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Ruling concerning the disagreement between Ecuador and Peru over the Zamora-Santiago sector

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RULING CONCERNING THE DISAGREEMENT BETWEEN ECUADOR AND PERU OVER THE ZAMORA-SANTIAGO SECTOR, DECISION OF 14 JULY 1945*

DÉCISION CONCERNANT LE LITIGE ENTRE L'EQUATEUR ET LE PÉROU SUR LE SECTEUR DE ZAMORA-SANTIAGO, DÉCISION DU 14 JUILLET 1945**

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Délimitation frontalière – question de la délimitation du secteur Zamora-Santiago (Bassin de Maranon) – interprétation du Protocole de paix, d'amitié et de frontières de Rio de Janeiro de 1942 et des accords relatifs aux conférences préliminaires de Puerto Bolivar – question de savoir si les frontières doivent suivre la ligne de partage des eaux entre le premier affluent du fleuve Zamora et le dernier affluent du fleuve Santiago, rejoindre le point de confluence des deux fleuves et continuer en ligne droite jusqu'à l'embouchure du fleuve Yaupi, ou au contraire, suivre la ligne des crêtes de la chaîne du Condor.

Délimitation frontalière – désaccord entre les Commissions péruviennes et équatoriennes exprimé dans les «informations officielles» publiées dans la presse – la démarcation antérieure réalisée par la Commission mixte comprenant la pose de piquets frontaliers, n'est pas pertinente

^{*} Reprinted from Ministerio de Relationes Exteriores del Perú, *Documentos Básicos sobre el Protocolo de Rio de Janeiro de 1942 y su ejecución.* Tercera Edicion, Lima, 1961.

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puisque son but était simplement de collecter des informations – l'intention des auteurs du Protocole était que la frontière suive le plus directement possible une ligne naturelle facilement reconnaissable depuis le fleuve San Francisco jusqu'à la confluence des fleuves Yaupi et Santiago, à savoir la ligne de partage des eaux Zamora-Santiago.

Interprétation conventionnelle – objectif réel des dispositions – erreur dans le texte du Protocole qui affirme que la ligne de partage des eaux Zamora-Santiago s'étend jusqu'à la confluence du fleuve Yaupi alors qu'elle ne le fait qu'approximativement, laissant un vide sur la ligne frontière – la règle reconnue du droit international en matière d'interprétation conventionnelle, est que « si le sens littéral du terme est en contradiction avec l'objectif manifeste du traité, cette interprétation ne doit pas exclure une interprétation plus large lorsqu'elle s'avère indispensable pour donner effet au but en question ». Un sens plus large devrait donc être donné au texte du Protocole afin que les objectifs manifestés par les deux gouvernements puissent être remplis – l'interprétation doit suivre autant que possible l'esprit du Protocole, de sorte que la frontière suive la ligne de partage des eaux sans se soucier de savoir si elle correspond bien à la ligne de crête de la Chaîne du Condor et à la ligne territoriale tracée entre la source du fleuve San Francisco et la confluence du fleuve Yaupi.

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Protocol of Peace, Friendship, and Boundaries between Peru and Ecuador

Rio de Janeiro, 1942*

The Governments of Peru and Ecuador, desiring to settle the boundary dispute which, over a long period of time, has separated them, and taking into consideration the offer which was made to them by the Governments of the United States of America, of the Argentine Republic, of the United States of Brazil, and of Chile, of their friendly services to seek a prompt and honourable solution to the programme, and moved by the American spirit which prevails in the Third Consultative Meeting of the Ministers of Foreign Affairs of the American Republics, have resolved to conclude a protocol of peace, friendship, and boundaries in the presence of the representatives of those four friendly Governments. To this end, the following plenipotentiaries take part:

For the Republic of Peru, Doctor Alfredo Solf y Muro, Minister of Foreign Affairs; and

For the Republic of Ecuador, Doctor Julio Tobar Donoso, Minister of Foreign Affairs;

Who, after having exhibited the respective full powers of the parties, and having found them in good and due form, agree to the signing of the following protocol:

^{*} Original Spanish version, translated by the Secretariat of the United Nations.

ARTICLE I

The Governments of Peru and Ecuador solemnly affirm their resolute intention of maintaining between the two peoples relations of peace and friendship, of understanding and good faith and of abstaining, the one with respect to the other, from any action capable of disturbing such relations.

ARTICLE II

The Government of Peru shall, within a period of 15 days from this date, withdraw its military forces to the line described in article VIII of this protocol.

ARTICLE III

The United States of America, Argentina, Brazil, and Chile shall cooperate, by means of military observers, in order to adjust to circumstances this evacuation and retirement of troops, according to the terms of the preceding article.

ARTICLE IV

The military forces of the two countries shall remain in their new positions until the definitive demarcation of the frontier line. Until then, Ecuador shall have only civil jurisdiction in the zones evacuated by Peru, which remain in the same status as the demilitarized zone of the Talara Act.

ARTICLE V

The activity of the United States, Argentina, Brazil, and Chile shall continue until the definitive demarcation of frontiers between Peru and Ecuador has been completed, this protocol and the execution thereof being under the guaranty of the four countries mentioned at the beginning of this article

ARTICLE VI

Ecuador shall enjoy, for purposes of navigation on the Amazon and its northern tributaries, the same concessions which Brazil and Colombia enjoy, in addition to those which may be agreed upon in a Treaty of Commerce and Navigation designed to facilitate free and untaxed navigation on the aforesaid rivers.

ARTICLE VII

Any doubt or disagreement which may arise in the execution of this protocol shall be settled by the parties concerned, with the assistance of the representatives of the United States, Argentina, Brazil, and Chile, in the shortest possible time.

ARTICLE VIII

The boundary line shall follow the points named below:

- a) In the west. -
 - 1. The mouth of the Capones in the ocean;
 - 2. The Zarumilla River and the Balsamal or Lajas Quebrada;
 - 3. The Puyango or Tumbes River to the Quebrada de Cazaderos;
 - 4. Cazaderos;
 - 5. The Quebrada de Pilares y del Alamor to the Chira River;
 - 6. The Chira River, upstream;
 - 7. The Macará, Calvas, and Espíndola Rivers, upstream, to the sources of the last mentioned in the Nudo de Sabanillas:
 - 8. From the Nudo de Sabanillas to the Canchis River;
 - 9. Along the whole course of the Canchis River, downstream;
 - 10. The Chinchipe River, downstream, to the point at which it receives the San Francisco River.
- b) In the east.
 - 1. From the Quebrada de San Francisco, the watershed between the Zamora and Santiago Rivers, to the confluence of the Santiago River with the Yaupi;
 - A line to the outlet of the Bobonaza into the Pastaza. The confluence of the Conambo River with the Pintoyacu in the Tigre River;
 - 3. Outlet of the Cononaco into the Curaray, downstream, to Bellavista;
 - 4. A line to the outlet of the Yasuni into the Napo River. Along the Napo, downstream, to the mouth of the Aguarico;
 - 5. Along the latter, upstream, to the confluence of the Lagartococha or Zancudo River with the Aguarico;
 - 6. The Lagartococha or Zancudo River, upstream, to its sources and from there a straight line meeting the Güepí River and along this river to its outlet into the Putumayo, and along the Putumayo upstream to the boundary of Ecuador and Colombia.

ARTICLE IX

It is understood that the line above described shall be accepted by Peru and Ecuador for the demarcation of the boundary between the two countries,

by technical experts, on the grounds. The parties may, however, when the line is being laid out on the ground, grant such reciprocal concessions as they may consider advisable in order to adjust the aforesaid line to geographical realities. These rectifications shall be made with the collaboration of the representatives of the United States of America, the Argentine Republic, Brazil, and Chile.

The Governments of Peru and Ecuador shall submit this protocol to their respective Congresses and the corresponding approval is to be obtained within a period of not more than 30 days.

In witness thereof, the plenipotentiaries mentioned above sign and seal the present protocol, in two copies, in Spanish, in the city of Rio de Janeiro, at one o'clock, the twenty-ninth day of January, of the year nineteen hundred and forty-two, under the auspices of His Excellency the President of Brazil and in the presence of the Ministers of Foreign Affairs of the Argentine Republic, Brazil, and Chile and of the Under Secretary of State of the United States of America.

Signed: Alfredo Solf y Muro

J. Tobar Donoso E. Ruiz Guiñazú Oswaldo Aranha Juan B. Rossetti Sumner Welles

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Ruling of Captain Dias de Aguiar concerning the disagreement over the Zamora-Santiago sector

BACKGROUND.—

On 5 and 6 July 1943, Lieutenant Colonel Bernardo Dianderas and Major Manuel Llanos, members of Peru's demarcation commission, carried out a reconnaissance flight over the Condor Range, with a view to studying the area in which the demarcation work of the joint group operating in that sector was to begin.

On 7 July Dr. Luis Tufiño, chairman of the Ecuadorian boundary commission, having learned of their reconnaissance mission, sent a note to his counterpart, Captain José Felix Barandiarán, chairman of the Peruvian commission, protesting that the mission had been carried out without his prior and due knowledge and without the participation of any member of the Ecuadorian commission.

On 9 August 1943, at Iquitos, Captain Barandiarán, chairman of the Peruvian commission, presented an official letter to the chairman of the Ecuadorian commission, outlining a plan for the demarcation of the boundary in the Zamaro-Santiago sector, and stated: "the demarcation line shall commence at the nearest accessible point to the source of the San Francisco River. It shall then proceed through the high peaks that form the watershed of

the Zamaro and Santiago rivers, or their tributaries, until the end point of the said watershed, and from this point shall follow a straight line to the thalweg of the confluence of the Yaupi and Santiago rivers."

On 8 October 1943, while the joint group was carrying out its work in that sector, the chairman of the Peruvian commission sent an official letter to the chairman of the Ecuadorian commission, in which he proposed "that the observations necessary to set up the marker indicating the northernmost point of the watershed of the tributaries of the Santiago and Zamora rivers shall be carried out".

It was not until 13 October 1943 that the chairman of the Ecuadorian commission replied to the proposals of his Peruvian counterpart. In his reply, Mr. Tufiño reviewed Peru's proposal and disputed it, largely on the grounds that the chairman of the Peruvian commission had referred to the end point of the watershed and had stated that the boundary "from this point shall follow a straight line to the thalweg of the confluence of the Yaupi and Santiago rivers". The chairman of the Ecuadorian commission concluded by stating: "until there is scientific evidence of where that end point is located, I shall give no order to proceed immediately with the observations necessary for setting up the marker".

This is the origin of the difference of opinion regarding the boundary sector between the source of the Quebrada de San Francisco and the mouth of the Yaupi river.

On 18 October 1943 the chairman of the Peruvian commission responded to the official letter of his Ecuadorian counterpart's note by reaffirming the position of his Government, stating that the boundary should follow the watershed between the last tributary of the Zamora and the first tributary of the Santiago River to the end of the watershed near the confluence of the Zamora and Santiago rivers, from which point it should continue by a straight line to the mouth of the Yaupi river.

On 28 October 1943 the chairman of the Ecuadorian commission reiterated his view that the demarcation line should not follow the confluence of the Zamora and Santiago rivers rather than continuing directly to the mouth of the Yaupi river. He further: asserted that the line should follow the course of the high peaks of the Condor Range.

Two days later, on 30 October, the chairman of the Peruvian commission replied by reaffirming his position and adding: "since we have been unable to agree on a common position, I believe we must turn to the provisions of the Rio de Janeiro Protocol and to the agreements of the preliminary conferences of Puerto Bolívar, by bringing the matter to the attention of our respective Governments so that they may, by mutual agreement, issue the instructions necessary for the demarcation of the sector concerned". The chairman of the Peruvian commission then proposed that the joint group operating in the sector should proceed to "determine the coordinates of the point at which the

line of the watershed of the Santiago and Zamora rivers intersects one of those rivers" and to "survey the stretch of the Santiago river between that point and the mouth of the Yaupi river".

Despite the opposition of the chairman of the Ecuadorian commission, as may be seen from official letter No. 104 SE of 2 November 1943, the joint group surveyed the Santiago river from the mouth of the Zamora river to the mouth of the Yaupi river, and explored and surveyed about 15 kilometres of the watershed of the Zamora river and the Cuango river, which is the first tributary on the Santiago river's right bank, downstream from the mouth of the Zamora, and set up a marker at the northernmost point of the surveyed watershed, at a distance of 510 metres from and at the azimuth of 61° 30' SW of the confluence of the Zamora and Santiago rivers. In the document recording the marker's inauguration, which was undersigned by the members of the joint group on 23 January 1944, the head of the Ecuadorian group stated: "even though the word 'Peru' has been engraved on the surface of the marker." which faces south and stands in the northernmost part of the watershed of the Zamora and Santiago rivers, the marker is not intended as a boundary marker, but as a basis for the aerial surveys to be carried out with a view to identifying the permanent boundary between Ecuador and Peru in the sector allocated to the undersigned".

On 16 November 1943, Mr. Francisco Guarderas, Minister for Foreign Affairs of Ecuador, referring to articles 5 and 7 of the Protocol signed at Rio de Janeiro on 29 January 1942, sent a note to Mr. Oswaldo Aranha, Minister for Foreign Affairs of Brazil, to inform him of the differences of opinion between the Governments concerning the demarcation of the boundary in the sector between San Francisco and the mouth of the Yaupi river, and requesting that he should intervene in accordance with the provisions of the Protocol

Following several months of negotiations, mediated by Brazil's Minister for Foreign Affairs, Ecuador and Peru signed an agreement, by exchange of notes, accepting his proposals for resolving the various differences of opinion that had arisen in implementation of the Protocol.

The aforementioned agreement states that the differences of opinion concerning the *Condor Range* "shall be resolved according to the solution recommended by Captain Braz Dias de Aguiar, following an in situ inspection".

ANALYSIS OF THE PERUVIAN INTERPRETATION. —

In support of its point of view the Peruvian commission submitted a memorandum of 28 June 1944 signed by its President, referring to the Protocol "of the Quebrada de San Francisco, the watershed between the Zamora and the Santiago rivers, to the confluence of the Santiago River with the Yaupi", and stating, "as the confluence of the Santiago and the Yaupi rivers is not located along the course of the Zamora-Santiago watershed and as

the Protocol does not indicate any restriction in this regard, it should be understood that the boundary should follow the Zamora-Santiago watershed until its end point, which is the confluence of the Paute and Zamora rivers (tributaries of the Santiago) and should then continue in the direction of the Yaupi-Santiago confluence".

As the issue at hand is the demarcation of a borderline which, in the words of the Treaty itself, must follow a watershed, Adami says on page 110, of "National Frontiers in Relation to International Law", "... a commission's duty is to interpret the intention of the Treaty's drafters and signatories, provided it is possible to determine it exactly, and, if proof of that intention is lacking, to proceed in accordance with the general spirit of the Treaty to the greatest extent possible".

The clear intention of the negotiators of the Protocol of Rio de Janeiro was that the border should run as directly as possible from the source of the San Francisco to the confluence of the Yaupi with the Santiago, and, since a geodesic line would be difficult and costly to set and therefore not suitable, they naturally tried to make the Zamora-Santiago watershed the boundary line.

"Any creek or river, no matter how small, forms its own river system, and the line appearing on a map and marked by a name is hardly more than the main current of a particular river basin, which represents all waters originating in that part of the area. We would see the number of secondary rivers grow steadily if we went from studying a general map to a particular section" (Tratado de Geografía (Geographical Treatise), p. 231). The signatories of the Rio de Janeiro Protocol, using general geographical maps with very small scales, did not notice that the line representing the section of the Santiago river located between the mouths of its tributaries, the Zamora and the Yaupi, is hardly more than the "collector" of waters in that region and that it would necessarily receive tributaries, both large and small, on both banks, which were not represented, some because they were too small and others because the maps were not sufficiently precise.

In the Itamaraty map library we found a few of those maps, which were available when the Protocol was being negotiated, two copies of which we are attaching. On all of them the section of the Santiago River under consideration is represented by no more than one line with no tributaries. On one of the maps there is a light line, in pencil, connecting the source of the San Francisco with the mouth of the Yaupi, which was probably used for study during the negotiations.

For the reasons we have just put forward, the negotiators of the boundary agreement used the expression "to the confluence of the Santiago and the Yaupi rivers" improperly, since that watershed does not actually run that far.

But should the border follow the watershed to the point indicated by the chairman of the Peruvian commission, thus departing considerably from its goal, which is the mouth of the Yaupi?

If the boundary were to be taken up to the mouth of the Zamora, that would solve the problem of continuity between the mouths of the Zamora and the Yaupi. How should those two points be connected? By following the course of the Santiago River? By a straight line connecting the confluences of both the Zamora and the Santiago, as the chairman of the Peruvian commission says? Either solution would introduce a border of nearly 50 kilometres which does not appear in the Protocol. The interpretation according to which the boundary would be extended to the mouth of the Zamora would lead to incompatibility with the general provisions of the Protocol.

A rule of international law in interpreting treaties is that "if the literal meaning of a word is in contradiction with the manifest objective of the treaty, that interpretation must not exclude a broader interpretation if it is indispensable for giving effect to the objective in question" (Derecho Internacional Público, Accioly, Vol. II, p. 462). Consequently, if the literal interpretation of the text of the Protocol leads to a result that is clearly outside the objective envisaged by its negotiators, it must be given a broader meaning, in order to achieve the objective that both Governments had in mind, which was to connect the source of the San Francisco and the confluence of the Yaupi with the Santiago by a natural line.

In his Memorandum of 28 June the chairman of the Peruvian commission, referring to the interpretation according to which the boundary would be taken up to the mouth of the Zamora River, that "this interpretation of the Protocol is the one Peru had in mind when it signed the Agreement. The official notice from the Boundary Office which the Peruvian Foreign Ministry published a few days after the Protocol was signed (6 February 1942), reads as follows: "The line, which passes through the point where the Yaupi flows into the Santiago, grants Peru the entirety of this river up to the Marañón, which clearly shows awareness that, after going through the Paute-Zamora confluence, the boundary should extend to the Yaupi-Santiago confluence".

We do not agree with the chairman of the Peruvian commission, since, if the boundary line, in the words of the Protocol, intersects or crosses the Santiago River at any point, it leaves part of the river's course in Peru and part in Ecuador. This was also the interpretation of the Government of Peru in its official notices, as we shall show. — When reference is made to a river or section of a river which crosses a border, i.e. when only one bank remains within Peruvian territory, official notices use the expression "as a boundary" instead of "entire". The issue of the newspaper "El Comercio" of Lima dated 1 February 1942, that is, three days after the Protocol was signed, published a notice from the Boundary Office of the Ministry of Foreign Affairs dated the day before, which read: "In accordance with the borderline between Peru and Ecuador, established by the Protocol concluded on 29 January 1942 in the city

of Rio de Janeiro, the following rivers belong to the Oriente region of Peru: the *Cenepa in its entirety*; the entire Santiago from the mouth of the Yaupi to its outlet into the Marañón; the entire Morona and part of its tributaries, the Mangosisa and the Cangaime; the entire Pastaza from the mouth of the Bobonaza to the Marañón; the entire Tigre, from the point at which it is formed by the Cunambo and the Pintoyacu; the Curaray, as a boundary from the mouth of the Cononaco to Bellavista, and from that point the entire course of the river downstream to its outlet into the Napo; the Napo, as a boundary from the mouth of the Yasuni to that of the Aguarico, the long stretch from the mouth of the Aguarico to the Amazonas being entirely within Peruvian territory; the Aguarico from its confluence with the Lagartococha to its outlet Napo; the entire Lagartococha River to its source, and the Güepi River from near the source of the Lagartococha to the Putumayo."

A mere reading of this notice shows us that when the Peruvian Government speaks of "the entire river", "entirety" or "entire course" it is referring to both banks of the river. With regard to the Santiago, when the notice speaks of "the entire Santiago, or from the mouth of the Yaupi to its outlet into the Marañón", it is limiting the course of the river between two perfectly defined points, the mouth of the Yaupi and that of the Marañón. "The entire Pastaza from the mouth of the Bobonaza to the Marañón", "the entire Tigre", etc., are similarly defined.

The notice in question gives us two clear examples of this interpretation when it says: "The Curaray, as a boundary from the mouth of the Cononaco to Bellavista, and from that point the entire course of the river downstream to its outlet into the Napo; the Napo, as a boundary from the mouth of the Yasuni to that of the Aguarico, the long stretch from the mouth of the Aguarico to the Amazonas being entirely within Peruvian territory." Here we see two rivers that have parts that border Peru and others that are entirely within Peruvian territory, that is, both of whose banks belong to Peru.

The Peruvian Government's second official notice, published in the 7 February 1942 issue of "El Comercio" and cited in the memorandum of the chairman of the Peruvian commission, reflects the same thinking, as it limits the course of the Santiago from its mouth to its confluence with the Yaupi; the Pastaza River from the mouth of the Bobonaza and the Tigre from the confluence of the Cunambo with the Pintoyacu River.

When the Government of Peru wishes to refer to the complete course of a river, from its source to its mouth, it uses the expression "entirety" or "entire course" without indicating specific points. Thus in its first notice it speaks of "the Cenepa in its entirety"; and in the second "the entire course of the Corrientes", without using the expressions "from" and "to".

The entirety of the course of the Santiago goes from its mouth to its source, and this is not located at the confluence of the Zamora and the Paute. For the Government of Peru, if the matter were viewed in this way, it would have to be acknowledged that the source of the Lagartococha was at the confluence of the Zancudo or Quebrada Norte with the Yuracyacu or Quebrada Central, as the chairman of the Ecuadorian commission claims.

The Santiago River is not formed at the union of the Zamora and the Paute. If that were the case it would be necessary for both tributaries to be of equal importance and to join without either of the two constituting the extension of the river they form. And this is not the case. The Santiago River, like many others, is called by several names from its headwaters to its mouth.

Villavicencio, describing this river, says: "Santiago: its most remote source lies in the Province of Cuenca, in the Quinuas, Cajas and Culebrillas lakes, on the western branch of the Andes, whose streams, taken as a whole, are called by the name of Matadero, with which it passes in front of the city of Cuenca; however, half a league downstream, it receives the Yanuncay, and takes the name of Verien, with which it flows for 1 1/2 leagues; it then receives the Machángura and takes the name of Chaullabamba or Chalguabamba (lake of fishes) until it receives the Azogues at Guangarcucho, where it takes the name of Chicticay River; it then flows for three leagues until it receives the Gualaceo, at Paute lake, whose name it takes; it flows for six leagues with this name to the mouth of the Pan, where it is called Jordán or Paute, with which it breaks through the eastern branch, turns sharply and enters the woods as just Paute; it first takes an east-south-east direction, then flows south-south-east until it joins the Zamora, where it changes its name to Santiago, and flows into the Marañón, below the Manseriche ravine." He goes on to say:

"Following its waters the main tributaries of the Santiago are: on the right, the Pucará, Yanuncay, Quinjeo, Gualaceo and Pan, until it enters the Andes and, on the left, up to the same point, the Machángara and the Azogues. Once through the Andes the Rosario and the Zamora are on its right" (Geografía de la República del Ecuador, Villavicencio, pp. 85 and 86). Later, on page 89, he says: "Zamora: this river is larger and almost rivals the Paute".

On page 534 of the Geografía del Perú, a posthumous work by Mateo Paz Soldán, Paris, 1862, we read the following: "Santiago River: it comes down from Ecuador and increases the volume of the Marañón upstream from the Manseriche ravines; it can be navigated by canoe".

Similarly, in chapter IV, page 89, of the "Study on the Question of Boundaries between the Republics of Perú and Ecuador", Santa María de Paredes, describing the general demarcation of the Government and Comandancia of Maynas, writes: "Santiago de las Montañas is found at the juncture of the Paute or Santiago and the Marañón ...". Further on, on page 95, we read: "Village of Paute, on the Paute or Santiago River".

These quotations show us that the confluence of the Santiago with the Zamora is not the source of the Santiago River. That river comes down from the branches of the Andes mountain range and, after being given several names, according to the different regions it crosses, takes the name of Paute, when it receives the Gualaceo, in the Paute plains, and finally that of Santiago after the mouth of the Zamora.

Consequently, the Santiago River in its entirety, as referred to by the official notice of the Boundary Office of the Foreign Ministry of Peru, published in the 7 February 1942 issue of "El Comercio", can only be both banks of the river from the confluence with the Yaupi onwards, and not its entire course from its source to its mouth.

If the interpretation that Peru had in mind when it signed the agreement was the one that the memorandum of the chairman of the demarcation commission is trying to give it, both official notices would say "from the mouth of the Zamora", and not, as they say, "from the mouth of the Yaupi", which is approximately 50 kilometres away.

The interpretation of the Government of Peru, which is provided to us by the official notice of the Boundary Office, is that the border should extend to the mouth of the Yaupi without going through the Paute-Zamora confluence, as is clarified by the map of the Peruvian-Ecuadorian region, dated 4 February 1942 in Lima, with the stamp of the Ministry of Foreign Affairs of Peru, which was published on the same page as the notice in the 7 February 1942 issue of "El Comercio".

On it the borderline clearly follows the Zamora-Santiago watershed north to a point at which it turns north-east and goes directly to the mouth of the Yaupi, thus confirming the text of the official notice.

The same map was published in Jose Pareja Paz Soldán's Geografía del Peru, published in Lima in 1943 (p. 29), i.e. after the Rio de Janeiro Protocol.

It was also reproduced, although without the official stamp, in a publication produced in Lima in 1942 in which a comparison is made between the area obtained by Peru in 1942 with the areas that would have been attributed to it under the Pedemonte-Mosquera Protocol (1830), the Treaty of García-Herrera (1890), the Menéndez Pidal line, the line of the Spanish Technical Arbitration Commission and, finally, the line of the Spanish Council of State. This publication does not have the earmarks of an official publication but appears to be semi-official in nature.

In paragraph 4 of the memorandum of 28 June 1944, the chairman of the Peruvian commission says: "This is also, without a doubt, the same interpretation that Ecuador made when it signed the Protocol and when the demarcation work began. This was why the technical experts of the Joint Boundary Demarcation Commission, on instructions from their Governments, worked on the northern part of the Zamora-Santiago watershed up to the end

point of that watershed and were able to set a boundary mark on the watershed a few metres from the confluence of the Paute and Zamora (tributaries of the Santiago). That boundary mark has all the physical features of the definitive boundary marks already set up along the demarcation line. In the instrument that was signed when the site was inaugurated, however, the head of the Ecuadorian group noted that the marker was not being inaugurated as a boundary line, but as a basis for the work 'to identify the permanent boundary between Ecuador and Peru in the sector allocated to the undersigned'. This means that the definitive demarcation of the boundary line in this area should be based on the boundary mark located near the Paute-Zamora confluence."

As can be seen from the joint group's correspondence, this was not the thinking of the Ecuadorian commission, or even the intention of the chairman of the Peruvian commission.

As we have already seen, in his first official letter, dated 13 October 1943, the chairman of the Ecuadorian commission protested against the Peruvian proposal of 9 August 1943 that the boundary demarcation should extend to the Zamora-Santiago confluence.

The work done by the joint group's technical experts on the northern part of the Zamora-Santiago watershed, the placing of the boundary mark at what they considered to be the end point and the placing of the Santiago River between the mouth of the Zamora and the confluence of the Santiago with the Yaupi, were the result of the Peruvian commission's proposal in an official letter dated 30 October 1943, which states "since we have been unable to agree on a common position, I believe we must turn to the provisions of the Rio de Janeiro Protocol and to the agreements of the preliminary conferences of Puerto Bolívar, by bringing the matter to the attention of our respective Governments so that they may, by mutual agreement, issue the instructions necessary for the demarcation of the sector concerned". He goes on to say, in paragraph 3: "In order to provide our Governments with as much information as possible about the actual geographic situation of this region, I suggest that the Santiago-Zamora or Morona-Santiago joint group should proceed to determine the coordinates of the point at which the line of the watershed of the Santiago and Zamora rivers intersects one of those rivers and to survey the stretch of the Santiago River between that point and the mouth of the Yaupi River."

The foregoing proves that the Ecuadorian interpretation "when the demarcation work began" was the opposite of Peru's interpretation, and that it was not the intention of the chairman of the Peruvian commission to conduct demarcation work, but to obtain data to be submitted to his Government to better inform it about the region's geographic situation.

Regarding the marker located near the Zamora-Santiago confluence, the document recording its inauguration itself states that it is not to be considered a boundary marker, because the head of the Peruvian group accepted and signed, without reservations, his Ecuadorian colleague's statement that it was not being inaugurated as a boundary marker but as a basis for future work.

ANALYSIS OF THE ECUADORIAN INTERPRETATION. —

In a memorandum dated 23 November 1943, the Minister for Foreign Affairs of Ecuador argues that, "following the letter of the Protocol, the boundary line should run from the Quebrada de San Francisco to the Yaupi along the watershed between the Zamora and Santiago rivers, and if that watershed cannot be located in whole or in part the boundary should be completed by a geodesic line connecting the end points of the line, namely, the Quebrada de San Francisco and the point where the Yaupi flows into the Santiago, which will then be adjusted to the accidents of the terrain and to geographical realities".

In support of this position, the Government of Ecuador states: "We should not forget that part B, point 1, speaks only of a section of the boundary from one known point, the Quebrada de San Francisco, to another known point, the confluence of the Santiago with the Yaupi, along a *line that is to follow the windings of the Condor Range*. To state, therefore, that this line should end at the confluence of the Zamora with the Santiago and not the confluence of the Santiago with the Yaupi is an idea contrary not only to the spirit of the Protocol but also to its literal sense. The Protocol identifies the two end points of the line with complete clarity, namely, the Quebrada de San Francisco and the confluence of the Santiago with the Yaupi, and that should be sufficient to prevent any argument to the contrary".

The Rio de Janeiro Protocol does not mention the Condor Range, but that is in fact where the watershed (divortium aquarum) between the Zamora and Santiago Rivers is to be found, although the watershed does not coincide with the line of the high peaks at all points. The watershed terminates close to the confluence of the Zamora with the Santiago, but the boundary line is supposed to extend to the mouth of the Yaupi.

Further on, the memorandum states in paragraph 4: "Peru is considering the watershed from a simplistic standpoint, as the points of drop-off in level from which water flows naturally to one side or the other of the terrain, but that is not the accurate, scientific concept of a watershed". It goes on to say: "The correct concept of a watershed involves other features more complex than a simple drop-off in ground level; it requires, for example, that the river systems on the two sides should not flow back together, so that the climatic conditions should not be the same". The memorandum at this point does not clearly define the author's thinking with regard to the concept of a watershed.

In the same paragraph, the memorandum states: "If the special characteristics of the watershed are to be found by examining the peaks and

ravines of a mountain range, it is because those are the only points that form the fundamental geographical figure of a given watershed. We need hardly mention the special situation of the Condor Range, which borders the vast Amazon jungle and divides the eastern region into two highly distinct climatic zones. If the watershed is formed, therefore, by a range such as this, the problem at hand should be resolved simply by determining the topography of the range, without reference to the actual dividing of the waters".

We do not understand what the author is trying to say in this part of the memorandum, which appears contradictory. If the Protocol provides that the boundary line should follow the watershed, how can the problem be resolved without considering the actual dividing of the waters?

In paragraph 6 of the memorandum, the Ecuadorian Minister states: "With regard to demarcation of frontiers, a watershed and a watercourse have similar value and significance. For example, if a section of the border is to be defined by a river and two end points of the natural feature are identified, the main arm of the river in between those two points is to be followed; when the border is to be defined by a watershed and the end points are identified, then among all the watersheds that may lie between them the border should follow the most important and definitive. This is the case with the watershed line that Ecuador is proposing between the source of the San Francisco River and the mouth of the Yaupi".

That statement is incorrect. Between two fixed points of a section of the border defined by a river, that is, between two points on the same river, it may happen that in the stretch between those points the river divides into various arms, forming islands. In that case, the border will follow the arm that follows the river's thalweg or median line, whichever the boundary treaty stipulates. But in the case of two points on the same watershed, the situation is different. The dividing ridge may have many spurs between those two points, but there will be only one watershed line. The spurs will be secondary dividing features, separating the waters of rivers running into the same basin, but there will be no doubt as to the location of the watershed line.

The Ecuadorian memorandum continues its line of argument in paragraph 12 by distinguishing the concept of "mountain systems", defined as "a set of chains or ranges", and ends by saying: "Only in a mountain system may it happen that the line of the high peaks does not coincide with or is not the same as the watershed line". It should be noted that these two lines may not coincide in any case.

In the written instructions of the chairman of the Ecuadorian commission to the head of the demarcation group operating in the region of the Zamora-Santiago watershed, paragraph 4 states: "Tasks to be accomplished: the boundary line in the Condor Range sector corresponds to the ridgeline of the range, where the following features must be identified: a).— the highest elevations or peaks; b).— the lowest elevations or ravines; c).— the curving line of its horizontal projection".

The boundary line specified in the Rio de Janeiro Protocol is a watershed, which may or may not coincide with the line of the high peaks of the Condor Range.

The chairman of the Ecuadorian commission, in official letter No. 104 SE of 2 November 1943 addressed to the chairman of the Peruvian commission, makes the same mistake when he says: "My thesis is based on the assumption that the boundary line should not extend beyond the limits of the Zamora and Santiago Rivers; in that area there is only a single mountain range or chain and not a system of chains or ranges, and in a single mountain range the line of the high peaks will always coincide with the watershed line. That is not the case in a system of mountain ranges or chains, where at times the two lines will not be the same". Again, the chairman of the Ecuadorian commission says that in a mountain range "the line of the high peaks" coincides with the watershed line. As we have said, those two lines do not always coincide. We can cite as an example the border between Argentina and Chile, whose boundary treaty, by stipulating that the frontier should follow the Cordillera of the Andes, left the door open to differing interpretations, which had to be settled through arbitration by the King of England in 1902.

CONCLUSIONS. —

Considering, on the basis of the above analysis, that:

The clear intention of the Protocol is that the border should run from the San Francisco river to the confluence of the Yaupi with the Santiago along the most direct and easily recognizable natural line;

The watershed between the Zamora and the Santiago does not extend to the confluence of the Yaupi, as the negotiators of the Protocol supposed, thereby leaving a gap to be filled in the boundary line;

The interpretation given by both Governments following the signing of the Protocol as expressed in the "official notices" published in the press, was that the frontier would run directly from the San Francisco to the mouth of the Yaupi without passing through the confluence of the Zamora;

The Ecuadorian commission never agreed with the interpretation whereby the boundary would run to the mouth of the Zamora and consistently protested against such an interpretation;

In accordance with the Protocol, the demarcation of the boundary line should follow *the Zamora-Santiago watershed*, *since the watershed line is what was intended*, regardless of whether or not it corresponds to the line of the high peaks of the Condor Range;

The work done by the joint commission in the northern end of the Zamora-Santiago watershed, including the setting up of a boundary marker, cannot be considered a definitive demarcation, since it was done in order to gather data that would provide the two Governments with further information, as proposed by the chairman of the Peruvian commission in his official letter of 30 October 1943:

The Protocol is not executable in the region in which the main watershed ramifies into a number of others (point D on appended map No. 18);

In the northern section of the Zamora-Santiago watershed there is a major outlier or spur of the range that terminates at the right bank of the Santiago across from the mouth of the Yaupi, as can be seen from the said map on a scale of 1:1,000,000;

The solution must come as close as possible to the spirit of the Protocol, which suggests a land boundary line from the source of the San Francisco to the confluence of the Yaupi;

We are of the opinion that the frontier should be defined as follows:

From the source of the San Francisco River, it shall follow the watershed between the Zamora and Santiago Rivers until it reaches the section in the north where a spur extends that ends across from the confluence of the Yaupi (approximately at point D on appended map No. 18); at that point it will follow the spur, that is, the watershed line that divides the waters that flow to the north into the Santiago River upstream of the mouth of the Yaupi from those that flow to the east into the same river downstream from the Yaupi. If the watershed line does not reach all the way to the confluence with the Yaupi, the boundary line shall follow a straight line from the end of the watershed line to the said confluence.

Braz Dias de Aguiar Naval and Military Captain

(July 1945)