

III.

THE ORIENTATION OF SCOTTISH CHURCHES, ILLUSTRATED BY AN ANALYSIS OF SOME EXAMPLES IN ABERDEENSHIRE AND BANFFSHIRE. BY F. C. EELES, F.R.Hist.S., F.S.A. Scot.

The orientation of ancient churches is a feature so constant and so familiar that it appears to have escaped investigation in Scotland. A certain amount of attention has been given to it further south, but with no very definite result, except to emphasise the almost universal adoption of the practice. With notable exceptions, chiefly in Italy, all Christians observed it down to the Reformation period. Since that time, especially in recent days, the more extreme Protestants on the one hand, and Roman Catholics on the other, have set it aside, while Anglican and Oriental Christians have continued to maintain it.

Orientation includes the congregation, or at least the officiating clergy, facing east during prayer, the building of churches and the placing of altars so as to accord with this principle, and the burial of the dead with the feet towards the east. The principle appears to belong to natural religion, and not to be peculiar to Christianity. It would seem, however, that the Jews prayed facing west, both in the Temple and in the synagogues. Maimonides, tracing this to Abraham praying upon Mount Moriah, considers that it was done in opposition to Gentile practice.¹ Tertullian, c. A.D. 205, tells us that the heathen suspected the Christians of being sun-worshippers, "because they were well known to turn to the east in prayer." St Clement of Alexandria says of pagan temples: "The most ancient temples looked towards the west (*i.e.* had their entrance towards the west), that those who stood with their face towards the image might be taught to turn towards the east."² There is good evidence of Christians having

¹ *On Prayer*, xi. 1, 2. Cf. orientation in sun-worship referred to in Ezekiel viii. 16.

² *Strom.* vii. 7, § 43.

faced eastward in prayer from very early days. When the world-wide religion of Christianity took the place of the local and national Judaism, the general instinct of turning to the place of sunrise seems to have been accepted without question. Religion is the breaking forth of light in darkness, the sunrise upon human life. Even the Jewish prophets had looked for a deliverer that should come forth like the sun, as Malachi said: "Unto you that fear my name shall the sun of righteousness arise with healing in his wings."¹ St Clement of Alexandria writes: "The east is the image of the day of birth. For as the light which there first shone out of darkness waxes brighter, so, like the sun, the day of the knowledge of truth has dawned on those immersed in darkness."² The earliest Christians believed in the immediate return of our Lord Jesus Christ to reign in glory. In the 1st Epistle to the Thessalonians, written probably in A.D. 65, St Paul bears witness to this, when, in reference to the Second Advent, he says: "We which are alive and remain unto the coming of the Lord" (1 Thess. iv. 15). It was believed that our Lord would come with the clouds of heaven and appear in the east, as the morning star, the sun of righteousness, the light of the world, the dayspring from on high.

Later, when Christians had left off expecting the immediate return of the Master, they still testified to their belief in his second coming, in whatever way and in whatever time, by turning to the east.³ Had not he himself likened his coming to lightning in the east, saying: "As the lightning cometh out of the east, and shineth even unto the west; so shall also the coming of the Son of man be" (St Matt. xxiv. 27). Here we have a definite mention of the east in connection with the Second Advent, albeit only in a simile.

This is the line of thought followed by St John Damascene⁴ and by Cassiodorus,⁵ who say that as Christ faced west when on the cross, we

¹ Mal. iv. 2.

² *Strom.* vii. 7, § 43.

³ St Hilary, on Ps. 67.

⁴ *De orthodoxa fide*, iv. 13, a chapter "concerning worshipping to the east."

⁵ *Ad Ps.* 67.

face east in prayer; that as he appeared in the east and then ascended into heaven, so he will reappear in the east, like the lightning in the text quoted above.

St Cyril of Jerusalem¹ and others explain that the catechumen at baptism turned from the west, the place of darkness, to the east, the place of light and the site of Paradise, which is reopened to him by that sacrament.

Some early writers explain that in praying towards the east the soul is seeking its old home in Paradise, to which it hopes to be restored in Christ.²

St Augustine is an early witness to the prevalence of turning eastwards in prayer in Western Christendom.

In later times, when the mediæval arrangement of the large choirs had developed and most members of them faced north and south ordinarily during services, the rubrics prescribed that those in such positions should turn eastwards, or rather towards the altar, at certain parts of the service, e.g. the *Gloria Patri* after the psalms.

But whatever be the explanation of its adoption, the antiquity and the universality of the practice remain. As regards the actual church building, the Apostolic Constitutions direct as follows: "And first let the house be oblong, turned towards the east." The same document also directs the congregation to "rise up with one consent, and looking to the east, pray to God eastwards."³ The rule is borne witness to by Socrates the historian, when he says of the church at Antioch that "it had its position inverted; for its altar looks not towards the east, but towards the west."⁴

The most striking of the earlier exceptions occur in Italy, especially

¹ Catech., xix. 9; St Jerome, *In Amos*, vi. 14; St Ambrose, *De iniat.*, 2; Lactantius, ii. 10; Pseudo-Justin, *Quest. ad Orthodox.*, 118.

² St Basil, *De Spiritu Sancto*, c. 27; Apostolic Constitutions, ii. § vii. cap. 57; St Greg. Nyss., *Homil. V. de Oratione Dominica*; St John Chrysostom, *ad Daniëlem*, vi. 10; Gregentius, *Disputat. cum Herb. Jud.*, p. 217.

³ ii., § vii., cap. 57. So also the Didascalia (Funk, i. 158 ff.) and Edessene Canons, i.

⁴ *Hist. Eccl.*, v. 22.

in Rome, though St Paulinus speaks of orientation as "morem usitantiorem" as contrasted with the basilica of St Felix at Nola. In Rome there were pagan basilicas adapted for Christian worship; churches had to be built by the sides of streets or at right angles to them; and in certain cases the situation of the building was determined by the desire to place the altar immediately over a martyr's grave. Nearly every point of the compass is represented in Rome, but in Ravenna and in places subject to Byzantine influence orientation is the rule.¹

But it must be noted that where the altar was at the west end the principle of orientation was maintained in another way, viz. by the celebrant and his ministers standing behind the altar and facing east, even when the congregation perforce faced west.² Thus the apparent exceptions are very much diminished in number. In later times the practice of the sacred ministers facing the congregation across the altar went very much out of use, though it is not obsolete even at the present day. Hence many of the apparent exceptions to orientation became true exceptions in course of time, so that later on the principle of orientation became practically a dead letter in Rome. This probably furnishes the reason why, with the spread of Roman liturgical customs on the Continent after the Council of Trent, neglect of orientation spread over the churches of the Roman obedience.

All over the rest of Christendom, whether East or West, North or South, orientation was the rule, and nowhere more than in these islands. The Celtic Church seems to have been specially rigid in this matter. Churches were built east and west, the altar being at the east end, the clergy and people in chancel and nave in front of it. This was also the case with side chapels, and the lesser altars which multiplied so greatly in the large town churches in the later Middle Ages.

¹ An analysis of orientations in Rome is given in *Sketches of Continental Ecclesiology, or Church Notes in Belgium, Germany, and Italy*, by Benjamin Webb, London, 1848, pp. 480-486. See also *Christian Art and Archaeology*, by Walter Lowrie, New York, 1901, pp. 176-178.

² See Goar, *Euchologion sive Rituale Græcorum*, Paris, 1647, p. 29.

In churches of the Roman obedience at the present day, the lesser altars are placed against the end walls of transepts, the side walls of the nave, or even at the west ends of aisles, without regard to orientation; but in pre-Reformation times such altars were almost invariably orientated.¹ When there were more of them than could be set against the east ends of aisles, against the east walls of transepts, or on either side of the door through the rood screen between the nave and the chancel, they were placed in side chapels enclosed by screens and built against the screens on the eastern sides of such chapels. Thus, the aisles of a church like St Giles', Edinburgh, or St Nicholas', Aberdeen, were divided into chapels by transverse screens at intervals. And in the small transeptal chapels so numerous in Scotland, the altar stood against the east wall and not beneath the window at the end.

The Reformation had but little effect on the orientation of churches and churchyards. In England it had absolutely none, and there the old principles have been strictly carried out down to the present day. Only in the case of certain town sites where orientation becomes practically impossible has it been set on one side. This occasionally happened in mediæval times, as in the case of the Greyfriars' Church at Aberdeen, which the requirements of the site seem to have caused to be placed north-west and south-east, the altar being at the latter end. In Scotland, even during the seventeenth century, churches continued to be built with their long axes east and west, and burials were invariably east and west. It was only when new churches began to be built on new sites during the latter part of the eighteenth century that the

¹ There may have been two exceptions at King's College Chapel, Aberdeen, where it is possible that the altar of the Venerable Sacrament stood against the north wall of the choir, east of the stalls, and the altar of St Katharine against the south wall. This position is assumed for these altars by Dr Norman Macpherson in his interesting and careful account of the Chapel, *Notes on the Chapel, Crown and other Ancient Buildings of King's College, Aberdeen*, Aberdeen, 1890. But it may be that these altars were against the west sides of small screens at right angles to the north and south walls.

old custom can be said to have died out, and then only gradually. When the change took place in internal arrangement it is difficult to say. Certainly, by the end of the eighteenth century, nearly every parish church had the pulpit in the middle of the south side, and the seats grouped round it. Some of the smaller churches had the pulpit at the east end, and it is probable that it was during the seventeenth century that the change in seating gradually came to be made. It would be interesting to know how far this was due to the influence of the English "sectaries" in the middle of the seventeenth century. Of course the communion tables had been placed lengthwise down the middle of each church most likely since the Reformation, though an instance is said to have survived in a Shetland parish church until the nineteenth century, where the table was at the east end.

In ancient times the belfry was nearly always at the west end, and this was the position it continued to occupy in the great majority of rebuilt churches till after the first quarter of the nineteenth century.

In the Scottish Episcopal Church orientation was impossible under the Penal Laws in the eighteenth century, but the growth of liturgical studies among Scottish Episcopalians during the same period resulted in the gradual revival of the practice after the repeal of the Penal Laws in 1792.

Orientation in burial has been strictly observed in the case of nearly all Christians. Even when that somewhat strange practice arose in the Frankish dominions in the eighth and ninth centuries of "translating" the bodies of saints and placing them in richly decorated shrines in the apses of churches, immediately behind the high altar, orientation was strictly adhered to. The shrine was set up east and west, with its west end and not its side immediately behind the altar.

An idea is widely prevalent that the clergy used to be buried the reverse way from lay folk, that is to say, with the feet to the west instead of to the east. This is not the case. No single example of this custom of earlier date than the sixteenth century has yet been

produced. No instance of such a practice has ever been forthcoming in the East. The notion that it existed of old has its origin in the practice of the Roman Church during the last three centuries, which has been to bury bishops and priests, but not deacons, with their feet to the west. John Burchard of Strasburg, who was Master of Ceremonies to Alexander VI. in the days when the pagan renaissance was at its height, tells us in his diary how he introduced the custom in imitation of that of the pagans of old. For some reason or other it was only adopted in the case of certain of the clergy, viz. priests and bishops. It does not appear in any official Roman service book until the reformed *Rituale Romanum* of 1614, and the custom is said not to be universal in churches of the Roman obedience even now.¹ There appear to be a handful of cases in which this practice has been adopted in the English Church, in the American Episcopal Church, and also by Scottish Episcopalians, under the mistaken belief that it is ancient; and I know of a case in England where a fifteenth-century brass of a clergyman of the parish was raised from where it had lain for four hundred years and replaced in the opposite position, from the same want of knowledge.

In Scotland, orientation in burial has been preserved right down to the present day. It is only within the last few years that one finds it neglected in the newer cemeteries and in many (but by no means all) recent additions to parish churchyards.

So far we have only spoken of orientation in general. When we come to analyse the orientation of particular churches, we find that there is considerable variation. While we can truthfully say that orientation was the rule, and that it was intended in each case, we

¹ There is no trace of it in the very full Instructions of St Charles Borromeo, issued by the third Provincial Council of Milan in 1573, nor yet in the well-known *Ceremoniale Parisiense* of 1703, in which Cardinal De Noailles, Archbishop of Paris, gathered up all the ceremonial uses of that metropolitan church. Its first appearance in any service book seems to be in the abortive edition of the *Rituale Romanum* of 1588, said to have been published by Cardinal Sanctorius and afterwards suppressed.

find that it varies from east-north-east to east-south-east; and we ask why, and what, if anything more than mere chance, determined the particular inclination in each case. This is a matter about which there has been a good deal of theorising in England. Some, for example, have sought to prove that churches were orientated according to the sunrise on the festival of the patron saint. This has been vehemently denied, and with good reason. It is not the writer's intention to advance any theory—at present, at all events—but merely to give the exact orientation of a group of churches, and to point out a few facts which emerge from a study of them.

In the plans of the early island churches drawn by the late Mr T. S. Muir¹ and the late Sir Henry Dryden,² arrows are given to show the points of the compass. These are hardly likely to be placed with such minute accuracy that it would be safe to attempt to calculate the exact degree of orientation from them, but they afford a rough guide to the amount of inclination north or south. An analysis of them gives the following result:—

DUE EAST.

Kilmory, Duirinish	M 269 ³
St Columba, Balivanich, Benbecula	D 88
Lybster, Caithness	M 108
Egilshay, Orkney	M 115

NORTH OF EAST.

St Olave, Kirkwall, <i>slightly</i>	D 110
St Carraig, Eilean Mor	M 201
Wyre, Orkney	D 114

¹ *Ecclesiological Notes on some of the Islands of Scotland*, Edin., 1885.

² *The Ecclesiastical Architecture of Scotland*, Macgibbon and Ross, Edin., 1896, vol. i.

³ In this table, M=Muir's *Ecclesiological Notes*, D=Sir H. Dryden's plans in vol. i. of Macgibbon and Ross's *Ecclesiastical Architecture*. The numbers refer to the pages in these books.

Brough of Deerness	D 103
St Tredwell, Papa Westray	D 106
Ness, North Yell	D 152
Inchkenneth, Mull, <i>North-East</i>	D 166
Teampull Rona, Rona, <i>nearly North-East</i>	M 92
Cullingsburgh, <i>more than North-East</i>	M 134

SOUTH OF EAST.

Crugleton, Wigtownshire	M 238
St Ninian, Sanda	M 267
„ „ Whithorn	M 232
Teampull Sula Sgeir, <i>slightly</i>	M 97
Linton, Shapinshay, <i>slightly</i>	D 122
Brough of Pirsay	D 136
Teampull Eorrapidh, Lewis	M 43
Teampull Beannachadh, Lewis, <i>nearly South-East</i>	M 43
Teampull-na-Triannaide, North Uist, <i>nearly South-East</i>	M 48, 277

In the Isle of Uyea, off Unst, in Shetland, is a remarkable case of an early church with the chancel at the west end of the nave and a doorway in the east wall. The actual position of the axis of the church is west-south-west and east-north-east. The case forms a noteworthy exception.

The groups of small chapels at Howmore, South Uist, and at Kilbar, Barra (D 70, 72), vary among themselves, the former group all inclining to the north, though in different degrees, the latter both to north and south.

Here the variants north and south are about equally divided, and each group is more than double those that are due east. The examples are too few and too widespread to admit of any deductions being made from them; but we may notice that they include undoubted Celtic

churches at both extremes and also due east, and churches probably of Scandinavian foundation of similar inclination.

We turn now to the Aberdeenshire and Banffshire lists, from which we get little if any more light, in spite of the greater number of churches and the more limited area. The results of the examination of the orientation of over sixty of them are given below. They have not been chosen for any special reason, but are fully representative of all parts of that district. In the list, the name of the patron saint where known, the county, and the diocese have been added in each case.

In Scotland it is much more difficult to obtain orientations accurately than in England, as so many of the ancient churches have been destroyed or rebuilt, and by no means always on the old foundations. In some cases, of course, we have the whole or part of the mediæval church. These have been indicated by an asterisk (*). In others the existing remains are of indeterminate date (in the case of certain grass-grown foundations) or of the seventeenth century. In these cases, which probably represent the position of the mediæval church, an obelus (†) has been used. Where the church has been rebuilt at a later time, the only guides are the oldest stones and the walls of burial enclosures. As may easily be imagined, these are by no means infallible, though they often give a good general idea. In many and many an old churchyard the more ancient grave-stones are placed with surprising regularity, while in others they have evidently been disturbed to such an extent that nothing can be safely deduced from their position. In cases where a definite group of old stones has been followed, the letter "s" is prefixed to the orientation, and where the orientation is only approximate, the letter "c." In other cases it may be taken for granted that the present church, most of the stones, including the oldest, with perhaps a burial enclosure, all have the same orientation. In a few cases, *e.g.* Philorth, Braemar, Fyvie, Meldrum, there was nothing sufficiently definite to justify inclusion in the list. In each case the figures are, of course, approximate.

When we come to analyse the list, we are struck by the fact that out of sixty-two churches and sites only eight can be said to be due east. Of the remaining five which are not due east, the vast majority incline to the north, viz. thirty-eight, as against sixteen which incline to the south. Only three incline as far as 20° to the south, whereas fifteen incline 20° or more to the north. The extreme inclination southwards is 20° ; the extreme to the north is as much as 35° . It is noteworthy that, out of nine which are almost exactly 20° north, five are mediæval churches, viz. Gamrie, Fordyce, Mortlach, Auchindoir, and Kincardine O'Neil, and all churches of importance. Magnetic north is now about 20° west of true north, and it might therefore be suggested at first sight that in these cases the compass may have determined the orientation. But it could not be suggested that the older churches were all 20° north of east, as the two most extreme cases on the list, Aberdour 35° north, and King Edward 20° south, are both mediæval churches. It must also be noted that the choir of Elgin Cathedral is only 5° north of east, and that the nave is nearly due east, while the great mediæval parish church of St Nicholas, Aberdeen, is due east.

But this does not take into account the periodic variation of the magnetic pole. It changes its position from $24^{\circ} 27'$ maximum variation west to $24^{\circ} 30'$ maximum variation east over a cycle of 320 years. Thus, in A.D. 1817 the maximum variation east was reached, while in 1497 the magnetic pole was at the other extreme, magnetic north and true north coinciding in 1657. Again, in A.D. 1017 magnetic north and true north would have been the same; in 1177 there would have been the greatest variation east. Presuming that the compass was known and used by 1497, we might expect to find churches of about that period inclining very much to the north of east; if the compass were known and used in the thirteenth century, which is hardly possible in the West, churches of that date would incline a good deal to the south. But this theory is not supported by the

facts, even if we could believe that the compass was known and used here so long ago.

If we examine the churches on the list to see if their orientations tell in favour of the theory of determination by sunrise on the festival of the patron saint, we find that all the evidence is strongly opposed to any such conclusion. Thus, to take a few cases where several churches are dedicated to the same saint :—

St Andrew, 30th November.		St Moluoc, 25th June.	
Alford . . .	25° N. of E.	Mortlach . . .	20° N. of E.
Tyrie . . .	25° N. of E.		
Gartly . . .	20° N. of E.	Rhynie . . .	5° to 15° N. of E.
Monymusk . . .	10° N. of E.	Clatt . . .	<5° N. of E.
Rayne . . .	E.	Tarland . . .	5° S. of E.
Logie Buchan . . .	20° S. of E.		

St Drostan,
4th December.

Aberdour . . .	35° N. of E.
Insch . . .	10° S. of E.

Then we note that, whereas the festivals of SS. Andrew, Drostan, Nathalan, Kentigern, Devenick, and Bridget all fall in winter, there are churches with these dedications which are orientated east or north of east, and in some cases very far north of east. While it is not possible to prove a negative in all cases, of course, we may safely say that we find nothing here to warrant the holding of the saint's day sunrise theory.

The character of the dedication tells us nothing, for we have Celtic saints as well as those of universal veneration at both extremes and also in the middle. Now, does the date of the actual buildings supply any clue to the mystery of varied orientation? Mortlach, Monymusk,

and Birnie are early churches; the first two are 20° and 10° north, and the third 5° south of east. Auchindoir and Deskford are of the sixteenth century; the former is inclined 20° north, and the latter 10° south of east. And the locality does not help us. King Edward (20° south) and Gamrie (20° north) are adjacent parishes; so are Insch (10° south) and Leslie (10° north).

It may be objected that no result has been reached by this collecting and analysing of a group of orientations of churches. But is it certain that there will never be any light thrown on the question when a great many more are tabulated? Perhaps. At any rate no result can possibly be obtained unless the data be accessible. A beginning must be made. It is by no means certain that there would be no result if we had the necessary information for the whole of Scotland.

LIST OF CHURCHES WITH DEDICATION AND ORIENTATION.

ABBREVIATIONS.

A Aberdeenshire.	a Diocese of Aberdeen.
B Banffshire.	m " Moray.
M Morayshire.	* Mediæval building, in whole or part.
AB Formerly in Aberdeenshire, now in Banffshire.	† Probably on mediæval foundations.
BA Formerly in Banffshire, now in Aberdeenshire.	c. <i>circa</i> .
	s Older stones.

Church.	Local-ity.	Dedication.	Orientation.	Remarks.
Aberdour . . .	A a	St Drostan	* 35° N. of E.	Some old stones 25° N.
Botriphnie . . .	B m	St Fumac	† 30 ..	Old fragment and old stones.
Boharm . . .	B m	(17th century)	30 ..	Older stones very regular.
Premnay . . .	A a	St Caran	s 30 ..	
Cluny . . .	A a	St Constantine ??	s 30 ..	Also burial en- closures.
Alford . . .	A a	St Andrew	s 25 ..	
Tyrie . . .	A a	St Andrew	c 25 ..	

LIST OF CHURCHES WITH DEDICATION AND ORIENTATION—*continued.*

Church.	Local-ity.	Dedication.	Orientation.	Remarks.
Glenmuick . . .	A a	St Mary	20° N. of E.	Some stones about 25° N.
Gamrie . . .	B a	St John	* 20 "	
Fordyce . . .	B a	St Talarican	* 20 "	
Mortlach . . .	B a	St Moluoc	* 20 "	
Gartly . . .	BA m	St Andrew	s 20 "	
Kennethmont	A a	St Regulus	† 20 "	Older stones very regular.
Auchindoir ¹	A a	St Mary	* 20 "	
Glenbuchat	A a	St Peter	20 "	
Kincardine				
O'Neil	A a	St Earchard	* 20 "	
Aboyne . . .	A a	St Adamnan	† c. 17 "	
Fetterangus .	BA a	St Fergus ?	† c. 15-20 "	
Rathen . . .	A a	St Ethernan	* 15 "	
Essil . . .	M m	St Peter	s c. 15 "	
Rothiemay . .	B m	St Drostan	s 10 "	
Forgue . . .	A a	St Margaret of Scotland	s c. 10 "	
Culsalmond .	A a	St Mary ? ?	10 "	Present ch., 1786, due E.
Leslie . . .	A a	St Ninian	10 "	
Tullich . . .	A a	St Nathalan	* 10 "	
Kildrummy ²	A a	St Bridget	* < 10 "	
Alvah . . .	B a	St Colman ?	< 10 "	
Monymusk . .	A a	St Andrew	* 10 "	
Rhynie . . .	A m	St Moluoc	s 5-15 "	
Cabrach . . .	AB a	St Mary	5-10 "	
Birse . . .	A a	St Michael	10 "	
Spynie . . .	M m	Holy Trinity	5-10 "	
Elgin . . .	M m	Holy Trinity	* c. 5 "	
Banff . . .	B a	St Mary	* 5 "	
Slains . . .	A a	St Ternan	† 5 "	
Towie . . .	A a		? 5 "	
Clatt . . .	A a	St Moluoc	* < 5 "	
Rathven . . .	B a	St Peter	† < 5 "	
Glengairn . .	A a	St Kentigern	† E.	

¹ A group of stones in S.E. corner of churchyard about 60° N. of E.

² Kildrummy Church is situated upon a hillock, and the churchyard is roughly oval in shape: some of the graves in the S.E. part are deflected to the S., and a few are almost due N. and S.

