

THE EARLY MAPS OF LONDON.

BY

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(Continued from p. 286.)

II.—INTERPRETATION OF EARLY MAPS.

In the first part of this Paper the need for analytical investigation was urged if the early maps of London were to yield reliable evidence of London topography. At the same time, it was pointed out how the investigation at an early stage required a classification according to types and a relegation to a class of the particular map which happened to be under consideration. In addition, a workable classification, together with identifying notes of the maps and of their earliest known editions which had been selected as types, was given. In continuation, the second part of the Paper now sets out a number of topics which require attention before the true meaning of a map is secured. When, therefore, the map which is under investigation has been classified and, as far as practicable, its edition has been settled, and when also the map has been studied with respect to the topics now to be pointed out, a long way will have been gone towards correct interpretation and ascertainment of the message which the map-producer desired to transmit.

Experience in the reading of early maps proves that false inferences may readily be drawn, and that much which is represented is the product of fertile

imagination. When with ambiguity present there occurs paucity of information, the assessment of the true value of a map's representation is far from easy. By the aid, however, of interpretation, the utmost that a document is capable of yielding is obtainable. When there is a total absence of information concerning that for which search is made, no aid is, of course, to be derived from any system of interpretation, however elaborate or complete, except perhaps in so far as it makes that absence clearly conspicuous. But by the ability to draw upon a knowledge of cardinal considerations, and by the application of the comparative method of investigation, many obscurities will be found to vanish, and explanations to be forthcoming, such as might not be the case if single maps alone were scrutinised or principles of interpretation were not to hand.

By interpretation is here meant the art of obtaining from the document, or set of documents, under review, the information which its author wished to impart, whether he was drawing upon a complete knowledge of his subject, or whether through lack of material he was supplementing or expanding, with artistic or pictorial embellishment, that of which he was in possession, or was representing conventionally what might be expected to exist. In short, interpreting in the sense here indicated consists in the telling in clear and intelligible language the whole of the story which the map producer has desired to communicate.

Interpretation is always entered upon immediately the truth of a marking upon a map is maintained or is questioned. Some people have learnt to interpret, others have the ability intuitively, and proceed forthwith without difficulty. Even to those fortunate individuals who can read maps without effort, the knowledge of a general scheme of interpretation cannot come amiss, for, by its aid, they can check their results

and can state to others the reasons for the conclusions at which they have arrived. Indeed, the more a person "takes to maps," the more he appreciates the need for an exposition of the means by which he reaches a decision. But whether he can interpret naturally, or whether he has to learn to interpret, it is certain that on every occasion when a map is investigated it receives a measure of interpretation. And the more a representation on a map is challenged, the more is the art of interpretation invoked.

To obtain the true story that a map has to tell, there are a number of facts and incidents which must be considered, many of which are closely connected with the production of the map from its inception to its publication. It is, then, the cautious consideration of these that leads to the conclusions which are to be derived from a study of the map under investigation.

In the first place, there is the necessity for a classification according to groups, families or types, and the allotment of the map to its proper group. This subject has already received full treatment. Then, in order to proceed in the investigation for any of the numerous reasons for which reference is made to a map, there must be present to the mind, either implicitly, which is usual, or explicitly, which is rare, the facts and incidents which mark the production of the map, and the means the author employed for communicating his message. These, which have so powerful a bearing upon the extraction of truthful information, and which should always be to mind before a definite pronouncement is made, may be summarised under the following headings:—

- a.—Position of the map in its group; derivative and debased or degraded copies.
- b.—Inter-dependence of type-maps.
- c.—Originator, author, or surveyor.

- d.—Engraver or reproducer.
- e.—Filling in vacant spacings by the insertion of typical map-details or map-reading accessories.
- f.—Re-issue and alteration of used plates.
- g.—Style.
- h.—Position chosen for the outlook.
- i.—Permanence of sites.
- j.—Conventional expression and the employment of symbols; characteristic sheet.
- k.—Date.
- l.—Enclosure within border-lines or framings.
- m.—Reference tables, keys, name, and other labels.
- n.—Shields of arms.
- o.—Ancillary pictures, panels, insets, scrolls, and borderings; water-marking, printing, paper, dimensions.
- p.—Titles of maps, legends and descriptive or explanatory notes.
- q.—Scale.
- r.—Coloration.
- s.—Orientation.
- t.—Meridianage.
- u.—Inscriptions denoting origin, authorship, or execution, or giving other information.
- a.—Position of the map in its group; derivative and de-based or degraded copies.*

As will have been noticed when dealing with the classification of maps, the genuineness of a map's representations is usually proportional to the remoteness of the map from its original, or what has to be taken as the original. By reference to the original, variations can be detected and their value as topographical evidence determined. In the majority of cases, the variations will be found to be accidental, and to have been introduced as the result of successive copyings and of interpretations by the engraver. As between one map and its immediate copy and successor, the variations may be slight, but collectively through a succession of copyings, each from its copied predecessor, the accumulated variations at length render the resultant map topographically valueless. Occasionally even

ludicrous results ensue. A notable instance of this occurs in connection with the second or polygonal Globe Playhouse in Southwark, in the time of James I and Charles I. In the Crace Collection at the British Museum, a debased copy of the Visscher Panorama of London of 1616 bears upon its face the words "The Globe" above a diminutive flagstaff at the top of a dwarfed steeple which rises from a building. Without a knowledge of the original Visscher, in which the words "The Globe," rightly or wrongly, appear above a building of the playhouse type, the survival in this curious derivative would be unmeaning.

The products of successive copyings may well be styled "degraded" or "debased," since the versions which copyings bring about usually contain all the faults of the prototype together with those which have arisen during the sequence of re-copyings.

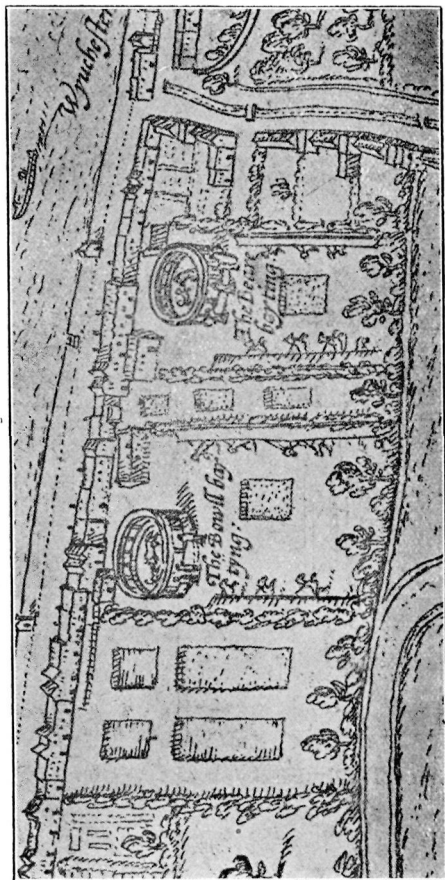
In the absence of the prototype, considerable hesitation must be shown in the acceptance of the representations of a single impression under examination, and still more hesitancy as regards the specific variations from its prototype which are to be seen. Only after confirmatory evidence has been adduced should the variations from the type be accepted.

As a simple example of confirmation of the accuracy of a detail in a bird's-eye view which has been employed as a type, a feature shown in Agas' map may be mentioned. At the west end of the destroyed nave of the church of St. Bartholomew, Smithfield, there is shown a fence or railing which encloses a narrow strip. That this railing existed when the original of Agas' view was drawn is probably true since, as we have been informed, the parish division juts out to enclose this small area or strip. In addition, a wood-block in "The Family Economist" for the year 1860 (page 168) shows that a wooden railing in that year still enclosed the strip.

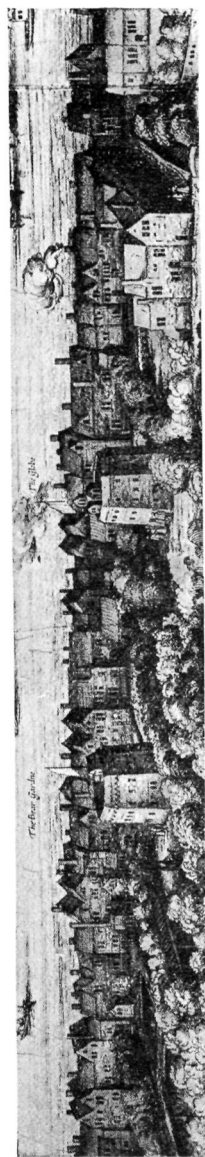
b.—Inter-dependence of type-maps.

The emphatic difference in character, style, and contents which, in general, has served as a basis for group-divisions suggests independence of origin in the maps. But although a map may be sufficiently distinctive to serve as a type or to head a group, yet closer examination shows that later map-makers were influenced by their predecessors, and reflected the work of earlier surveyors. Allowance must therefore be made for this inter-dependence. The adoption of earlier works by a reputable author should, in general, be confirmatory of the accuracy of what he borrowed, but as erroneous mapping is seen, in instances, to have been transferred, *this principle cannot hold in all cases.* Assessment, then, of the value of a representation demands a knowledge of the extent of the borrowing. In the case of the Visscher Panorama, although it differs in many ways from its predecessor in the Atlas of Braun and Hogenberg, yet indications are to hand that the later map borrowed from the earlier. Similarly, if the "Agas" map be taken as an independent survey, it is obvious that the draftsman servilely moulded his production upon the map of Braun.

By critical examination of the two maps this inter-dependence may be proved. For this purpose a particular locality should be taken in hand rather than the large area which the whole of each map covers. In the present instance, the locality to the west of London Bridge on the Surrey side, known as Bankside, is selected. In the examination we may proceed according to three methods. Thus, a comparison may be made of the characteristic duplication, common to the maps, of a small portion of Maid Lane, now called Park Street (east and west), and also of a continuing



(a) FROM THE ATLAS OF BRAUN AND HOGENBERG, 1572, FOR
COMPARISON WITH (b).



(b) FROM VISSCHER'S PANORAMA, 1616, FOR COMPARISON WITH (a) ABOVE.

length of this duplication which runs east and west on the other side of Deadman's Place, Deadman's Place to-day forming the north and south portion of Park Street. According to the second method, we may observe the conventionally-sketched houses which compose the fringe of habitations upon the bank of the river; or, thirdly, we may employ the proof presented by an enumeration of the plots shown on Bankside and noting their contents.

As regards (1)—the duplication which appears on both maps of a short length of Maid Lane—we notice on the Braun map (Plate VIII) that this length extends from near the upper end of Deadman's Place to the Bear Baiting pit which is so clearly indicated. Similarly, in Visscher (Plate VIIIb.), we see also the length illustrated, although the lower border-line of the map has cut away most of the hedge-row which lined its southern bank, and has left for surmise what to the south was originally present on the engraver's draft. The repetition in the later map of this duplication which has no basis in fact is good evidence of the reliance placed upon the earlier map, for there can be but little doubt that the length in question was imaginary, and that its appearance on the Braun view was due either to the exigencies of map-making or to ignorance, possibly to misapprehension, on the part of the draftsman or the engraver. That it was imaginary appears when we retrace our knowledge step by step to the time of the maps, for no real reason can be discovered for supposing this short thoroughfare ever to have existed. It is true that there is authority which, if accepted uncritically, might lend colour to its having existed; but closer examination of the authority shows that another interpretation which the authority bears assists the body of

extraneous evidence in ascribing a fictitious character to the representation on the maps.

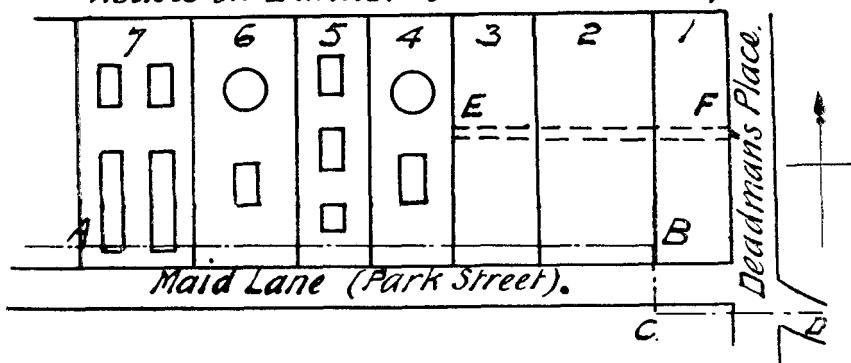
Concerning the occurrence, too, on both maps of the continuing public thoroughfare to the east of Deadman's Place, a priori the former existence of this public way is also difficult to understand since the way would have cut through the private gardens of the Bishop of Winchester. But no such thoroughfare is shown by the careful Norden in his map of 1593 (Pl. II., facing p. 269); nor is there extant any original evidence other than that in the two maps and their copies from which its existence might be inferred. Further, the drawing of the adjacent trees, the wall, etc., is practically identical. The appearance, therefore, on the later map of this thoroughfare points unmistakably to the Braun example being in front of the Visscher draftsman or engraver when he was engaged on his task.

As regards the second method of proceeding, viz., by observing the houses on the bank of the river, presumably no one will maintain the houses to be other than conventional sketches of residences. On closely inspecting the sketches, and bearing in mind the small scale on which the Braun map is drawn, it is clear that the gabled roofs which lie north and south occur at the same intervals along the row of houses, and that they are similarly drawn. A further examination shows the number and shape of the intervening houses in the two maps to be virtually the same. The conclusion follows that the Visscher was a copy of the Braun. Indeed, it may not be too much to allege that the Braun map was employed as the draft for the artistic Visscher. The further curious fact is also revealed by the comparison: after the plots of ground on Bankside

with their buildings and contents had been drawn in the Visscher picture, the houses composing the fringe were sketched and were placed relatively to the buildings on the plots as though the bear-garden in Visscher was the same as the bull-ring in Braun and as though the building misnamed "The Globe" by Visscher occupied the site of Braun's bear-pit. That neither was the case is proved below.

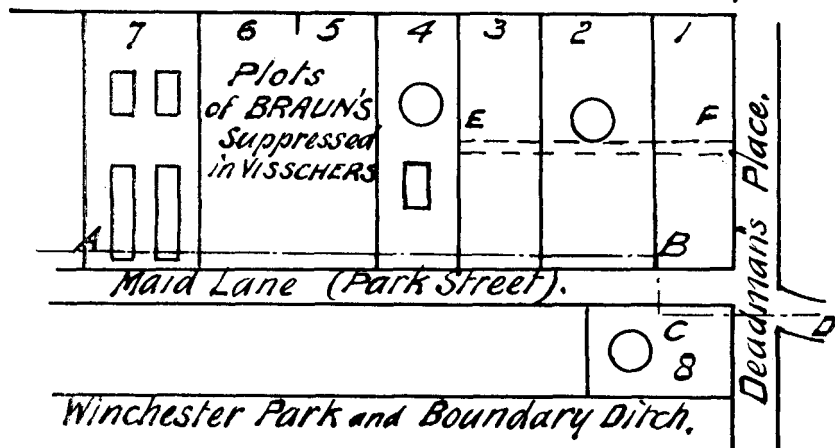
With respect to the third method of showing the inter-dependence of the maps, a method which enumerates the plots and notes their contents, it will aid the proof if the up-and-down scale on which the Bankside area is drawn is made uniform. By this means the duplicated portion of Maid Lane, as mentioned above, may be removed from consideration. To secure this uniformity of scale, the plots to the north of the duplicated portion must be stretched southerly, so that the duplicated portion of Maid Lane overlaps its counterpart at the eastern extremity of the lane as it appears in Braun, and the up-and-down scale of these plots made thus to correspond to the same scale upon which the area to the west of this short length is drawn. In the next place, due regard being had to the hedgerows, lines of trees, dots, and other symbols which denote divisions between adjacent plots, the investigation continues by a numbering of the plots from east to west, 1, 2, 3, 4, 5, 6, and 7, as shown on the diagram, Plate IX. Thus, plot 4 in the Braun map contains the bear-pit, plot 6 the bull-ring, and plot 7 the four Pyke Ponds. Having treated in this way the Braun map, the Visscher example is to be dealt with in the same manner. At once the plot containing the Pyke Ponds can be identified, and is

Houses on Bankside of Conventional pattern.



Plan of Braun's map-view, 1572, with the up-and-down scale made uniform. 4: Fourth plot with bear-pit. 6: Sixth plot with bull-ring. 7: Pyke-Ponds plot. A, B, C, D: Approximate plane of elevation at the lower border-line of Visscher. E, F: Position of short duplicated length of Maid Lane as shown on Braun.

Houses here on Bankside of Conventional pattern



Plan of Visscher's map-view, 1616, with the up-and-down scale made uniform. 2: Second plot with the Rose Playhouse. 4: Fourth plot with bear-pit. 5, 6: Plots in Braun suppressed in Visscher. 7: Pyke-Ponds plot. 8: Globe Playhouse plot removed from Visscher. A, B, C, D: Approximate plane of elevation at the lower border-line of Visscher. E, F: Position of short duplicated length of Maid Lane as shown on Visscher.

therefore to be numbered 7 to agree with the corresponding plot in the previous map. Then placing the number 1 upon the right-hand plot of the series, we pass to the left, and, in succession, number the plots which are there to be found 2, 3, and 4. But the plot next to 4 is already numbered 7. Plots 5 and 6 of the Braun map must therefore have been suppressed. The suppression is also evidenced by the want of parallelism of the line which divides plots 4 and 7 as compared with the lines which divide the other plots. To account for the suppression of the plots we may suppose the engraver to have worked from one side, either the left or right hand side of the plate, and, finding that he had not allowed himself room, he had then worked from the other edge of the plate, and had joined the plot 4 to the plot 7 in the best way he could. The diagrams (Plate IX.) drawn to a uniform up-and-down scale in the manner mentioned above show clearly the inter-dependence of the two maps from the reasoning based upon this enumeration of the plots. In the upper diagram, the plots as illustrated in Braun are numbered as explained, while in the lower diagram the corresponding plots are similarly identified. This analysis of the Bankside area also points out how the bull-ring in plot 6 of Braun is omitted in Visscher, an omission which accords with the fact as we suppose it to have been that, by 1616, the date of Visscher, the bull-ring had been abolished. Further, in both maps the bear-pit is seen to appear in the same plot 4 as it should do, but a new playhouse, the Rose—*circa* 1592—has arisen in the interval between the maps upon plot 2. That this new playhouse, the Rose, should, in Visscher, be labelled “The Globe”

need not disturb us. The Globe playhouse had surpassed the decaying, or possibly the already dead, "Rose," and the Dutch engraver, having heard of the world-renowned Globe, but not having heard of the Rose, mistook his instructions on the draft, and struck out the sketch of the Globe in favour of the Rose, the sketch of which had been masked by the drawing of the Globe placed immediately below. Supposing in this way the Rose to have been the Globe, the engraver would have placed the title "The Globe" in the position in which it now appears in the Visscher map. As an alternative explanation for the survival of the title, "The Globe," we may suppose that, although the Globe playhouse was clearly shown on the draft to the south of the Rose, and on the south side of Maid Lane, the engraver, when completing his plate by putting in the lower border-line, excised from the picture the Globe, which, owing to the absence of adjacent topographical features of interest, was practically standing alone. Forgetting the presence of the words, "The Globe," he allowed the words to remain on the map as we now see them, a survival which has led to so much misunderstanding.

This somewhat lengthy analysis, although concerned with but a small area, is sufficient to indicate the dependence of the Visscher map-view upon its predecessor, the Braun map; or more correctly perhaps upon the larger scale map from which the Braun was derived. In general, it also suggests how the inter-dependence of the other maps in the series may be proved. As the result, the map-reader must not lose sight of the inter-dependence of maps, and of the possibility of old matter, whether accurate or inaccurate, re-appearing without essential

variation, and without acknowledgment. Old matter must be interpreted by reference to the source from which it is taken, receiving, perchance, a measure of confirmation from the known personality of the borrowing map-producer.

c.—Originator, author, or surveyor.

At an early stage in the investigation of maps the question of authorship comes up, for unless faith can be placed on the ability, accuracy, or honesty of an author, his productions must be viewed with suspicion. Opportunity for observation by the author, and the probabilities of his visits in person to localities and buildings, or of the receipt of information are relevant to the enquiry. Authorship, moreover, may have been purely nominal, the work having been performed by assistants; but, in general, the known facts in the life of the author whose name is transmitted to us is sufficient for the investigation under this head.

d.—Engraver or reproducer.

If the original draft is at fault, and the engraver is nothing but an executant, the result cannot be better than the draft. Probably it will be worse, for the engraver himself is sure to interpret and to vary what he sees in his draft. If he has knowledge of the locality in hand, the result may be preferable to the original; but if the edition is carried through without topographic intelligence, error will be superposed. Where the draft is defective, the engraver is left to his own devices, and where possible will supplement his imperfect instructions. He will fill in voids with houses of a common type, while gardens, walls, bridges, etc., of the normal pattern will find a lodgment there.

e.—Filling in vacant spacings by the insertion of typical map-details or map-reading accessories.

Where exact information was exiguous or lacking, or when the engraver's draft was hopelessly confused, it was natural for the author or the engraver to supplement deficiencies or voids. Supplementing in this way would consist of the filling-in of houses, garden-plots, etc., according to the type which the area under treatment yielded. In the case of vacant areas of large size, areas which were unsurveyed or contained nothing of interest relevant to the publication, the map-maker introduced a compass-dial, an elaborately adorned scale of distances, ribbons or scrolls bearing titles, legends, etc. In succeeding editions by the same or by other artists or publishers, spaces which had not thus been treated were often completed without intelligence or ingenuity. Much care must therefore be exercised in distinguishing what the artist set down as the result of direct observation from what he invented for supplementing his defective instructions. Neglect on this score is bound to lead to faulty conclusion. Experience in map-reading, together with the employment of extraneous knowledge, must be called up in the solution of the ever-present difficulty of separating the true from the symbolic or the fanciful.

f.—Re-issue and alteration of used plates.

This was a common practice, and one which has often given rise to error. By additions and variations, the map was made to accord with the needs of the moment. They were often so unskillfully performed that their detection is easy, especially when the prototype is available. In re-issues, there are to be seen out-of-date inscriptions, and also inconsistencies between parts of the map. Portions of maps were also employed to adorn the title-pages of books which were

published many years later. The date, then, of the book in such instances gives no clue to the date of the map except so far as it gives the latest limit of date. Detached pictorial title-pages should be allotted to the groups from which they have sprung. Thus the view in the title-page of the Cambridge Bible of 1648 is but a degraded version of the Merian map of London of 1638.

g.—Style.

The style in which a map is drawn or the manner in which its salient buildings have been sketched may point conclusively, by comparison with better known productions, to the author of the original from which the map was taken, or suggest the map as being an original itself by the same author. Alternatively, the comparison may show that the accustomed attribution is erroneous. In the case of the "Agas" map, the attribution to Agas seems to have originated through a comparison of styles. Similarly, also, to some extent the probably correct attribution of the London map in Braun's Atlas to Hoefnagel is an example. Further, a comparison, in addition to telling a tale derived from style, may lead to identification of a picture-map and a reference to its original source. In many cases, too, the style in which buildings are drawn proclaims the nationality of the artist or engraver, particularly when his instructions have been scanty or his opportunities for sketching or surveying what he has been called upon to set down have been few. In these circumstances, he will naturally draw upon his stores of knowledge and thus proclaim the class of work in which he has been trained, or in which he has had most experience. Consequently, then, mannerisms of the map-maker may be expected to intrude themselves. It should, therefore, be an aim of the map-reader to recognise these when present.

h.—Position chosen for the outlook.

In the case of bird's-eye views, the position chosen for the outlook may not necessarily be a real one. In such instances there is, therefore, the difficulty of discovering the imaginary position from which the view appeared. Where the position is fictitious, the draftsman will be relying ultimately upon his knowledge of the various landmarks, and will be depicting them with an exactitude which is not obtainable from the general outlook which a real position affords. Further, the tendency to illustrate ordinary habitations according to type, and not as they actually stood, is greater where the standpoint is fictitious than where, as in the Hollar panorama of 1647, the real position afforded by the tower of St. Saviour's Church is selected as the observation station. Even when the position is a real one, if notable buildings tend to mask one another, or the known directions of roads are obscured, the artist does not scruple, on occasion, to vary the positions so as to bring them into view in the picture.

i.—Permanence of sites.

The tendency to permanence in the matter of the sites of roads, tracks, bridges, and divisions of property due to natural or artificial causes is of importance when the interpretation of pictorial maps is entered upon. There are many reasons for this permanence, reasons which need not be here recounted. It is sufficient to say that, in former times, the occasions were few when it became necessary to extirpate ancient ways in favour of symmetric planning, and to substitute grandiose architecture for picturesque domesticity. Granting the tendency to permanence—which can scarcely be gainsaid—an intimate knowledge of streets, lanes, alleys, and blind-ends is of more than ordinary value. If, in an early map, a road, passage, ground-

plan of a house or estate, or even a yard of some dimensions is drawn, its counterpart will be visible to-day with its character unchanged. Alternatively its "fossil" in situ will be found, or some account will be discovered of its closure or of its complete alteration in character. If neither of these is forthcoming, suspicion may be attached to the map's representation, and, although proof of inaccuracy is not obtainable, yet conclusions drawn from the map may well be reserved.

In the majority of instances it is easy to follow up the thoroughfares and sites of three centuries ago. Sometimes the old name of a road or street still endures; but sometimes it has been transferred reprehensibly to a substituted adjacent thoroughfare.

When an old survey drawn to scale is to hand, it may be employed with success in pointing out, with the aid of the ordnance survey, the survival of the feature under discussion.

In short, in the interpretation of map-views, the assistance afforded by the tendency for sites to remain permanent can scarcely be overrated.

j.—Conventional expression and the employment of symbols; characteristic sheet.

To avoid verbiage or tedious explanation, and to assist description, abbreviations, whether of words or of objects, are usual. By their aid and by their pregnancy of meaning much information is confined within the narrowest of limits. The depiction of localities by bird's-eye views is an example where, as we know, scope is given to artistic skill, even at the risk of the distortion of facts. In the case of individual buildings or of small areas, such as parks, tenting grounds, etc., degraded sketches become symbols, and are read as such. These ideograms, together with other conventional markings, can be collected and a "Charac-

teristic sheet" devised. In the maps of modern times little difficulty is present in interpreting the symbols and conventions adopted, but as regards maps and plans of the sixteenth and seventeenth centuries, the meaning to be attached to them is not always apparent. Further, the attitude of mind of the Elizabethans and the Stuarts to whom the maps were addressed was probably different to that of the student of to-day, so that what was formerly clear and easy of comprehension may now elude observation. This possibility of meaning which is still hidden must therefore not be forgotten. A characteristic sheet on a small scale is carried by the county map which accompanies Norden's "Middlesex," 1593, and is here reproduced (Plate X.). In addition, a sheet compiled from various sources is also given (Plate XI.).

k.—*Date.*

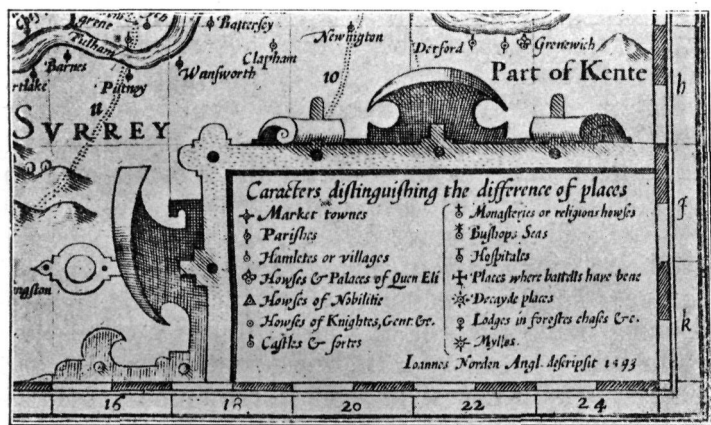
Of paramount importance in the application of the information afforded by a map or plan, whatever the class to which it may belong, is the date of the document. The date may be that of the original survey, of the aggregation of the independent sketches of which it may be composed, of the actual engraving, or of the publishing. Of considerable moment, also, is the date of the variation of a plate or block, and consequently of its imprints in its altered condition. Some or all of these dates may possibly be known. The date which is quoted, when the occasion for citation arises, is usually given without reference to the fact with which it is so intimately connected. For many purposes, the respective dates are sufficiently near to obviate the necessity of distinguishing them. When, however, they are remote, it is desirable for a date to be quoted with its qualification. Perhaps of all the dates for quotation the least useful is that of publication.

To settle the date of a map, a review of all the considerations that can be brought to bear when interpreting a map may be required. When the date is not obvious, as, for instance, by being engraved on the map, the dates when its author flourished or lived will provide limits. When in a book, the book itself may provide the required information, or the date of publication of the book, or its registration at Stationers' Hall, will give the latest limit. The precaution, however, must be taken of settling whether the map was contemporary with the publication of the work, or whether the map was subsequently inserted in it, a practice not uncommon.

If both the magnetic north and the geographical north are indicated by arrows, the angle between them should give the year when the indication was affixed, and consequently the date of the map, exactly or approximately.

The anonymous re-issue of an old map also occasions difficulty. Unless a map can be recognised as

PLATE X.



FROM NORDEN'S MAP OF MIDDLESEX.

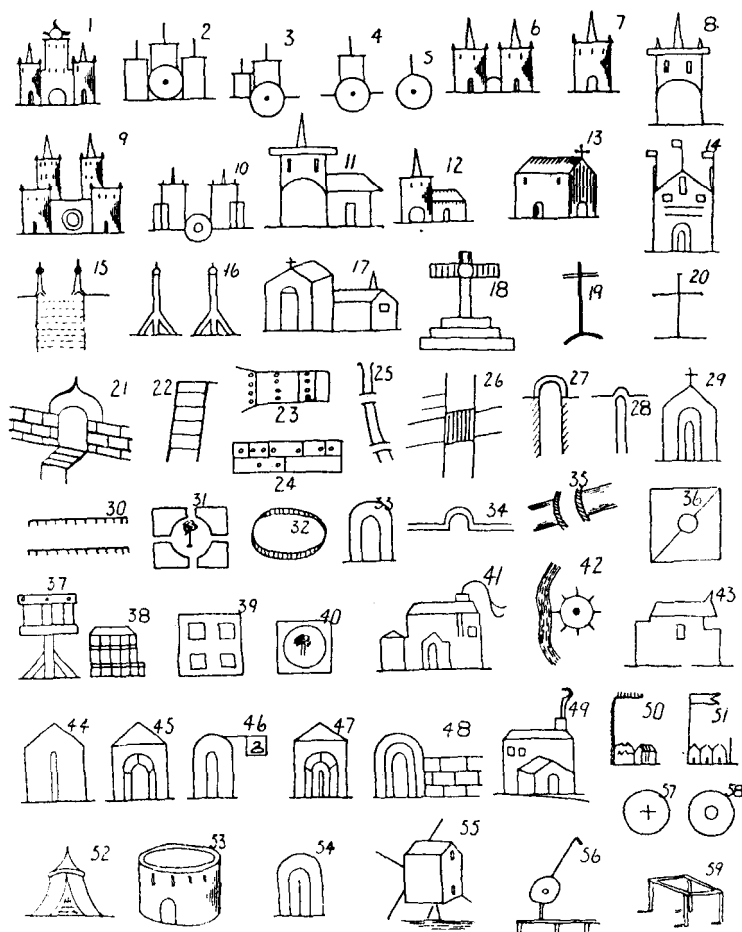
being of the date which is seen on the original plate, or, on the other hand, as of the date which is borne by the re-issue, the date attributed may be open to suspicion. In some cases, the date which is given may be proved by internal or external evidence to be impossible, while, in other cases, the date, although seemingly that of the original publication, may be conclusively shown to be the date of the re-issue. False datings have arisen through engraved labels being excised from original plates and transferred to newer productions, when not only the date is at fault, but also the name of the author.

An example of a false ascription to Norden is seen in a map-view in the Crace Collection. (Views, Port. I, 12.)

Account must also be taken of the appearing of buildings which were known to have been erected in a certain year. When a building occurs of a temporary character only, the date of the map may be confined to narrow limits. "Intelligent anticipation" of events may also lead to false datings, and this possibility must not be forgotten. Thus, in connection with London maps, the spire on old St. Paul's, which was destroyed by fire in 1561, may be shown as replaced, the intention to do this, however, not being fulfilled. When a building has received a new name at a known date, the new name upon an impression affords a valuable indication as to the date of the execution of the map. Thus the substitution of the name "Whitehall" for "York House" after Wolsey's downfall points to the edition having been carried through after Wolsey's disgrace. In a like manner we may conclude from an old name being present the latest limit in date.

On this question of date, the arranging and grouping of the map-views, and their reference to certain types, have an important bearing. If the map which

CHARACTERISTIC SHEET.



1, 2. House and manor of the King; 3. gentleman's seat and church; 4. 7, 8. gentleman's seat; 5. village or parish; 6. castle; 9, 10. market town; 11, 12. parish church; 13, 17. monastery; 14. St. Saviour's, Southwark; 15. London Bridge and chains; 16. chains to St. Saviour's, Southwark; 18. Bermondsey Cross; 19, 20. graveyards; 21. Leicester Gate and stairs to Thames; 22. river stairs, Southwark; 23, 24. bridges; 25, 26, 27, 28, 34, 35. bridges and ditches; 29. gate of Winchester House, Southwark; 30. tenter fields; 31, 39, 40. garden plots or ponds; 32. park; 33, 44-5-6-7, 54. Inns; 36. sink; 37. pillory; 38. cage; 41, 49. dwelling houses; 42. water-wheel; 43. brewhouse; 50. houses and palings; 51. same as 50 through successive copying; 52. battle-site; 53. playhouse; 55. wind mill; 56. crane and wharf; 57. bull-ring; 58. well; 59. gallows.

is under investigation can be allotted to its original by reference to the grouping, the remoteness of a copy may become apparent by reference to other copies in different states, and its date be approximately or exactly determined. By reference to an original, also, additions, substitutions, or subtractions may be recognised, and by this internal evidence the date which may appear on the map be checked.

l.—Enclosure within border-lines or framings.

Formerly, as now, startling modifications were effected in order to reduce maps and plans to the limits of space available. For this reason the directions of roads and the flowings of streams were varied without compunction. But when borderings and framings are cut away, as by the engraver on a re-issue or by the holder of the print after publication, wrong impressions may be gathered. When these important clues to correct reading are absent, full allowance must be made, for possibly the map under investigation has been distorted considerably by the limits set by a framing which for some reason is not presented in the edition to which the map belongs.

The style and the design of the borderings should also be observed, for, by their aid, assistance in arriving at dates or authorships may be secured.

m.—Reference tables, keys, name and other labels.

These are common, and afford important clues to genealogy and datings. By consecutive copyings a steady degradation or debasement in wordings or spellings sets in. When name-labels are placed adjacent to buildings curious results occasionally ensue, as when a building has almost atrophied, but the name in a modified form is still shown in large characters. A name, too, may remain, although, before publication of the

edition, the buildings which it denoted had been cut out of the picture. This probably is the case as regards the Globe Playhouse of the Visscher map, where the name remains, but the Playhouse is absent. (See above, page 361.) A shifting of a name may be seen in many degraded maps. Thus the Bear Gardens on Bankside are made to appear in the quadrangle of the Palace of the Bishop of Winchester.

n.—Shields of arms.

The presence of these often leads to accurate dating and to some extent to the class of person to whom the publication was addressed. The insertion of arms was a convenient means of propitiating prospective patrons of the publisher, at the same time serving the useful purpose of filling up vacancies in the sheet. Examination of the arms may reveal the presence of a coat assumed by a single individual whose dates are known. In the case of the "Agas" map, the Guildhall example carries the arms of James I, which are seen to have been substituted for something previously occupying the same position. The State barge seen on the river bears, however, the arms of Queen Elizabeth. On the Visscher panorama in the British Museum the water-tower at Queenhythe, which faces the Thames on its north bank, also shows the arms of Queen Elizabeth.

o.—Ancillary pictures, panels, insets, scrolls, and borderings; water-marking, printing, paper, dimensions.

Conclusions may sometimes be reached by reference to the pictures or "sculptures" which often adorn the margins of a plan. Although individual pictures may change, yet upon the whole sufficient remain to permit the similarity with the original, adorned, map to be perceived, and the plan to be thus referred to its proper source. Clues to the origin of impressions

may also be obtained from the shape and style of panels, insets, cartouches, and ornamental borderings. Thus, where judgment is in suspense as regards authenticity or reliability, indicia such as these, in conjunction with others of a similarly weak character, may point unmistakably to the source of the map. The ornamental borderings, adornments of cartouches, and other artistic embellishments of features to be found on the engravings would of themselves make an interesting study. From the maps there might be caught a reflection of the new art of the Renaissance at different periods whereby the progress of that art in this country could be traced onwards from the middle of the sixteenth century until it became lifeless and, by mechanical treatment and unintellectual repetition, incapable of free expression. The water-marking of the paper upon which the map-view appears should also receive attention, as well as the manner in which the inking and "pull" have been executed. From water-marking, limits of date, within which the impression must lie, are discernible. From the structure of the paper, also, conclusions may sometimes be drawn by the expert in the manufacture of paper. Dimensions, also, must not be lost sight of. By measuring a map, and in a less degree by noting the scale adopted, a simple test may be ready to hand for determining whether the print under investigation is a first or early impression, or is a copy of an altered original.

p.—*Titles of maps, legends and descriptive or explanatory notes.*

These should be examined in every instance, and compared. The source or genealogy of an impression may be traced by peculiarities in wording and spelling, as well as by the situation on the map of these indica-

tions. A lengthy descriptive note accompanies the Visscher map in the British Museum. It is printed at the foot of the map, and on the same sheets of paper. (v. also "London Topographical Record," Vol vi, 39.)

q.—Scale.

As an aid to the identification of a map, its source, or the group to which it belongs, the scale of measurement illustrated on the map may be employed. In reading distances, if the scale given is in miles and fractions of a mile, the length of the mile chosen as the standard should be observed, for until the time of Charles II the old British mile, with local variations, may have been employed. Often, however, a scale of paces appears. Where no scale is given, the investigator must be prepared for changes of scale in different parts of the same map, either horizontally or vertically. Even when a scale is shown, it may not have been possible for the draftsman to have employed the same scale consistently in all areas.

To discover the boundaries of a change of scale in the same map, information outside that given by the map must be drawn upon. (For an example of a probable change of scale in the same map, v. p. 359.) The picture of a scale garnished with scrolls, and forming the base of stretched dividers, serves in many instances to fill up vacant areas on maps.

r.—Colouration.

When colour is present, this should be set down, and an endeavour made to discover when it was applied. The colouring may have been part of the original scheme before publication, or it may have been applied by wholesale purchasers. Colour-printing as we know it is a modern process. If applied when the print was in the hands of purchasers of single copies,

this fact, although of small importance, should still be mentioned, as it may yet be useful for purposes of identification. Often, however, colour has been applied in such a way as almost to obliterate the design over which it is laid.

s.—Orientation.

If the upper portion of the print does not represent the north, or if there is any doubt on this score, the true facts must be elicited, or else grievous error in drawing conclusions may follow. Although unlikely as regards London when taken as a whole, yet when detached portions are considered this possibility of error may be great. In legal documents, where the boundaries of an area are required to be specified, internal evidence may show that the points of the compass in the map which was before the lawyer who drafted the document were misapprehended. Since the limits of accuracy in the early maps are wide, it is usually sufficiently accurate if the geographical north is identified with the magnetic north. If, however, the magnetic north alone is indicated, it becomes necessary to know, owing to the continuous variation of the magnetic pole, the year when the indication was applied to the map if the geographical north is to be obtained.

t.—Meridianage.

When the longitude is marked, the meridian upon which it is reckoned should be noted. At the present time the longitude of a place is by common consent reckoned from the meridian of Greenwich; but early map-makers adopted for their initial meridian the great circle which passed through the Azores or through the Canary Islands. The vague western basis through the Azores or the Canaries seems to have continued in British maps to the end of the seventeenth century.

BISHOPSGATE INSTITUTE,
LONDON, E.C.2.

6 Feb. 24

My dear Major,

We have here the blocks
that were made to illustrate
Dr Martin's 'Early Maps' or
rather we have those which
face pp 268, 269, 275, 278,
279, 282, 357, 360,
369, 371

There will be no difficulty
in the matter of their employ-
ment by you; but it would
be better if you wrote a letter
to the Council for permission
to use them. This is merely

a matter of form. If, however,
You are needing them at once,
I will take the responsibility
of sending them to You & Your
application may follow.

I would, however, rather
trust that You have the
consent of the Council.

I am glad that there is
a hope of an early despatch
of the new part of the
Transactions.

With all good wishes.

Sincerely Yrs.

Wm. J. Gos.

When the meridian of St. Paul's is taken as the standard, this, too, should receive attention.

u.—*Inscriptions denoting origin, authorship, or execution, or giving other information.*

Although ideograms and symbols in various stages of growth may convey information, and when collected and grouped can form a "characteristic" sheet, yet manifestly there is much that they cannot impart. Monograms, cyphers, and rebuses could indeed go far towards settling questions of authorship and execution, but these devices were not employed to any great extent in the early maps under review, full wording being apparently preferred. That some such indications should appear is desirable, for often they alone supply the information which is needed for assessing the true worth of the maps and for settling the degree of confidence which is to be reposed in them.

Among the words which are more commonly to be found on the maps are the following:—Augmented, caelavit, curantibus, descripsit, delineavit, designavit, excudit, excudebat, fecit, impensis, invenit, laboravit, ornavit, perambulavit, sculpsit, and solde with its variants. Of these it is only necessary to remark that "descripsit" probably means "drew it," or "set it down pictorially," a meaning which also may be attributed to the word "described" in the title to Speed's edition of the map of Middlesex—"Midle-sex described," etc.—where no description in the modern sense is given. In like manner, at the bottom of the same map we read within a laid-on, ornamental, cartouche—"Described by John Norden, Augmented by I. Speed, Solde in Popes head alley against the Exchange by George Humble." "Descripsit" in this

sense may thus be opposed to "perambulavit," which, occurring elsewhere in the series of maps, is apparently equivalent to "surveyed." "Curantibus" may well stand for "under the supervision," while "inventit" suggests the modern meaning of the word "invent"—to originate or bring into being—rather than the Elizabethan meaning of "light upon" or "come across."

Among other words which are to be found in connection with the maps are *carde*; *gally fuste*; *model*; and *plat* or *platforme*. According to the N.E.D., the first occurrence of the word "*Carde*" in the sense of a map or plan was in 1527—"A little *mappe* or *Carde* of the world" (Hakluyt, *Divers Voyages* (1582), Book IV.b). An early occurrence also of the word "*Carde*" is, according to Payne Collier, in the Registers of the Stationers' Company under date 1562-3: "Received of Gyles Godhead for the copyes as followeth . . . The *Carde* of London." What *Carde* of London is here alluded to has evaded recognition. As regards the word "*model*," spelt as usual in several ways, it now ordinarily means some construction in miniature or on an enlarged scale of an object which already exists or is to be made, the construction being sufficiently realistic or precise for the purpose in hand. In Elizabethan times, however, it is clear that the word was applied to a drawing or design on the flat. Thus the N.E.D. quotes under date 1579-80, "Pompey liked exceedingly well the theater . . . and drew a *modell* or *platforme* of it. . . ." (North, *Plutarch Pompeius*, 1595). So, too, in Shakespeare (1597), "When we meane to build, we first survey the Plot, then draw the *Modell*" (2 *Hen. IV.* I, iii. 142). With respect to the word "*Plat*," the N.E.D. gives as

some of its meanings, "A plot . . . A plan or diagram of anything . . . a map" and, under date 1598, quotes from Hakluyt's *Voyages* 1, 437, "To note all the islands, and set them downe in plat." In the case of "platforme," the N.E.D. gives as meanings—"a topographical plan, chart, map" and quotes, under date 1579-80, "[They] were every one occupied about drawing the Platforme of Sicilia" (North, *Plutarch* (1676) 456). In Visscher's map there is inscribed against a three-masted vessel above Bridge the words "gally fuste." The word "fuste," according to N.E.D., is a variant of "foist" which means "A light galley; a vessel propelled both by sails and oars." Another meaning being given as "A barge, a small boat used on the river."

As regards the topics discussed above, while no procedure can altogether compensate for want of the perceptive faculty, yet by employment of the procedure set out many invalid conclusions may be prevented, even if a reading correct in all particulars may not be secured. On the other hand, to him who is gifted with the map-sense, the system will, it is hoped, be found to be of assistance in checking results at which by other means he may have arrived.

From the foregoing it will be gathered that the true reading of a sixteenth or seventeenth century map or bird's-eye view of London is not easy. In some instances, little difficulty is present in arriving at the author's meaning; in others, owing to lack of information concerning the origin of the maps, and concerning the other facts, a knowledge of which are necessary when studying a map, no conclusions of much value can be reached. Doubtless in the great majority of

instances, no formal method of interpretation is usually present to the mind of the individual who reads a map; and this absence may detract but little from the result attained. In other cases, however, and particularly where doubt exists as to what a map purports to show, assistance in arriving at conclusions is to be welcomed. However this may be, the brief remarks in this section of the Paper may, on the one hand, arrest judgment where insufficient data appear, and, on the other hand, assist in arriving at a sound decision concerning representations on a map where all the necessary information is forthcoming.

Summing up, it is to be said that maps, of whatever sort they may be, form one method merely of imparting information, and therefore they have an evidential value of their own. As with other sources of evidence, they have to be interpreted. Interpretation necessarily involves, as a preliminary step, classification or grouping, and the relegation of maps to the classes or groups to which they belong. Settlement of the groups demands an original as a type. This, when obtained, leads to the identification of degradations and the recognition of additions and omissions. The investigation which then follows of the circumstances, facts, and incidents in the production of the maps, and the means which can be seen to have been employed in their making, lead further to better understanding. As a final step in a consideration of the maps, a knowledge of the possible opportunities presented to the map-producers, a knowledge to be derived from their personalities and biographical incidents, secures further ability in judging the value of the cartographical representations which have come down to us.* With all this information present we can deal with our maps in the same way as

* This section of the Paper is deferred for a future occasion.

in everyday life we assess the truth of what is brought to our notice, accepting, rejecting, or suspending judgment, and awaiting further information. So after all, it comes to applying to our old documents the same reasoning as we apply to present-day writing and pictures, and then, if we differ, we can differ with each other honestly, and, if the matter is of sufficient importance, we can await development, without dogmatic conclusion, but with confidence in future enlightenment.

(To be continued.)