimate.
593 DUSC.GRE/X/P125/1 Instructions for the surrender of the lease of Old Learmouth Farm by Mr Smith, stating details of his away going crop and the conditions under which he continues at Sunnilaws, 4 October 1849.
Lumsden in 1851. No further building work is recorded at West Learmouth after Smith had moved out. Much more is recorded at East Learmouth, which may even have been at a higher level than under Compton. A list of new buildings on the estate records that, between 1850 and 1856, new stables, a cart shed, a killing house, hovels, a granary, cow byres, piggeries, poultry houses and a building with feeding boxes had been built at East Learmouth. The coach house, riding stables, dog kennels and troughs conducting water to the threshing machine had also been restored. An account also records the building of cottages between 1851 and 1857, while another document reveals expenditure between 1849 and 1852. There are very few records of building after 1857 so it is impossible to comment on later tenants’ activities. It is clear, however, that building on the Learmouth farms was strongly influenced by both landlords and tenants. The landlords’ policy provided an opportunity for the tenants to have building work carried out. It is also possible that the landlords’ agents tried to persuade the tenants’ to have building work done, as the 1845 report cited above seems to suggest.

There is little evidence for other types of improvement; though a disagreement between the third Earl Grey, and a tenant of West Learmouth called William Piper Lumsden shows that some did occur. William Piper Lumsden took the lease of the farm after the death of his father John Lumsden in 1872. Some cropping returns survive for this period showing that most fields were farmed in a four- or five-course rotation. This is contrary to the terms of the lease which required a five-course system, but must have been allowed as Grey’s agent would have been aware of it from the cropping returns. The four-course system is arguably better as it is more productive, but may have been too intensive for the Tweedside area. On the best soils in the farm it may have been appropriate and so could be seen as an improvement. There is some indication of further irregularities in William Lumsden’s activities, as from November 1879 he began to accrue an arrear which he paid off in April 1882. Probably as a result of this he made an agreement with Grey, in 1880, that for the next two years the rent would be reduced

594 DUSC.GRE/X/P253 1851 lease.
595 DUSC.GRE/X/P234 1846-1856 Buildings on the Howick estate.
596 DUSC.GRE/X/P182 buildings accounts.
597 DUSC.GRE/X/P68 1845 building report.
598 DUSC.GRE/X/P254 1872 lease of West Learmouth.
599 DUSC.GRE/X/P271 cropping returns.
from £1950 to £1700 and that he would be at liberty to leave the farm following that
time.\footnote{DUSC.GRE/X/P266 1880-Note by G. A. Grey of Milfield of alteration in the terms of William P. Lumsden’s lease of West Learmouth Farm.} This worked for a few years but from November 1883 he began to accrue an
arrear which he never paid off.\footnote{DUSC.GRE/X/V25 tenants ledger.} In 1884 Lumsden took a new lease of the property but only for three years, this included a £200 allowance for lime and fodder.\footnote{DUSC.GRE/X/P221 1844 lease of West Learmouth.} From the expiration of this lease in 1887 William Piper Lumsden continued to fill in Cultivation
Returns and may have been leasing the property a year at a time. It appears that his
relationship with his landlord and the land agents was deteriorating as a letter between
two of the agents says that he had attempted to have most of the £200 allowance for
linseed cake, when only £100 should have gone to this. Cleghorn, the author of the
letter, describes Lumsden as a ‘slippery character’ and warns MacDonald, the recipient, to
‘keep an eye on him’.\footnote{DUSC.GRE/X/P286 27\textsuperscript{th} January 1886 letter J Cleghorn to EJ MacDonald.} This appears to show an interest on Lumsden’s part in particular
improvements. From 1887, however, he took four successive crops of grain on \textit{Night
Close}, and three on \textit{South Kirkhill} and \textit{North Constable}.\footnote{DUSC.GRE/X/P271 cropping returns.} This would have exhausted the
land and is contrary to the terms of all previous leases of Learmouth. It also suggests that
William Lumsden was more interested in extracting profit from the farm than in abstract
notions of improvement and efficiency. By May 1888 Lumsden’s arrear was £1000, and a
letter of the 1\textsuperscript{st} of November of that year implies that he had been asked to leave.\footnote{DUSC.GRE/X/P115/5 letter Albert Grey to George Grey.} It
was written by Albert Grey to George Grey and discusses a letter from Lumsden to Albert.
Albert Grey appears to have disliked the tone of the letter and remarks that Lumsden
should realise that he had been treated with ‘indulgence’. He goes on to discuss the
collection of the remaining arrears and the harvesting of the awaygoing crop.\footnote{DUSC.GRE/X/V25 tenants ledger, DUSC.GRE/X/P115/5 letter Albert Grey to George Grey.} The last
cropping return for Learmouth was filled in by Mr Fox, Grey’s steward, who had probably
been farming East Learmouth on Grey’s behalf since Smith surrendered his lease. This
contains details for both 1889 and 1890, suggesting that Lumsden did not complete a
return in his final year on the property. An annotation on the edge of the document
notes that it will take several years to return the farm to its proper value following the
irregular cropping.\textsuperscript{607} Further evidence that William Piper Lumsden damaged the farm comes from an 1892 survey, in which the surveyor noted that West Learmouth was in better condition than he expected.\textsuperscript{608} In November 1888 Lumsden paid off his arrear with a cheque for £1500.\textsuperscript{609} He commissioned a report by Messrs Turnbull and Calder giving a favourable view of his management of the farm,\textsuperscript{610} which he used to claim compensation from Grey. He wrote to Grey on the 11\textsuperscript{th} March 1889 giving a detailed list of items for which he wanted to be compensated.\textsuperscript{611} This included cattle cake from 1887 to 1889, bones, kinate and nitrate from 1884 to 1888, and damage done by the landlord failing to drain and maintain the fences.\textsuperscript{612} Again, this shows an interest in some areas of improved farming, though the extent may be exaggerated or the report entirely fabricated. Albert Grey did not respond favourably to this report, and had George Grey prepare a counter-report.\textsuperscript{613} From then on Lumsden grew increasingly desperate and angry, asking a friend of his, Adam Calder the author of the initial report, to write to Albert Grey on his behalf.\textsuperscript{614} Again Grey dismissed this, as a letter from George Grey to Albert Grey advised him to give Calder nothing.\textsuperscript{615} Lumsden’s final act appears to be a letter to Albert Grey on the 18\textsuperscript{th} December 1890. In this he accuses Grey of wrecking his home, as his sons had been forced to leave due to Grey’s actions.\textsuperscript{616} A copy must have been sent to George Grey as he wrote to Albert Grey discussing it. In this letter he says that the sons had gone to South Africa without telling their father, following a quarrel, taking the money belonging to the eldest of them. He also added that Lumsden’s wife had left him and gone to Berwick.\textsuperscript{617}

The cropping returns also show that several fields of West Learmouth were put down to permanent pasture from 1887 onward, including: \textit{South-East Moor, South-West Moor, North-East Moor, North-West Moor, Piperdown and Middle Moor}. This may show
that the Agricultural Depression made it difficult for Grey to find a tenant, thereby requiring him to retain Lumsden on whatever terms he would accept. The need to reduce rent and the area of pasture may show that Lumsden was struggling to make a profit. Overall, it appears that Lumsden’s farming was a mixture of the very good: four- or five-course rotations selected with soils of in mind, lime, and artificial fodders; and the very bad: taking successive crops of corn on certain fields, and the reduction of some to permanent pasture. It appears that Lumsden used improved husbandry to increase output, rather than in response to a sense of moral duty to use land as efficiently as possible (c.f. Tarlow 2007; 35). He may however have done so from necessity, as he appears to have suffered from the effects of the Agricultural Depression of the late nineteenth-century.

In all, the data from Learmouth demonstrates that both the landlord and tenant had essential roles in the introduction of improvement. Both probably acted from motives of profit and prestige, though at least in the case of William Piper Lumsden profit was more significant. This may, in turn, be due to the economic climate in which he farmed. Tenants and landlords also responded to developments in agricultural technology as some of the improvements are associated with high-farming.

Conclusions

A wide range of improved husbandry practices have been observed in the case studies. These include both permanent changes to fixed capital, such as buildings and drainage, and impermanent improvements such as manuring and the use of improved crop rotations. None of the improvements recorded are particularly unusual, though the frequency of river and stream improvement is greater than expected given the scholarly focus on under-draining (e.g. Philips 1989, Cook and Williamson 1999, though see Brassley 2000; 415). Many of these introductions fit in with changes in technology, for example, much of the evidence for drainage at Howick dates from the mid-nineteenth-century after the invention of cheap, extruded drainage pipes (Brassley 2000; 516). Similarly, many of the technologies associated with high-farming, particularly the introduction of oil-cake as a fodder and imported manures like guano, appear to have been widely used, even by those farmers who did not take a full interest in improvement.
Finally, the creation of farmsteads consisting of ranges of buildings around a yard, as at West Learmouth and almost all of the Longhorsley farms, is a result of increasing understanding of the importance of the preservation of manure (Harvey 1970; 66-110). It is too simple to say that new inventions were introduced as soon as they were discovered because of some obvious superiority. It is, however, true, if somewhat obvious, that new technologies had to have been invented before being introduced to specific farms. Thus technological development does have a role, albeit a limited one, in the introduction of improvements.

For an improvement to be introduced it was also necessary that farmers were aware of it. Consequently, it may be more important to study the way in which the knowledge of improvements spread. Unfortunately, there is only very limited evidence for this in the cases examined above. The cuttings taken from agricultural journals by Frederick Grey in the mid-nineteenth-century, and the investigation of the cattle feeding methods of Lord Prudhoe at the same time, are examples of two processes by which this may have happened. By improving, and through doing it in ways which were visible to his peers, Frederick Grey was participating in a fashionable activity. This itself appears to have been a reason to improve, though it is very difficult to identify confidently. The ornamentation on many of the cottages in Howick estate village, does, however, suggest that they were not simply functional (Fig. 7.38). The establishment of the model farm at Howick Redstead was probably also motivated by fashion, as such farms were intended to be shown to visitors.

Fashion is often thought to be at odds with economic motivations for improvements. This is not necessarily the case as fashionable improvements could cause an increase in profitability, especially as the fashion was to show an extensive of knowledge of agriculture. Economic factors could be associated with the introduction of improvements in two ways. Firstly, increased profits could provide a motive for improvement, and, secondly, capital was needed to introduce many husbandry methods. In both cases improvements would be linked to changes in either national economic trends or to the fortunes of the individuals involved. The phases of improvement at Howick both occur at times of agricultural prosperity, as well as being associated with the arrival of new owners. Similarly, much of the rebuilding at Learmouth occurred during
the mid-nineteenth-century agricultural boom. The rebuilding at Bigge’s Quarter in Longhorsley may also be associated with the Napoleonic War rise in grain prices. Indeed, this may have been Charles Bigge’s motivation for buying the land. In all these cases the influence of economic factors could either be in motivating people to improve for profit, or the provision of capital. One mechanism by which this capital reached farms was through the advance of capital by estates for improvements to buildings and drainage carried out by the tenants.

In this way the estate or the landlord had agency in improvements on particular tenanted farms. This has been seen many times, especially in the improvement of buildings and drainage at Learmouth and Howick Sea Houses. These improvements were made at the same time as improvements were being made to other Howick estate farms. The fact that these improvements were not made on all farms on the estate means that it was only particular tenants who took advantage of the provision of estate capital. This can be demonstrated directly by the instance in which Ralph Compton refused new piggeries on the grounds that he could not have paid the interest.618

None of these factors can be seen as a prime-mover in the introduction of improvements. All factors seem to be equal and to interact with one another. So, for example, a particular tenant may have the capital to carry out improvements, awareness of improved methods, and the desire to do so for profit or status. These things themselves come from elsewhere, for example, the capital may be the result of estate policy or national economic trends, whereas awareness comes from reading agricultural journals or speaking to neighbours. These interactions are quite different in each circumstance so it is impossible to develop a multi-causal model for the introduction of improved farming. They do however seem to be ‘assembled’ together by the tenants or landlords who carry out the improvements.

This ‘assembling’ role performed by people means that factors which are specific to an individual person may be as important as larger scale national trends like economics and fashion. These include events in the careers of the people making the changes, as for example Charles Grey stopped making improvements at Howick when he became Prime

618 DUSC.GRE/X/P68 1845 building report.
Minister in 1830. Thus, the factors which govern the introduction of improvements are very varied, interrelated and always unique to the particular event under consideration.
Chapter 8

Discussion

The five types of event discussed above: enclosure, farm consolidation, land-use redistribution, settlement dispersal and improvement, each involve different forms of agency. In fact, every occurrence of each type includes different agencies. It is tempting to try to select one agent as the prime mover in each type of event, or to build a generalised model which attempts to explain all instances of enclosure, settlement dispersal etc. This line of reasoning would allow us to identify causes, something which is instinctively desirable. However, as described above (Chapter 1), Non-Representational Theories usually reject generalising models and explanations, because these cannot fully describe the mediation and assemblage of agencies (Latour 2007; 59). We will now attempt a different approach by examining carefully how each agency was mediated and assembled. As we shall see, it is not possible to find a single process by which this occurred in every event. This means that generalising models and explanations are quite unable to come to terms with the complexity of local interactions. Some of the most obvious agencies present in the five types of action will be described below. This list cannot be complete, but the mediation of each will be described. The importance of many of these agencies has been recognised individually in previous studies; however they have never been taken together and understood as an assemblage from which action emerges.

People

One agency which comes across very clearly in the case studies is that of individuals. Changes to the landscape often occurred immediately after a new person inherited or entered a particular farm, so such changes could be ascribed to that person. The idea that individuals were responsible for improvement and enclosure is quite an old idea, and was a mainstay of traditional histories of the Agricultural Revolution. The most prominent of these is the work of the pioneering agricultural historian, Prothero (1961). He believed the Agricultural Revolution emerged from the experimental and propagandist work of Jethro Tull, Arthur Young, Robert Bakewell and Charles Townshend. These, and a small group of other individuals, were thought by Prothero (1961, 148-206) to have
developed and publicised the techniques which caused the increase in output. This is a very simplistic interpretation and has been subject to lively criticism. For example, the importance of Bakewell in this pantheon has been criticised by Whykes (2004) and Russell (1986; 146) who point out that there were serious downsides to his sheep and cattle breeds (Russell 1986) and that he inherited an already improved farm (Whykes 2004; 38). They concluded that he stands out mainly because of his success as a self-publicist. Similarly, MacDonald (1975; 133) has suggested that the Culley brothers failed because Bakewell’s New Leicester sheep, which they introduced, was less suitable for the harsh northern conditions that the native Cheviot, but they were successful in creating a reputation for themselves. Other studies have criticised the ways in which elite understandings of improvement could diffuse to tenant farmers. Many have observed that agricultural books written by aristocratic experts were criticised by small-holders and tenants who thought the authors had little practical experience (Holmes 2006; 61-8; MacDonald 1979). Others have criticised the effectiveness of the model farm as an example to tenants (Wade-Martins 2002; 5, MacDonald 1981; 224). Similarly, the utility of leases for imposing improved farming on tenants has been rejected, as improved farming occurred on farms without strict leases (Wade-Martins and Williamson 1998). It appears that the traditional model of aristocratic and gentle individuals inventing improved husbandry and spreading it to tenant farmers is deeply flawed. Individual agency does not, however, have to be that of the aristocracy. Nor does it necessarily imply that one individual had a global or national impact, as Prothero (1961) does. Our concern here is the idea that individuals influenced landscape change.

Some recent research has begun to reinstate the role of the individual in agricultural and landscape change. One of the best examples of this is Brown’s (1999b) study of the Duke of Bedford. He has shown that the Duke was the main impetus for innovation on his estates, which he achieved principally through enclosure. While doing this he built up large debts and appears to have been responding to Whigish ideals of progress and not profit alone. Brown (1999b; 187) argues that Bedford may have created a climate of innovation in the area, and notes that Oxfordshire, which was not dominated by large estates, was less agriculturally advanced than other counties. Similarly, Gent (2010) has shown that the Seventh Earl of Carlisle was strongly involved with agricultural
improvement on his estates, as it became more acceptable for Whig politicians to be
involved in agriculture during the mid-nineteenth-century. At East Flanders Moss, in
Perthshire, a major programme of reclamation was instigated by Hew Graeme of
Arngomery, a lawyer (Harrison 2009; 9-10). Finally, Dixon (1984) and Wrathmell (1975,
1980) ascribe multiple examples of Northumberland village desertion to improvement
schemes initiated by wealthy merchants investing in landed property. Other, less well
documented, examples of landlords acting as individuals in the creation of landscape
change have been noted. For example, Moore-Colyer (1997; 157) found that one
landlord wrote a manuscript detailing his intentions for a planned enclosure. Taken
together these show that the will of an individual landowner could be a powerful agency
on their own farm or estate, though it is debatable whether this influence diffused
beyond their direct control. Most published examples are of members of the aristocracy,
precisely because of the large volume of documentation describing their actions. Similar
examples, and some which highlight the agency of tenant farmers and small landowners
have been observed in our Northumberland case studies.

This is clearest in a number of individuals who were especially involved in
improvement. George Grey is a particularly good example. He became tenant of Milfield
Hill Farm in 1782, after the previous tenant, William Mills, surrendered his lease.\textsuperscript{619} This
coincides with the earliest evidence for the discussions preliminary to enclosure of the
Common in 1789, as the Orde manuscripts contain a set of legal opinions of 1782 entitled
‘Milfield Division Papers’.\textsuperscript{620} That Grey was behind this seems to be confirmed by a
passage in Josephine Butler’s (1869; 10) book on her family, which reads thus:

“\begin{quote}
When my grandfather [George Grey] first came to Milfield the plain was still a
forest of wild broom. He took his axe, and like a backwood settler cut away the
broom, and cleared for himself a space on which to begin his farming operations.
\end{quote}"

Grey was involved in other enclosures, as he served as a commissioner at Elsdon, and so
was clearly interested in enclosure and improvement.\textsuperscript{621} It is of course possible that
others were influential in promoting the Milfield Common enclosure, and it is not certain

\begin{itemize}
\item \textsuperscript{619} DUSC.GRE/XP35 4\textsuperscript{th} February 1783 lease and DUSC.GRE/X/P89 22\textsuperscript{nd} February 1782 surrender.
\item \textsuperscript{620} NRO.1356/M.5 1782 Milfield Division papers.
\item \textsuperscript{621} NRO.QRD3 Elsdon enclosure plan and award.
\end{itemize}
that the Division Papers mark the beginning of the enclosure process. None the less the coincidence of the date of this document with Grey’s arrival at Milfield is convincing given Grey’s known reputation as an improver. It seems then that George Grey’s arrival at Milfield was important in causing the enclosure of the common.

Similarly William Mills, George Grey’s immediate predecessor at Milfield, seems to have been a keen engrosser and played an important role in the enclosure of Milfield’s arable lands. William Mills is first recorded as a Milfield tenant in 1723 in a rental of the Howick estate.\(^{622}\) This shows that he was a joint tenant with Thomas Mills, though he became the sole tenant between the end of the rental in 1729 and the first surviving lease of the property of 1735. Prior to 1723 the property was let to John Pringle, John Cunningham and Thomas Nathaniel, so it is likely that Thomas and William Mills (or perhaps just Thomas as he is probably William’s father) had engrossed the farm. In addition to Milfield Hill, William Mills also became a tenant of Milfield Demesne, from John Orde, and in partnership with George Burn, between 1741 and 1778. This made William Mills at least joint tenant of nearly all the land in Milfield Township. It has been argued in Chapter Three that the arable land of Milfield was enclosed by agreement in 1777. This coincides closely with the renewal of William Mills’ lease of Milfield Demesne and an apparent attempt at abolishing the tithes of Milfield by George Burn.\(^{623}\) It appears that William Mills, like his successor, was important in ensuring that enclosure occurred.

Anthony Compton was also important. He farmed Learmouth and engrossed the leasehold farms to allow enclosure and settlement dispersal. Anthony Compton is first mentioned in connection with Learmouth in a rental of 1708. He was not a tenant in that year but was the land agent.\(^{624}\) He began to engross farms at Learmouth in 1719, while he lived in Berwick-upon-Tweed where he was an alderman.\(^{625}\) He continued to acquire leasehold farms until 1733 when the last tenant, a man named Thomas Gregson, surrendered his lease allowing Compton to take the final farm.\(^{626}\) Compton then surrendered his other leases and had three new leases drawn up which included greater

\(^{622}\) NRO.1356/F/1 Grey estate rental.
\(^{623}\) NRO.1356/A/15 lease of the tithes of Milfield.
\(^{624}\) DUSC.GRE/X/P80 1708 rental.
\(^{625}\) DUSC.GRE/X/P73 1719 lease of Learmouth farms.
\(^{626}\) DUSC.GRE/X/P73 lease of Mill lands and Hurch Law.
detail on the landowner’s title to the estate. These leases describe Compton as ‘of Learmouth’ suggesting that he had moved there after 1724, when he was styled ‘of Berwick’. It is likely that Compton built the farm at West Learmouth as the earliest evidence for this is a plan of 1793, though the surviving building is early-nineteenth-century (Fig. 8.1).\(^{627}\) Compton’s actions were also important in creating unity of control which both formed a ring-fence farm and allowed his successors to enclose easily. In the event this was done by his great-nephew Ralph Compton in 1799. It is unclear why Anthony Compton did not complete the enclosure himself, though it is possible that he was prevented from doing so by a small piece of glebe land which Ralph Compton later possessed.\(^{628}\)

Many of the people described above were substantial gentry farmers, but the less wealthy also had a part to play. One of these was William Dobson, a tenant of Longhorsley, who engrossed three farms. The first two were engrossed some time before the 2\(^{nd}\) January 1677, as they were let to him together in a lease of this date. He had probably occupied the farms earlier, but only had a written lease from 1677 when they were introduced to the township. Another lease of this date let a third farm to William Dobson. It shows that it was in the occupation of Katherine Grey demonstrating that William Dobson entered it at that time.\(^{629}\) Thomas Pinkney also engrossed farms at Longhorsley. In 1740 he took the lease of farms previously occupied by William Bell and William Grey.\(^{630}\) In addition to this he had much work done on the house, as the rental records £2-8-4 spent on the house itself, and £3-13-9 spent on building a milkhouse. This is higher than the amounts spent on other tenants.\(^{631}\) He does not seem to have been successful, however, as he left in the following year.\(^{632}\) Similarly, Robert Swann may have entered a newly created farm formed from some strips of land in the south of the township (Fig. 8.2), as his rent is greater than that of his predecessor by £1. Like Pinkney, he had improvements made. Henry Young and Ralph Carnaby were also acquisitive, and took part of Thomas Pinkney’s farm on his departure. This was next to farms which Ralph

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\(^{628}\) DUSC.GRE/X/P276 1793 plan.

\(^{629}\) DUSC.N12/10-11 two leases to William Dobson 2\(^{nd}\) January 1677.

\(^{630}\) DUSC.N113 1740 rentals of Longhorsley.

\(^{631}\) DUSC.N113 1740 rentals of Longhorsley.

\(^{632}\) DUSC.N113 1740 rentals of Longhorsley.
Carnaby and Ralph Young (presumably a relative of Henry) held in neighbouring Todburn. A plan of 1773 confirms that these were joined to their existing farms as it does not show a boundary between the Todburn and Longhorsley holdings (Fig. 8.3). A few other tenants of Longhorsley were also involved in a disproportional amount of building, but were not involved in engrossing.

Robert Keith is another particularly active small tenant farmer. He rented Knightside and Spartishaw in Elsdon from William Orde in 1848. He also took the lease of Townhead from Thomas Hall-Laidler on the 25th September 1872, remaining the tenant of this property until the end of the nineteenth-century. On the 21st July 1881 he added the Batt Field to his holding but lost the lease of this in 1894 following a dispute with the landlord over the repair of buildings. A letter of the 31st March 1898 from Matthew Hall to James Cooper, who was managing The Batt and Townhead lands, remarks that Keith had recently become tenant of the Rothbury Charity lands, and describes this as “another branch up the tree of life for Robert Keith”. Keith was a particularly demanding tenant; he asked for a reduction of the Townhead rent in 1898, threatening to quit the farm if he failed to receive it. He also took a disrespectful approach to the landlord delaying his reply and writing that he expected that the reduction would be granted. He also asked for repairs to be made to a building on the Batt Field in 1887. The managers of the estate seem to have taken this badly, as, had he asked for the repair before he took the lease they could have had more rent. It is quite likely that this timing was intentional.

Some small tenants at Howick also engrossed farms. Alexander Young was involved in this activity in 1712, as he was let the Low Flat, South Farm, Lowfield Farm,
North Moor, High Flatts, Butterlaw and Pilferlands in two separate leases.\textsuperscript{643} Similarly, Alexander Marshall, who was tenant of Howick Heugh in 1712, increased his holding in 1722 by adding a property called East Farm and the two Flatts.\textsuperscript{644} Some Howick tenants also appear to have been particularly active in improvement. In the mid-nineteenth-century Sea Houses Farm went in hand after the death of its tenant Mr Thompson. It remained in hand between 1853 and 1855 when it was let to a Mr Aitcheson and his son.\textsuperscript{645} Thompson did not carry out much improvement, though a limited amount of draining appears to have been done during his tenancy.\textsuperscript{646} Improvement began in earnest in 1854, while the farm was still in hand and increased sharply in 1855 shortly before it was let to the Aitchesons.\textsuperscript{647} It is likely that these were repairs and improvements made at the request of the Aitchesons before they entered the farm. From their entry until 1858 the Aitchesons continued to have work done on the farm buildings. They also performed some draining. Middle Field was drained in 1854, Camp Hill in 1855, North Dove Cot and North Banks in 1856, and Middle Moor in 1859 (Fig. 7.17). The Aitchesons were also allowed £30 for manures from 1861 onwards.\textsuperscript{648} It appears, then, that improvement at Sea Houses correlates very closely with the arrival of a particular tenant.

All these examples are tenants, but landlord or landowner agency is also important. One of the most obvious examples occurred at Howick, where the earliest important landowner, Edward Grey, bought up most of the land in the township between 1593 and 1623 (Chapter 3). He also made an agreement with John Craster to enclose a small piece of land which he was unable to purchase in 1607.\textsuperscript{649} Finally he appears to have been responsible for the enclosure of the remainder of the township, by unity of control, in the first half of the seventeenth-century (Chapter 3). His successors made little change to the landscape, until Sir Henry Grey introduced written leases in 1712 this

\textsuperscript{643} DUSC.GRE/X/P72 1\textsuperscript{st} June 1712 lease of Howick Low Flatt, South Farm, Lowfield Farm and North Moor, DUSC.GRE/X/P72 9\textsuperscript{th} March 1712 lease of Howick High Flatts, Butterlaw and Pilferlands.
\textsuperscript{644} DUSC.GRE/X/P72 9\textsuperscript{th} March 1712 lease of Howick Heugh and Low Farm and DUSC.GRE/X/P72 7\textsuperscript{th} July 1722 lease of half of Southfield Farm.
\textsuperscript{645} DUSC.GRE/X/P81 rentals of Howick 1853-5.
\textsuperscript{646} DUSC.GRE/X/V102 1840-1867 drainage book.
\textsuperscript{647} DUSC.GRE/X/P182 1845-58 rough accounts of expenditure on the Howick estate.
\textsuperscript{648} DUSC.GRE/X/P259 1861-1866 rentals, DUSC.GRE/X/P183 Notebook containing particulars of the Grey estates and terms of tenancies.
\textsuperscript{649} DUSC.GRE/X/P112 eighteenth Century copy of an arbitration award for the division of Howick, July 1607.
occurred only two years after his inheritance of the Howick estate (Bateson 1895; 352). His son, also called Henry Grey, built the hall in 1782 created a landscape park, and moved the village to its present site (Pevsner and Richmond 1987, 194, Chapter 4). From the beginning of the nineteenth-century the activities of the Howick’s owner become more visible as documentary sources increase. A pattern of change occurring immediately after the inheritance of the estate by each new generation emerges. The first case was between 1804 and c.1830: beginning only three years after Charles the Second Earl Grey moved into Howick Hall, his uncle Henry Grey having retired in 1801, and four years before his inheritance of the estate in 1808 (Smith 1990; 136). During this time several new machines and tools were introduced, the number of farm horses increased, new crops and fertilisers were experimented with, and new administrative techniques were introduced (Chapter 7). There was also a period of particularly intensive building and drainage activity between 1804 and 1808 which may have been connected with the division of the township into two farms one of which was let to a tenant in 1810. From around 1830 there is much less improvement on the Howick home farm, which probably coincides with Charles Grey’s term as Prime Minister which began in 1830 (Smith 1990; 258).

Activity began again in 1846; the year after Grey died and left the estate to his son Henry (Bateson 1895; 352), though as most estate correspondence is signed by Frederick William Grey, Henry’s younger brother, the estate appears to have been managed by him. This period included the creation of a model farm at Redstead. This farm was subject to an intensive period of building work between 1846 and 1858, which included the construction of many specialised buildings including liquid manure tanks (Chapter 7). There was also a large amount of draining carried out at this time, and many experiments with new crops and manures. Grey seems also to have taken an interest in agricultural literature, making cuttings from periodicals and corresponding with neighbouring farmers (see above Chapter 7). This period ended around 1861 when Frederick William Grey was appointed First Lord of the Admiralty, so it may have stopped as he acquired more political responsibility (Lambert 2009). When Albert the fourth Earl Grey inherited the estate in 1894 there was no new period of improvement, which may reflect a lack of

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650 DUSC.GRE/X/P81 rental of Howick 1810.
interest on his part. There were however many changes to the way in which labour on
the estate was managed including the construction of a school and the introduction of
profit sharing and cow keeping schemes (Chapter 7). Changes at the Howick estate
appear to correlate very well with the arrival of new landowners and thus clearly include
the agency of particular individuals.

A similar phenomenon can be seen at Longhorsley in 1808 when the Earl of
Carlisle’s estates at Bigge’s Quarter were purchased by a man called Charles William
Bigge.651 One of his most obvious impacts on the landscape was the construction of a
neo-classical mansion called Linden Hall and a park (Figs. 8.4, 8.5 and 8.6). He also
appears to have rearranged the farm boundaries to create larger farms with more regular
shapes (Fig. 4.8). The farmsteads depicted on a 1773 plan are also very different from
those depicted on the 1842 Tithe Plan (Figs. 7.19), and, as there is little evidence in the
Howard of Naworth papers for building work after 1773, it is likely that this rebuilding
was carried out by Charles William Bigge (see above chapter 7). At the same time View
Law was built on an entirely new site (Fig. 4.8). Bigge also owned a farm called Blackpool
Farm in Freeholder’s Quarter, which he had purchased from Mr Bolton in 1823.652 The
Tithe Plan shows that this was much more consolidated than the other farms in
Freeholder’s Quarter (Fig. 4.2),653 so it seems that either Bigge, or his predecessors who
were also wealthy, were active in improving this too. This contains a quite advanced
nineteenth-century farmstead. As at Howick a new owner seems to have ushered in a
period of modernisation and improvement. Finally, one of the Orde family may have
been responsible for the amalgamation of both Knightside and Spartishaw and the farms
around East Nook in Elsdon, creating some of the largest areas of open pasture on the
Tithe Plan (Fig. 4.23).

These examples are from the aristocracy and upper gentry but it is possible to see
the agency of much smaller landowners in action at Elsdon. The most obvious example is
a man called Thomas Thornton. Thornton came from Harwood, to the south of Elsdon
and purchased several farms between 1810 and 1825.654 His purchase of Burnstones

651 DUSC.N13/15 1808 draft conveyance of estates at Longhorsley.
652 NRO.ZBS/28/1 Abstract of title of Blackpool Farm.
653 NRO.DT192M Freeholder’s Quarter Tithe Plan and Apportionment 1842.
654 E.g. NRO.ZBS/26/2 29th February 1820 release of a moiety of Burnstones.
from the descendants of Thomas Pearson; Francis and Thomas, is particularly illuminating. He bought the first half in 1820 from Francis Pearson. A letter of 1822 suggests that Thornton was dishonest in this transaction as a letter from Francis Pearson accuses him of “know[ing] the illegality of the sale” and claims that Francis Pearson had been “forsed [sic.] into the measure by my situation”, alluding to a “family difference”. The letter also implies that Thornton had paid less than the market value and instructs him to go “to my nephew” and “make a fair offer for the whole”. The most likely explanation for this is that Francis Pearson and Thomas Thornton had not sought the permission of Thomas Pearson, Francis’ nephew and heir to the estate under an entail placed on it by Thomas Pearson’s will. Thornton must have rectified the situation, probably out of court as there are no other documents relating to the matter. He was still owner of Burnstones in 1840, and in fact purchased the remaining moiety from Thomas Pearson on 18th May 1825. Finally, Thomas Thornton bought Low Mote from Alexander Hall on the 11th May 1824. The circumstances of this sale are also suspicious as Thomas Thornton had been one of three trustees of the estate appointed by the will of Matthew Hall to hold the land for Alexander until his twenty first birthday. It is possible that Thomas Thornton used his position as a trustee to manage the estate to his advantage, influence Alexander Hall, or at the very least to familiarise himself with the farm. Most of these purchases join land together though at the time of the Tithe Commutation the estate was being let as separate farms (Fig. 4.16); it is possible therefore that Thornton was giving himself the possibility of splitting up his estates at Elsdon in different ways. Thornton was clearly ambitious and acquisitive, and his amalgamation of farms had a landscape impact because it allowed boundaries between farms to go down (Fig. 4.18).

Another good example of the agency of smallholders is Thomas Pearson. He purchased Burnstones from Thomas Hall on the 31st of January 1766, and Red Hall field

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655 NRO.ZBS/26/2 28th February 1820 correspondence F. Pearson to T. Thornton.
656 NRO.ZBS/26/2 30th May 1773 Will of Thomas Pearson.
657 NRO.DT164M Elsdon tithe apportionment.
658 NRO.ZBS/26/2 17th and 18th May 1825 lease and release of a moiety of Burnstones.
659 NRO.ZBS/26/2 11th May 1824 Conveyance of Low Moat.
660 NRO.ZBS/26/2 29th October 1814 Will of Matthew Hall.
661 NRO.ZBS/26/2 30th and 31st of January 1766 lease and release of Burnstones.
from Michael Elsdon on the 26th November 1768.\textsuperscript{662} The sale of Burnstones by Thomas Hall, who had inherited the property,\textsuperscript{663} seems to have been because he was unable to keep up repayments on a mortgage, as the mortgage had been assigned several times and still had interest owing on it at the time of the sale;\textsuperscript{664} situations like this often provided the opportunity for outside investors like Pearson to buy land in Elsdon. These properties are both in the open fields to the east of the village, but the purchase did not consolidate any strips (Fig. 4.16). Thomas Pearson lived in Newcastle, and seems to have made a living from his ownership of a quarry at Walbottle.\textsuperscript{665} This means that he probably bought the property as an investment using capital accumulated from his other activities. It is likely that Pearson was responsible for the construction of Pearson’s House Farm, so, again, his activities had a landscape impact.

The enclosure of Elsdon Common was the work of both large and small landowners. It is clear that the lord of the manor was in favour of the enclosure as he sought legal opinions on whether he could enclose parts of the common without the consent of the freeholders, and what he would receive for his right to the soil in the event of a Parliamentary Enclosure. The Enclosure Act, of 1731, also shows some of the individual agents involved in the enclosure as it lists thirty-two petitioners for the Bill. Little is known of most of these people. However, certain details can be determined from a careful reading of the Enclosure Award as twenty-two received allotments.\textsuperscript{666} Taking the size of the allotment as a proxy for the size of the holding it can be seen that these twenty-two included most of the large landowners, nine receiving over 100 acres, in comparison with only two allotments of this size to people who were either not named in the Award or not petitioners. Despite this some smaller landowners are present, for example Thomas Hedley who received only 21a-2r-0p, or Edward Hall who received 22a-0r-32p. Ten of the other petitioners are not mentioned in the Award. This is either because they received allotments for which no landowner is named in the Award, or because they had died or left the township between the passing of the Act 1729 and the making of the Award in 1731. In the only case in which biographical details are known,

\textsuperscript{662} NRO.ZBS/26/2 26th November 1768 lease and release of Red Hall Field.
\textsuperscript{663} NRO.ZBS/26/2 31st January 1766 Conveyance of Burnstones.
\textsuperscript{664} NRO.ZBS/26/2 31st January 1766 Conveyance of Burnstones.
\textsuperscript{665} NRO.ZBS/26/2 30th May 1773 Will of Thomas Pearson.
\textsuperscript{666} NRO.QRD3 1731 Elsdon Enclosure Award.
that of Jeremiah Bayles, it turns out that he was not actually a landowner at either the time of the Act or the Award. On the 25th October 1725 he had married Catherine Elsdon (Stephens 1903, 103), who was entitled to Low Mote by her late father’s will, but only in the event of her mother’s death. As it turned out, Jeremiah Bayles never possessed this farm as he died in 1755 predeceasing Catherine’s mother. The land ultimately went to Catherine’s half-brother Alexander Hall. In this case Jeremiah Bayles petitioned for the enclosure in the expectation that it would add to holdings that he would come to possess in the future, or in the knowledge that his wife would in any event. Particular landowners also took some initiative in setting out their allotments as, for example, part of the allotment to Matthew Reed for Shittleheugh was placed with his allotment for Killhouse on the other side of the township. In this case the Award specifies that it was at his direction. This was not always done, and it is possible that the each person had a different desired outcome from enclosure leading to the complex pattern of allotments (Fig. 8.7). Chapman and Seeliger (2001, 29) have found evidence elsewhere, in the form of letters to the commissioners, that commissioners often took individual landowners wishes into account. From these examples it is clear that all classes and types of person could be involved in improvement and enclosure. There may be some bias towards the aristocracy on account of their greater wealth, though as they are better represented in the sources this is difficult to assess. On the whole it is not possible to generalise about the importance of one class; each case must be assessed separately.

In contrast to those who were highly involved in improvement and enclosure certain people took very little interest. A good example is Cuthbert Lockewood who sold the estates which he had inherited from his father Oswey in 1623, probably only shortly after receiving them. His father had purchased these forty years before in 1581 and may have intended to leave an inheritance for his son. A similar series of events occurred at Elsdon. Here Thomas Pearson built up an estate by purchases in 1766 and

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667 NRO.ZBS/26/2 21st May 1729 Deed of Covenants to Declare the uses of a Fine.
668 NRO.ZBS/26/2 4th December 1755 Conveyance of Low Mote.
669 NRO.QRD3 Elsdon Enclosure Plan.
670 NRO.QRD3 Elsdon Enclosure Award.
671 DUSC.GRE/X/P43 18th August 1623 bargain and sale.
672 DUSC.GRE/X/P43 12th November 30 Elizabeth bargain and sale.
These were divided between his sons, Francis and Thomas, at his death in 1775. Francis Pearson was clearly planning to sell his estates in 1815 as he suffered a common recovery on them in that year. He finally sold them to Thomas Thornton of Harwood in 1820. Francis Pearson lived in Middlesex, so it is possible that distance from the estates in Northumberland meant that he took little interest in them and certainly must have had other sources of income. Thomas Pearson died in 1817, leaving his share of the Elsdon estates to his son Thomas. This Thomas sold up shortly after, in 1825, again to Thomas Thornton. As with Francis neither Thomas lived at Elsdon, both lived in Newcastle, and both were master mariners. Finally, James Ogle of Longhorsley seems to have opposed the 1664 enclosure agreement to such an extent that his lands had to be left out. This meant that the enclosure was not completed until 1688 when Ogle’s farm was purchased by Mr Bulman, who had supported the 1664 enclosure, and parts exchanged with Mr Horsley. This is not to say, however, that these people were without agency, their sales allowed people who did instigate landscape change to purchase their estates and caused them to purchase at particular times.

Other people did not make improvements despite continuing in possession of their estates. A good example is Aislabie Proctor. He was the incumbent of Alwinton which had some glebe land in Elsdon. Proctor seems to have taken very little interest in this property and appears to have had very little idea of what he possessed in Elsdon. For example, he claimed that he had not heard of a piece of land called ‘Threep Land’ mentioned in the lease of part of his estate called Bainshaw Bog. Similarly he had to write to a resident of Elsdon to ask where one of the gardens that he owned was and to whom he had let it. In addition he did not sign the lease of Bainshaw Bog as, he notes, “I suppose I ought to have done".

673 NRO.ZBS26/1 conveyance of Burnstones 1766 31st January 1766.
674 NRO.ZBS/26/2 30th May 1773 Will of Thomas Pearson.
675 NRO.ZBS/26/2 25th November 1815 Common Recovery upon a Moiety of Burnstones.
676 NRO.ZBS/26/2 28th and 29th February 1820 lease and release of a moiety of Burnstones.
677 NRO.ZBS/26/2 28th and 29th February 1820 lease and release of a moiety of Burnstones.
678 NRO.ZBS/26/2 27th and 28th May 1825 lease and release of a moiety of Burnstones.
679 NRO.ZBS/26/2 17th and 18th May 1825 lease and release of a moiety of Burnstones.
680 NRO.ZBS26/1 conveyance of Burnstones 1766 31st January 1766.
681 NRO.ZBS/26/2 30th May 1773 Will of Thomas Pearson.
682 NRO.ZBS/26/2 25th November 1815 Common Recovery upon a Moiety of Burnstones.
683 NRO.ZBS/26/2 28th and 29th February 1820 lease and release of a moiety of Burnstones.
684 NRO.ZBS/26/2 28th and 29th February 1820 lease and release of a moiety of Burnstones.
685 NRO.ZBS/26/2 27th and 28th May 1825 lease and release of a moiety of Burnstones.
686 NRO.ZBS/26/2 17th and 18th May 1825 lease and release of a moiety of Burnstones.
687 NRO.358/21/10 Enclosure Agreement 1664.
688 NRO.335/21/1 conveyance 4th April 1688.
689 NRO.ZHE/14/3 correspondence A Proctor to C.S. Bell 24th September 1873.
690 NRO.ZHE/14/3 correspondence A Proctor to C.S. Bell 29th October 1873.
691 NRO.ZHE/14/3 correspondence 7th October 1870.
word of mouth, a method which could be easily exploited.\textsuperscript{685} This attitude may stem from the fact that the lands were quite distant from his main holdings in Alwinton, and also that his profession was as a clergyman not a landlord. He attempted to sell some of his land in 1874, though, despite the auction being held the sale fell through, as the land still appears in glebe terriers of 1895.\textsuperscript{686} It is possible that the legal status of the land as glebe made the sale impossible. A similar example of mismanagement is that of the Hall-Laidler estate, which is also in Elsdon. This resulted from a rather complex situation arising from the will of Thomas Hall-Laidler who died in 1885 or 1886.\textsuperscript{687} He initially devised his estates to Matthew Hall, his “friend”,\textsuperscript{688} in trust to pay his debts. After this the lands were to go to his sons Thomas, Jeremiah, Martin and Percival when the youngest was twenty-five. These estates were to be subject to a legacy of £100 to his daughter Elizabeth on her twenty-fifth birthday and an annuity of £20 to his widow for life. A house in Morpeth was also devised to James Cooper, the “natural son” of Thomas Hall-Laidler.\textsuperscript{689} In 1897 Matthew Hall resigned the trust and signed it over to James Cooper. Cooper appears to have been involved informally in running the farms up to this point, as there is correspondence between him and Matthew Hall.\textsuperscript{690} Cooper’s management of the estate was subsequently challenged by Thomas Hall-Laidler’s legitimate children.\textsuperscript{691} There is some evidence that Cooper and Hall made poor decisions regarding the running of the estate for example, a tenant called William Charlton was able to refuse to repair the fences as they were not mentioned in his contract. Furthermore, Matthew Hall felt that it would be difficult to enforce the lease as stamp duty had not been paid, and the estate had been let by word of honour several times since the tenant entered.\textsuperscript{692} Again the agency of Aislabie Proctor, Matthew Hall and James Cooper made a difference to how the landscape developed, as they appear to have been exploited by tenants like Robert Keith, the Thorntons and William Charlton. Indeed they may have rented some of these lands knowing that the way in which they were let

\begin{itemize}
\item \textsuperscript{685} NRO.ZHE/14/3 correspondence A. Proctor to J. Snowball 24\textsuperscript{th} September 1873.
\item \textsuperscript{686} NRO.ZHE/14/3 April 14\textsuperscript{th} 1874 correspondence J. Snowball to C.S. Bell, NRO.DN/E/9/1/103 Alwinton and Holystone terrier 20\textsuperscript{th} March 1895.
\item \textsuperscript{687} NRO.ZBS/25/1 7\textsuperscript{th} April 1886 Will of Thomas Hall-Laidler.
\item \textsuperscript{688} NRO.ZBS/25/1 7\textsuperscript{th} April 1886 Will of Thomas Hall-Laidler.
\item \textsuperscript{689} NRO.ZBS/25/1 correspondence J. Cooper to M Hall 7\textsuperscript{th} June 1886.
\item \textsuperscript{690} NRO.ZBS/25/1 correspondence M Hall to J Cooper 1886 to 1897.
\item \textsuperscript{691} NRO.ZBS/25/1 correspondence WH Ord to J Cooper 8\textsuperscript{th} July 1888.
\item \textsuperscript{692} NRO.ZBS/25/1 correspondence J Cooper to M Hall 7\textsuperscript{th} June 1886.
\end{itemize}
could work to their advantage. This is a form of agency, though it is unintentional, as it shapes the way in which landscape change occurred.

Finally, there were some tenants who did not participate in improvement. A good example of this is a man called Ralph Compton. He was the tenant of East Learmouth farm in the mid-nineteenth-century, while a man called William Smith was the tenant of West Learmouth. There is evidence for building work at both farms up to 1846, but only at West Learmouth from 1846-47 (Chapter 7). It is probably significant that the building at East Learmouth stopped earlier as an 1845 report on the farms said that Mr Compton had stated that he needed more accommodation for pigs but did not want to pay the interest on the capital. In 1848, Compton became bankrupt and left the farm. At the same time William Smith surrendered his lease of West Learmouth, which went on hand until 1851 when it was let to John Lumsden. Building work at West Learmouth ceased on William Smith’s departure, suggesting that he was the impetus behind it. In the same year a man called William Smith, who may well be the former tenant of West Learmouth, took the lease of East Learmouth, and immediately instigated a programme of building. It seems, then, that building work ceased when tenants were unwilling to have it done. Their reasons for this may not always have been personal preference as Ralph Compton’s financial situation probably prevented him taking on improvement.

A similar example of a tenant failing to use improved methods is provided by William Lumsden. He succeeded his father, John, as tenant of West Learmouth in 1872. Lumsden’s farming may have been irregular from the beginning of his tenancy, as some

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693 DUSC.GRE/X/P182 1845-1855 accounts of expenditure on various farm buildings, DUSC.GRE/X/P233 1st August 1851 memorandum of new buildings to be built at East Learmouth, DUSC.GRE/X/P233 July 1st 1852 statement of alterations to East Learmouth buildings, GRE/X/P234 1846-1856 Buildings on the Howick estate.
694 DUSC.GRE/X/P68 building report.
695 DUSC.GRE/X/P233 Letter May 1st 1848 R. Compton to G.A. Grey.
696 DUSC.GRE/X/P253 1851 lease of West Learmouth to John Lumsden.
697 DUSC.GRE/X/P182 1845-1855 accounts of expenditure on various farm buildings, DUSC.GRE/X/P233 1st August 1851 memorandum of new buildings to be built at East Learmouth, DUSC.GRE/X/P233 July 1st 1852 statement of alterations to East Learmouth buildings, DUSC.GRE/X/P234 1846-1856 Buildings on the Howick estate.
698 DUSC.GRE/X/P182 1845-1855 accounts of expenditure on various farm buildings, DUSC.GRE/X/P233 1st August 1851 memorandum of new buildings to be built at East Learmouth, DUSC.GRE/X/P233 July 1st 1852 statement of alterations to East Learmouth buildings, DUSC.GRE/X/P234 1846-1856 Buildings on the Howick estate.
cropping returns show that certain fields were farmed in a four-course system, even though the lease required a five-course system. This must have been allowed as Grey’s agent would have been aware of it from the cropping returns. From 1887 Lumsden took four successive crops of grain on Night Close and three on South Kirkhill and North Constable. This was not permitted and damaged the farm, as a crop return of 1890 contains a note which says that it will take some time to repair. Lumsden was clearly having difficulty in running the holding as he got into arrears between 1879 and 1882, and again between 1883 and the end of his tenancy. In addition, he had the rent reduced in 1880. The arrears eventually reached £1000 in 1888 when he was asked to leave. Lumsden appears, then, to have farmed negligently, though he did attempt to defend himself. He employed Messrs Turnbull and Calder to survey the farm in order to provide evidence in his favour, with the intention of claiming compensation for unspent improvements, including manures and fodders. He may well have been using some improved techniques but overall his farming appears to have been poor. This may, itself have been because he was struggling to make a profit given the low price of grain during this period. So, again, a particular tenant may be connected with a lack of improved farming, though only in the context of agricultural depression.

Thus, our case studies show that people possessed agency in all types of landscape change considered here. This deals a blow to studies which would draw simple correlations between events and economic or environmental trends (e.g. Turner 1980). If they were right changes to tenants or landlords would make no difference to landscape development. It is also clear that all different classes and social groups are involved in improvement and enclosure. Tenants, landlords, small owner-occupiers, gentry and aristocracy have all been shown to be engaged in improvement. By the same token some members of all these groups were ambivalent to their estates or farms. In many cases their agencies are very similar. For example, Edward Grey, a member of the aristocracy,

699 DUSC.GRE/X/P271 cropping returns.
700 DUSC.GRE/X/P271 cropping returns.
701 DUSC.GRE/X/P271 cropping returns.
702 DUSC.GRE/X/P266 1880 Note by G. A. Grey of Milfield of alteration in the terms of W.P. Lumsden’s lease of West Learmouth Farm.
703 DUSC.GRE/X/V25 tenants ledger, DUSC.GRE/X/P115/5 letter A. Grey to G. Grey.
704 DUSC.GRE/X/P96 report by James Turnbull and Adam Calder.
705 DUSC.GRE/X/P233 11 March 1889 copy letter William P Lumsden to George Grey.

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Thomas Thornton, a very small landowner, and Anthony Compton, a wealthy tenant farmer all practiced engrossment. They were also constrained by similar factors like the need to wait for a farm to pass to someone who was willing to sell it or give up a lease. As a result it is impossible to identify one group which caused improvement or enclosure. This is especially so because much of the agency is unintentional; many of the people who were uninterested in improvement none the less made a difference to the way in which it was carried out through neglect of their estates, or their desire to dispose of them. Despite all this correlations between economic trends and social groups do exist. I do not dispute the facts which such studies reveal; I simply show that, because individual agencies come across clearly in local studies, such models are very limited in their explanatory powers. Correlations occur because human agency originates in an assemblage of different agencies, some of which have been the subject of traditional models. These agencies must now be considered.

Money

The importance of money in agricultural improvement has been discussed in economically determinist works. Of these, one of the most obvious is the suggestion that the high grain prices of the Napoleonic Wars encouraged landowners to increase the area of arable cultivation through Parliamentary Enclosure (e.g. Prince 1989; 44-5, Turner 1980; 86, Chambers and Mingay 1966; 84). Similar types of explanation include; Mingay’s (1997; 32) suggestion that price movements resulting from improvement of transport networks may have prompted enclosure; Parton’s (1985; 52) theory that enclosure in Sussex was partly driven by the value of building land near towns; and Searl’s (1993) conclusion that Cumbrian commons were enclosed as larger numbers of stock were depastured due to the development of droving networks from Scotland. Similarly, Beresford (1983; 177-216) linked the high and stable price of wool to late-medieval and early-Tudor village depopulation. Deterministic explanations have also been brought to bear on improvement, as it has been suggested that investment slowed during the late-nineteenth-century Agricultural Depression (Prothero 1961, 386-7). On the other hand, recent studies have begun to make more complex analyses of responses to price movements. For example, Shepherd (1992) found that, while many Sussex small farmers were put out of business by the post-Napoleonic War depression, its effects were
mediated by a number of personal and local factors. These include the poor rate burden, the stage in the family life cycle, and the number of children. Crust (1995) has shown that a tenant farmer called William Paddison survived the Depression through a combination of good decisions and a favourable situation. Similarly, Hunt and Pam (1997) have examined yearly price fluctuations during the late-nineteenth-century Depression to show that individual farmers would not have been able to perceive long-term trends in favour of livestock production clearly enough to be able to make decisions based on them. This explains why people did not switch from arable to livestock production even though overall livestock prices fell less. Studies like these begin to express how economic trends were mediated by local factors, including individuals. The importance of this is demonstrated by the five case studies.

Many of the people who made the greatest changes were wealthy individuals. Anthony Compton, who engrossed the leasehold farms at Learmouth, was an Alderman of Berwick, and so was probably quite wealthy. This would have allowed him to stock a relatively large farm and made him a more attractive tenant for the landlord (Mingay 1962; 473-4). Consequently, his wealth was essential for him the changes that he made. Similarly, Thomas Pearson had a non-landed income from a quarry which he owned at Walbottle, and left a large estate at his death. He almost certainly invested money from this business in his purchases of land at Elsdon. Charles William Bigge, who bought and improved Bigge’s Quarter of Longhorsley, was a Newcastle banker and died a wealthy man. Bigge initially bought the estate jointly with a man called Ralph Carr. A series of letters between Carr and his brother record the way in which Carr raised money to make the purchase. He already had £9,500 owed to him when he heard about the sale, and thought that he could make a further £25,000 by selling another estate. He did not feel that this was enough and asked his brother if he wanted to purchase it jointly. This did not happen as he eventually divided it with Bigge. Similarly, two purchasers of land at Elsdon had money from other sources: William Goldburn was a butcher from Newcastle,
and George Davidson was a gentleman, though the source of his wealth is unknown.\textsuperscript{712} Thus, access to capital was clearly important in being able to achieve landscape change or agricultural improvement.

Similarly, a lack of capital resources could cause an endeavour to fail. Many examples of this have been described in published literature, for example, a scheme to drain East Flanders Moss in Perthshire failed because it was underfunded (Harrison 2009; 9-10). Mingay (1962; 471-2) thought that small farms were less able to compete, and that this was exacerbated by depressions, or the high costs of Parliamentary Enclosure. Some failures can also be found in the case studies. A particularly clear example is that of Ralph Compton at East Learmouth. He initially had building work performed, but by 1845 he could not afford new piggeries even though they were needed.\textsuperscript{713} Two years later he became bankrupt and left.\textsuperscript{714} Similarly, Wilson sold Milfield Demesne to John Orde in order to pay a debt. James Wilson mortgaged the estate several times up to 1736, by which time it was encumbered with just over £1200.\textsuperscript{715} He then assigned the lands to his son who sold them to John Orde of Morpeth in 1741.\textsuperscript{716} This was a common route by which property came onto the market. Thomas Hall sold Burnstones to Thomas Pearson in order to pay debts, and Eleanor and Robert Blakey sold Townfoot to Thomas Thornton for the same reason.\textsuperscript{717}

It appears, then, that access to capital, or the lack of, it was a major factor in determining the ability of an individual to cause landscape change. Personal fortunes could rise and fall due to purely local factors, but were more likely to be created in favourable economic conditions or to fall during depressions. Thus, personal wealth mediated national economic trends in local events. This can be seen quite clearly in some of the case studies, and is most clear at Howick South Side. This farm went in hand at the end of the 1810s, following a turbulent period of letting and re-letting. Two tenants called Thompson left in 1814, and it was re-let at the reduced rent of £1000 to a Mr

\textsuperscript{712} NRO.ZBS/26/2 7th May 1720 conveyance of lands at Elsdon, ZBS26/2 30th Jany 1773 release Geo Heslop & Ux. to Wm Goldburn.

\textsuperscript{713} DUSC.GRE/X/P68 building report.

\textsuperscript{714} DUSC.GRE/B2/7/164 correspondence, DUSC.GRE/X/P68 building report.

\textsuperscript{715} NRO.ZBS/14/1 Abstract of title of William Orde Esqr to Milfield Demesne 1842.

\textsuperscript{716} NRO.ZBS/14/1 Abstract of title of William Orde Esqr to Milfield Demesne 1842.

\textsuperscript{717} NRO.ZBS26/1 31st January 1766 conveyance of Burnstones, NRO.ZBS26/1 abstract of title of Mr Anthony Hall Thornton.
William Jackson.\textsuperscript{718} At this time a single field, South Whinney, and a cottage were detached from the main farm and let to a Mr Reavell.\textsuperscript{719} William Jackson first experienced difficulty between October 1814 and March 1815 when he only paid £450 of his £500 half year’s rent.\textsuperscript{720} This is towards the end of the Napoleonic Wars and largely comprises the period of Napoleon’s first exile. By October 1816 the arrear had reached £159-19-0, despite a reduction in the rent to £750 per annum.\textsuperscript{721} Jackson had died by March 1818 and his executors paid off his debts in the following year.\textsuperscript{722} After this South Side does not appear as a tenanted farm suggesting that it had been taken in hand as other tenants could not be found. Similar problems were experienced at Howick at the end of the nineteenth-century. Messrs Aitcheson left Sea Houses in 1866 having begun to accrue an arrear in 1860. After this the farm was on hand until the end of the nineteenth-century. The arrears accrued by the Atichesons cannot be connected with the late nineteenth-century depression as this did not begin until the 1870s, however, the fact that no new tenant was found probably is. Finally, William Lumsden’s experiences at Learmouth were probably a result of the difficulty in making a profit from farming at the end of the nineteenth-century, as he had entered only a year before the depression.

It is clear, then, that individual fortunes, which allowed improvement to be performed, were partly determined by macro-economic trends. Thus, in many cases economic downturns were a halt to improvement. However, depressions could offer certain opportunities, particularly to tenant farmers. This revealed by a dispute between Ralph and Fenwick Compton (the tenants of Learmouth at the beginning of the nineteenth-century) and their landlord, the second Earl Grey. In 1818, three years after the end of the Napoleonic Wars, the Learmouth leases were due for renewal. The process of negotiation is first mentioned in a letter of 14\textsuperscript{th} January 1818, which states that the land agent, Mr Anderson, had met with Mr Compton (which one is not specified) and made no agreement.\textsuperscript{723} A later letter mentions that Fenwick Compton was unhappy with

\textsuperscript{718} DUSC.GRE/X/P81 1814 rentals.
\textsuperscript{719} DUSC.GRE/X/P81 1814 rentals.
\textsuperscript{720} DUSC.GRE/X/P81 1815 rentals.
\textsuperscript{721} DUSC.GRE/X/P81 1816 rentals.
\textsuperscript{722} DUSC.GRE/X/P81 1818 and 1819 rentals.
\textsuperscript{723} DUSC.GRE/B2/7/145.
planned alterations to the farm boundaries.\textsuperscript{724} The Comptons also thought the rents being asked by Anderson too high.\textsuperscript{725} It is likely that the Comptons knew that they could make greater demands of their landlord since the economic conditions following the end of the Napoleonic Wars had made finding tenants more troublesome.\textsuperscript{726} On 15\textsuperscript{th} May 1818 Anderson forwarded a letter from Ralph Compton to Earl Grey in which Ralph claimed that he could not take on Sunnilaws as well as West Learmonth due to his state of health. In the covering letter Anderson described his negotiations with an alternative tenant, Mr Thompson, who he recommended to Grey.\textsuperscript{727} This prompted action from the Comptons, who wrote directly to Grey accusing Anderson of treating them unfairly, and also told Mr Thompson that the farms were not tithe free, a condition which would significantly reduce their value.\textsuperscript{728} As a result Thompson refused the farm, and Anderson again offered it to the Comptons on the grounds that they were “respectable and old Tenants”.\textsuperscript{729} They refused this offer, and Anderson considered approaching Thompson for a second time before letting it by proposals, as he felt that this would damage Grey’s reputation as a landlord and attract the wrong sort of tenant.\textsuperscript{730} On the 22\textsuperscript{nd} June Anderson wrote to Grey to inform him that he had agreed to let East Learmonth to Fenwick, but had not made an agreement with Ralph. In the same letter Compton said that he was glad to have brought the business to an end as he had lost sleep over it.\textsuperscript{731} Ralph must have left shortly after this, and the fact that he paid all his outstanding rent at the Whitsuntide before 30\textsuperscript{th} March 1819 may provide a date.\textsuperscript{732} Several letters between 31\textsuperscript{st} July and 18\textsuperscript{th} September detail legal proceedings taken by Grey against Ralph Compton, though it is unclear exactly why.\textsuperscript{733} Similarly, it is likely that the pressure that

\textsuperscript{724} DUSC.GRE/B2/7/152, GRE/B2/7/156 also discusses disagreement over the boundaries.
\textsuperscript{725} DUSC.GRE/B2/7/168.
\textsuperscript{726} On the 30\textsuperscript{th} January 1818 Anderson remarked that “I do now experience considerably more altercation and trouble in letting of Farms, than when I first entered into your Lordships service.” (DUSC.GRE/B2/7/152).
\textsuperscript{727} DUSC.GRE/B2/7/164.
\textsuperscript{728} DUSC.GRE/B2/7/168.
\textsuperscript{729} DUSC.GRE/B2/7/170.
\textsuperscript{730} DUSC.GRE/B2/7/170.
\textsuperscript{731} DUSC.GRE/B2/7/174.
\textsuperscript{732} DUSC.GRE/B2/7/184.
\textsuperscript{733} DUSC.GRE/B2/7/210, DUSC.GRE/B2/7/214, DUSC.GRE/B2/7/216. An arbitration award shows that Grey was successful in this (DUSC.GRE/X/P80).
William Piper Lumsden was able to exert on Grey to have a reduction of his rent in 1888 was made possible because of the shortage of suitable tenants.  

This suggests that money was important in landscape change, but that it did not work predictably, as assumed by economically deterministic models. As at all times there were landowners and tenants who were successful and those who were unsuccessful. Their failure or otherwise was a combination of economics, their own responses and other factors. Consequently, economic trends were only made present in particular events by providing people with more or less money, which could lead to different consequences. Economics also influenced people’s expectations of seeing a return from an investment, as it is possible that Bigge bought land when he did because it was a time of rapidly rising grain prices. The idea that economic trends are mediated through personal finances and perceptions of economic change helps to explain the variety of experiences of economic boom and depression revealed in the case-study townships. This unpredictability is due to the fact that many other actors are present in each event.

**Estates**

The estates are one such type of actor, and were usually managed by a steward of land agent. This agent would collect rent and perform administration at the instruction of the landlord. Over time the position of land agent became increasingly professionalised; much work being undertaken by firms by the mid-nineteenth-century (English 1984). The estate could affect individual farms in several different ways. Firstly, it could select tenants of a particular type; substantial tenants were often preferred as they could be trusted to stock a large farm, would invest in improvements, and were less likely to fall into arrears (Mingay 1962; 471-2). The desires and financial means of the landlord could also be mediated through the estate as estate policy. This made it easier or harder for tenants to have improvements made. Sometimes absentee landlords are thought of as particularly neglectful, though Beckett (1983) has shown that this was not always the case. Estate policy could also reflect national economic trends, as Farrant (1979) has shown, that some estates became cautious about investment during the depression, while others responded by investing more heavily.

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734 DUSC.GRE/X/P266 1880 Note by G. A. Grey of Milfield of alteration in the terms of W.P. Lumsden’s lease of West Learmouth Farm.
This all suggests that estates could mediate the economic trends discussed above. A few examples of their agency can be demonstrated in our case studies. One of the best examples is the enclosure of Learmouth. This occurred in 1799, and is revealed by an account showing expenditure on hedges in that year. It also shows expenditure on hedges at other properties of the Howick estate, namely: Presson, Downham, Sunnilaws and Wark. Wark was also subject to a Parliamentary Enclosure, which was supported by the Second Earl Grey who inherited the Howick estate nine years later. This suggests that the enclosure of Learmouth was part of an estate policy to enclose the Tweedside area of which all these farms are a part. However, it may not simply be because of the estate forcing its policy on the tenantry. The enclosure also coincided with the coming of age of Fenwick Compton, the younger brother of Ralph Compton who was tenant of Learmouth. During the enclosure the estate was divided in two, creating East and West Learmouth Farms. It is possible that Ralph requested the enclosure to divide the farm to provide for his younger brother. He would have been a position to do this as Learmouth is by far the largest of the Tweedside farms making him an important tenant. Thus, the estate not only mediated the agency of the landlord, but also that of the body of tenants as a whole, and individual tenants where they were of sufficient importance. Indeed, some firms saw the representation of tenants as an important part of their duty (English 1984; 42).

Another way in which the estate had agency in the landscape change was the provision of capital for buildings and drainage. During the later nineteenth-century the Howick estate spent large amounts of money on many of its leasehold farms. This is recorded in the ‘Buildings’ and ‘Draining Books’. Some was provided by government loans, through the Lands Improvement Company, most of which was spent on draining. This money was not spent equally on all farms; in fact some received none at all. It appears that it was only spent where tenants were able to pay interest on the investment so as to ensure a return for the estate (Philips 1989). Estate funds were also spent at the

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735 DUSC.GRE/X/P181 1799-1801 hedging accounts.
736 Journal of the House of Commons (37 Geo III 22 May) 53, 594 Grey appears to have been part of the committee which examined the Bill.
737 DUSC.GRE/X/P29 1798 lease.
738 DUSC.GRE/X/V101 building book, DUSC.GRE/X/V102-3 drainage books.
739 DUSC.GRE/X/P343 Particulars of drainage carried out under Lands Improvements Company Loans.
desire of tenants when they requested a particular improvement. Some evidence of the way in which tenants influenced estate spending has already been discussed; Ralph Compton refused new piggeries as he was unable to pay the interest on them.\textsuperscript{740} Other examples include the allowances to William Lumsden and the Aitchesons for manures.\textsuperscript{741} There is little other direct evidence for this but it was probably common. Furthermore, the list of farms in the Buildings and Drainage Books is incomplete, suggesting that some tenants did not request as much expenditure as others.

It appears, then, that the estate’s agency was not simply a case of the desires of the landowner being forced upon the tenantry. It is instead a combination of landlord and tenant interests. It also mediated national agencies scale. For example, drainage loans used in the second half of the nineteenth-century were made available to compensate for the repeal of the Corn Laws (Moore 1965, 554-555). Thus, the estate may be seen as a hybrid of several different agencies (Wylie 2007, 200-1), that is, they no longer appear as indivisible bounded entities as the boundary of the estate’s agency is penetrated by fashions, knowledge and wealth from outside itself.

**Fashions**

Another apparently external factor implicated in landscape change is fashion. Williamson (2002; 47) proposed that newly developed notions of privacy led tenants to live outside villages. This resulted in dispersal. Tarlow (2007) has made an in-depth study finding that improvement was often a response to a sense of moral and patriotic duty. She noted that contemporaries saw the agricultural production base as a prerequisite for, and index of, progress. This made agricultural improvement a patriotic duty (Tarlow 2007, 35). She also argued that assumptions of economic rationality were probably wrong, suggesting that eighteenth-century farmers may not have been able to respond as sensitively to markets as several models require and that improvement had a symbolic value beyond its profitability (Tarlow 2007, 41). This is because ‘improvement’ had come to be associated with ‘progress’, a concept which was valued irrationally. She noted several cases in which un-economic ‘improvements’ were made for symbolic reasons,

\textsuperscript{740} DUSC.GRE/X/P68 building report.
\textsuperscript{741} DUSC.GRE/X/P221 1884 lease of West Learmouth to W.P. Lumsden, DUSC.GRE/X/P259 1861-1866 rentals.
including the draining of Lytham Moss, Perthshire which failed to provide a return (Tarlow 2007, 53). She also pointed out the aesthetic value of improved livestock, revealed by the popularity of paintings of prize-winning specimens (Tarlow 2007, 66). A few examples from the case studies also demonstrate the importance of fashions. Country houses and parks were built at both Howick and Longhorsley. At the former this was done by Sir Henry Grey, and seems to reflect his family’s social advancement, having been created baronets in the previous generation (Bateson 1895; 352). This hall was built in the contemporary neo-classical style by William Newton of Newcastle (Pevsner and Richmond 1987, 194-5) (Fig. 8.8), whose work was in great demand following the success of his Newcastle Assembly Rooms (Wills 2009). It was surrounded by parks with wooded walks (Fig. 8.9). In order to create a view of the hall the village was moved to the north, but the church retained (Fig. 6.2). Similarly, at Longhorsley Charles William Bigge built a mansion immediately after his purchase of landed estates, marking a social advance and probably a desire to emulate elite practices (Thompson 1990). Again this is a grand neo-classical building by Sir Charles Monck and John Dobson (Kilburn 2009). Charles Monck was a well-respected amateur architect who was influential in bringing the Grecian style to the North-East (Kilburn 2009), while John Dobson is one of the North-East’s most important architects (Faulkner 2009). It is also set in a landscape park, which was probably used for hunting, a sport for which Bigge had a strong enthusiasm. 742

A much clearer case of improvements being made for fashion’s sake is the creation of the model farm at Howick Redstead by Frederick William Grey. This farm may be compared with Pasture House, which is also part of the Howick demesne, but which was run for a profit. Redstead is much larger and contained many more specialist buildings and equipment than Pasture House (Fig. 7.14, table 8.1). 743 While all of the tools at Redstead are theoretically useful, some, like the portable railway, were probably superfluous. Similarly, it was probably unnecessary to have several different types of plough. This suggests that the farm was being used for display more than practical agriculture. Certainly, Grey was keen to share the results of his experiments at Redstead as he answered a questionnaire on cattle farming in great detail, providing much

742 NRO.ZCE/F/1/2/11 Correspondence 5th May 1807 C.W. Bigge to J. Carr
743 DUSC.GRE/X/P254 26th December 1856 fire insurance policy, DUSC.GRE/X/P236 1851 valuation of stock and implements.
information on the regime and his opinions on feeding boxes.744 The fashion for agricultural improvement was, however, only brought to Howick by Grey as change began when he arrived. He was clearly particularly interested in agriculture, choosing to run the estate, despite not being the legal owner (his elder brother was the actual heir). He also read many periodicals on agriculture, cuttings from which were sent to the estate office. In addition he had his stewards ask other farmers in the area about their preferred methods of cattle feeding (Chapter 7).745 By these mechanisms Frederick Grey learnt both the techniques and doctrines of improvement. By examining local detail it is possible to reach a more satisfactory understanding of these mechanisms rather than attributing them to a vaguely defined ‘society’.

Antecedent landscapes

Global agents, such as estates, fashions and economics, are not the only important factors in landscape change. The landscape itself also influenced subsequent developments. This has been examined by other authors, for example, Mingay (1997; 32) thought that encroachments on a common could force a general enclosure. Similarly, many authors have suggested that enclosure was necessary for particular improvements (e.g. Chambers and Mingay 1966; 52, 79, Williamson 2002; 46-7). The size of a village also seems to affect its desertion and shrinkage as deserted villages were usually small (Beresford 1983, 203, Neave 1993). An obvious example of this in the way in which pre-enclosure features were used in enclosed landscapes. At Learmouth the enclosure divided the township into two farms (Fig. 8.10), whose boundary preserves the line of a pre-enclosure bog. Similarly, the network of roads and the location of West Learmouth farm survived the enclosure. At Milfield too, several pre-enclosure closes were retained in 1777 (Fig. 8.11), albeit with straightened boundaries. These are quite basic influences, but it is impossible to explain fully all details of these enclosures without taking the earlier landscape into account. It is also interesting that the farm boundary at Learmouth was only present in a certain since before enclosure. After enclosure its nature was completely different. Such gradual incremental change is an example of Mol and Law’s (1994) ‘fluids’.

744 DUSC.GRE/X/P186 cattle feeding questionnaire and responses.
745 DUSC.GRE/X/P125/10 details of cattle feeding.
Enclosure was also affected by the number and types of landowners. In some cases this appears to have made enclosure more difficult to achieve, as there was much more dispute over the Longhorsley and Elsdon enclosures, both of which had larger populations than the other case studies. This necessitated the use of more formal methods (Chapter 7). At Elsdon the number of landowners affected the pattern of allotments, as the commissioners were unable to place all holdings near to the village leading to a very fragmented allocation. Finally, the presence of glebe land at Learmouth may have slowed the enclosure and necessitated the use of an agreement for this small piece of land.

**Family relationships**

Family relationships have only received a limited amount of attention in published literature. Several authors have suggested that strict settlement reduced the ability of landlords to raise capital for improvement until the law regarding these was reformed in the mid-nineteenth-century (English 1990; 89). Similarly, Colyer (1981; 92) has found that encumbrances reduced estates’ abilities to invest in improvement during the late nineteenth-century Depression. Finally, Thompson (1990; 44) has demonstrated that newly wealthy individuals purchased land in order to provide an inheritance for their children. Many examples of this can be seen in the case studies. The clearest is that of William Dobson who engrossed three leasehold farms at Longhorsley in 1677. He died shortly after, in 1699, and split them between his children: James, John and George. A similar example is that of Thomas Pearson, who built a modest estate at Elsdon from 1766 to 1768. He left it to his children, Thomas and Francis, in 1775. Family relationships were therefore a reason to divide and create estates. Other examples of this can be found, for example, two Thornton wills divided estates at Elsdon in 1814 and 1848. After the first will Thomas Thornton, the eldest son went about reconstructing the estate by purchase. The suggestion that Learmouth farm was divided in two at enclosure in order to provide for a younger brother of the tenant has been suggested above. This shows a quite unique way in which family relationships could divide estates.

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746 DUSC.N12/10-11 Leases to William Dobson 2nd January 1677, DUSC.N111 1698 rental.
747 NRO.ZBS26/1-2 deeds of lands at Elsdon.
748 NRO.ZBS26/1-2 deeds of lands at Elsdon.
The close coincidence between Fenwick’s coming of age and the date of the enclosure implies that Ralph Compton, who was tenant of Learmouth and brother of Fenwick, had suggested that the farm should be enclosed, as this would have provided an opportunity to divide the farm in two to provide for his brother.

Family relationships could also have quite unexpected consequences. The brothers Fenwick and Ralph Compton seem to have competed with each other during a rearrangement of boundaries at Learmouth. In fact Ralph Compton remarked to the land agent that he made a high offer of rent “in a passion for the sole purpose of defeating his Brother [sic.] of Clover Field and Kiln Close”. Similar rivalry may be seen among the Thornton brothers at Elsdon. Thomas Thornton, one of the siblings in question, purchased several farms between 1810 and 1825. The first property was Scotch Arms, which was bought jointly with his father, Robert, on the 12th May 1810. Robert and Thomas also owned Mill Lands in partnership with his father, so this was probably acquired under a similar arrangement. His father’s will of 1814 left a moiety of Mill Lands to Thomas’ brothers Robert and Henry. It seems that this was interpreted by Robert and Henry as including Scotch Arms. Thomas seems to have disputed this but eventually came to an arrangement with Henry to purchase his share in 1832. The other quarter remained with Robert Thornton and passed to his son. Another unexpected way in which family could influence the building of estates was the attempt by Ralph Carr to join with his brother so that he would have enough money to purchase Bigge’s Quarter, though in the event this did not occur. It is likely that family connections led Edward Grey to establish his seat at Howick, as Greys had held land there since 1319, though their exact relationship with Edward is obscure (Bateson 1895; 349). It was also probably significant that the first purchase was from his brothers, Rodger and Arthur, who may have offered him a favourable price because of their relationship.

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749 DUSC.GRE/B2/7/168.
750 E.g. NRO.ZBS/26/2 29th February 1820 release of a moiety of Burnstones.
751 NRO.ZBS/26/2 12th May 1810 Release of Scotch Arms lands.
752 NRO.ZBS/26/1 29th October 1814 Will of Robert Thornton.
753 NRO.ZBS/26/1 29th October 1814 Will of Robert Thornton.
754 NRO.ZBS/26/2 19th June 1875 Agreement of Sale.
755 NRO.ZCE/F/1/1/209 12th December 1801 letter from R Carr Charlotte Street to John Carr Newcastle.
756 DUSC.GRE/X/P43 12th November 30 Elizabeth bargain and sale.
Marriages, too, were often important. At Elsdon, Low and High Mote farms were joined by marriage. The first indication of this is a deed poll of 1729 which devised the land to Elizabeth Hall and Matthew Hall for life and then to Elizabeth’s daughter by her first marriage, Catherine, and her husband Jeremiah Bayles. This altered the outcome of the will of Elizabeth’s first husband Robert Elsdon who must have left it to her while she remained his widow.\textsuperscript{757} It is likely that Matthew Hall owned Low Mote as it was certainly the property of his son Alexander,\textsuperscript{758} and other occupiers had often been Halls (Stephens 1903; 114, 141, 143, 164, 168, 171, 217, 221, 235). This may have caused the enclosure commissioners to place the allotments for the two properties together (Fig. 4.19).

Family relationships appear to influence the creation and use of estates in many unexpected ways in addition to their traditional roles. For example, the idea that people built up estates in order to create an inheritance for their children is unsurprising and has been suggested in other studies, on the other hand rivalry between brothers has rarely been thought of as an agent of landscape change. They are a very personal, local factor, and yet appear to be as significant in local events as global factors like prices and fashions. So, we could argue that Fenwick Compton’s coming of age was just as important as the rising price of grain in causing enclosure at Learmouth, or at least in causing it to occur in 1799. The former is instinctively surprising for archaeologists and social scientists, while the latter seems common sense. However, the statement is true, the only difference is that Fenwick Compton’s age could have no effect outside Howick while grain prices could. In other words grain prices are better connected and therefore global while Compton’s age is not. This is an important difference for explaining trends in the frequency of enclosure, but is unimportant in trying to explain enclosure specifically at Learmouth. When we realise that similar local factors must have operated in every landscape change, it becomes clear that correlations between a global factor and landscape change are always incomplete explanations and that such models are necessarily blunt instruments.

\textsuperscript{757} NRO.ZBS/26/2 21\textsuperscript{st} May 1729 Deed of Covenants to Declare the uses of a Fine.
\textsuperscript{758} NRO.ZBS/26/2 4\textsuperscript{th} December 1755 Conveyance of Low Moat.
Environmental factors have often been invoked to explain landscape change. For instance, Brown (1999a; 123) found that more farms developed on former open fields in the Salisbury plain area, as these were more easily exploited. Short (1976; 155) thought that poor soils may have been responsible for the rapid turnover of tenants on the Ashburnham estate. Grigg (1966; 68) found that, in Lincolnshire, some pastures were such high quality that they were not ploughed even during the Napoleonic Wars. Most prominently, Williamson’s (2002) model of increasing regional specialism relied heavily on the environmental conditions of different parts of the country to explain the form which landscape and agricultural changes took.

Some other examples may be observed in the case studies. Firstly, many of the differences between the coastal and central plain townships, Howick and Longhorsley, and the other three are probably due the environmental differences between them. Howick and Longhorsley had a greater proportion of arable to pasture before enclosure than did those in the north and west, and were enclosed earlier. It is likely that the higher fertility of the soils in these townships made arable farming more profitable in them (Bailey and Culley 1813; 2-3). Thus, the fact that these were more favourable areas for cereal cultivation than the uplands has played an important role in the development of their landscape.

Environmental conditions also played a role in the development of local landscapes. A clear example is the distribution of post-enclosure ridge-and-furrow at Longhorsley. This correlates with neither farm nor estate boundaries and is, therefore, not caused by human action (Fig. 5.8). Unfortunately, it is not clear whether the distribution represents the extent of post-enclosure arable, the extent of ridge-and-furrow use, or the extent of later cultivation which destroyed the ridge-and-furrow. Whatever the case it is important to remember that although the location of the ridge-and-furrow reflects environmental conditions it is still a product of human action and inaction. We must assume therefore, that all people at Longhorsley were equally aware of the potential of the land and the technologies available for cultivating it in ridges. Only
this would lead them to act in similar ways and produce a pattern which appears to contain no human agency.

Pieces of waste left uncultivated after enclosure are also examples of the influence of the environment on local landscapes. These include the common at Longhorsley which was reserved by the 1664 enclosure agreement. It was placed on the worst land in the area according to the Agricultural Land Classification. Another piece of rough grazing near Cold Wells Field was left unimproved following the enclosure of Longhorsely, though it was technically enclosed (5.12). Finally, at Howick another piece of rough grazing called Harrow Hill and West, Middle and East Moor Fields was left uncultivated (Fig. 5.10). In both cases the land in question was too wet to drain. The enclosed pastures at Longhorsley and Howick were later drained, showing that as technology reduced the price of draining the effect of environmental conditions changed. It is also important to realise that all these occurrences were a result of human decisions, as people had to understand or learn that land was uncultivable with particular technology or at a reasonable expense. The effect of human agency is especially clear at Howick. Here Harrow Hill was drained during either an early-nineteenth-century phase, immediately after inheritance by the second Earl Grey, or during the mid-nineteenth-century under his sons. This shows that the enthusiasm of certain people could also overcome environmental conditions. To point out human, monetary and technological agency in these events does not reduce the agency of the environment; it simply finds other agencies at work within it following Law’s (2004) Baroque geography.

Environmental conditions could also affect the way in which land reverted to waste during times of low grain prices. For example, much of the land at Elsdon and Learemouth, which went down to grass, either after the Napoleonic Wars or during the late nineteenth-century Depression, was former common, and thus of poor quality. The fact that such pieces of land were chosen time and again as pasture is the result of environmental conditions. Finally, the environment affected the location of settlements. At Howick the late-eighteenth-century model village, was placed on a piece of former waste. This was possible because the site was chosen by Henry Grey, the owner of

Howick, and not the people living in the village, who had to put up with damp cottages throughout the nineteenth-century.  Similarly, Tithe Hill Farm was put on a piece of low quality land. This farm was created by an agreement between Henry Grey, the landlord, and Ralph Compton, the tenant of Learmouth, to abolish glebe and certain tithes. In this agreement Tithe Hill was granted to Compton in lieu of a moiety of the tithes of corn and grain and of the glebe. The difference in status between the two individuals may have allowed Grey to dictate where the farm was to go, and thus retain possession of the best land in the township. However, it is also likely that, as Compton would occupy all the land either as tenant or owner, he did not care which pieces he owned and which he rented.

Consequently, the ability of human actions to have an effect is mediated by the environment, while human actions can also form a part of the environment’s affect. This blurring of the divide between nature and culture is typical of Non-Representational Theory (Harrison et al. 2004, 9-10, Wylie 2007, 200-1). The environment also created the need for agricultural changes, as particular landscapes were suitable for some practices and not others. Finally, it allowed some farmers to succeed and others to fail as farms in favourable areas may have been better able to survive more difficult economic circumstances.

Conclusions

It is not possible to separate out the agencies discussed above or to claim that an event was *caused* by any one factor. Each emerged from an assemblage of agencies. For example, the Learmouth enclosure involved the agency of Anthony Compton. However, his agency emerged from his wealth, and desire to emulate the aristocracy. It also involved his successors, who actually carried out the enclosure. Ralph probably asked for the enclosure from the land agents. He possibly thought of the likelihood of a return from rising grain prices during the Napoleonic Wars, which may have provided him with money to defray the costs. The landscape itself also had agency. It is a suitable farm to enclose as it has rich land (Bailey and Culley 1813, 2-3). This attracted Compton to it. The landscape also caused boundaries to be placed in their particular locations. Similarly, the

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760 DUSC.GRE/X/P222 1876-1885 correspondence from the Alnwick Union Rural Sanitary Authority.
761 DUSC.GRE/X/P276 1793 plan of Learmouth.
The presence of glebe land probably prevented Anthony Compton from enclosing it himself. The relationship between Ralph and his brother Fenwick is also important as Ralph may have wanted the enclosure in order to provide a farm for his brother. The estate also had some agency, as it was part of a wider estate policy, and because the estate provided capital which made it possible. There were also many other agencies which have not been described above. For example, the written leases allow the engrossment, carried out by Compton, to survive and to allow his descendants to enclose. The list is not, and probably cannot be, complete: the examples discussed in this chapter are simply the most obvious and well-documented. These agencies were never assembled in the same way twice, and as such the similarities between different cases of one type of event, such as enclosure, are only ever very superficial.

Some of these agencies are, of course, non-human. This is not to suggest that non-human objects have intentions but that intention is not important; agency is just the ability to make a difference to an event. As human intentionality is examined it becomes clear that it emerges from an assemblage of agencies. These include ideas, which have been picked up from reading and conversations, and the possibilities allowed by wealth and landscape. Some of the agencies are also hybrids. This is most clear in the estate which obviously embodies the landlords, tenants, and estate finances. When examined closely however all actors appear as hybrids. The ability of a person to make a difference to landscape change emerges from things like knowledge and wealth.

It can be said that agencies like these are mediated by the people, which raises an important point about the relationship between local and global. It has been shown that apparently global agencies, like economic trends, were only made present in events by local mediators, in this case people who were either wealthy or not, and who chose to spend their money in particular ways. This means that local factors are no less important than global factors which are only ever present when made so by local mediators. As a result studies of landscape change must allow for the agency of some unexpected actors like sibling rivalries, rather than cherry-picking acceptable agents, as only then can they fully come to terms with the complexity of an event.
Chapter 9

Conclusions

In response to the first objective outlined in Chapter 1, this thesis has examined five distinct types of landscape change, namely: enclosure, farm consolidation, land-use redistribution, settlement dispersal and agricultural improvement. Via seven chapters it has revealed that each event entailed a large number of actors, some of which were local and others global fulfilling the second and third aims. This has demonstrated the inadequacy of existing models in explaining the local manifestations of these processes, demonstrating the necessity of a new approach. The way in which any particular landscape change occurred is shown here to have been contingent upon a large number of local factors, and that national factors were mediated locally. The ways in which this was achieved has been examined in response to the fourth aim.

Enclosure

This thesis has demonstrated that the choice of enclosure method was dependant on specific local conditions, leading to complex histories at all case studies (Chapter 3). Enclosure occurred in multiple phases in all case studies. Milfield was the simplest. The arable land was enclosed around 1777 by one agreement and the common in 1789 by a second. Learmouth was also enclosed in two pieces. The first by an agreement of 1778 which only enclosed the glebe, and the second by unity of possession and enclosed the remainder. This followed a long period of engrossment of the leasehold farms by Anthony Compton, and appears to have been timed to coincide with the Parliamentary Enclosure of Wark Common. Longhorsley was more complex still and involved piecemeal enclosure and a number of informal agreements, finished off with an early formal agreement in 1664. At Elsdon the open-fields were enclosed by a series of piecemeal and informal enclosures from at least the early-eighteenth-century to the twentieth. The common was enclosed by Act of Parliament in 1731, though small pieces had been assarted prior to this. Finally, Howick was mostly enclosed by unity of possession between 1623 and 1635, following a period of engrossment by Edward Grey. A small piece which Grey was unable to purchase was, however, enclosed by an agreement of

762 NRO.358/21/10 Enclosure Agreement 1664.
This shows that enclosure was achieved by a number of different methods throughout the post-medieval period. It appears that the most formal methods were used only when absolutely necessary. Informal methods were used whenever possible, probably because they were significantly cheaper. This alone suggests that many different factors were taken into account during enclosure, making it a complex process. In addition, the period of time over which most enclosures took place adds to their complexity as the context in which they occurred changed. This means that models which link enclosure to one or more external factors in order to find a correlation cannot be accepted. For example, Turner (1980, 106-34) found correlations between the number of Parliamentary Enclosures and the price of grain and interest rates. This shows that both were considered in a large majority of enclosures nationally, but could only have been one of many factors in any particular event.

Farm consolidation

Throughout the post-medieval period there is a trend towards ring-fence farms. Prior to this thesis academic discussion of the process has been very limited, though it has been considered an important result of enclosure (Mingay 1997; 36-7). However, like the changes to land-use patterns, this trend was not always completed, and was rarely a direct result of enclosure (Chapter 4). Milfield had the simplest consolidation of the five case studies as ring-fence farms were created by the c.1777 enclosure, and enlarged by the 1789 agreement. This was possible because there were only three major landowners at Milfield. At Learmouth enclosure actually post-dated consolidation which occurred through engrossment in the early-eighteenth-century. At Bigge’s Quarter, Longhorsley, by contrast, enclosure completely failed to produce ring-fence farms. Consolidation happened much later, between 1719 and 1773. It was achieved by a piecemeal process in which tenants amalgamated or divided the existing farms, though it may have been encouraged or facilitated by the landlord. At Howick the process is much less clear. It is possible that in the early-eighteenth-century Howick’s farms were nearly ring-fence. However, their boundaries were far from static, and their descriptions in leases suggest that they were thought of as groups of fields rather than farms. The boundaries became more permanent later in the century. Finally, there are places in which ring-fence farms were exceptional. At Elsdon very few farms were completely ring-fence. This was in large
part due to the enclosure Award. The commissioners were unable to award all the allotments next to the holdings for which they were given because there were so many landowners involved. They may also have wanted to allot the different qualities of land fairly. Similarly, there were also very few ring-fence farms at Freeholder’s Quarter in Longhorsley. As at Elsdon, this may also be because there were many different landowners in this area. This meant that, in contrast to Bigge’s Quarter, the amalgamation of two neighbouring farms required one to be purchased by the owner of the other. This made consolidation more expensive. However, Blackpool Farm in Freeholder’s Quarter was consolidated. This was owned by the Bolton family prior to 1823 and then Charles William Bigge, both of whom were wealthy. This implies that, while large numbers of freeholders could be a barrier to consolidation, it was possible for ring-fence farms to be created if a landowner was wealthy and enthusiastic enough about improvement.

Land-use patterns

Like settlement dispersal land-use change did not always happen instantly at enclosure. While this has often been discussed on a regional or national scale (e.g. Prince 1989, 48-51, Grigg 1966, 67, John 1960, 145-9, Williamson 2002) this thesis is the first to address it at the level of single townships (Chapter 5). Pre-enclosure Northumberland townships appear to have had an arable core and pastoral periphery. The proportion of each varied regionally. The coast and interior townships had very little permanent pasture, to the extent that they had only pockets of common around the edges of their arable fields. The upland areas by contrast had extensive, continuous commons surrounding their arable fields. In Tweedside the proportions seem to have been half and half. Following enclosure this pattern broke down and the two land-uses became interspersed between each other. This did not happen immediately however, as at both Howick and Longhorsley pieces of common remained unimproved in the mid-eighteenth-century, over 100 years after they were enclosed. Their improvements both required new technology, money, and owners who were willing to perform the reclamation. There were other cases in which land was retained purposefully as a common, preventing the change in land-use distribution being completed. At Longhorsely this was placed on the

763 NRO.ZBS/28/1 Abstract of title of Blackpool Farm.
worst quality land. The change in land-use pattern could also be reversed. This is particularly clear at Elsdon where post-enclosure ridge-and-furrow shows that areas which were rough grazing in 1866 were once cultivated or improved, but had reverted to waste by the mid-nineteenth-century. This also occurred to a lesser extent at Learmouth. The factors which shape this change are complex. The environment clearly has a major role as the pieces of land which remained unimproved were often of the worst quality, as were those which reverted to rough grazing later. This is also clear at Longhorsely, where post-enclosure ridge-and-furrow does not reflect tenurial boundaries, meaning that it must reflect environmental conditions but none the less relied on developments in technology. Much of the reclamation at Learmouth and Howick probably occurred during periods when the estate was particularly enthusiastic about improvement, as occurred in the early and mid-nineteenth-century. Consequently, as with the other processes discussed here, a range of factors must be considered.

Settlement dispersal

Settlement dispersal has also been shown to be very complex (Chapter 6). Most current models seek to explain village desertion and so only discuss the creation of dispersed farmsteads when it is intimately connected with village desertion (e.g. Beresford 1971, Wrathmell 1980). For example, Wrathmell (1980; 116-9) found that, at Clarewood, improvement by John Douglass in the late seventeenth-century depopulated a village in order to create two farmsteads. This thesis has revealed, however, that settlement dispersal could often occur without village desertion and that isolated farmsteads could themselves be abandoned. Further research is required on both processes. At Howick dispersed farms were probably created shortly after enclosure, as they appear on a plan of 1759,\(^764\) when rentals show that they were the only farms in the township.\(^\text{765}\) It is likely that they were created as part of a planned rearrangement of the township by Edward Grey during the early-seventeenth-century. This is similar to the events which Wrathmell (1980) described in several south Northumberland settlements. Events at Howick differ from Wrathmell’s model; however, as farm dispersal did not depopulate the village. It remained until 1782 when it was removed by emparkment and

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\(^{764}\) DUSC.GRE/X/P276 1759 plan of Howick by D. Hastings.

\(^{765}\) GRE/X/P80 1756 rental.
replaced by a model village. Settlement dispersal at Learmouth also differs from accepted models in important respects. Here dispersal began in the eighteenth-century when Anthony Compton engrossed all the leasehold farms, built West Learmouth Farm, and moved there in 1733. The next event was in 1778 when a small enclosure agreement created Tithe Hill Farm. Settlement dispersal was completed in 1799 when the enclosure of the remainder of the township provided an opportunity to create a second farm, called East Learmouth, and transfer the population of the village into cottages at the two farmsteads. Again, this is similar to Wrathmell’s model, as the depopulation occurred as part of a planned rearrangement of the township, but differs from it because of the earlier dispersal events. At the remaining townships there was no village depopulation. On the other hand they do exhibit settlement dispersal and farmstead desertion. At Milfield one farmstead, Milfield Hill, was constructed outside the village following the enclosure of the arable land in around 1777. This did not lead to village depopulation, the village actually grew, but the other two farms were still farmed from the village. Milfield Hill was occupied by George and later John Grey, who were well-known as improvers, so the new farm may have been at their request. Sadly little survives today to reveal the types of buildings their farming required (Fig. 6.6). At Bigge’s Quarter, Longhorsely dispersal occurred to some extent between 1719 and 1773. During this time the landlord and the tenants created ring-fence farms by a piecemeal process, which may have been instrumental in allowing dispersal. The fact that dispersal did not occur to the same extent in Freeholder’s Quarter, where little farm consolidation happened, supports this. Finally, at Elsdon dispersed farmsteads were built on many detached enclosure allotments. This did not happen in every case and often occurred a long time after the enclosure. Where the circumstances are known they were often built by wealthy owners suggesting that the construction of the farmstead had to await an investor who could afford it. Dispersed farmsteads were deserted at Longhorsley and Elsdon. This usually occurred when farms were engrossed. Many of these survive in ruined condition, and show that many were small, house-bye structures. Three at Longhorsley and six at Elsdon were unknown to the Historic Environment Record before the production of this thesis.
In short, it appears that farm dispersal and improvement were important elements of village depopulation, but did not always lead to it, and rarely caused it as immediately as Wrathmell’s (1980) model would imply. This means that other factors including emparkment, economic stimuli and specific local barriers to improvement or depopulation must also be taken into account. This makes it difficult to build a generic model of village desertion and requires every case to be examined in detail.

The cases in which dispersal occurred without village desertion are also interesting. This process required ring-fence or near ring-fence farms, but were not always built immediately after farm consolidation. They occasionally occurred following enclosure, though again they neither necessarily nor immediately followed it. It appears that it was necessary for a person with sufficient wealth and enthusiasm for improvement to arrive in order for them to be built. The cases of farmstead desertion are too few and too poorly documented to make much comment, but seem to have occurred through engrossment.

Improvement

The introduction of improved husbandry techniques has also been shown to be influenced by a large number of local factors (Chapter 7). At Howick, improvement occurred in several phases each beginning upon the inheritance of the estate by a particular generation of the family. The first to be clearly documented occurs after Sir Henry Grey inherited Howick. He built the house and landscape park and moved the village to its current site in 1782. He also introduced written leases in 1712. These allowed the landlord to specify particular methods of husbandry and ensured the tenant had enough security to invest in improvement. The next phase began at the start of the nineteenth-century when Charles the Second Earl Grey inherited. He rearranged the farm boundaries, built new farmsteads, introduced new machines and experimented with crops and manures. This phase ended in the 1830s after the Second Earl became Prime Minister. Improvement began again in the 1840s when Frederick William Grey, the son of Charles Grey, began running the farm on behalf of his brother: Henry the Third Earl Grey. This phase also involved construction, including the creation of a model farm at Redstead. New machines were introduced and experiments were performed. New types of manure
were especially important, particularly guano and bones, which were a major part of the state-of-the-art ‘high-farming’ which required heavy fertiliser input. Draining was also important, and several government loans were taken out to pay for it. This was also a cutting-edge technology as the extrusion of cheap ceramic pipes had only recently been invented (Brassley 2000, 516). This came to an end in the 1860s soon before the Depression, and shortly after Frederick Grey was made First Lord of the Admiralty (Lambert 2009). The next owner, Albert Grey, the Fourth Earl, did not carry out as much improvement but did make attempts to improve the conditions of his estate workers. This seems to underline that people were important agents in bringing improved husbandry to Howick; however, we must remember that the technologies had to exist in order to be introduced and were often new at the time. The owners of Howick also had to learn of particular improvements. In the case of Frederick Grey we know that this came about through agricultural journals and correspondence with peers as cuttings and letters survive. For the other case studies less is known. Improving phases also occur at times of agricultural prosperity and end during difficult circumstances, suggesting that either a supply of capital or a more certain return were also important. At Longhorsely much drainage was carried out. Most of the archaeological evidence for this is in Freeholder’s Quarter, but documents show that some was performed by Charles William Bigge at Bigge’s Quarter. This may mean that different landowners used different types of drainage. The buildings at Bigge’s Quarter were modernised much earlier than those at Riddle’s Quarter, suggesting enthusiasm for this particular improvement on the part of Bigge. The improvement of Learmouth’s buildings was left to the tenants, some of whom were more enthusiastic than others. At Elsdon certain improvements are mentioned in letters, especially draining, and manures, but these appear to have been used only where particularly useful rather than as a matter of course. There is also much physical evidence for drainage but this was probably particularly important on such poor land. All of these instances show that many factors needed to come together to determine how improvement was introduced to a particular area. These included money, technology, knowledge and enthusiasm. Many were brought to a particular area by an

766 NRO.90421/3 1861 sale particulars of the Linden Estate.
individual, explaining the correlation with certain owners and tenants at several of the case studies.

**Actors and agency**

A number of different actors can be identified in each of these processes (Chapter 8). As described above (Chapter 1) some are not human, as an actor is defined here as anything which makes a difference to an event (Latour 2007). The revelation of the significance of non-human actors within a non-determinist explanation of post-medieval landscape change is an important contribution of this thesis. In each case the actors behave in different ways because they interact with different assemblages of other actors. This prevents the creation of generalised models of each type of event. The identification of these actors fulfils the second and third objectives (Chapter 1). This section will also describe how these actors were assembled in response to the forth objective.

Humans are one of the most obvious actors in many of the events discussed, and whose role has been revealed clearly in this thesis. People from many different classes clearly made a great difference to how and when agricultural improvement and landscape change took place. The most obvious example is Howick where the inheritance of the estate by each generation ushered in a subtly different era of improvement, while other commitments often prevented owners continuing improvement. Tenants were equally important. The most prominent example is Anthony Compton’s engrossment of the leasehold farms at Learmouth. He was a particularly wealthy tenant, but the less wealthy, such as Robert Keith of Elsdon were also ambitious and engrossed property in similar ways. Consequently, it is difficult to identify one social group which is particularly important in causing landscape change in the period. It is also important to realise that human agency is not restricted to the situations in which people were intentionally active or successful as failure or inaction can make just as much difference to an event. A clear example of this is the failure of Thomas Pinkney’s venture at Longhorsley which provided to opportunity for the division of his farm. Similarly, the arrival of the Fourth Earl Grey, who was much less interested in agriculture than his predecessors, ended the period of improvement at Howick. Thus, inaction and failure can also be an important form of
agency. As before, disinterested, landowners and tenants came from all social backgrounds. At Longhorsley several small tenants made little improvement to their farm buildings while others did. At the other end of the scale the Fourth Earl Grey made little change to Howick.

Both the ability and desire to develop or ignore the landscape emerge from an assemblage of other actors, which become visible through archaeological examination of the humans themselves. This allows local processes to follow national or regional chronological trends, even where the same people were not involved. This is because ‘global’ actors, such as economics, fashion or science are at work. In contrast to deterministic explanations, however, these are understood to be mediated by particular local actors. Global actors are therefore only global because they are mediated time and again by many different actors in different events. This may best be understood through the idea of the late-nineteenth Agricultural Depression. This clearly affected several of our case studies as William Piper Lumsden failed to farm successfully after 1873, improvement at Howick began to slow from the mid-nineteenth-century, and probably much of the reversion to waste which occurred at Elsdon happened at this time. None of these effects are the same. William Piper Lumsden was a tenant and so suffered difficulty through falling into arrears. Howick was farmed directly so the Grey’s simply cut back on improvement. The changes at Elsdon are probably a reflection of both types of response, and perhaps a realisation that meat production was a better option than grain under late-nineteenth-century conditions. The differences between them arise because the drop in the prices of agricultural products which constituted the Depression was being mediated locally by different actors in each case. It is also important to realise that many tenants and landlords did not suffer at the Agricultural Depression, so it only had its effect where it impacted the personal finances of the farmers and landlords involved. Having understood this we may detect the influence of economics in other cases. The rise in prices during the Napoleonic War may have been significant in prompting improvement at Howick and the enclosure of the Tweedside area of that estate of which Learmouth is a part. The fall in prices after the war caused some Howick tenants to fall into arrears, while the tenants of Learmouth were emboldened by the lack of competition for their farm to demand lower rents. Finally, it is important to note that Ralph Compton of East
Learmouth’s bankruptcy, which temporarily halted building work at his farm, was not the result of a wider economic downturn. This reinforces the idea that personal finances are of primary importance and from the channel through which national trends are mediated.

Economics are not the only global factor to be mediated locally, fashions were also important. The construction of landscape parks and neo-classical country houses at both Howick and Longhorsely are probably examples of the influence of fashion on the landscape. It is, however, clearest at Howick where Frederick William Grey clearly adopted ideas from fashionable publications and was keen to demonstrate his knowledge through both correspondence and inviting visitors to his model farm. Similarly, the Fourth Earl Grey was influenced by changes in politics as social concerns became more important during the transition from Whigism to Liberalism (Searl 1992, 16-28). This led to him concentrate his efforts more on the welfare of his labourers than on husbandry practice. As before these fashions are only present in the local interactions where they are mediated by specific actors, in this case particular people. For example, the F.W. Grey mediated knowledge which he acquired from books and conversations. From these he also gained an expectation that he would receive prestige by demonstrating knowledge. Thus, fashion is not unproblematically present in local conditions; it is brought there by particular people. As discussed above other people are clearly less interested in mediating such ideas, or had less access to them.

Having reduced these two global factors to their local mediation, it is possible to understand purely local or personal factors on the same terms, in response to the third aim (Latour 2007, 173-218, Chapter 1). The estates themselves, as institutions, are important local actors in many landscape changes, as they may have encouraged improvement or provided capital. The estate was important in the enclosure of Learmouth, as this was clearly an estate policy undertaken at several neighbouring properties. On the other hand it has been shown above that this enclosure was probably requested by Ralph Compton, tenant of Learmouth, in order to create a farm for his brother. It appears then that Ralph Compton requested enclosure which was then adopted as estate policy. It was probably adopted generally because the Charles the

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767 DUSC.GRE/X/P125/10 details of cattle feeding, DUSC.GRE/X/P186 cattle feeding questionnaire and responses.
Second Earl Grey was keen to improve his newly inherited estate, and because grain prices were high thereby allowing a high return on his capital. Thus, the estate could mediate the agencies of both landlords and tenants, but was also an important part of the tenant’s ability to create change as permission and capital were both required. Similarly, the estate’s desire to improve could be thwarted by unwilling tenants. This is clearly demonstrated by Ralph Compton’s refusal of new piggeries in 1845.68 As with all other actors the agency of the estate is key to how events took place but is entirely different each time because of the other actors with which it is assembled. Such actors include the land, soil and climate. These could provide opportunities to pursue improved agriculture or could prevent it. It is notable that Learmouth and Milfield are among the most improved townships, as they have soils which are amenable to turnip agriculture. This was fashionable in the late eighteenth and early-nineteenth centuries, so these townships attracted wealthy improvers like George Grey and Anthony Compton. Soil and climate probably also caused some regional patterns, especially the early enclosure of Howick and Longhorsley on the coast and central plain, and their high proportions of arable immediately before enclosure. Some environmental conditions shaped the nature of improvement locally, determining which fields would be improved or left as rough pasture. In addition, antecedent landscapes could either be a barrier or an opportunity. Those townships with the most fragmented patterns of landholding were often more difficult to enclose and consolidate. This made them unattractive to improvers. Consequently, tenure and environmental conditions were an important part of a person’s ability to carry out landscape change. However, they also influenced which people were present at a particular area as certain conditions were attractive to improvers. On the other hand it was possible for someone with enough enthusiasm and money to overcome such difficulties, as Charles William Bigge or the Boltons were able to create a ring-fence holding at Blackpool Farm in Freeholder’s Quarter where other landowners failed. Thus, these factors were mediated locally by the wealth and enthusiasm of particular people. As such, the environment is as much subject to human agency as human agency is to it. A final local actor which must be considered is the family. It was clearly responsible for changes related to inheritance; however it is also important in creating enthusiasm for

68 DUSC.GRE/X/P68 1845 building report.
improvement. This is clear at Learmouth where Ralph Compton probably wanted enclosure so that he could create a farm for his brother. It is also likely that some of the engrossers, such as William Dobson of Longhorsley or Thomas Pearson of Elsdon (Chapter 4), were concerned with leaving something for their children to inherit. They could also influence improvement in other ways and several cases of sibling rivalry have been discussed above. Thus, family relationships, while not an obvious actor in landscape change could be important in a variety of ways. They remind us that while ‘global’ actors like fashion were important in creating enthusiasm for improvement local factors were equally significant transformations.

Thus, many different actors can be identified in each type of landscape change. However, each acts in a unique way in every event. This is because they only act within an assemblage of other actors. In short, actors only behave in the way that they do because of their relationships with other actors. Actor-Network Theory uses a behavioural ontology, meaning that actors only exist through acting, and so implies that actors only exist through their relationships with other actors (Mol 2002, vii-viii, 6). These ideas require us to understand the past in a very different way. It is hoped that this thesis provides a clear demonstration of the applicability of Actor-Network Theory in archaeology, and reveals how it may be used to discuss individuals without privileging human intentionality, and non-humans without being determinist.

Non-Representational archaeology

A number of important points have been made above. Firstly, global actors are only global because they are mediated in many different local events. They are mediated by local actors, for instance national prosperity is brought to a local interaction by personal wealth while knowledge of fashions come from reading and conversation. This means that local actors are as important as global ones in any particular event. This creates a large and complex assemblage of actors making each unique. As a result, rather than being unified phenomena enclosure, consolidation, improvement, land-use change and settlement dispersal are all composed of series of unique events. They are only united in discussions by contemporaries, or historians and archaeologists. In each of these events every actor behaves in a unique way because of its relationship to the other
actors involved. This means that it is not possible to build generalised models because the role of each actor is different in every case. Consequently, it impossible to reach a satisfactory explanation of any type of event. It is, however, possible to describe thoroughly the actors involved in a particular local event as has been done here. Latour (2007, 137) in fact rejects the idea of explanation completely. He suggests that either the assemblage is fully described and an explanation superfluous, or that an explanation would just be another actor, and so adding it would only extend the description. Such a description has been given above of the various types of event at each case-study. It is, however, difficult to justify an approach which can only explain local instances of a phenomenon even if it is accepted that the phenomenon is a creation of archaeologists and historians more than an objective aspect of the past.

As has been suggested above, some actors are ‘global’ in that they are connected to more local events than other actors. Their identification is possible and may be used to suggest why types of landscape change were more common in particular periods than others. It must, however, be acknowledged that this does not explain the type of event fully. Turner (1980, 106-134) did this when he linked the price of grain and capital to enclosure activity, and what Wrathmell also did when he equated improvement with settlement dispersal. It has also been employed by post-processualists in linking enclosure to the rise of individualism (Johnson 1996) or to doctrines of improvement (Tarlow 2007). This approach is valuable because it may show why enclosure, for instance, was more common in certain periods. It is, however, a very long way from explaining the causation of a type of event as it does not describe the ways in which these agencies are mediated. By understanding global actors as things which are mediated locally we reach a better explanation of the anomalies which inevitably emerge in any attempt to correlate a cause and an event. Such ‘noise’ is usually dismissed, however it may be more satisfactory to realise that they are cases of mediation varying. Actor-Network Theory is not a solution on its own, but does provide a different way to deal with the relationship between the local and the global, and provides a framework to address problems which were not accessible to determinist and post-processual theory. A possible avenue for further Actor-Network Research would be to identify common channels by which global agencies were mediated, such as the transportation of ideas and
ideology in books and journals. This could include the study of the availability and uptake of agricultural books. Thrift (1996) has begun to create such a ‘geography of knowledge’. He studied the social and spatial distribution of printed books in general finding that in England chapbooks were less easy to come by in areas remote from large cities (Thrift 1996, 109). Similarly, knowledge found in some printed books was restricted to the most wealthy due to their price (Thrift 1996, 109). He went on to suggest that this influenced the replacement of the practical knowledge, which was acquired by watching other people, with empirical, book-learnt knowledge. It would be interesting use Thrift’s methods to study the spatial distribution and accessibility of agricultural books to probe the spread of the knowledge which allowed improvement. Thrift’s work is not strictly Actor-Network, but is Non-Representational in the sense that his emphasis of the distribution of knowledge was born out of a realisation that knowledge is created through a finite number of situated practices, and not homogenous throughout society. In this sense such work would continue the critique of socially determinist post-processualist archaeologies proposed by this thesis.

The practices discussed here occurred in a very well documented period and one in which archaeological remains are abundant. It therefore appears difficult to apply our approach to earlier periods, because this thesis has relied upon very detailed data. A few archaeologists have used Non-Representational Theory to study the Mesolithic, but it has yet to be applied to later prehistoric, Roman or medieval archaeology. Where archaeologists have applied Non-Representational Theory to the Mesolithic they have usually avoided Actor-Network Theory in preference for Ingold’s (2000) taskscape (e.g. McFayden 2006, see Conneller 2010 for detailed discussion). This differs from Actor-Network Theory by taking an anthropocentric approach. It is essentially phenomenological but differs from traditional phenomenology (e.g. Tilley 1994, 2004, 2008) by focusing on practice rather than perception. Such an approach has been criticised by Latour (2007, 60-61) for failing to acknowledge Non-human agency, which is the logical conclusion of any rejection of intentionality as the source of agency. None the less it has been a useful approach as for instance Conneller (2010) used it to reach a more nuanced view of Mesolithic landscapes. She did this by recognising that the landscape consists of a congealed taskscape in which sites are created through particular practices.
and the memories of those practices (Conneller 2010, 185). An alternative, though related approach, is that of McFayden (2008). In this architecture is taken as a practice rather than a series of discrete bounded entities. In such an approach sites are seen as in relational engagement with their surroundings (McFayden 2008, 308). Drawing on Deleuze and Guattari’s (1992) notions of ‘fold’ and ‘space-time’, she suggests that a site’s boundaries are permeable and that practice, while spatially distributed, draws on other places and times as tools or materials are moved between them. The focus on practice, the critique of the boundedness of, in this case architectural structures, and the implicit suggestion that the practices discussed take place in non-Cartesian space means that McFayden’s paper shares much with ANT without taking an explicit Actor-Network approach.

Consequently it is possible to deploy Non-Representational Theory and ANT in examinations of prehistoric archaeology. To begin to understand how this may be done it is necessary to realise that the accounts given above are, while very detailed, far from complete. They are thus not categorically different from accounts of the distant past which are even less complete. Therefore, it is possible to understand ancient practices as drawing on actors from other places and times (as McFayden (2008) did), and that these are mediated by both humans and non-humans, without feeling any necessity to build an apparently complete list of those actors. It is also helpful to accept that, even in prehistory, the archaeological record consists of direct evidence of particular events such as flint knapping or butchery (McFayden 2006, 126), which are just as contingent and situated as the enclosure and improvement events discussed in this thesis.

This thesis has shown that Actor-Network Theory provides an important critique of the explanations offered by both traditional and post-processualist explanations of landscape change in the post-medieval period. It does not however offer an alternative explanation. Instead it rejects the possibility of explanation in favour of description. This type of description has been attempted here and has revealed that there is a great disparity between current models of post-medieval landscape development and local events. This is because each landscape change emerged from a large variety of actors of which ‘global’ actors, favoured in previous models, were only one type. At face value this is unsatisfying as it denies the possibility of explaining landscape change. It does however
draw attention to the way in which actors become global, through building connections between different local events. It has been suggested that Thrift’s geography of knowledge offers one way forward, though discussions of flows of capital between individuals are equally important. Finally, this understanding of change allows a better explanation of the anomalies which are present in any determinist model.
### Appendix A: List of Possible Case Studies Derived from Map Database

<table>
<thead>
<tr>
<th>Place</th>
<th>Estate maps</th>
<th>Tithe maps</th>
<th>Enclosure maps</th>
<th>Enclosure Documents</th>
<th>Date of enclosure (from Tate 1978)</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Acomb</td>
<td>1891 and 1900 Clarke</td>
<td>1840</td>
<td>1799</td>
<td>2 sets of papers</td>
<td>1799</td>
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<tr>
<td>Allendale</td>
<td>C. 1790, 1852,</td>
<td>1849</td>
<td>1800</td>
<td>5 Awards 1 act and a description of allotments</td>
<td>1792</td>
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<tr>
<td>Alnwick</td>
<td>1827, 1826, 1780, 1849, 1813, 1826x2, 1815, 1848, 1816, 1833, 1847, 1771, 1874, 13 in Alnwick, 1846 (Alnwick and Alnwick Moor), 1840 (Alnwick South Side), 1845 draft</td>
<td>1846</td>
<td>1854</td>
<td>papers</td>
<td>1850</td>
<td>May be the enclosure commissioner's papers</td>
</tr>
<tr>
<td>Beadnell</td>
<td>1707, 1744, 1759,</td>
<td>None</td>
<td>1801, c. 1800 (‘allotments)</td>
<td>none</td>
<td>Not listed</td>
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<td>1835, c. 1835, 1840, c.1845 and 1n.d. Craster papers</td>
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<td>1861, 1821, 1791-1847, 1866, 1867, 1865, 1894, 1821, 1840 Grey collection, 1800, 1840, 1815, 1883</td>
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<td>Corbridge</td>
<td>1 n.d., 1772, 1778, 1850 x2, 1851, 1849, 1851, 1779, 1778, 1776-7</td>
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<td>3 all 1779 + 2 more tracings 1778 and 1776-7 in ZHE.105 and a plan showing enclosed land NRO.2950/25</td>
<td>2 Acts/bills, 2 Awards and a convenience ZHE.105/5 Copy of book of survey ZHE.105/6 memorandum</td>
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<td>None though there should be an Award according to Tate 1978</td>
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<td>Edlingham</td>
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<td>1838 x3, 1831, 1839, 1849, 1854, 1843, 1896, 1731, 1840</td>
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<td>1783 Claydon and Gibson showing ‘enclosed land’ 1843 in Bell Collection c. 1840 in Blackett, 1787,</td>
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<td>Longhorsley</td>
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<td>Division papers and correspondence are particularly rare.</td>
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<td>1763 Norham Moor</td>
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<td>1853, 1854, 1855 Armstrong Berwick 1800 Calydon and Gibson, 1875</td>
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<td>1859 and 2x1860</td>
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<td>Alnwick Castle</td>
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<td>Wark (Northern)</td>
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<td>Wark (Southern)</td>
<td>1769, 1852x4, 1838, 1883 plus several undated</td>
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<td>none</td>
<td>Award, papers, correspondence</td>
<td>1754, 1804, 1805</td>
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<td>Warkworth</td>
<td>Two undated in the Grey papers 1860, 1868-95, 1857, 1884, 1858, 1848, c. 1840, 1851, 1856, 1879, 1846</td>
<td>None</td>
<td>1856</td>
<td>Minutes of meetings</td>
<td>1807 and 1850</td>
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<td>Wooler</td>
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<td>none</td>
<td>1778, 1867 (Wooler and Earle), 1869 (Wooler and Humbleton)</td>
<td>Letters for enclosure</td>
<td>1776</td>
<td>Minutes of meetings are likely to be particularly interesting in highlighting motives and conflicts in enclosure</td>
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## Appendix B: Manuscript Collections Entered into the Map Database

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<td>Lord Crew’s Charity</td>
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<td>Evelyn Carr</td>
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<td>Campbell and Campbell</td>
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<td>Claydon and Gibson</td>
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<td>NRO.118</td>
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<td>Orde</td>
<td>NRO.1356</td>
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<td>Riddell</td>
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<td>Earl Grey Family Papers</td>
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### Appendix C: Aerial Photograph References

#### Longhorsley

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