In Scotland a cartographic culture was created in the Renaissance in response to changing social and political circumstances. Prior to the sixteenth century, few if any maps of Scotland were compiled within the country, and those compiled elsewhere were characteristically short on data. To the medieval English mapmaker Ranulf Higden, Scotland was a peripheral country that could be approximately located, but whose geography could not be accurately portrayed. Thirteenth-century maps of Scotland by Matthew Paris contain a few named places, possibly obtained from monks who traveled there, but placed within highly stylized coastal outlines. Even the Gough map, the most detailed original depiction of fourteenth-century Scotland, with over a hundred place-names probably derived from the excursions of English armies, is strikingly defective in its outline, particularly in comparison with its depiction of England. The mid-fifteenth-century manuscript maps that John Hardyng appended to his “Chronicle” following a political mission to Scotland are remarkable for the beauty of their representations of castles with banners flying, but the castles bear little resemblance to contemporary architecture and are so large that very few are portrayed. These maps all present external views of Scotland. In the sixteenth century, the external depictions became more fully informed; by the end of the century, a Scot had mapped the human landscape of the country, possibly more comprehensively and in greater detail than in any other country at that time. Other Scots sought to build on his achievement.

The period from the marriage of James III in 1468 to the accession of James VI of Scotland to the English throne as James I in 1603 marked the end of Scotland as an independent kingdom. In the late fifteenth and early sixteenth centuries, although relatively impoverished by European standards and generating little trade, Scotland had sufficient surplus wealth to allow patronage by the aristocracy, the church, and the larger towns—so much so that an eminent historian can speak of “the sheer exuberance of Scottish cultural and intellectual life” at that time. Scotland was a confidently extroverted and assertive European country at the height of its political independence. Scholars from the three universities founded in the fifteenth century distinguished themselves in the great Continental centers of learning. Contacts with the Netherlands were particularly strong, as is still visible in architecture. There was a taste for the best products of Europe. Scottish poets and scholars looked outward to a wider world. Although a printing press was set up in Edinburgh in 1508, Scottish writers continued to send their work to Antwerp and Paris, where it could gain wider circulation. Even Scottish coinage was influenced by the styles of contemporary Europe, more so than by English coinage. Thus Scotland played a greater part in European affairs than might have been expected from its economic or military status. In these circumstances, it is not surprising that the maps that represent the beginnings of Scotland’s cartographic renaissance and that signify the new and extroverted mood in Scotland were published elsewhere in Europe.

The Reformation was more than a reformulation of spiritual beliefs. It was a catalyst for political and social change, including an increase in literacy and the gradual construction of a new and distinctive ecclesiastical institution. The single most significant cartographic episode in the mapping of Scotland, which in this case took place within Scotland rather than elsewhere in Europe, was assuredly a product of the Reformation, and mapmaking is among the activities cited by social historians as evidence of the intellectual achievements of sixteenth-century Scottish society. The episode itself was a detailed survey of Scotland undertaken by Timothy Pont in the last two

1. Ranulf Higden’s fourteenth-century ovoid map of the world, National Library of Scotland, Edinburgh (Adv. MS. 33.4.12, fol. 3v) is characteristic. The map is reproduced in Margaret Wilkes, The Scot and His Maps (Motherwell: Scottish Library Association, 1991), 5.
5. Wormald, Court, Kirk, and Community, 67 and 150.
decades of the sixteenth century. Pont’s father, Robert Pont, was a lawyer, ecclesiastical author, minister of the kirk, and five times moderator of the General Assembly of the newly reformed Church of Scotland during the period of the survey.7 Much work remains to be done on how these maps came to be made and to what ends. Were they the passive products of their circumstances or active catalysts for change? Current explanations of the maps’ form and content remain in part conjectural.

**FIRST STEPS TOWARD A SCOTTISH CARTOGRAPHY**

Two names are associated with the beginnings of the sixteenth-century transformation of the outline of Scotland to recognizable form. They exemplify the influence of both internal and external compilations in the eventual emergence of a cartographic culture within the country. The first was George Lily, an English exile in Italy who compiled *Britanniae Insulae . . . nova descriptio* in 1546. The provenance of this map, with its improved delineation of Scotland, is largely conjectural, related to the presence of Lily in Rome and possibly utilizing the knowledge of other Scottish visitors to Rome, where it was published. However, Lily seems to have obtained some of his place-names from the work of Hector Boece, first principal of the University of Aberdeen, whose history of Scotland (1526) was incorporated into later chorography.8

A remarkable tradition of chorography in Scotland, extending throughout the sixteenth century and beyond and associated with names such as Boece, George Buchanan, and Sir John Scot (Scott), has long been identified by Emery.9 Withers has explored the origins of the tradition and its translation from Renaissance mainland Europe to Britain, and to Scotland in particular, as late as the sixteenth century.10 Chorographical study “emphasized the local in both historical and geographical senses: the surveying of estates . . . genealogies of local families . . . description of local natural features and human productions.”11 Such studies were merged into the older chronic traditions and assumed a political dimension by emphasizing historical continuity. Insofar as one purpose of chorography was to identify and maintain social order and stability, cartography was a logical, if technically more difficult, extension. A map presents a selective contemporary record in which persons of influence or in authority and their habitations and environs can be conspicuously set in geographical context. Social stability is reinforced by presenting them as part of the natural order of things, both past and present.

The second person associated with the transformation of cartography in sixteenth-century Scotland is Alexander Lindsay, a Scot who has been described as a pilot and hydrographer but who has not been identified with confidence. He is credited with “a unique Scottish navigational handbook,” *A Rutter of the Scottish Seas* (ca. 1540), containing some two hundred items of navigational information.12 The original Scots language version has not survived, but there are six extant texts, in English and French. At least four of these texts were accompanied by charts, probably not the work of Lindsay himself.

The rutter was compiled from several earlier sources to serve a naval expedition by James V in 1540 from Leith to the Western Isles, with the objective of preventing further insurrection following the dispossession of the hereditary lord of the isles by the Scottish Parliament in 1493. The data contained in the rutter have been the subject of detailed scrutiny, with scholars concluding that “the rutter maintains a high degree of accuracy,” and that it “exercised a perceptible influence upon the cartography of Scotland . . . for about a century, and that this influence lay partly in the improvement of the outline and partly in the supply of a body of 150 coastal and island place names,”9,13 for example, in the charts of Robert Dudley and the maps of Gerardus Mercator, Laurence Nowell, and Abraham Ortelius.

The search for the first steps toward the sixteenth-century transformation of the delineation of Scotland and the practice of cartographic skills within Scotland is complicated by the fact that they occurred during a period of increasing mobility among Scots of influence and intellect. The archetypal example of the itinerant Scot is John Elder, who was born in Caithness, probably graduated from St. Andrews in 1536, trained as a priest, and may have lived in England for some twenty years prior to his probable departure for France in 1556.14 He is known to have visited Rome, where he met with fellow Scots, about 1538. He is also known to have provided Henry VIII with a map of Scotland in 1543 for his planned invasion of Scotland. The

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14. It is not known whether a John Elder who appears in the records of the University of St. Andrews is the same person as a namesake in records elsewhere. See Moir, “History of Scottish Maps,” 12–13.
map seems not to have survived, but it may have been a source for George Lily.\textsuperscript{15} Another delineation of Scotland that implies local sources and has been shown to have benefited substantially from the lost work of John Elder is Gerardus Mercator’s eight-sheet engraving \textit{Angliae Scotiae \& Hibernie nova descriptio}, published in 1564.\textsuperscript{16}

The influence of the exiled Scot is also evident in the first printed map of Scotland alone, \textit{Scotia}, engraved by Paolo Forlani in Italy around 1566. A comparison with possible sixteenth-century sources suggests that it was based on an engraving that in turn derived from Lily’s map of 1546.\textsuperscript{17} More is known about John Leslie (Lesley), bishop of Ross, a historian who was ecclesiastical adviser to Mary, Queen of Scots, and who, as a consequence, was exiled to Rome. The map published to accompany Leslie’s history of Scotland in 1578 is probably another version of Lily’s map of 1546, but the source for his larger-scale map, also dated 1578, is more problematic. The circumstances of its printing were unusual and are themselves the subject of debate.\textsuperscript{18} The source of the alterations that Leslie made to the well-known delineation by Ortelius (\textit{Scotiae tabula}, 1573) can only be presumed to be Leslie’s personal knowledge—a plausible presumption for a former professor of canon law, judge, and member of the Privy Council, but a presumption nevertheless.\textsuperscript{19}

Hence the first tentative steps toward cartographic awareness among Scots were due more to external than to internal events, and the mapping of Scotland from outside the country, albeit largely by itinerant or exiled Scots, was not by itself sufficient to create a culture of cartography in Scotland. To a home-based Scot, this mapping from without probably did little more than emphasize the inadequacy of current maps of Scotland. Toward the end of the sixteenth century, however, the evolving ecclesiastical and political climate in Scotland facilitated the sort of transformation that could only come about from within.

THE EMERGENCE OF A SCOTTISH CARTOGRAPHY: THE ROLE OF TIMOTHY PONT

Part of the reason why mapmaking in Scotland was slow to develop seems to have been the lack of demand for maps within Scotland, apart from occasional military sketching. The earliest significant town plan, a small plan of St. Andrews by John Geddy, was not compiled until about 1580.\textsuperscript{20} The earliest recorded regional map of a part of Scotland dates from 1559, but it is drawn at a relatively small scale and contains little local detail.\textsuperscript{21} However, the lack of cartographic activity or of interest in maps within Scotland changed toward the end of the sixteenth century, a time when the process of government was also in transition. Professionalism and efficiency were increasingly apparent in the government of James VI, and, in consequence, mapmaking began to be seen as useful by the state. There is evidence of James’s readiness to provide financial support for mapmaking, an activity that enhanced the creation of a national identity and thus emphasized both the social hierarchy and the monarch’s role.\textsuperscript{22} In fact, the General Assembly of the Church of Scotland eventually provided more direct assistance than the state, by seeking to involve every presbytery in a parallel chorographic exercise. It is not surprising that the General Assembly should have involved itself in that way at that time, since chorography and cartography afforded potential evidence of God’s work on earth and hence supported contemporary interpretations of the truth of the scriptures, which were at the heart of the Reformation in Scotland.\textsuperscript{23} These were the evolving circumstances of the transformation of Scotland’s cartographic status in the last two decades of the sixteenth century.

By the end of the sixteenth century, Scotland was one of the most comprehensively mapped countries of Europe, largely as a result of the work of one man. Timothy Pont spent much of the last two decades of the sixteenth century traveling through most of Scotland, mapping and otherwise recording what he saw and heard in great detail. The map published to accompany Leslie’s history of Scotland eventually provided more direct assistance than the state. There is evidence of James’s readiness to provide financial support for mapmaking, an activity that enhanced the creation of a national identity and thus emphasized both the social hierarchy and the monarch’s role. In fact, the General Assembly of the Church of Scotland eventually provided more direct assistance than the state, by seeking to involve every presbytery in a parallel chorographic exercise. It is not surprising that the General Assembly should have involved itself in that way at that time, since chorography and cartography afforded potential evidence of God’s work on earth and hence supported contemporary interpretations of the truth of the scriptures, which were at the heart of the Reformation in Scotland. These were the evolving circumstances of the transformation of Scotland’s cartographic status in the last two decades of the sixteenth century.


18. A debate that has been described in terms of fantasies and cartographical ghosts; see R. A. Skelton, “Bishop Leslie’s Maps of Scotland, 1578,” \textit{Imago Mundi} 7 (1950): 103–6.


23. In the same way that natural philosophy, which in the later Enlightenment sought to encompass order, reason, and regularity in nature, has been set in the context of Calvinistic attempts to comprehend the design and diversity of creation. See David Allan, \textit{Virtue, Learning and the Scottish Enlightenment: Ideas of Scholarship in Early Modern History} (Edinburgh: Edinburgh University Press, 1993), 8. “Various scholars are currently thinking along these lines, albeit not yet in print,” Dr. Grant G. Simpson, personal communication, 7 October 1998.
What motivated him to undertake such a hazardous and strenuous task is not known. There is no clear documentary evidence of his motives. His father, Robert Pont, "took a notable part in the establishment of the Presbyterian form of church government in Scotland." As provost of Trinity College, Edinburgh, he granted a charter of church lands to Timothy in 1574, a grant that was confirmed in 1583, the year that Timothy graduated from St. Leonard's College, St. Andrews. Pont therefore enjoyed some financial support from ecclesiastical sources during the time of his survey, suggesting that his work was of potential value to the newly reformed church.

Recent historiography has identified a series of remarkable attempts by both church and state in Scotland to extend their powers into the Borders and the Highlands in the sixteenth and early seventeenth centuries, and it may be no coincidence that twelve engraved maps by Pont in Joan Blaeu's *Atlas novus* cover the Borders. Pont's detailed depictions of where people lived were potentially of use in the imposition of external authority, such as that of the state. The only other clue to Pont's motivations is in the form of a commission by John Lindsay, Lord Menmuir, holder of the office of master of the metals, giving Pont powers to search for minerals and metals in the Orkney and Shetland Islands. However, much of Pont's work on the ground had probably been completed by 1592; the document was probably issued in response to an established track record and thus tells us little of his initial motivation. Although there is mention of William Camden on an extant manuscript map by Pont, there is no actual evidence to support the tempting suggestion that Pont sought to emulate the work of Christopher Saxton in England and Wales. John Speed certainly defers to Pont in his chapter on Scotland in *The Theatre of the Empire of Great Britaine...* (1611), but this was long after Pont had completed his survey. What we do have is the best possible evidence of his mapmaking in the form of manuscript maps in his own hand.

Among the treasures of the National Library of Scotland, Edinburgh, are thirty-eight sheets bearing seventy-eight maps by Pont. These are undoubtedly only a part of Pont's mapmaking output. Indeed we can be sure that much of the best of Pont's work survives only in the form of engravings by Blaeu and not in the original draft manuscripts. The surviving documents nevertheless constitute the finest extant collection of manuscripts relating directly to the coverage of any one country in Blaeu's great atlases. Their significance extends beyond the history of Scotland's cartography, and they were the subject of a research initiative coordinated from the National Library of Scotland.

The majority of Pont's surviving maps are working documents rather than finished drafts that an engraver could copy (fig. 36.1). Mostly they derive from the earlier phases of Pont's work, when he was in the field or when he was exploring the ways in which field documents could be put together with a view to publication. We can deduce a little of the logistics of mapmaking in the field from the maps themselves, including routes that Pont may have followed on the ground and the way in which he made mosaics of maps of small areas to create larger documents. Unfortunately, we know very little about his techniques for measuring and recording information, other than what little is implied in the maps themselves. These record primarily human habitations located within frameworks of rivers and streams, in a style suggestive of sketching by eye without instrumentation. We also know that, with the
FIG. 56.1. PART OF PONT MANUSCRIPT 1: DUNNESS AND TONGUE. A typical example of one of Pont’s extant rough drafts, showing adjustments to the orientation and location of major geographical features such as Faraid Head (“Faro head”) and Loch Eriboll (“Loch Erebill”). Profiles of prominent mountains such as Ben Loyal (“Bin Layall”) are recognizable and indicate Pont’s vantage point on the ground. Descriptive notes occur at relevant locations and mention such things as good salmon fishing and safe harbors. Most settlements are located by means of a conventional symbol, which varies in its precise rectangular form. Sketches, which are often likenesses, are used for prominent structures. Size of the entire original: 29 × 28 cm. Photograph courtesy of the Trustees of the National Library of Scotland, Edinburgh (Adv. MS. 70.2.9 Pont 1).
possible exception of one map, Pont failed to find a publisher for his work in his lifetime, implying absence of any influential sponsorship, which is itself a clue in the search for the origins and purpose of the survey.35

We know something of what happened to Pont's maps after his death in the early years of the seventeenth century, and of how they became the source material for the larger part of volume 5 of Blaeu's *Atlas novus* (1654), from the introductory matter to that volume. However, much more has been learned from the study of the manuscript maps themselves in relation to Blaeu's engravings of forty-seven regional maps of Scotland. It is now recognized that in all probability the much larger collection of Pont's work, as it then was, was dispatched to Amsterdam in the 1630s, where some of it was engraved. The part of the collection that Blaeu dispatched to Scotland for further drafting by Robert Gordon of Straloch (a scholar with chorographic rather than surveying and cartographic experience) included only one map that had already been engraved in Blaeu's workshops. The maps that were returned to Scotland, therefore, were mainly early or unfinished drafts that were difficult to decipher but were required for complete coverage (fig. 56.2).

Among the maps that Blaeu returned were an additional six maps by Pont that were to be Gordon's sources then sent back to Scotland for further drafting by Robert Gordon of Straloch (a scholar with chorographic rather than surveying and cartographic experience) included only one map that had already been engraved in Blaeu's workshops. The maps that were returned to Scotland, therefore, were mainly early or unfinished drafts that were difficult to decipher but were required for complete coverage (fig. 56.2).

Among the maps that Blaeu returned were an additional six maps by Pont that were to be Gordon's sources

for the final drafts that he compiled for Blaeu’s engravers in Amsterdam. These seven maps greatly enhance the value of the collection, giving it a significance in the history of cartography well beyond the Scottish context, because they are evidence of how the process of engraving affected the content and planimetric accuracy of the published document. They afford the unusual opportunity to compare the cartographer’s intended depiction with the engraver’s interpretation of the drafts. Indeed it has been demonstrated that the potential influence of the engraver on the cartographic properties of the map was considerable, with a measurable reduction in both the quantity and the quality of the information contained.  

The relationship between Pont’s drafts and Blaeu’s engravings is exemplified by a comparison of Blaeu’s Nithia with the extant Pont manuscript that was its only source. Blaeu omits 40 percent of Pont’s named physical features and 10 percent of his named human features. In the course of preparing the printing plate, errors of interpretation and transcription occurred, including the introduction of implausible spellings. Pont’s rudimentary conventionalism in the use of symbols is standardized by Blaeu, who reduces the number of categories without rigorous consistency. The engraved map is an inferior contemporary record of Nithsdale.  

The impact of Gordon in the 1630s on the maps of Scotland that Blaeu published in 1654 was probably less significant than has frequently been suggested, and the engraved maps are a detailed depiction of Scotland largely dating to the late sixteenth century. Indeed by that time Scotland must have been one of the best-mapped countries of the world, although the maps were not to be widely circulated until the middle of the next century.  

Mapmaking was one of several geographical practices relevant to the creation of a Scottish national identity. The earlier tradition in this respect, however, was chorographic, not cartographic, and on many of the extant Pont manuscripts written observations and maps are combined. Pont was not so much breaking with the chorographic tradition as adding the related skills of cartography in particularly spectacular fashion. A detailed sketch map was a time-consuming but significant additional device to achieve the chorographic objectives of encapsulating regional identity and sustaining social order. It was a concise means of locating, evaluating, and categorizing large numbers of places. Sketched likenesses of houses or castles emphasized structures whose occupants were adjudged to be of particular importance.  

This interpretation of Pont’s work relies in part on extant Pont manuscripts. The National Library of Scotland holds a manuscript that is attributed to Pont, consisting of a detailed topographic description of part of one Scottish county, reviewing the history, marches, topography, government, and battle sites, followed by a gazetteer of over 350 places in the county. It is improbable that this account of a part of Ayrshire was unique and that there were no similar accounts of other parts of the country. It may well be the sole identified example of Pont’s finished chorographic texts. Pont’s manuscript maps seem to have been separated from his textual records at an early date, so that the provenance of the latter unattributed accounts was no longer apparent. Indeed there are other unattributed topographical notes in the same source and elsewhere that may derive from Pont.  

Although Pont followed the chorographic tradition, he increased the use of sketch maps to the extent that, in the absence of many of his texts, we now see his maps as his main recording technique. Although his maps were germane to the needs of both church and state, Pont adopted a format that was difficult to render in Scotland at that time, in the absence of copperplate engraving skills.  

Although the sixteenth-century cartographic transformation of Scotland was largely the work of one man, the renaissance of cartography in Scotland was more broadly based. The church had provided Pont with financial support, and after his death (between 1611 and 1615) completion of the project eventually became a matter of public concern. Charles I and the Scottish Parliaments all acted to facilitate completion, although their motivations have not been explicitly documented. The General Assembly of the church took action to try to fill gaps in both maps and written descriptions, with Sir John Scot, director of the Chancery, as the main instigator. Completion and publication of the survey was clearly a matter of national concern in the 1640s.  

Perhaps the best evidence of a climate conducive to landscape description and mapmaking in Scotland is to be found in the work of Gordon in Aberdeenshire. Gordon was born into a titled family in the northeast lowlands. He studied at Marischal College, Aberdeen, and, in keeping with the practice of educated Scots of his time, he com-

39. Edinburgh, National Library of Scotland (Adv. MS. 33.2.27); a meticulous edition was published: Timothy Pont, Topographical Account of the District of Cunningham, Ayrshire, Compiled about the Year 1600, ed. John Fullarton (Glasgow, 1858).  
completed his studies in mainland Europe—in his case, Paris. He is said by a contemporary to have been a mathematician, and his interest in astronomy is attested by his astrolabe, but there is no evidence that he practiced ground surveying of any form. Gordon has been presented as primarily, if not solely, concerned with bringing Pont’s work to posthumous fruition, as a cartographic draftsman working in close association with the publishers. He came to the task quite late in life, and his previously published work was antiquarian in nature. He certainly set about drafting numbers of maps working directly from Pont’s manuscript maps, including some of Pont’s work that is no longer extant (fig. 56.3). However, his work on the Pont manuscripts was not undertaken solely to meet the needs of Blaeu. The form and content of some twenty extant manuscript maps by Gordon show that he envisaged the publication of numbers of new maps of parts of Scotland at scales differing from those engraved by Blaeu (fig. 56.4). Gordon compiled maps according to his own agenda, with assistance on the ground from his son James Gordon.

Some forty years later, Sir Robert Sibbald acquired the Pont and Gordon manuscripts for an ambitious but never-realized atlas project that was planned to rectify the shortcomings of Blaeu’s coverage of Scotland. The Scottish Atlas, or the Description of Scotland Ancient & Modern was not only to include an account of the history, achievements, and customs of the Scottish peoples, as well as descriptions of the country’s resources and administration.

42. Sir Thomas Urquhart, Tracts of the Learned and Celebrated Antiquarian (Edinburgh, 1774), 125.
It was also to contain seventy maps, many of them new. The project originated in the minds of Robert Gordon and his son James. Thus Pont was not unique as a cartographic visionary in Scotland. By the seventeenth century, a map was a recognized means of communication, and other Scots were prepared to devote time and effort to the cartographic depiction of the country.

The causes of the emergence of a cartographic culture in Scotland in the sixteenth century are still being explored. The evidence to date is largely circumstantial, and much documentary research remains to be conducted. What is apparent is that in the sixteenth century Scotland emerged as an increasingly unified, independent-minded, and outward-looking country that began to foster the compilation of charts and maps by home-based citizens. After the Reformation, both kirk and state saw merit in uniform cartographic coverage of the landward areas of Scotland. One man set about the task with remarkable thoroughness and tenacity, although the culmination of his task was delayed until the middle of the seventeenth century. The posthumous publication of Pont’s surveys involved many individuals in public life, facilitated the emergence of a widespread awareness of cartography in Scotland, and endowed Western cartography with a unique collection of contemporary documents.