

THE GENERAL ASSEMBLY

July 6, 1928

The opening meeting of the General Assembly of the International Astronomical Union was held in the Stadsgehoorzaal of Leiden commencing at 10.00, President de Sitter in the chair. The President delivered the following address.

LADIES AND GENTLEMEN,

It is a great pleasure to me, and I consider it a great honour, to open this third general assembly of the International Astronomical Union, and to extend to you all a hearty welcome. Yesterday we all heard the good wishes expressed on our behalf by His Excellency the Minister and by the representatives of the Academy of Sciences and of the University of Leiden. It is under the favourable auspices of these good wishes that we are prepared to begin our work to-day. A good deal of important discussion awaits us, and we shall have to undertake some strenuous labour in the next week.

But before we begin our work, I ask you to rise and to remain standing while we remember those that have gone from us since our last meeting. Death has taken a heavy toll of us. It has bereaved us of our vice-president, Prof. Vincenzo Cerulli, in whom we lose a member of the Executive Committee, who was always ready to devote his labours and his influence to the furthering of the highest international aims of the Union. Also Prof. Cerulli's predecessor in the office of vice-president, the venerable Prof. Antonio Abetti, has been taken from us. Italian astronomy has been heavily stricken: there are two more Italian colleagues amongst those who have left us. Besides the two already mentioned, we must commemorate

Prof. M. Antoniazzi
Dr J. L. E. Dreyer
Prof. W. J. Hussey
Dr E. Padova

Prof. A. Pérot
Dr H. Philippot
Prof. J. F. Schroeter.

In the work of several committees the absence of these eminent astronomers will be seriously felt, and we all sympathize with their friends and relatives in their bereavement. I ask you to remain silent a few seconds in respectful memory of those that have passed away.

The present meeting marks an important epoch in the life of our Union. I do not say a critical epoch, because it is not critical. It is a stage in the natural development of the Union which was bound to come sooner or later. Some of us may have wished this stage to occur at an earlier epoch, others may have been so sanguine as to expect that even a further station would have been reached to-day, but time and science and the prospective life of our Union are long, and we must not try to precipitate events. The Union was founded in 1919 by the representatives of seven or eight nations. At the time of its first meeting at Rome in 1922 it already counted 18 adhering nations, in 1925 there were 21, and to-day 23. The two who have joined since our last meeting are the Argentine Republic and Egypt, and I have pleasure in extending a hearty welcome to the representatives

of these countries here present. It is, however, not to this steady growth of the Union that I was referring when I said that the present epoch is a specially important one, but to the fact that we have here to-day as our guests a great number of colleagues, representing in all eight different nations, that have not yet joined our Union. The Statutes of the International Astronomical Union contain an article, that I believe does not occur in those of most other Unions, entitling the president to invite scientific men not members of the Union to take part in the meetings. At the General Assembly of the Union at Rome, six years ago, the scope of this article was enlarged (there is a formal detail connected with this, to which you will have to give your attention this morning) so as to extend this prerogative of the president to all nations entitled to join the Union. No very extensive use was made of this article on former occasions. When, however, after the unanimous vote of the Research Council in June 1926 "all nations entitled to join" had become synonymous with "all nations," I considered that the time had come to use this prerogative, or I should say this privilege—for such I have felt it to be—of the president for the purpose for which it was meant, and I have addressed invitations to the astronomers of all nations to come to Leiden and to take part in our discussions. It is a great satisfaction to me to be able to say that very many of them—about one-eighth of our total number—have accepted this invitation. Nearly one-half of these belong to the great German nation, great I mean in the number and the importance of its contributions to astronomy.

Es ist mir eine grosse Befriedigung dass ich heute so vielen Deutschen Astronomen hier Willkommen heissen darf.

Nicht nur erfüllt mich Freude weil ich viele persönlichen Freunde unter Ihnen sehe—ein der vornehmsten Zwecke dieser Versammlungen ist ja die Freundschaften unter Kollegen zu fordern und zu erneuern—aber wirkliche Bedeutung erlangt diese Freude doch erst dadurch dass ich weiss dass ich spreche im Namen aller Mitglieder der Internationalen Astronomischen Union, und der Union selbst. Es haben sich in den vergangenen Jahren Vorurteile festgesetzt ins Gehirn der Menschen verschiedener Länder, welche die natürliche und notwendige Internationale Zusammenarbeit erschwerten. Auf beiden Seiten hat man diese Vorurteile überwinden müssen. Das gelingt nur allmählig, denn der Sieg über ein Vorurteil erheischt immer Opfer und bringt keinen Ruhm oder Popularität als Ersatz dafür, und gewöhnlich weiss die eine Partei nicht welche Opfer die andere gebracht hat, oder begreift nicht einmal dass es Opfer waren. Aber am Ende siegt doch der gesunde Verstand, und die Notwendigkeit der Internationalen Zusammenarbeit hat auch hier die Schwierigkeiten überwunden. Diese Notwendigkeit besteht natürlich für andere Wissenschaften wie für die Astronomie. Die Astronomie aber ist immer vorangegangen in der Internationalen Verständigung. Von den verschiedenen Internationalen Unionen, die unter dem Research Council ressortieren, ist jetzt auch die Astronomische die erste deren Versammlung wirklich international ist. Wir sind davon überzeugt dass unsere Besprechungen dadurch viel gewinnen werden, und dass der Rat und die Kritik der Deutschen Astronomen uns sehr wertvoll sein werden. Wir freuen uns aufrichtig darüber dass Sie, meine Herren, nach Leiden gekommen sind, und ich kann Ihnen versichern, soweit Sie das nicht schon jetzt aus eigener Erfahrung wissen, dass Sie hier ein sehr herzliches Willkommen finden werden.

Et puis je fais bon accueil à vous tous, représentants des autres nations qui ont accepté mon invitation; soyez les bienvenus dans notre pays, vous, astronomes venus de la Russie, et ceux de la Hongrie, de la Roumanie, de la Chine, de l'Autriche, de l'Esthonie, de la Lithuanie. Je regrette infiniment de ne savoir vous adresser dans votre langue à vous. Veuillez me pardonner cette impuissance, et croyez à mes bonnes intentions, je vous prie. Au nom de l'Union Astronomique Internationale je vous rends grâce d'être venus pour prendre part à nos discussions et de vouloir contribuer au grand travail par votre conseil et votre critique.

International organization is a necessity for the life of science, and for astronomy perhaps more than for any other science. The investigation of the variation of latitude, the determination of longitude, the wireless distribution of time, the Carte du Ciel, the establishment of standards of wave-lengths, and many more similar subjects, can only be satisfactorily dealt with by international co-operation. In all of these subjects, of course, the real work must be done by individual astronomers, but decisions must be taken, and in some cases funds must be administered and money spent, requiring an authoritative sanction, that can only be derived from an international body consisting of representatives of all nations. If the same men were to meet as a society of individuals, they would not have the same authority. On the whole I think that the organization of our Union is wonderfully well adapted for the purposes it is intended to serve. Most of the subjects I have mentioned, and others that I have omitted, used to be cared for by international bodies, either permanent or intermittent, such as the International Congresses for the Carte du Ciel, the International Solar Union, and others, which were all organized more or less in the same way. These organizations have disappeared in the general wreckage of the world war, and their functions have been taken over by the International Astronomical Union and its several commissions. Each of these commissions pursues its own ends, but I think there is a very real gain arising from the co-ordination of kindred subjects in one Union.

The present is the third meeting of the Union, and judging from the number of delegates and guests, and from the importance and the length of the draft reports of the several commissions, it promises to be as successful as its two forerunners. A certain tradition has been formed regarding the procedure at the meetings, which has proved to be appropriate on two occasions already, and will, I have no doubt, gain in force by the experience that will be added during the present meeting. If I were to name the most characteristic feature of the manner of working of the Union, I should say that we are ruled more by precedent than by law. In most cases the rules thus established by precedent and custom are compatible with the Statutes—in some cases perhaps it would be possible, if we tried hard, to discover some evasion of or contradiction to the law here and there, but we do wisely prefer not to try to make such discoveries. I am convinced that those laws are best which leave most room for the evolution of a system of practical rules out of the necessities of actual life. Therefore, when our Statutes have to be revised in some years' time, I hope that they may remain as flexible and elastic as they are now, and become even more so.

Just as the Commissions in the Union are subordinate to the Union, so the several Unions, of which ours is one, are subordinate to the Research Council. There is, of course, a very sound principle at the base of this organization; and

the co-ordination of the different Unions, providing the possibility of organized intercourse between them, that is thus created, is most useful, but still I think there is a danger in making this pyramid-like structure too rigid. It might be found some day to stand on its apex instead of on its base, and thus be in unstable equilibrium.

The place of the Research Council is at the top of the pyramid, the decorous crowning feature of the whole building, symbol and token of its unity. Its function is determined by this symbol: it has to serve the Unions as the organ of their mutual relations and intercourse. The actual work that is important, the hard work for science, is done in the Unions, and cannot be done anywhere else but in the Unions, which therefore must have complete freedom each to do its own work in its own manner.

The Unions were created by the Research Council. They have so far been imbued with the respectful veneration that is due from children to their parents. The time comes, however, in all families when the children grow up, and are strong enough to take their fortunes into their own hands. Parents and children are apt to differ over the exact epoch when this time has arrived, but it is bound to arrive sooner or later. Wise parents rejoice when their offspring have acquired the strength and wisdom to go their own way, unwise parents regret their loss of power, but they wail in vain: the grown-up children will go their own way all the same.

Many important points will be submitted to your judgment and decision. Some of these may be treated entirely in the meetings of the commissions, others will call for a careful consideration in the General Assembly. Also for these latter it will be desirable to defer the treatment in the General Assembly till after the meetings of the commissions, so that we can have the benefit of the well-considered advice based on the discussions in the commissions. Some important questions of organization arise with regard to the commissions that have taken over the work of the former International Solar Union. Originally this was distributed over six commissions. At Rome, however, four of these were combined to form the present Commission 12, only the commissions on standard wave-lengths and on solar rotation remaining independent. The large Commission 12 has organized itself into a number of "centres", of which the activities are, however, too much interwoven to make them into separate commissions. The increase of the number of these centres, and the growth of the membership of the commission, calls for some reorganization. I have no doubt that a satisfactory solution of the difficulties will be found.

Several questions of notation and nomenclature will be brought up. Such points should only be settled by complete and unanimous international agreement. Several of the most important countries have not yet joined the Union, so that it might appear preferable to defer the taking of decisions till a later epoch. On the other hand the longer the decisions are deferred, the worse becomes the confusion now existing in several departments, and the more difficult it will be to reach authoritative decisions afterwards. In these circumstances we may profit much by the assistance of those astronomers who have accepted my invitation to come to the meeting. We may perhaps hope that they will not only take part in the discussions and give us their valuable advice, but also support by their adherence the decisions or resolutions that may be reached with their co-operation.

Other points that will require your attention are the measures to be taken

with regard to the few still unfinished parts of the *Carte du Ciel*, and the question whether the regulations for the *Bureau de l'Heure*, which must be renewed in 1931, should be revised. On these points also you will, of course, be guided by the advice of the respective commissions.

From the few topics that I have mentioned, amongst the many that will be submitted for your consideration, it is clear that considerable demands will be made on your time and your endurance during the next week. If the importance of conclusions were proportional to the number of persons by whom they are adopted, the results of our present meeting will be the most important ever reached. In Rome, six years ago, 83 astronomers were gathered. In Cambridge there were 189, this time our number exceeds 260. I may mention that for the lighter portions of the programme, provided to give our brains a rest after their strenuous work, the number is more nearly 360. Let us assume that the delightfulness and attractiveness of the several excursions and receptions will be proportional to that number. Anyhow, one way and another, we shall be kept fairly busy, and I think we had better begin forthwith. In declaring the third General Assembly of the International Astronomical Union open, I express the hope and the confidence that its success will be complete in every respect.

Prof. Turner asked whether the President, in referring to the adherence of visitors to the decisions taken at subsequent meetings, meant that they would have the right to vote at the meetings.

The President replied that the point would be referred to later.

The President announced that Resolution (*a*) on the Agenda, the proposal to amend the Statutes, which had been submitted by Great Britain and the United States, had been taken over by the Executive Committee. In their name he had much pleasure in moving that in Statute V 12 the words "or of a country entitled to adhere" be added after the words "provided they are subjects of one of the adhering countries." This was a question of an administrative character and he would call upon the representatives of any country which opposed the resolution to rise. No country objected and the resolution was carried unanimously.

The President then explained that the status of the visitors at meetings of commissions would be exactly the same as that of members of the Union who were not members of the commissions concerned. They could take part in discussions with the leave of the president or chairman but could not vote.

A letter of greeting to the Union conveyed through Father Stein from His Eminence Cardinal Pietro Maffi, President of the Vatican Observatory, and a telegram of greeting from Dr Hale were read to the meeting and it was agreed to ask the President to send greetings and a message of thanks to Cardinal Maffi and to Dr Hale, and also to telegraph the best wishes of the Union to its ex-Presidents, M. B. Baillaud and President Campbell.

The President then announced that Baron de Vos van Steenwijk had kindly undertaken to make arrangements for the provision of interpreters to assist at the meetings of the different commissions and that he would arrange for the translations of resolutions adopted by the commissions. Presidents and Secretaries of commissions were asked to arrange direct with Baron de Vos van Steenwijk.

It was agreed to appoint Prof. G. Abetti as Vice-President for the meeting in the place of the late Prof. V. Cerulli.

Prof. Chrétien, Baron de Vos van Steenwijk, Prof. Mauderli and Prof. van Biesbroeck were appointed recorders for the meeting.

The Secretary then presented the Executive Committee's report. He reminded the Assembly that the chief event of importance referred to in the report, besides those already referred to by the President, was the extraordinary meeting of the General Assembly in January 1926; at that meeting the unit of contribution was changed to a gold basis and it was decided to make grants, which on the original fluctuating standard had fallen much below their intended value, up to the sum which was meant when the grants were authorized. As the income of the Union during part of the period covered by the report had been received on a lower scale, while the grants under the above-mentioned decision were made on a higher scale, there had been a loss to the Union which during the three years had amounted to about £700. The details would of course have to be checked by the Finance Committee, which would make its recommendations to the General Assembly as to the unit of contribution for the next three years.

Two special grants were made by the Executive Committee in the preceding three years: one of £100 to Dr Gautier, to cover part of the cost of publication of latitude observations made during the years 1914-21; and one of £50 to the *Astronomische Nachrichten* towards the cost of publication of star corrections for the reference stars to be used in the coming opposition of Eros. In adopting the report the Assembly would be also approving these grants.

The report was adopted save for the financial portion which was referred to the Finance Committee. The following were nominated by the respective countries to serve as the Finance Committee, to audit the Secretary's accounts and to make recommendations to the General Assembly as to the unit of contribution for the years 1929-31:

<i>Argentine Republic</i>	Prof. B. H. DAWSON
<i>Australia</i>	Mr Z. A. MERFIELD
<i>Belgium</i>	Dr J. DELVOSAL
<i>Canada</i>	Prof. C. A. CHANT
<i>Czechoslovakia</i>	Prof. J. SVOBODA
<i>Denmark</i>	Prof. N. E. NÖRLUND
<i>Egypt</i>	Dr M. R. MADWAR
<i>France</i>	Prof. H. ANDOYER
<i>Great Britain</i>	Dr J. JACKSON
<i>Holland</i>	Prof. A. A. NIJLAND
<i>Italy</i>	Prof. L. CARNERA
<i>Japan</i>	Dr A. TANAKADATE
<i>Norway</i>	Prof. S. ROSSELAND
<i>Poland</i>	Prof. M. ERNST
<i>Portugal</i>	Prof. F. M. DA COSTA LOBO
<i>South Africa</i>	Dr H. SPENCER JONES
<i>Spain</i>	Rev. LUIS RODÉS
<i>Sweden</i>	Dr W. GYLLENBERG
<i>Switzerland</i>	Prof. S. MAUDERLI
<i>United States</i>	Dr E. P. HUBBLE

The President reminded the Assembly that the Statutes of the Union would require revision before the end of 1931. The appointment of a committee would be necessary to work out the details and the Executive Committee had put that upon the Agenda for the meeting. But there was a hope that several other countries would join the Union before long and the Executive Committee felt it desirable to postpone the appointment of this committee and to ask the incoming President to appoint such a committee at a later date that might seem to him opportune. It would not be nominated at present. Its recommendations would of course be all submitted to a General Assembly—ordinary or extraordinary—to be voted upon by the countries concerned, those adhering to the Union.

Prof. Turner expressed surprise that the Executive Committee should ask the General Assembly to delegate its powers in so important a matter to one person. He was not, however, prepared to oppose their action.

The President announced that the Executive Committee had nominated the following body, under Prof. Shapley as convener, to assist the Executive Committee in the task of drawing up the lists of presidents and members of the commissions of the Union to hold office after the conclusion of the Leiden meeting: Profs. Bianchi, C. Fabry, A. Fowler, Kamienski, Lindblad, Nijland, Nušl, Father Rodés, Profs. Shapley, Stroobant, Tanakadate.

The President gave notice that at a later meeting of the General Assembly the Executive Committee would bring up the question of making clearer the meaning of the term "member of the Union," in order that the problem of choosing members of commissions might be facilitated.

The following were appointed to act as chairmen of commissions in the place of those presidents who had not been able to come to Leiden: (5) Prof. Stroobant; (9) Prof. C. Fabry; (14) Prof. A. Fowler; (20) Dr van Biesbroeck; (25) Prof. van Rhijn; (26) Prof. Hertzsprung; (28) Dr Hubble; (29) Prof. Russell; (30) Dr J. S. Plaskett.

The President drew the attention of the Assembly to the request from the International Geodetic and Geophysical Union, referred to in the Executive Committee's report, that the two Unions might meet near one another in a 4-dimensional universe—both in time and space. He explained the difficulty in meeting again so soon as 1930 in ordinary assembly but added that the matter would come up for decision at the final meeting of the General Assembly at Leiden.

Prof. Turner asked leave to explain, in the absence of Prof. Lallemand, the reason why the Geodetic Union had thought it possible that this Union might wish to change its date of meeting: the statutes had to be changed before the end of 1931 and governments had to be consulted about their adhesion to a new convention. The Union might very well want to meet in 1930.

Prof. Deslandres expressed agreement with Prof. Turner.

The President said that the point so raised would be considered at the final meeting.

The remaining resolutions submitted to the General Assembly by National Committees (p. 13) were then taken into consideration and were referred to commissions as follows:

- (b) and (c) to Commissions 3 and 4;
- (d) to Commissions 3, 24 and 33;
- (e), (f) and (g) to Commissions 3, 22 and 27;
- (h) to Commission 3;
- (i) and (j) to Commission 5.
- (k) to Commission 8.
- (l) to Commission 19;
- (m) to Commissions 24, 28;
- (n) to Commission 9;
- (o) to Commissions 12, 15.

The General Assembly then adjourned till 13.30 on Thursday, July 12.

Reception by the Municipality of Leiden

At the reception by the Municipality of Leiden in the Municipal Museum "De Lakenhal" on the evening of July 6, the following address was delivered by the Burgomaster, Dr A. van de Sande Bakhuyzen.

MESDAMES ET MESSIEURS, membres du Congrès de l'Union Astronomique Internationale.

Après le gouvernement national l'honneur de vous souhaiter les bienvenus là où se tiendront vos réunions revient au gouvernement de la ville et je vous suis fort reconnaissant que vous vous soyez rendus à notre invitation afin de nous procurer l'occasion de vous dire combien nous apprécions que notre ville ait été élue, si tôt dans la vie de votre Union, comme siège de ses délibérations.

Nous croyons devoir votre visite au fait que l'université est établie ici et que son observatoire astronomique jouit d'une bonne réputation parmi vous. Nous la devons aussi au fait que les Pays-Bas ont joué un rôle important et utile dans la coopération scientifique qui surtout pour l'astronomie est d'une importance éminente et aux efforts que des savants hollandais n'ont cessé de faire pour maintenir cette coopération pendant la guerre et pour la remettre en marche après le rétablissement de la paix.

L'occasion de recevoir à Leyde des savants de renom se présente assez souvent mais il est rare de voir dans nos murs une telle affluence d'hommes célèbres accourus de tous les coins du monde pour échanger des propos scientifiques comme celle que j'ai l'honneur d'adresser maintenant, et je suis convaincu que vous remarquerez que toute la population, non seulement cette partie qui a des relations avec le monde scientifique de l'université, se réjouit de l'honneur que votre choix rend à la réputation de leur ville natale et tient à cœur de vous fournir des preuves de leur appréciation et de leur reconnaissance.

Tout ce qui touche d'ailleurs de près l'université intéresse les citoyens. Datant depuis plus de 350 ans l'union de la ville et son université est devenue si intime que les deux ne forment qu'une entité inséparable dont les constituants sont nécessaires l'un pour le bien-être de l'autre.

Nous avons cru pouvoir vous inviter, Mesdames et Messieurs, de venir nous rencontrer dans le musée local de la ville installé dans l'ancienne Halle des draps parce que ce musée évoque tant de souvenirs qui se rapportent à l'histoire de la fondation de l'université.

Leyde avait son importance longtemps avant qu'elle ne fût douée de ce temple

de science. Son industrie, son commerce, sa culture enfin justement rendaient sa possession si désirable dans les yeux de nos ennemis du seizième siècle—nos amis d'aujourd'hui—les Espagnols, qu'ils l'assiégeaient. Leyde fut alors presque le dernier refuge d'un peuple persécuté à cause de ses idées indépendantes, si non libérales, sur la religion, le dernier rempart de la Hollande qui se débattait désespérément contre des forces matérielles sur tous points supérieures aux siennes.

Le siège de Leyde a été l'apogée de cette guerre de quatre-vingts ans des Provinces Unies et a conquis par son issue heureuse et victorieuse une importance primordiale dans l'histoire de ces jours. Ce fut la victoire du droit à l'existence de la religion réformée en Hollande, plus encore, ce fut la vindication de l'indépendance et de la liberté d'un peuple bien capable de se gouverner lui-même.

Entourée par un cercle de fer forgé autour de ses murs par les mains habiles des généraux espagnols la ville n'avait pour se défendre ni armes, ni troupes suffisantes, ni vivres pour tenir tête pour plus que quelques semaines.

De combats il n'y en a presque pas eu; ce ne fut point une épreuve des qualités militaires des citoyens, ce fut une épreuve d'endurance du peuple, une épreuve de ses qualités civiques. La patrie, la cause pour laquelle on se battait n'exigeait point le sacrifice de son sang sur le champ de bataille, ne faisait point appel au courage physique des hommes. L'épreuve fut plus terrible, plus dure. Au lieu de pouvoir se jeter dans le mêlée pour y trouver la mort ou un succès immédiat, la situation demandait que les hommes, les femmes, même les enfants tinsent tête à cet ennemi terrible: la faim. La famine décimait le peuple, parents voyaient mourir leurs enfants—chaque jour un peu plus.

Ce que le gouvernement de la ville exigeait fut qu'on souffrît, qu'on mourût, qu'on ne prêtât point l'oreille aux conseils des faibles, aux sifflements séducteurs de l'oiseleur ennemi, qui par ses agents dans la ville assiégée excitèrent le peuple contre ses autorités, essayèrent de le séduire de se rendre.

Mais on a tenu ferme, on a tenu ferme jusqu'au moment où l'activité assidue du prince d'Orange, le Taciturne, portait fruit et une flotte pouvait naviguer les champs inondés après la perforation des digues.

La récompense fut l'établissement de cette université, que ce fameux Prince, avec une ironie fine, présentait aux citoyens au nom de leur Seigneur et Maître, le Roi d'Espagne, pour être un *praesidium libertatis*, ce qu'elle est restée jusqu'à nos jours.

Dans ces salles, Mesdames et Messieurs, vous trouverez maints tableaux rappelant les incidents de ce siège, dans les vitrines nous avons exhibé quelques souvenirs de ces jours-là. Chaque bon citoyen de Leyde les connaît et se fera un vrai plaisir de vous les montrer, de vous les expliquer.

Tout à côté du rôle utile qu'il joue, le radio a ses désavantages. Entre autres il rend les voyages, dit-on, moins nécessaires, moins intéressants, moins instructifs. Je me suis rendu compte de la possibilité qu'on puisse en Océanie, en Sibérie, dans un village quelconque dans le Haut-Congo, choisir entre un nombre infini de concerts, de théâtres, ou de discours intéressants et qu'on puisse entendre peut-être aussi les débats de Messieurs les Astronomes réunis à Leyde. Je ne saurais vous prédire qui l'emportera là-bas, mais je suis sûr que nous autres, citoyens de Leyde, stimulés surtout par le fait de votre présence, nous suivrons avec un intérêt soutenu les rapports de ce que vous viendrez nous apporter comme nouvelles découvertes merveilleuses. Quel image de la perspective momentanée

de votre science sortira de vos conseils? Avec la plus vive impatience nous attendrons quels progrès vous aurez à nous dévoiler, jusqu'à quelle profondeur vous avez pénétré les mystères de ce ciel si innocemment bleu à nos yeux.

A son début la théologie régnait suprême à notre université. L'Astronomie fut une des premières des autres sciences pour venir lui faire concurrence et a été enseignée ici pendant près de 300 années. Laquelle de ces deux a réussi le mieux à nous faire connaître le ciel, laquelle des deux nous en a rapprochés le plus?

J'espère que vous trouverez dans cette ville pendant les heures que vous vouerez à vos travaux une atmosphère calme et digne du niveau où montent vos délibérations.

Pour le temps que vous serez un peu libre de vous divertir, de regarder autour de vous, un comité de mes concitoyens a fait de son mieux pour arranger un programme. Puisse tout le monde y trouver beaucoup de son goût. Si vous avez le loisir de visiter les points intéressants que Leyde peut vous offrir, vous trouverez dans les membres de ce comité et du comité des dames des guides qui auront un grand et véritable plaisir de vous les montrer.

En finissant, Mesdames et Messieurs, je ne puis formuler qu'un vœu, c'est que votre visite à Leyde vous puisse donner autant de satisfaction qu'elle nous procure de plaisir.

Prof. Schlesinger replied to this speech of welcome as follows:

BURGEMEESTER, LADIES AND GENTLEMEN,

To me falls the pleasant task of saying a few words in reply to the cordial greetings you have just addressed to us. First of all let me say, what must be in the minds of all of us, what a pleasure it is to astronomers to be welcomed to Leiden by one who bears the name van de Sande Bakhuyzen. Many of us knew well your honoured father and your honoured uncle and recall happy meetings with them in days gone by, particularly at Hamburg now fifteen years ago.

A visit to Holland and to Leiden means much to an American. Our young culture is based upon that of old Europe, and it is of course to England that we owe most in this respect; the language, for example, that we speak still bears considerable resemblance to that in use in England. But next to England our greatest debt is to Holland. I was born in a city that used to be called New Amsterdam, on the banks of a river discovered by your Hendrik Hudson. A good deal of my boyhood was spent in the town of Harlem now in the centre of New York city. Some of us here this evening are wont to spend our summers near the town of Plymouth, named by the Pilgrims from the port from which they sailed from England. Leading up from the water-front of Plymouth is Leiden Street; the first soil in the permanent home of the Pilgrims in America thus bears the name of the last soil in Europe upon which they trod, and the name reminds us of the months during which the Pilgrims found sanctuary here before they sailed across the wide and unknown ocean. There are few Americans who have come to Europe without turning aside from the more crowded roads to stand for a moment in your Pieterskerk to do homage to the memory of the brave little band who worshipped there during their Leiden days. I have dwelt perhaps longer than I should on what Holland means to Americans, but I have no doubt that our friends from other countries could recall equally deep memories of a country whose name has always been associated with freedom and understanding.

On this occasion, however, it is as astronomers that we have come to Leiden. You have spoken, Sir, of your Observatory, and its work, but I fear in altogether inadequate terms. In choosing Leiden for a place of meeting thus early in the Union's history (for this is only our third meeting) we have meant in this way to pay tribute to the Leiden Observatory and to the contribution that the present staff are making toward the progress of our science. I am sure my colleagues here to-night would agree in placing the Observatory in the very front rank at the side of a few similar institutions that have behind them the resources of countries far greater than little Holland.

Burgemeester, we thank you for the wishes you have expressed; they have already been fulfilled in large measure; and we thank you and your fellow citizens for the way you have succeeded, we know not by what magic, in making us feel so completely and so instantly at home among you.