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his discovery that a paper by me, published in the *Journal* of September 1917, was written to justify an expression in the Memoir. A book takes longer to put through the press than a paper in a periodical, especially when author and printer are at opposite sides of the world; and in fact the whole of the Memoir was written and corrected in proof—the only alteration other than verbal being the addition of two footnotes—before the paper in this *Journal* was even contemplated.

TRANSLATIONS FROM THE CHINESE WORLD MAP OF FATHER RICCI

Lionel Giles, M.A., D.Litt.

IN order to save space, I will assume that readers of the *Geographical Journal* are acquainted with the main facts relating to Ricci's series of World Maps, as set forth in the most instructive articles by Messrs. Baddeley and Heawood which appeared in the October number of 1917. The present article is an attempt to supplement those data (gathered from Ricci's 'Commentarij' and other European sources) by a survey of the actual contents of the R.G.S. map itself. A full critical examination is hardly possible without the use of Chinese characters; but I hope by a translation of some of the legends and place-names to throw a little further light on the questions discussed by the previous writers, more especially (1) the date of the R.G.S. copy, and (2) its relation to the Ambrosiana Map and the European maps of the world existing at that period.

The inscriptions on the map may be conveniently grouped under four separate heads: (1) a number of what, for want of a better term, may be called "prefaces." One of these is from the pen of Ricci himself; the others are complimentary notices or short explanatory essays written by Chinese friends; * (2) discourses on the elements of astronomy, cosmography, and kindred subjects; (3) place-names; (4) notes on the products of various countries, the manners and customs of the inhabitants, etc.

Ricci's preface will be found just south of the Tropic of Capricorn, and west of the central meridian. The beginning has been so badly rubbed as to render a connected translation impossible, but fortunately this portion seems to contain only general observations of little interest. Omitting the first five columns, then, we come at once to his account of the genesis of the World Map:

. . . Filled with admiration for the great Chinese Empire, whose fame extended over ten thousand *li*, I came from the West on a floating raft, and

* Cf. 'Commentarij,' p. 394: "Et il Lingoazon . . . hebbe di altri letterati molti prohemij che danno autorità all' opera e dipoi di sculпто in tavole." Trigault ('De Christiana Expeditione,' edn. of 1616, p. 425) says: "Huic operi varia Literatorum poemata splendorem addiderunt," "poemata" being probably a slip for "procemia."

in the year *jên-wu* (1582) . . . * Certain scholars of Kwangtung requested me to make a map of the various countries I had passed through, so that the memory of my journey might endure. At that time I was not yet thoroughly conversant with the Chinese language; nevertheless, I made a series of selections from the maps and books which I had brought with me, as well as from the notes and diaries of several years, and had them engraved on blocks. The translation, however, made by an official interpreter † could not in the nature of things be free from mistakes; so in *k'eng-tz'ü* (1600), ‡ when I went to Nanking and received the instructions of Mr. Wu Tso-hai, § I prepared a second edition of the map for him.

In *hsin-ch'ou* (1601) || I came to Peking, where several gentlemen saw this map and were much impressed by it. They persuaded me to stay in the capital and treated me with friendly hospitality far above my deserts. Mr. Li Wo-ts'un, ¶ President of the Board of Repairs, ** had long been devoted to the study of geography, and had compiled a book on the subject for the use of students. †† He was deeply interested in this map, and was convinced that the correspondence between the celestial circles and the terrestrial degrees of latitude and longitude was based on an immutable law. As the result of most painstaking calculations which absorbed him uninterruptedly for a whole year, he was fain to acknowledge the narrow scope of his own previous map, which did not cover a tenth part of the globe as shown in the maps brought from the west; and he suggested a new edition of my work on a larger scale. I replied:

* One or two characters are illegible here, but 1582 clearly refers to the date of his arrival in China.

† *Ssü-pin* means literally "an official in charge of strangers," and we know that there was such an official at the capital under the T'ang dynasty. That Ricci had the help of a native interpreter appears from Trigault's account: "Gubernator igitur ipse P. Matthæo Riccio auctor fuit, ut eam tabulam Sinicè loquentem faceret, auxilio Interpretis adhibito." Later on, at Peking, he speaks of an "advenarum praeffectus," which is an exact translation of *ssü-pin*.

‡ *K'eng-tz'ü* was the year extending from 14 February 1600 to 2 February 1601. According to Mr. Baddeley, Ricci reached Nanking in February 1599. However that may be, the present text certainly indicates that the second edition of the map appeared in 1600, and not, as Father Tacchi Venturi assumes, in the preceding year.

§ Here we have the characters for the name "Uzohai," as it is spelt in Trigault and Ricci's own Commentaries. As we shall see, Wu's *ming* or personal name was Chung-ming; Tso-hai was only his *hao* (sobriquet or "appellation").

|| Trigault gives the date of Ricci's entry into Peking as 24 January 1601, which in Chinese would be the 21st day of the 12th moon of *k'eng-tz'ü*. But *hsin-ch'ou* here is doubtless taken as roughly corresponding to 1601.

¶ This is the official of whom we hear so much from the Jesuits under the appellation *Lingozuon* (also spelt by Trigault *Ligotsun*, *Ligotsum*, *Ligotzum*, and less correctly *Ligozo* and *Lingoson*). "Wo-ts'un," like "Tso-hai," is a *hao*. His personal name was Chih-tsao, and his literary style Chên-chih. Li Chih-tsao is known as the part author of two treatises on plane geometry and arithmetic (to be found in the British Museum library), but no one seems to have realized his identity with "Lingozuon." In the Ming History there are biographical notices of no fewer than 415 men with the surname Li, but Ricci's friend is not among them.

** Cf. 'Commentarij,' p. 394: "questo . . . aveva un' offitio grande nel Tribunale delle Fabbriche;" Trigault, p. 425: "in operum publicorum tribunali graui munere fungebatur."

†† Cf. Trigault, *ibid.*: "Lingoson . . . annis iuvenilibus superiorem ausus fuerat totius regni Sinensis descriptionem & quindecim provinciarum tabulas exactè sanè in lucem edere."

"For so many countries to become known by your means throughout China would be their good fortune. How can I refuse, then, to undertake a new and careful revision?" Thereupon, with the aid of the original maps brought from my humble country,* as well as of many Chinese topographical works, I prepared a new edition, correcting the errors in the old translation and in the numbers of the degrees, and also adding the names of many hundred new kingdoms; and wherever a space happened to be left vacant on the paper, I inserted notes on the customs and products of the various countries.

Although absolute completeness could not be achieved, yet it was a great improvement upon the previous map. Now, the real shape of the earth is spherical, whereas in the present map it is a flat surface, so that the truth of the matter is not easily comprehended at a glance. Therefore, again following the plan adopted in my own country, I also drew two hemispheres, one showing all that lies north of the equator, and the other all that lies south of it, the two poles falling exactly in the centre of the hemispheres, so as to give some idea of the real shape of the earth.†

For the greater convenience of the spectator, I made the map in the form of a large screen with six leaves,‡ thus enabling him to travel about, as it

* A good deal depends on the interpretation of this passage. Translated word for word, the Chinese is: "Then take humble district original map (or maps)," etc. The word translated "district" seems to be used vaguely for Europe as a whole; but even if it were restricted to Italy, there is no reason for thinking that Ricci is alluding to maps actually printed in that country.

† Mr. Heawood tells me that Plancius's map is the only one of this period he knows of that gives *insets* of complete north and south hemispheres, though *separate* maps of such occur in De Jode's Atlas of 1593, and even as early as 1510, or thereabouts, in a MS. treatise by Glareanus which was exhibited at the Royal Geographical Society in 1903. (See *Geographical Journal* for June 1905.)

‡ That the third edition of Ricci's Map was intended to serve as a folding screen appears from passages both in the 'Commentarij' and in Trigault, which seem to have been misunderstood by Mr. Baddeley. Ricci says (p. 394): "La prima cosa che fece fu ristampare il mappamondo assai più grande degli altri, in sei quadri più alti della statura di un huomo, che si piegano con sue aselle al modo della Cina molto galanti." (The first thing he did was to reprint the World-map, on a considerably larger scale than that of the previous editions, in six rectangular panels, taller than the stature of a man, which fold up by means of loop-hinges (?) after the elegant Chinese fashion.) Again (p. 577): "... Sei tavole, ciascheduna di un braccio di largo e due o più in lungo, che, stampati in esse, si incollavano in altre come impannate attaccate insieme con aseglie, per potersi raccogliere e stendere nelle sale con molta leggiadria." (Six sheets [made of silk], each a cubit in width and two or more in length, which, when the map had been printed on them, were pasted on to other sheets, as paper windows are, and fastened together by means of loops, so that they could be folded up or opened out in rooms without any difficulty.) What tends to make this passage obscure is, firstly, the doubtful meaning of "aseglie," and secondly, Ricci's omitting to tell us that the sheets were fixed to wooden frames before being fastened together. This can be gathered, though not perhaps very clearly, from Trigault, p. 209, where he speaks of the presents sent to the Pope: "In his erat descriptio Geographica totius Sinarū Imperij in peculiari huius Orientis tabula depicta. Nam elegantem in modum valvas plicatiles componunt, ita ut aliam alia complectatur, quae deinde explicatae aulam universam occupant, & nullius adminiculo stantes oculis blandiuntur. Id gentis vocabulo *Guei-pim* appellatur." (Among these was included a map of the Chinese Empire depicted on a kind of table peculiar to this part of the Orient. Folding panels are elegantly joined together in such a way that they can close on one another, and when opened out stretch right across a room, standing without any other support and offering a pleasing object to the

were, while reclining at ease in his own study. Lo ! to be able to scan all the countries of the world in turn without going out of doors must mean some small addition to one's faculties of sight and hearing.

I have heard it said that the great book of the universe can only be read by the higher type of man ; and thus, he attains to the perfect Way. For, knowing heaven and earth, he can testify to the supreme goodness, greatness and unity of Him who controls heaven and earth. It is the uninstructed who reject God ; and the learning that does not revert to the Sovereign Deity as its source is not really learning at all. Virtue consists in abolishing the germs of evil and in making perfection one's goal. He who, while slow to take heed of small things, is quick to appreciate what is great, who diminishes the sum of his petty anxieties in order to revert to the Supreme Unity, is surely not far from true wisdom. I, a man of no cleverness, in translating this world-map, do not presume to assert that I am helping men to acquire the knowledge born of experience ; this can only be achieved by individual effort. But I look with hope and expectation to those who, like myself, are sojourners on this earth beneath the canopy of heaven.*

Respectfully indited by Matteo Ricci, a native of Europe, on a lucky day of the first month of autumn of the year *jén-yin* (1602) in the reign of Wan-li.†

The next preface that claims attention will be found some 30 degrees west of Cape Horn. The author is Ricci's friend "Uzohai," and it is referred to in the 'Commentary' (p. 317) as "un proemio assai elegante e dotto." It was first printed in the Nanking edition of 1600.

Tsou Tzū declared that outside the Middle Kingdom there are eight other kingdoms similar to it, and that these nine kingdoms are encircled by a narrow sea.‡ But his theory is extravagant and nonsensical. According to tradition,

eye. This is called in native parlance a *Guei-pim*.) On p. 425, describing the third edition of the World-map, he adds the information that it was "neatly mounted on a number of swinging panels made of wood" (valuis quibusdam ligneis affabrè concinnatam). *Guei-pim* is in the modern transliteration *wei-ping*, the usual term for a folding screen. Mr. Baddeley was evidently thinking of a map on rollers, for he translates : "fastened together along the edges with ribbons so that they could be rolled up or spread out in rooms." As for "aselle," or "aseglie," it is a word borrowed from the Portuguese "azelha," a loop or handle. This is the diminutive of "aza," one meaning of which is stated in Figueiredo's dictionary to be "a piece of metal attached to wind-screens, where it serves the purpose of a latch (*puxador*)." In the present passage, however, it is probably not a metal hinge or latch, but a connecting loop in the form of a silken band.

* Trigault (p. 179) tells us that Ricci "inserted in convenient places on his map the sacred truths of our most holy religion." This, however, is the only passage in which I can find any trace of Christian propaganda.

† It is interesting to observe that Ricci does not scruple to follow the Chinese practice, derived perhaps from Taoism, of inditing on a "lucky day." The month corresponds to 17 Aug.—16 Sept. 1602 ; but, as in the case of printed books, the date of the preface cannot be taken as sure evidence of the date of publication. Further on we shall see that the present copy of the World-map must have been printed at a considerably later date than 1602.

‡ A full account of Tsou Tzū and his cosmographical theory is given in Ssü-ma Ch'ien's *Shih Chi*, chap. 74. Tsou Yen was a native of the Ch'ü State who lived about 300 B.C., being a younger contemporary of Mencius. According to him, the so-called Middle Kingdom formed only one out of eighty-one equal parts into which the

the south-eastern branch of the K'un-lun range runs into China, and that is why all the rivers flow to the east. But the north-western branch must still constitute the other half of these mountains, and no one can clearly determine its limits. Now the earth is wide and great; but having a form it must be limited in size, and looked at from the standpoint of China, it does not stretch beyond the sea in the south-east, the K'un-lun in the west, and the Gobi desert in the north. Is it not a hard task to define the boundaries of the world? Restricted to what one sees, it might be considered small; stretching away beyond the reach of vision, it might be thought large. But notions of this kind are all misleading.

Li the philosopher* has come to China from Europe, and published a complete map of the world which has been much spoken of amongst the literati. I have ascertained that the maps which he makes are all based on originals printed in his own country. For the natives of his country and those of *Fu-lang-chi* (Portugal)† are fond of travelling to great distances, and when they pass through remote regions, they make a report of them which is duly noted down. Gradually accumulating information in this way, they have gained some idea of the shape of the whole earth; only the south polar zone has never yet been reached by any man.

If we wish to perfect our knowledge, we must pursue a system like this. Our philosopher is certainly no devotee of the black art or superstitious practices;‡ he worships God morning and evening, and has sworn never to be false in thought, deed, or word. With regard to his mathematical demonstration of the nature of the heavens and the remoteness of the sun, moon, and stars, although it is not easy to follow, yet there seems to be evidence for his statements, and they should be recorded until fuller knowledge is available.

Written by Wu Chung-ming, a native of Hsi (Hweichow in the modern Anhwei).

The long inscription in the middle of the Pacific, between the Tropic of Cancer and the Equator, is by Li Chih-tsao, who begins by giving a general explanation of Ricci's system and comparing it with the results attained by Chinese geographers, especially under the Yüan dynasty. He continues—

Hsi T'ai Tzū§ himself on his sea voyage crossed the Equator, where the two celestial poles, north and south, were on a level with his line of sight.

world was divided. There were nine provinces in China, and China itself belonged to a group of nine kingdoms, which were enclosed by a strip of sea. This group, again, was one of nine similar groups, and the whole was encircled by a vast ocean, the boundary between heaven and earth.

* "Li" represents the first syllable of Ricci, and *Shan-jên* (mountain man or recluse) is a title often bestowed on thinkers, whether living in seclusion or not.

† *Fu-lang-chi*, originally the Chinese rendering of "Franks," was applied to Europeans in general, but more especially to the Portuguese in the sixteenth and seventeenth centuries.

‡ This is put in because the Jesuit Fathers were popularly supposed to be magicians in possession of the secrets of alchemy; on more than one occasion they were involved in serious trouble on this account. See especially Trigault, p. 200.

§ An honorific title bestowed on Ricci meaning "The Eminent Philosopher of the West."

Proceeding still further south, he came to *Ta-lang Shan* (the Cape of Good Hope), and saw the southern pole high above the horizon. This was on the 36th parallel of latitude. . . .

This map was reprinted for him by a number of gentlemen at Nanking, but . . . * Accordingly, in conjunction with my friends, I had a screen made in six leaves . . . enlarging it to four times the size of the old production ; † and yet many names of countries are still omitted which in times past have brought tribute to China.

Li Chih-tsao concludes by discussing further details in the arrangement of the map.

The three remaining prefaces may be dismissed quite briefly. They are couched in the ultra-elegant and allusive style affected by Chinese literati in this species of composition.

Ch'í Kuang-tung tells us that his friend Li Chih-tsao was on intimate terms with Ricci, whose work he admired greatly, and that he caused this map with its inscriptions to be engraved for the printer in the form of a screen. "Thus it was made possible for the spectator, sitting at his ease, to survey the whole world at a glance—a feat that could never have been accomplished except by one who carried the map about in his own brain. May we not say that the author is a man who has penetrated the arcana of the universe?"

Ch'ên Min-chih is full of recondite allusions in praise of Ricci's achievement : "Hsi T'ai Tzŭ," he says, "has journeyed over a space of thousands and tens of thousands of *li*, passing through twenty different realms and at last reaching our country, where he has entered the capital and is welcomed morning and evening by Li, President of the Board of Repairs—truly, an extraordinary meeting!"

Yang Ching-shun quotes Chuang Tzŭ : "The limits of an external world are recognized (by the true Sage), but not assigned ;" and Tzŭ Ssŭ Tzŭ : "There are things which even the divinely inspired man does not know." After reviewing the attempts of Chinese writers to formulate a system of geography, he eulogizes the profound science of Ricci. From his closing remarks we gather that he was an official colleague of Li Chih-tsao.

Just outside the map on the left-hand side, above the inset of the southern hemisphere, we find the actual imprint :

Chang Wên-tao of Ch'ien-t'ang (Hangchow) passed the paper (over the blocks) on a day in the first month of autumn, 1602.

The inscriptions which surround the outer circumference of the map are mostly short scientific essays or discourses on various subjects. Starting from the title, "Complete Map of the Myriad Countries of the World," at the right-hand corner, we first see a diagram representing the nine celestial spheres and the times of their revolutions, with explanatory notes on the left ; then, proceeding downwards, we come to a long in-

* Some characters here are illegible, but the general purport seems to be that the Nanking edition was for some reason or other unsatisfactory.

† This statement is interesting, as giving us roughly the dimensions of the Nanking edition. The words in the Chinese text, however, are "twice double," which might conceivably mean *three* times the previous size.

scription signed by Ricci, in which he discusses the shape and size of the earth. He proves the fact of its sphericity by reference to his own experience at the Cape of Good Hope, where "I still had the heavens above my head and not beneath my feet." He enumerates the five zones and the five continents with their respective boundaries—Europe, Libya, Asia, America, and Magellanica. With regard to the latter, "its boundaries cannot yet be exactly determined, but its northern side extends up to Greater and Lesser Java and the Straits of Magellan." Then follows an explanation of the parallels and meridians. The prime meridian passes through the Fortunate Islands (Canaries); * hence Nanking is situated 32° N. lat. and 128° E. long.

If the latitude of two places, north or south of the equator, is the same, the climate tends to be similar in each. If two places are an equal number of degrees from the equator, only one is to the north and the other to the south, then the four seasons and the length of day and night in these places are equal, the only difference being that the seasons are reversed, and winter in the one is summer in the other. The further from the equator, the greater the inequality of day and night in summer and winter. The sun travels 30 degrees in 1 *ch'en* (2 hours). Manchuria being 140° E. long. and Burma 110° E. long., it follows that there is exactly two hours' difference in their time. If there is a difference of 6 *ch'en* between two places, then day and night are reversed (midnight in the one being midday in the other). If the two places are also equidistant from the equator, one north and the other south, then the inhabitants of those places are walking with their feet exactly opposite to each other. Thus, Nanking is in N. lat. 32° and E. long. 128° , and *Ma-pa-tso* † in South America is in S. lat. 32° and E. long. 308° . Therefore the people at Nanking are walking with their heads downwards in relation to the inhabitants of *Ma-pa-tso*. Places of the same longitude have the same time and see eclipses of the sun and moon at the same moment.

On the left of the above is a "Short Discourse on the Four Elements" (the Chinese, it may be noted, recognize Five Elements, namely, water, fire, wood, metal, and earth):

When God created the universe in the midst of space, He began by evolving the four elements out of chaos and assigned to each its proper place in accordance with its inherent nature. The nature of fire is light, so it rose to a position just below the nine celestial spheres and remained there; the nature of earth is heavy, so it solidified and settled down between the heavens and the terrestrial globe; the nature of water is lighter than that of earth, so it rested above

* Trigault (p. 179), speaking of the Shiuhing edition, says, "reieto insularum Fortunatarum primo meridiano;" but this may simply mean that the prime meridian, as in the R.G.S. copy, did not coincide with the left-hand extremity of the map. On Verbiest's World-map in two hemispheres, which dates from c. 1670, the prime meridian is made to pass through Peking. The British Museum copy which I have consulted contains the eastern hemisphere only.

† Mapazo or Maparo appears in many maps of the second half of the sixteenth century as a place on the south bank of the Upper Amazon. It is strange that Ricci should have shifted it so far south.

t ; the nature of air is neither heavy nor light, so it remained above the water and the earth, but below fire. What we call earth is the grossest of the four elements, while fire is the purest. The place of fire being near the heavenly spheres, it accompanies them in their revolutions. This is fire in its original state, which is very pure and very hot, but not light-producing. Why is this? It is because there is no fuel or coal, etc., to transmit its light. Once it encounters some external object, its brightness appears and light is emitted. It may be compared with pottery that has been in the furnace for a long time : if you take the fuel away, although the pottery gives out no light, yet its temperature is very high and will readily set fire to other things. All the myriad objects of the world were originally moulded out of the four elements. Furthermore it is said that air is distributed in three several regions—upper, lower, and central. Since the upper region is near to fire, it is always very hot. As the lower region is near to water and earth, and water and earth, being constantly exposed to the rays of the sun, emit a certain amount of heat, the air in this region is just warm. The central region, being equally removed from the upper heat and the lower warmth, is always very cold, and produces frost, snow, etc. Moreover, these three regions of the air differ from one another in their shape. Thus, under the north and south poles, which are furthest from the sun and where the dark or negative principle is paramount, the upper and lower (hot and warm) regions are constricted within a narrow space, while the cold central region is very extensive. Under the celestial equator, on the other hand, which is nearest to the sun, and where the negative principle is insignificant, the contrary is the case, that is to say, the hot and the warm regions are extensive while the cold region is proportionately narrow, as shown in the above diagram.

Below the Jesuit monogram at about “4 o'clock” in the circumference of the map, Ricci quotes a passage from the ‘Yüan History’ (chap. 52 *ad fin.*) on the varying length of days and nights, which shows considerable scientific knowledge for the fourteenth century, and indirectly confirms the truth of his own conclusions.

On the continent of Magellanica near South America is a table thus explained by Ricci :

Every degree of latitude, south and north of the equator, equals 250 *li* on the earth's surface. With regard to the degrees of longitude running east and west, only on the equator is a degree equal to this. In calculating the rest, the further you go north or south, the smaller the degree ; so that these degrees of longitude are all less than 250 *li* in length. An arithmetical table showing the diminishing number of minutes and seconds is appended on the left ; for, knowing the breadth of a degree in minutes and seconds, we can find out the corresponding number of *li*.

It will be gathered that this table is one giving the number of minutes and seconds of the equator contained in a degree of longitude under each parallel of latitude. Being assured by Mr. Hinks that the figures would be of interest to geographers, I append the table.*

* A similar table was given by Plancius, whose values for certain selected latitudes are quoted by Dr. Wieders in ‘Nederlandsche Historisch-geographische Documenten in Spanje,’ p. 162. In some cases they differ from those of Ricci by one second. When

<i>Lat.</i> <i>Degree.</i>	<i>Long.</i> <i>Mins. Secs.</i>		<i>Lat.</i> <i>Degree.</i>	<i>Long.</i> <i>Mins. Secs.</i>		<i>Lat.</i> <i>Degree.</i>	<i>Long.</i> <i>Mins. Secs.</i>	
1	59	59	31	51	26	61	29	3
2	59	57	32	50	53	62	28	10
3	59	52	33	50	29	63	27	14
4	59	51	34	49	45	64	26	18
5	59	46	35	49	9	65	25	21
6	59	40	36	48	32	66	24	24
7	59	33	37	47	55	67	23	27
8	59	25	38	47	27	68	22	29
9	59	16	39	46	38	69	21	30
10	59	5	40	45	58	70	20	31
11	58	54	41	45	17	71	19	32
12	58	41	42	44	35	72	18	32
13	58	28	43	43	53	73	17	33
14	58	13	44	43	20	74	16	32
15	57	57	45	42	26	75	15	32
16	57	41	46	41	40	76	14	31
17	57	23	47	40	55	77	13	30
18	57	4	48	40	9	78	12	28
19	56	44	49	39	22	79	11	27
20	56	23	50	38	34	80	10	25
21	56	1	51	37	46	81	9	23
22	[56]* 38		[55]† 36	56		82	8	21
23	[53]* 14		53	36	1	83	7	19
24	54	49	54	[55]† 16		84	6	16
25	54	22	55	34	25	85	5	14
26	53	56	56	33	33	86	4	11
27	53	28	57	32	41	87	3	8
28	52	59	58	31	48	88	2	6
29	52	29	59	30	54	89	1	3
30	51	58	60	30	0	90	0	0

Ricci adds :

In the table on the right, 60 minutes make 1 degree, and 60 seconds make 1 minute. Applied to the surface of the earth, every degree of latitude equals 250 *li*, and every minute $4\frac{1}{6}$ *li*; so that 1 *li* works out at $14\frac{2}{3}''$, 10 *li* at $2' 24''$, 100 *li* at $24'$, 1000 *li* at 4° , and 10,000 *li* at 40° .

Coming now to the left-hand side of the map, we find an explanation of eclipses, followed by a proof that the sun is greater than the earth, and the earth greater than the moon. The long inscription extending from top to bottom is mainly an array of figures :

Circumference of the Earth : 90,000 *li*.

Distance from the centre of the Earth—

To the surface of the Earth : 14,318.9 *li*.

To 1st or Moon sphere : 482,522 *li*.

To 2nd sphere (Mercury) : 718,750 *li*.

To 3rd sphere (Venus) : 2,400,681 *li*.

To 4th sphere (Sun) : 16,055,690 *li*.

To 5th sphere (Mars) : 27,412,100 *li*.

To 6th sphere (Jupiter) : 126,769,584 *li*.

these figures in minutes and seconds of arc are turned into decimals of a degree they should become natural cosines of the latitude, since in Ricci's time the ellipticity of the Earth's figure was not known. A test at every tenth degree shows agreement within two units in the fourth place, which is as good as can be ensured with the number of figures used. Hence the table of cosines used by the author of the above table was correct.

* Mistake for 55.

† Mistake for 52.

‡ Mistake for 35.

To 7th sphere (Saturn): 205,770,564 *li*.

To 8th sphere (fixed stars): 322,769,845 *li*.

To 9th sphere (Primum mobile): 647,338,690 *li*.

These spheres enclose one another like the coats of an onion. All are hard, transparent, and colourless like crystal, and sun, moon, and stars inhere in their substance like the knots in a plank of wood.

As to the 28 "mansions" of fixed stars,

Those of the 1st magnitude are $106\frac{1}{6}$ times as large as the earth.

"	2nd	"	$89\frac{1}{8}$	"	"
"	3rd	"	$71\frac{1}{3}$	"	"
"	4th	"	$53\frac{11}{12}$	"	"
"	5th	"	$35\frac{1}{8}$	"	"
"	6th	"	$17\frac{1}{10}$	"	"
	Saturn is		$90\frac{1}{2}$	"	"
	Jupiter "		$94\frac{1}{2}$	"	"
	Mars "		$1\frac{1}{2}$	"	"
	Sun "		$165\frac{3}{4}$	"	"
	Earth "		$36\frac{1}{27}$	"	Venus
	" "		31,951	"	Mercury
	" "		$38\frac{1}{3}$	"	Moon
	Sun "		$6,538\frac{1}{5}$	"	Moon

Hence it can be proved that, if there are men on the 4th sphere and those above it, they cannot see the Earth. The Earth, then, is a mere speck compared with the immensity of heaven.

On the continent of Magellanica, south-east of Madagascar, is a table giving the declination of the sun* in degrees for any day of the year, and alongside are directions for its use in determining the latitude of the place where you are. Thus,

If you are at Peking, and observe that the sun is $72^{\circ} 25'$ above the horizon at noon on the 3rd day after "Little Heat" (one of the 24 solar terms of the Chinese, corresponding to July 7th), you refer to that day in the table and find that the sun is then $22^{\circ} 25'$ north of the equator, the difference being 50° . 50 from 90 is 40, so that the latitude of Peking is 40° N.

Near the left-hand bottom corner of the map is a dissertation on the ecliptic and seasons of the year (partially illegible), with an illustrative diagram.

Enclosed in a circle not far from the South Pole are directions for constructing an instrument (evidently a "home-made" sort of astrolabe) to take the altitude of the North Pole above the horizon. I have succeeded in piecing together the following translation, thanks to the kind help of Mr. Reeves:

Use one side of a level drawing-board either of bronze or of wood, taking care that it is perfectly flat, and the larger the better. In the middle suspend a thread at the end of which is a plummet, in order to obtain straightness, and

* Tables of the sun's declination are to be found in most works on navigation and mathematical geography of the sixteenth century, e.g. Medina, Cortes, Apianus and Gemma Phrysius, etc.

through the centre draw a cross line at right angles. The vertical thread represents the direction of the zenith, while the cross line indicates the horizon. From the centre, with a pair of compasses, describe a large circle to represent a [vertical] circle in the heavens. In the cross [*i.e.* at the points of intersection of the two straight lines with the circle] make four marks, each mark to indicate the completion of 90 degrees, so that the total comes to 360 degrees. Using a "time-foot-rule" [?] protractor], subdivide one quadrant into 90 degrees; one quadrant thus subdivided is sufficient. If the board is large enough, each degree can be further divided into 60 minutes, giving results of great precision. In the centre fix a "measure-sky-footrule" [sighting rule] which can be revolved. Along the middle straight line of the ruler cut away one half at both ends, in order to read degrees and minutes. On the [revolving] rule, at 20 or 30 [?] from the centre, place two pegs ("ears"), and in the middle of each bore a small hole, taking care that the two holes are in the same straight line, so as to permit you to see through [both at the same time]. At night you are to point [the sights] towards the Pole Star so as to bring it into view. If at any point upon the earth you observe (say) an altitude of 10 degrees, then you know that the North Pole at this spot rises so many degrees above the horizon, and that this spot is so many degrees distant from the Equator.

Finally, in the eastern Pacific there is this note on the equator:

This central line is the line of equal days and nights, and divides the earth into two equal parts. All that lies above it is North, all below it is South. In the countries lying near this line the seasons are each a month and a half in duration, there being eight seasons altogether in the year, two springs, two summers, two autumns, and two winters. The four seasons of the northern region are the opposite of those in the southern region: when it is spring in the north, it is autumn in the south; when it is summer in the north, it is winter in the south. The reason apparently is that the rays of the sun have to travel a greater or lesser distance, respectively.

Turning now to the legends relating to various countries, we will begin with Europe, which is not treated so fully as some other parts of the world. The following general account draws a flattering picture, hardly warranted, unfortunately, by the history of that period:—

The continent of Europe contains some twenty-four states, all of which enjoy a monarchical system of government. They follow no heterodox doctrines, but are reverent adherents of the holy Christian religion, which recognizes one Supreme Deity. Their officials are divided into three classes: the first are occupied with matters of religion, the second with statecraft, the third with military affairs. [. . .] the five grains, the five metals, and a hundred fruits of the earth; their wine they make from the juice of the grape. [They are clever craftsmen] and all are versed in the elements of astronomy and philosophy. [. . .] they set great store by the five relationships. [. . .] The princes and their subjects are [prosperous] and wealthy. All the year round they are in communication with foreign countries. Their merchants and traders have spread all over the world. In past ages, being 80,000 *li* away, they had no intercourse with China; but in the last 70 years or so communication has been established.*

* The first Portuguese navigator to reach China for purposes of trade was Fernão Perez, who arrived at Canton with seven ships in 1517. Hence we may conclude that this legend appeared in the first edition of Ricci's map (1584).

In Northern Russia is a notice of a "Country of Dwarfs":

The inhabitants, both male and female, are only about 1 foot high. At the age of five they have children, and at eight they are already old. Being constantly devoured by cranes, they have to live in caves in order to escape. Here they wait until the third month of summer, when they come out and destroy the eggs of their enemies, riding on goats.

There is a confusion here between the northern dwarfs who, according to Plancius,* were "in height foure foote as those be of Groyneland" (doubtless Eskimo), and the classical "pigmies" mentioned in Homer and more fully described by Aristotle; these latter were said to inhabit India or Æthiopia.

The various states of Germany have a single king over them all. The crown is not hereditary, but the princes of seven states join in designating one worthy man who is made ruler.

Verbiest makes the same statement in different words. The Baltic is called the Sea of Germany, and the production of amber is mentioned:

The best amber is of a golden hue, the next best is blue, while the red is much the least valuable.

The Rhine flows out of the Danube, and a river connects the Black Sea with the Baltic. Rumania is placed south of the Danube, and Albania is shown between this country and Macedonia. The outlines of Italy and Greece are remarkably crude, considering that Ricci was an Italian. Opposite Rome, we have the following meagre account of the Pope:—

The Supreme Pontiff of this region is celibate, and concerns himself solely with the Christian religion, residing in the State of Rome. He is revered by all the countries of Europe.

Verbiest goes more into detail, and gives an enthusiastic description of St. Peter's in Rome. Of Sicily, it is said that

This island has two mountains, one of which constantly emits great flames, and the other volumes of smoke. This goes on unceasingly day and night.

In the Caucasus there is a Country of Women.

This country also has male inhabitants; but if too many are born, they are put to death.

North-east of this is the country of the one-eyed people. The Dardanelles, Sea of Marmora and Bosphorus are merged into one rather wide channel. Altogether, the geography of Europe is markedly inferior to that of China.

The Island of Trees (Madeira) is half a month's journey from Portugal. . . . The Portuguese† burned down the forests, and it was eight years before they

* This and other quotations from Plancius's great map of 1592 (on which see *Geographical Journal*, 46, p. 159), have been taken from 'Blundevile His Exercises: The Description and Use of Plancius his Mappe,' 4th edn. (1613). It must be remembered that many of the legends were copied by Plancius from Mercator and others.

† Here called men of *Po-êrh-tu-wa-êrh*, not *Fu-lang-chi*. Verbiest's name for them is of Lusitania."

were wholly consumed. Now vines are planted in their stead and good wine is made from them.

The Fortunate Islands (Canaries) produce everything man needs, including grape-wine and white sugar, tillage being unnecessary. The climate is damp without rain.

Passing into Africa (for which Ricci prefers the name Libya), we are told that *Ya-ta-la Shan* (Mount Atlas)

is the highest mountain in the world. When the sky is clear and cloudless, those who are halfway up cannot see to the summit. Men call it the axis of heaven. The inhabitants sleep without dreams, which is very strange.

The *Ya-ch'a-na-ju* are the "Azanagi" of Plancius, or dwellers at the mouth of the Senegal—the Sanaga of the old voyagers.

The inhabitants are of a dusky colour. They readily uncover their bodies and only keep their mouths covered up, either with cloth or with leaves. But they hide their nakedness when they go to battle [. . .]* Only at meal-times do they uncover their mouths.

South of this country is Lake *Wu-pa*, traversed by the Niger, and further east is "Little Libya." The coast of Tripoli is "Little Africa." The Nile is described as

the longest river in the world. It flows into the sea through seven mouths. In this country there are no clouds or rain all the year round, hence the inhabitants are skilled in astronomy. Every year the river overflows, which makes the land very fertile, as though the fields had been manured; so that when the natives sow their crops they reap an hundredfold. The country is renowned for its wealth and abundance.

In Central Africa there is a legend, partly obliterated, which refers to the extraction of civet; this perfume is said to be the sweat emitted by a species of cat: "it is scraped off with stones, and is much used by Europeans."†

Just north of the equator, and not far from the east coast, are *Jên-ho-mi-ti-li* and *Ya-ma-la* (the latter perhaps Am(h)ara in Abyssinia, shown just here in some Dutch maps).

Both of these countries are near the sun, hence the bodies of the inhabitants are burnt black. They wear no clothes, and their hair is short and curly. The land produces no iron, but gold and silver, ivory, rhinoceros horn, and other valuables.

There is also a Country of Black Men, which is placed some 10° further south. The "Sources of the Nile" are marked, oddly enough,

* The text here is a little doubtful. Mr. Heawood has traced this legend to Cada-mosto, who sailed down the west coast of Africa in 1455-56. A narrative of his voyage is given in the 'Paesi novamente ritrovati,' and in Ramusio's collection.

† Abyssinia and Arabia are known to have been principal centres in the production of civet. See Hirth and Rockhill's 'Chau Ju-kua,' p. 234. According to Plancius, however, the "Muske Cats, which produce civet or Zibeth, are brought from the Realms of Pegu and Tarnassary."

along the bank of a river flowing nearly south from a large central lake into the Indian Ocean. South-west of this lake is the kingdom of Monomotapa, where there is

a beast with a head like a horse, a horn on his forehead, and an extremely thick hide. . . .

This seems to be a mixture of the rhinoceros and the unicorn. In Plancius, the rhinoceros is only mentioned as occurring in "the Realms of Cambria [*i.e.* Cambaia, Cambay] and of Bengala."

The Mountains of the Moon run in a south-easterly direction to a point on the sea-coast corresponding roughly to Delagoa Bay. The Cape of Good Hope, as we have seen, bears the name *Ta-lang Shan* or "Great Wave Mountain," the origin of which is doubtful. Mr. Heawood suggests that it may be derived from the "Cabo Tormentoso" (Stormy Cape) of Dias, though he thinks it strange that Ricci should have used this name, which was never generally adopted. The *Ying-fang tê* River, debouching east of the Cape, is evidently the Rio de Infante (so named by Dias after his associate João Infante). Off the coast, we read that

the sea in these parts is rough all the year round. It contains monstrous fish as big as great junks.

The legend on the southern continent: "Parrot country, so-called from the great number of parrots," may be compared with Plancius: "This is the land of Popeniayes, so called of the Portingals because those Birds in that Countrie are of incredible bignes." The "*Psittacorum Terra*" had already appeared in Mercator's map of 1569.

Further east, and still between 45° and 50° S. lat., we are surprised to learn that

this country has many kinds of spices, but the natives are savage and cunning, and trade cannot be carried on with them.

Is this a reminiscence of Plancius's Countrie of Beach (S. lat. 15° 4' long. 148°), which was "rich in gold, but little frequented by Marchants of other Countries, by reason of the crueltie of the people"? *

Taking Asia next, and working our way eastwards, we come across a legend in Asia Minor (called *Na-to-li-ya*) which unfortunately is undecipherable. Of Palestine it is stated that

God came down from heaven and was born in this country; therefore men call it the Holy Land.

The Dead Sea is marked, and the accompanying inscription, though very faint, seems to refer to the buoyancy of its waters.

* Beach (also written Breach and Boeach) is a corruption of Polo's Locach or Lochac (probably Siam or Cambodia). Its location on a great southland was due to misinterpretation of Polo's narrative, which largely contributed to the general belief in a southern continent.

Ho-la-pi-ya (Arabia): Frankincense is produced in this country. The shrub is very small and does not occur elsewhere. It also produces a herb called *mo-êrh* (myrrh), used for embalming dead bodies.

The Persian Gulf is called the Sea of *Mo-shêng-ting*.

Pa-êrh-ch'i-ya (Parthia): The country produces jade-stones of all colours, diamonds, and *ya-ch'ing* (raven black) stones.

The name of the Caspian is obliterated. Ricci says that

it is doubtful whether it is a sea or a lake. Its waters are salt, so there is some justification for calling it a sea.

The Sarmatians . . . keep their faces covered up, with the exception of the mouth and eyes. They drink horses' blood. It is their custom to flog those guilty of theft, and then put them to death.

Plancius (following Marco Polo) says that the Tartarians "let their horses blood, and with that blood quench their hunger and thirst."

The huge (imaginary) island in the Arctic, north of Siberia, has no name assigned to it, but it bears the following inscription:

In the extreme north of this country there is sun for half the year and no sun for the other half. Consequently, fish-oil is used for burning in lamps to take the place of daylight. The cold is extremely severe, making it difficult for men to travel hither, so that little is yet known as to the inhabitants and natural features of the country.

The other large island, further east, is the home of Yakshas (nocturnal devils) and Vagrant Spirits.

The inhabitants live in holes, clothe themselves in skins, and do not know how to ride.

In this region the cold is so excessive that the sea turns into ice, and the natives pass over it with horses and carts. They scoop out holes in the ice and catch large fish in great numbers. As the five grains will not grow in their country, they eat fish to appease their hunger, burn fish-oil in their lamps, and use fish-bones in the construction of their houses, boats, and carts.

Still further east is the "Northern Ocean":

The books tell us that it contains many islands, but they do not give their number or their names.

In the Country of Disembodied Spirits just within the Arctic zone on the 90th meridian,

the natives go abroad by night and conceal themselves by day. They flay deer and clothe themselves in the skins. Their ears, eyes, and noses are like those of other men, only their mouths are on the top of their heads. They feed on deer and snakes.

In the country called *Ko-êrh-mo*

the dead are not buried, but their corpses are suspended from trees by means of iron chains.

A picture of this will be found in Anthony Jenkinson's map of Russia

included in Ortelius' Atlas of 1570. The next legend is the first we have met that comes from a Chinese source, namely the *Wu Tai Shih* (History of the Five Dynasties in the tenth century):

The Ox-hoof *T'u-ch'üeh* (Turks) have human bodies with the feet of oxen. The river is called the Hu-lu Ho (Gourd River); in summer and autumn the ice on it is 2 feet thick, in winter and spring it reaches to the very bottom, and they are obliged to melt it in vessels over a fire in order to have water to drink.

Shih-ti-ya I-mao wai is the "Scythia extra Imaum" that we hear of in Plancius. The I-mao Mountains are, of course, the Imaus of the ancients separating the two parts of Scythia. "They are so high that if you climb to the top and look at the stars, they appear bigger."

It is customary in this country for a son to kill his parents when they have grown old, and to eat their flesh. By so doing, he is held to be taking pity on their age and infirmity, and he inters them in his own belly because he cannot bear to cast them out on the hillside.

The land of the Tatars is very extensive, stretching from the Eastern to the Western Sea, though the inhabitants do not all belong to a single stock. In general, their occupation is archery and horsemanship. They have no cities or fixed habitat, and they carry their houses with them on carts for the sake of convenience when shifting their place of abode.

North-east of this are the *Yü-chüeh-lü*:

Their country is bitterly cold. The rivers yield large fish, and there are also great numbers of sables, black, white, and yellow. The natives are very courageous.

This legend is also taken from the *Wu Tai Shih*. The *Ti-tou-yü* are a tribe mentioned in the History of the Northern Wei, as is also the more important tribe called *Wu-lo-hou* (a branch of the Uigurs), whose country is "low-lying and damp. The climate is very foggy and cold. The natives esteem courage and are not treacherous."

Several branches of the *Shih-wei* (a tribe of Kitan stock) are located in Eastern Siberia by Ricci, whose information is derived from the *Sui Shu* and the *Wu Tai Shih*. The *Wa-chieh-tzŭ* are enclosed on three sides by the Shih-wei.

They have thick heads of hair and wear skins as clothing. They ride bareback and are good archers. They kill any man they meet and eat his flesh raw.

In the extreme East is the name *Po-êrh-wu*. Plancius has "the plaine fields of Bargu" at this spot.

In the Amur region (the course of which river was unknown at that date) Ricci has the note:

In this country there are great snowdrifts, and men ride on wood (? in wooden sledges) in order to avoid falling into holes. Their occupation is trapping sables, and they clothe themselves in fish skins.

This is taken from an account of the Northern Shih-wei in the *Sui Shu*.

Straits of Anian [Bering Strait]: At this point it was formerly thought that the lands of the two sides of the world were joined together. But now it has been discovered that this great sea intervenes, and that through it one can penetrate to the Northern Ocean.*

The position of many of the Central Asian cities is very peculiar. Thus, Turfan is shown west of Yarkand, and a long way south-west of Samarkand! Owing to the enormous lateral extension of the Black Sea and the Caspian (the latter reaching to about the same degree of longitude as Ceylon), the space available for Turkestan is extremely limited, and Tibet is well-nigh crowded out altogether. At the same time, Ricci gives much more detail than Verbiest seventy years later, who seems hardly to have drawn from Chinese sources at all.

The location of *T'ien-fang* (the old Chinese name for Arabia) north of the Yin Shan, or T'ien Shan, of Central Asia is a curious blunder, which we find repeated in the Ambrosiana Map, except that there it is placed much further west, near the eastern bend of the Obi. The explanation may be that tribute from T'ien-fang was sent to Peking through Samarkand; it is recorded more than once in the Chinese histories that the envoys from these countries arrived in the capital together, and Ricci may have jumped to the conclusion that they were near neighbours.

It is interesting to find Yang Kuan, the famous frontier gate under the Han and T'ang dynasties, more or less correctly placed not far west of Sha-chou (Tunhuang). It is also shown very clearly on the map of China sent home by Ricci in 1584, which Mr. Baddeley mentions on p. 265 of his article. I have discovered that this map bears the date Oct.-Nov. 1555, by which time the gate had already long ceased to exist.†

Not far east of the Yin Shan is the Onon River, with the Tola River and Sari-kihar, Jinghiz Khan's residence, a little beyond. South of this place are the *Wa-la* or Oirats, subsequently known as Kalmuks, Eleuths, and Dzungars,‡ and south-west is the "Karakorum River" or Orkhon.

The Great Wall, though not actually named, is more accurately traced by Ricci than by Plancius, who (following Ludovicus Georgius) places it as far north as the 53rd parallel. It is mentioned by Trigault (p. 328: "immanes illos muros Regni Sinensis Tartariaeque discrimen"), who, however, only gives it a length of 500 *li* (Sinensia stadia quingenta); on p. 546, he raises this estimate to "ducentorum fere miliariorum," which is still far from the truth.

East of the stony wilderness to the east of Khotan there are shifting sands, in which travellers leave no tracks, and consequently they lose their way if they proceed; so they make piles of bones in order to recognize the route. There is no water or vegetation, and much wind.

* On the Straits of Anian see *Geographical Journal*, vol. 45, p. 540.

† For a proof that Yang Kuan was the original "Jade Gate," see *Jour. Roy. Asiatic Soc.*, July 1914, pp. 715 *seq.*

‡ See Bretschneider, 'Mediæval Researches,' vol. 1, p. 159.

The "stony wilderness" is evidently the Taklamakan desert, for which there is very little space on the map owing to the undue length attributed to the Yellow River. The *Hsi-fan* (of north-eastern Tibet) and the K'un-lun Mountains are placed on its eastern bank. It is made to rise in a comparatively large lake (about three times the size of Koko-nor, which is much too small) called the Sea of Constellations.*

A little to the north-west is a still larger lake, the *Chia Hu*. This is the source of four almost parallel rivers: the *An-i-Ho* (Ganges),† which "receives thirty streams and carries golden sand," another flowing through Eastern Bengal, a third called the River of Golden Sand (a name still applied to the Upper Yangtse), which passes through Burma and unites with the fourth before reaching the sea.‡

The middle and lower course of the Yangtse, including the Min River, is fairly well shown, except that the Han River is made to join the main stream a long way above the Tung-t'ing Lake, and even above the "Three (Ichang) Gorges." This feature also appears on the Chinese map of 1555; but in this case, as the river does not pass through Hanchungfu, it is perhaps rather to be identified with the Kia-ling Ho. I observe that Ricci follows native usage in calling the Yangtse simply *Kiang* (the River). Trigault (p. 286) uses the name "Yamsu" and translates it *maris filius*, an error which is still found cropping up at the present day.

An important fact which has previously escaped notice is that China bears the name "Great Ch'ing (*i.e.* Manchu) Empire," showing that the R.G.S. copy must have been printed after the Manchu conquest in 1644. The China Sea (north of Formosa, therefore what we should call the Yellow Sea) is likewise *Ta Ch'ing Hai*. Both the Vatican map (which is undoubtedly of the 1602 edition) and the Ambrosiana map have "Ming" instead of "Ch'ing" in these two places. Moreover, to the east of Hainan there is the following inscription:—

The Middle Kingdom is renowned for the greatness of its civilization. It comprises all between the 15th and 42nd parallels, and the other parts of the world that are tributary to it include a very large number of States. This World-map contains a small selection of its mountains and rivers, provinces and circuits. For the remainder, which cannot be given here in full, see the Topographies of the Empire and of the provinces.

Instead of *Chung Kuo* (Middle Kingdom) the Vatican map again has *Ta Ming*. These are the only differences, however, that I can discover between the R.G.S. and Vatican maps (I mean, of course, the twelfth

* Cf. Trigault, p. 323: "Id flumen a prima sua scaturigine lacum efficit, quem à constellationibus appellat."

† The *An-jih* River on Verbiest's map is "4800 *li* long, about 5 *li* broad, over 100 ft. deep, and enters the sea by seven channels. Its waters yield golden [sand]."

‡ The lake no doubt represents the fabulous Lake Chiamay of Barros, Camoens, Mendes Pinto, and the map-makers of the time, which was supposed to give rise to the four principal rivers of Indo-China. The name is probably that of the principality of Chieng-mai or Zimmé, on an upper branch of the Menam.

part of the latter reproduced in the 'Commentarij'), with one small exception: in the description of the shifting sands translated above, there is another character, apparently struck out, just before the word "wind" in the Vatican map, for which there is no room in the R.G.S. copy. All the other legends and names correspond exactly, so that we are justified in regarding the R.G.S. map as a re-issue of the 1602 edition, printed from the same blocks after a few trifling corrections had been made.*

Few Chinese towns are given apart from the provincial capitals. Neither Shiuhing,† where Ricci stayed for so long, nor Shiuchow † (Trigault's *Xaucea*) is marked, but we find *Chi* (Kianfu) in Kiangsi, which is undoubtedly the *Chiengan* of Trigault.

(*To be continued.*)

REVIEWS

EUROPE

London and its Environs.— Edited by **Findlay Muirhead, M.A.** The Blue Guides. London: Macmillan & Co.; Paris: Hachette & Cie. Pp. lxvii. and 501. 30 *Maps and Plans*. 7s. 6d. *net*.

THIS is the first volume of a new international series of guide books, to be issued jointly by publishing houses in London and in Paris (where they will appear in French as "Les Guides Bleus"). From the general excellence, moderate price, and handiness of this volume, it may be predicted that as the series grows it will—at all events here and in France—probably supplant the once ubiquitous "Baedeker." The demand for the famous German guides will certainly shrink to small dimensions in Allied countries; and it is significant that the editor of this Guide and Mr. James F. Muirhead, one of his collaborators, were formerly associated in the English editorship of the Leipzig "Handbooks."

The difficulty of preparing a comprehensive guide to London at the present time must have been very great; and it might well be thought that the period when many public collections and other "sights" are inaccessible to the public, and when the whole of London life is subjected to abnormal restrictions—these conditions fluctuating from day to day—was the least opportune for such an enterprise. Such changes are, however, as the editor says, "more functional than organic," and the aim appears to be to describe as far as possible the London after the war. This has necessitated a good deal of compromise. The usual descriptions are given of the contents of the museums and picture-galleries, with warnings that some of these are entirely closed until peace-time; while elsewhere the writer even projects himself into the future in such statements as: "during the Great War its [the Tower's] former use as a prison was revived."

The Guide opens with several chapters by various hands upon aspects of

* Ricci writes on 10 May 1605: "Il Mappamondo che mandai doi anni sono, è stato ristampato più di dieci volte" ('Lettere dalla Cina,' p. 272). It is not likely that further reprints were made after the publication of Verbiest's World map, so that the date of the R.G.S. copy probably falls between the years 1644 and 1670 or thereabouts.

† Post Office spelling, based on local pronunciation. The Wade spelling is *Chao-ch'ing* and *Shao-chou*, respectively.