NIEUW ARCHIEF VOOR WISKUNDE (3), XXVI (1978), 177-205

"WISKUNDIG GENOOTSCHAP" 1778-1978: some facts and figures concerning two centuries of the Dutch Mathematical Society

"Een onvermoeide arbeid komt alles te boven"

P.C. BAAYEN

1. Mathematical life in the Netherlands had reached a low ebb in the second half of the eighteenth century. The days of STEVIN and DESCARTES, of VAN SCHOOTEN, HUYGENS and De WITT, the days of Johann BERNOULLI's professorship in Groningen, they were all long past; and whereas abroad the aging EULER, LAGRANGE, young LAPLACE and others were achieving brilliant results, in the Low Countries nothing worth noting was being contributed towards the development of mathematics.

One should not conclude that nobody was interested in the mathematical sciences. Several treatises were translated into Dutch, among them works of C. WOLFF, EULER, CLAIRAUT, SIMPSON [1]. In 1754 a monthly journal was started, the *Maandelijkse Mathematische Liefhebberije, met het Maandelijks Nieuws der Fransche en Duytsche Schoolen*, and it found a regular group of readers [2]. Its editor from 1754 till 1765, Jacob OOSTWOUD, in 1766 became a member of the "Kunstrechnungslieb- und übende Societät" in Hamburg (obtaining the guild name "der Occupierende"), and his example was soon followed by several other Dutch admirers of the mathematical arts, both practitioners and dilettantes [3], among them the founders of the "Wiskundig Genootschap", Arnoldus Bastiaan STRABBE (guild name: "der Stabilierende", 1795), Jan BOLTEN ("de Bevruchtende", 1781), Harmanus RAKERS ("der Reflectierende", 1780) and Pieter HEYNIS ("der Hülfreiche", 1780) [4].

In 1769 publication of the *Mathematische Liefhebberije* was suspended, but in 1770 a new periodical was started, with the title *Oeffenschool der Mathematische Weetenschappen*; STRABBE was its editor. Financial difficulties forced the publisher after a few years to back out. In the last issue (not dated) STRABBE proposes (as he puts it,

on the advice of one of the subscribers) to form a Society with the express purpose of resuscitating the journal, and also aiming, more generally, at the dissemination and development of the mathematical sciences [5].

Apparently, STRABBE's proposal met with sufficient response. In 1778 at Amsterdam the "Genootschap der Mathematische Weetenschappen, onder de spreuk: Een onvermoeide arbeid komt alles te boven" ("Society for Mathematical Sciences, with the device: Untiring Labour Overcomes All") was founded [6]. Publication of a mathematical journal was resumed, under the new title *Kunst-Oeffeningen over verscheide nuttige onderwerpen der Wiskunde*; the first volume is dated 1782 (see illustrations 1 and 2). Since then, although the names of its periodicals were changed several times, and although not every year a complete volume appeared, the "Wiskundig Genootschap" has continued publication of a mathematical journal up to the present day [7].

The second part of the first volume of the *Kunst-Oeffeningen* contains the Laws of the Society at that time and the oldest preserved membership list. Both make it clear that the Society, though residing in Amsterdam, had a much wider scope. For instance, the Laws prescribe that the Governing Board of the Society should consist of 7 members, 4 of which (including the Secretary) had to be residents of Amsterdam (the "Binnenbestierders") while the other 3 had to be living *outside* the capital (the "Buitenbestierders") [8]. Also, the membership list, which counts 6 honorary members and 95 ordinary members, shows that the first members derive from all over the United Provinces, 16 of them even living outside the country. The list also illustrates the close relations, at the beginning, with the "Kunstrechnungslieb- und übende Societät" in Hamburg: among the first 42 members, a third were also member of the Hamburg Society.

2. The period in which the "Wiskundig Genootschap" was founded was not a quiet and peaceful one. In the Republic of the United Netherlands two factions, the "Patriotten" (who more and more sympathized with the French revolutionaries) and the "Prinsgezinden" (supporters of the Prince of Orange) clashed again and again, and ever more vehemently. Internationally, the American Revolution (1776) drew France into a war with Britain (1778); Britain, invoking the British-Dutch Defense Treaty of 1678, wanted the Republic to ban all commerce with France and North America, and the Dutch government acquiesced, but Amsterdam and Haarlem, on their own, continued trafficking with France and sought a private treaty with the Americans, and in 1780 Britain declared war to the Dutch Republic. In the next decade the storms of the French Revolution swept over the country; in 1795, the Prince of Orange fled.

All this political unrest did not leave a notable impression on the "Wiskundig Genootschap", to judge from the remaining documents. True, there exists in print a lecture by J. De GELDER in 1814, in which he denounces, with flowery rhetorics and in no uncertain terms, "that terrible tyrant, Napoléon", whose officials even went so far as to inspect and censor the publications of "Een onvermoeide arbeid komt alles te boven", "as if State Secrets could be hidden behind our mathematical symbols" [9]. But the general impression remains that our mathematicians of around 1800 kept themselves aloof from matters of state and politics.

Long before the inception of the "Wiskundig Genootschap" several learned societies were founded throughout Europe. Among the oldest are the Italian Academies of the seventeenth century (Accademia dei Lincei 1603, Accademia del Cimento 1657), the Royal Society in London (1660), the Leopoldinisch-Carolinische Akademie der Naturforscher und Ärtze (1652) and the Academie des Sciences in Paris (1666). The eighteenth century saw the advent of the Spanish Academy of Sciences (1714), the Academy of Sciences of St.Petersbourg (1725) and the Russian Imperial Academy (1728), while the American Philosophical Society was founded by Benjamin Franklin in 1743.

BAAYEN

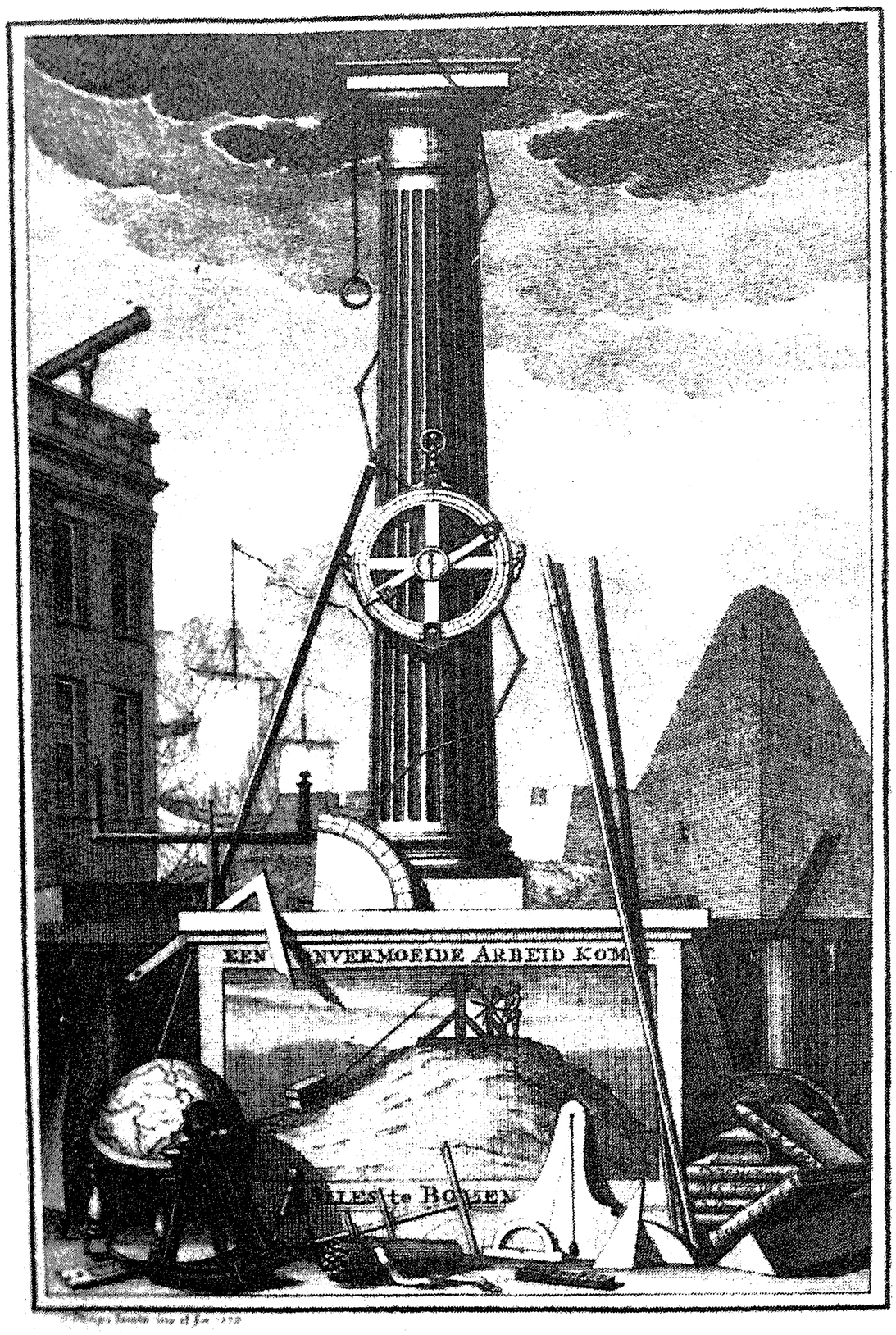


Illustration 1.

Frontispiece in the first volume of *Kunst-Oeffeningen*, the first journal of the "Wiskundig Genootschap" (cf. illustration 2).

KUNST-OEFFENINGEN
OVER
VERSCHEIDE NUTTIGE ONDERWERPEN
DER
WISKUNDE,
EERSTE DEEL.
Tweede Stuk.
BEVATTENDE
EENE VERZAAMELING VAN
MATHEMATISCHE EN ANDERE
VOORSTELLEN,
MET DERZELVER
ONTBINDINGEN.
DOOR HET
GENOOTSCHAP DER MATHEMATISCHE
WEETENSCHAPPEN,
ONDER DE SPREUK:
EEN ONVERMOEIDE ARBEID KOMT ALLES
TE BOVEN.

Te AMSTERDAM
By DE ERVEN VAN F. HOUTTUYN.
MDCCLXXXII.

Illustration 2.
First journal of the "Wiskundig Genootschap".
Title page of the second part of the first volume.

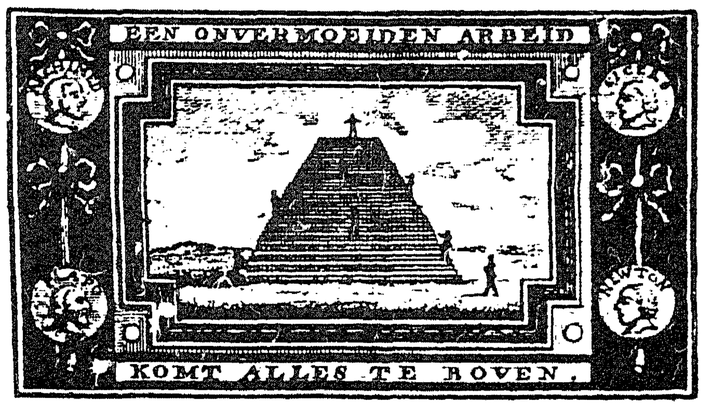
In the Netherlands, the "Hollandse Maatschappij der Weetenschappen" goes back to 1752, the "Zeeuwsch Genootschap der Weetenschap" (of which EULER was one of the early members [10]) and the "Bataafsch Genootschap der Proefondervindelijke Wijsbegeerte" both hail from 1769, while - to mention just one other - the "Provinciaal Utrechts Genootschap voor Kunsten en Wetenschappen" originated in 1773.

Nevertheless, the "Wiskundig Genootschap" is one of the oldest societies especially devoted to mathematics. Only the "Mathematische Gesellschaft" in Hamburg (1690; mentioned above under the older name "Kunstrechnungslieb-und übende Societät") is considerably older (as far as I know). For comparison: the London Mathematical Society was started in 1865 and the American Mathematical Society in 1888.

3. I gave 1778 as the year of origin of the "Wiskundig Genootschap". Actually the evidence for this, though quite convincing, is only circumstantial. The first General Meeting was probably held in 1780, and for more than a century it was assumed that 1779 was the year in which the Society was founded. The oldest explicit mention of 1779 as the year of foundation which I was able to find in the archives, occurs in a response to a government request for information in 1808 [11].

It was STRABBE himself who destroyed the earliest documents of the society. He was the first Secretary, and in the early years of the "Wiskundig Genootschap" this was a very powerful position: the Secretary remained in office as long as he was a member of the Society, while the term of the President was only 3 months! An important part of the early publications of the Society dealt with mathematical problems, and their solutions proposed by members, and it was the Secretary who decided whose solutions were to be printed in the journal. By 1803, several members felt that STRABBE abused his authority, by favouring his own solutions over those of the members. In the 25th General Meeting, convened at the sign of "De Stad Hamburg" on Tuesday, 3d April, 1804, just as action against STRABBE was to be initiated, a letter from him was presented in which he resigned as Secretary. The minutes of the (Board) meeting of 7th April, 1804 continue the

REDENVOERINGEN
BY HET OPENEN EN SLUITEN
DER ZESDE
ALGEMEENE VERGADERING
VAN HET
GENOOTSCHAP,
ONDER DE SPREUK:
Een onvermoeide arbeid komt alles te boven.
Uitgesproken den 29 Maart 1785,
DOOR
PAULUS ROMOND,
BESTIERDER VAN 'T GENOOTSCHAP.



Te AMSTERDAM,
Gedrukt voor Rekening van den AUTHEUR.
MDCCLXXXV.

Illustration 3.

Title page of a lecture by P. ROMOND at the occasion of the 6th General Meeting, showing an old emblem of the "Wiskundig Genootschap". This emblem incorporates the device.

honderd-tweede Vergadering.

Saturday den 24. September 1791. 71

In deeze Vergadering zyn verscheenen

Jan Visser van Nieuwendam, Voorzittend Bestierder.
Joannes van der Paardt, Vice-President.
Jean Correch ——— } Binnen-Bestierders.
Johannes Bernardus Noordunk }
Johannes te Veltrúp van Haarlem, Buiten-Bestierder.
Harmanus Rakers Pietersz. Penningmeester.
Arnoldus Bastiaan Strabbe, Secretaris.

Na resúmptie der Notúlen van de laatst gehoudene Vergadering, werdt, by opmaaking der Cassa, bevonden dezelve op heden nog in advans te zyn de somma van ƒ 280 : 3 : —.

Vervolgens werdt gestatteerd de Rekening van den Secretaris A. B. Strabbe, voor de vertaaling en correctie van het derde Deels derde Stuk van Montúcla's Historie der Wiskunde.

De Heer Jan Visser Vltzn. Buiten-Bestierder, gaf in de Die Straubach, Lecon , en Carsten Smaarlens, beide de overeen.

Eindelyk werdt gerefereerd, in gevolge de bepaaling door Heeren Gecommitteerden tot het Werk der Wetten gemaakt, om 600 Briefjes, van 12 in een Vel, te laaten drukken, om door alle de Leden van het Genootschap ondergeteekend te worden, zynde van den volgenden inhoud:

" Ik ondergeteekende verklaare onits deezen genoegen te neemen in de Wetten van het Genootschap der Mathematische Weetenschappen, A°. 1778 te Amsterdam opgericht, onder de Spreuk: Een onvermoeide arbeid komt alles te boven; Zodanig als dezelve door Heeren Gecommitteerden tot het Werk der Wetten, geämpliceerd, gealtereerd en verbeterd, en door Heeren Bestierderen in der tyd gresgekeurd zyn: my verbindende dezelve in

72

in alles stiptelyk te zullen achtervolgen en nakomen; gelyk ik my door deezen ook verpligte om, in geval van verhuizen, de plaats alwaar ik gaa wonen aan den Penningmeester, of één der Correspondenten, bekend te zullen maaken."

Na resumptie der Notulen Scheidde deeze Vergadering.

J. Visser
praesidend Bestierder.

story; in particular, it is mentioned that some documents, among them the first Book of Minutes of the Society's meetings, were not recovered from STRABBE ("zijnde het Oude Notulenboek reeds voor Scheurpapier gebruikt": as he had already used up the old book for scratch paper).

It was M. Van HAAFTEN who proved beyond doubt that not 1779 but 1778 must have been the year of origin of the "Wiskundig Genootschap" [12]. Van HAAFTEN points to the minutes of the meeting of 24 September 1791, which mention 1778 as the year of the foundation (see illustration 4) and also refers to STRABBE's Preface to his book *Eerste beginselen der fluxie rekening* ("First Principles of the Calculus of Fluxions") which appeared in 1798 (cf. illustration 5). A very significant find was made by L. Van Den BROM, who searched the newspapers printed in Amsterdam in 1778 and located a small advertisement in the newspaper *Amsterdamsche Courant* of Saturday 10 October, 1778, in which the firm "Erven van F. HOUTTUYN", printer for the Society in 1782 (see illustration 2) offers for sale "BERICHT en WETTEN van Het GENOOTSCHAP DER MATHEMATISCHE WEETENSCHAPPEN te Amsterdam, onder de Spreuk: *Een onvermoeiden Arbeid komt alles te boven*". And recently S. ENGELSMAN discovered in the periodical *Algemene KONST- en LETTER-BODE* of Friday 24 April, 1789 an article on the occasion of the tenth General Meeting of the "Wiskundig Genootschap" (probably written by STRABBE) in which the information is given that "at the end of the year 1778 the first foundation of this Society was laid by four Devotees of Mathematics (...)" [31].

Illustration 4.

Taken from two pages from the Book of Minutes 1789-1810. The year 1778 is mentioned as the one in which the "Wiskundig Genootschap" was founded. There is also a reference to STRABBE's translation of MONTUCLA's book.

Van HAAFTEN advocated adherence to the tradition of celebrations at General Meetings with an index divisible by 25 or 50 (these General Meetings traditionally are held near the end of the Society's year, usually in April; in the early years they were the *only* meetings to which the common members - not belonging to the Board - were admitted). Thus, he himself gave an address on the history of the Society, on the occasion of its sesquicentennial celebration, at the 150th General Meeting in 1929. As it happens, the General Meeting in March 1978 carries the lustral number 200 (and not 199, as was to be expected). Van Den BROM pointed out to me that this is a consequence of a transgression against the traditions of the "Wiskundig Genootschap" made in 1968: in that year a special meeting, convened in January with the purpose of passing a change in the Laws of the Society, was given a number in the row of General Meeings, so that the April meeting of that year obtained the number 190 instead of the number 189 [13].

4. An excellent account of the early history of "Een onvermoeide Arbeid komt alles te boven" is presented by Van HAAFTEN [12]. Mathematically, the first century of the Society is very disappointing. "It is a horror to compare the situation in our country towards the end of the eighteenth century - the time of the foundation of the Mathematical Society, the mathematical level of which was at first that of reckoners, gaugers, amateurs, and at best of sea captains, artillerists and actuarians - with that in the neighbouring countries", wrote D. Van DANTZIG [14]. And H. FREUDENTHAL [15] adds: "One may safely say that mathematically the Netherlands at the end of the nineteenth century lagged a century behind the rest of Europe".

Some of the 19th century Dutch mathematicians won appreciation outside the country, such as J.H. Van SWINDEN (1746-1823), R. LOBATTO (1797-1866) and D. BIERENS De HAAN (1822-1895). They are discussed in Van HAAFTEN's book, and elsewhere in this issue there are articles on BIERENS De HAAN and F.J. Van Den BERG (1833-1892). As is well known, the one great exception to the mathematical dearth in 19th-century Netherlands, Th.J. STIELTJES (1856-1894), did not succeed in obtaining

an academic position in his own country and went to France (1885), where he became professor of mathematics in Toulouse (1886). (I may add that the Dutch mathematicians were aware of STIELTJES' importance; several of his papers were published in the "Nieuw Archief voor Wiskunde", and in 1884 he was nominated as the first candidate for a professorship in Groningen (but the government refused to appoint him); in that same year Leiden awarded him a doctorate "Honoris causa" in Mathematics and Astronomy, while in 1885 he was elected a member of the "Koninklijke Akademie van Wetenschappen". The "Wiskundig Genootschap" edited and published STIELTJES' *Oeuvres complètes* [16]. (Elsewhere in this issue one may find an article (by S.C. Van VEEN) on STIELTJES and his work; see also the recent biography [17].)

Towards the turn of the century the tide began to turn. In other papers in this issue one finds information on P.H. SCHOUTE (1846-1913), D.J. KORTEWEG (1848-1941) and G. MANNOURY (1867-1956). In 1899, L.E.J. BROUWER (1881-1966) joined the "Wiskundig Genootschap". These men (and others) were to change the state of mathematics in the Netherlands, both through their own work and through their influence on their students.

A historical survey of Dutch mathematics in the first half of the 20th century was written by J.G. Van Der CORPUT [18]. The two decades 1920-1940 are the field of a special study, published by the "Wiskundig Genootschap", simultaneously with this special issue of the "Nieuw Archief voor Wiskunde", on the occasion of the bicentennial celebration [28].

EERSTE BEGINSELEN

DER

FLUXIE-REKENING.

BEHELZENDE EENE DUIDELYKE VERKLAARING VAN DE GRONDEN DEEZER VOORTREFFELYKE WERTENSCHAP, BENEVENS HAARE TOEPASSING EN GEBRUIK IN ONDERSCHEIDENE DEELEN DER

WISKUNDE.

DOOR

ARNOLDUS BASTIAAN STRABBE;

Mathematicus en Wynroeijer te Amſterdam.

MET PLAATEN.

Te AMSTERDAM,

BY J: B: ELWE,

Boekverkooper op de Pypemarkt by den Dam.

MDCCXCIX.

Illustration 5[a].

Front page and first page of the Preface of STRABBE's book on the Calculus of Fluxions. In the

WISKUNDIG GENOOTSCHAP 1778-1978

VOORREDEN.

Van alle de Mathematiſche Weetenſchappen is, buiten alle tegenſpraak, de Leerwyze der *Fluxiën* de uitgebreidſte en verhevenſte. Zy is eigenlyk een nieuw gedeelte der Wiskunde, in zich ſluitende eene *Analyſis*, welke zich onvergelykelyk verder dan die der Ouden uitſtrekt. Veele zwaarigheden, welke door alle andere bekende Leerwyzen byna onöverkomelyk zyn, worden langs deezen weg met eene ongemeene vaardigheid, ſierlykheid en klaarheid opgelost.

Na hetgeen ik in het *Oeffenſchool der Mathematiſche Weetenſchappen*; by wyze van eene inleidende Verhandeling, over dit onderwerp heb medegedeeld, en waaröver veele hoogſchatters der Wiskunde my hun genoegen betuigd hebben, bleef my eeniglyk den wensch over, om t'eenigen tyde eene volkomener en meer uitgewerkte Verhandeling over dat keurig onderwerp het licht te doen zien.

De moeijelykheid om zodanige Werken, waar toe veel kosten verëischt worden, en welke; wel verre van in den algemeenen ſmaak te vallen, ſlegts aan weinigen behaagen, aan den man te helpen, verydelde eenige achteréenvolgende Jaaren het ontwerp, 't welk ik my had voorgeſchreeven, om naamlyk eene volkomene Verhandeling over de eerſte beginſelen der *Fluxie-Rekening* onzen landgenooten mede te deelen; en zekerlyk zouden alle myne poogingen, om eenmaal mynen wensch te vervullen, tot hier toe vruchteloos gebleeven zyn, zo niet het Genootſchap der Mathematiſche Weetenſchappen, onder de Spreuk: *Een onvermoeide arbeid komt alles te boven*, waar van ik de eer heb, ſints deszelfs oprichting in den Jaare 1778, Lid en

Illustration 5b.

bottom line of page 2, 1778 is mentioned as the year of foundations of the "Wiskundig Genootschap".

5. Concerning the recent history of the "Wiskundig Genootschap" there is here room for only a few observations.

The second world war affected the Society deeply. The report of the 166th and 167th General Meeting [13] lists 6 members killed during the war because they were jews [19] and 3 others who also met a violent death [20]. They also refer to difficulties caused by the decision in 1942 to award a prize to H. FREUDENTHAL for his solution to one of the Society's prize problems. J.F. KOKSMA, who was president of the Society at the time, succeeded in assuaging the Nazi officials. When subsequently a decree was issued that programs of prize competitions should stipulate a prohibition for Jews to participate, the Society decided to stop the prize problem program "till the return of better times".

The next few years form a period of recovery and restoration. In 1950 FREUDENTHAL entered a proposal for a revision of the Laws of the Society which at first caused some unrest; but in 1951 the Laws were indeed changed, giving the members more influence. (A notable consequence of this revision was a great reduction of the average term of Board membership. Formerly Board members stayed on for a score of years or more: e.g. KORTEWEG kept his Board position till he died at an age of 93 in 1941; having become a member of the board in 1883, he was probably the only one whose term of office exceeded half a century. MANNOURY was member of the Board from 1905 till 1947. But nowadays the regular term of office is 4 years, with the exception that the Secretary, the Treasurer and the Inspector of the Library can be re-elected if they remain serving in the same position.

In the same year 1950 the International Mathematical Union asked the "Wiskundig Genootschap" to organize the 1954 International Mathematical Congress in the Netherlands. The Society agreed, and the 1954 congress, which was held in Amsterdam with J.A. SCHOUTEN as chairman (J.F. KOKSMA was the Secretary of the Organizing Committee) was a great success.

Another change with which the name of FREUDENTHAL is connected has its real cause in the changing social circumstances of the sixties: the replacement of the monthly scientific meetings by a yearly 2-day

congress (together with incidental symposia). The traditional meetings on the afternoon of the last Saturday of the month fulfilled not only a scientific role, but also a social one: there one met his colleagues, and the occasional visiting mathematician from abroad. In the 'sixties, however, attendance of these meetings steadily declined, due, no doubt, to the quick development of the mathematical institutes of the Universities and the rapidly expanding international contacts, but in part also in consequence of the abolition of Saturday as a regular working day and as a school day.

During FREUDENTHAL's Presidency in 1964-1966 the first "Nederlands Mathematisch Congres" was held (21-22 April 1965, at the Technical University in Twente), and it attracted nearly 300 attendants. Since then every year such a congress has been held, and the consistently good attendance proves that the decision "to concentrate 6 or 8 monthly meeting on 2 days" has been a wise one [21].

After the decease of L.E.J. BROUWER (1881-1966), the Society decided not only to edit and publish his collected papers (they appeared in 2 volumes, edited respectively by A. HEYTING and H. FREUDENTHAL [22]), but also to institute a series of "Brouwer Memorial Lectures", to be held every three or four years by a mathematician who in his own field has done work of outstanding importance. Each Brouwer lecturer receives a gold medal, with on one face a portrait of L.E.J. BROUWER, his name and the years 1881-1966; the other face carries name and device of the "Wiskundig Genootschap", the year 1778, the name of the Brouwer lecturer, and the date of the lecture. The first Lecture was given by R. THOM on August 25, 1970; the second by A. ROBINSON on April 26, 1973. For the third Brouwer Memorial Lecture, to be held in 1976, A.V. SKOROHOD in Kiev was invited, but regrettably he could not accept the invitation. Now the third Lecture will be given by A. BOREL on March 30, 1978, at the occasion of the bicentennial congress.

6. From the start the "Wiskundig Genootschap" has been interested in mathematical education, and it has always counted many mathematics teachers among its members. In the early journals half of the space

was devoted to mathematical problems and their solutions ("ontbindingen", submitted by members), while the other half was used for instruction in the mathematical theories in order to help the members acquire the skill necessary for successful participation in the communal problem solving (good sales-policy!). Van HAAFTEN remarks even that the early Society almost could be called "an institution for mathematical instruction by mail, under direction of STRABBE [23]".

The Society also published several elementary textbooks [24], such as STRABBE's *Eerste beginselen der fluxierekening*" ("First principles of the Calculus of Fluxions", 1798), O.S. BANGMA's *Verhandeling over de regtlijnige en klootsche driehoeksmeting* (Treatise on plane and spherical trigonometry, 1808), BANGMA's *Inleiding tot de Algebra ten dienste der Scholen* ("Introduction to Algebra for Use in the Schools", 1811) and J. De GELDER's *Meetkundige Analysis* [25]. For further details on the involvement of the early "Wiskundig Genootschap" with mathematical education, we refer the reader to Van HAAFTEN [12]; see also the paper of Joh.H. WANSINK in this issue.

The Society always maintained its interest in mathematics teaching and in mathematics teachers. But nowadays, now that mathematical research and the mathematics of the teacher have diverged so much, special measures are in order. Thus every winter a special symposium for teachers is conducted. Sections on mathematical instruction at the "Nederlandse Mathematische Congressen" are very much encouraged. The Society participates in the "Nederlandse Onderwijscommissie voor Wiskunde" (the dutch Subcommittee of the International Committee on Mathematical Education) [26].

It is perhaps significant for the close assimilation of the "Wiskundig Genootschap" and mathematical instruction that in 1952 P. WIJDENES, well-known in the Netherlands through the many school texts which he wrote (cf. WANSINK's paper) was appointed an honorary member of the Society.

It is no longer the case that the "Wiskundig Genootschap" directly influences the mathematical activities at the Dutch Universities. At one time things were different. For instance, in 1917 at the General Meeting the Society appointed a committee, consisting of

L.E.J. BROUWER (chairman), J.C. KLUYVER, L.S. ORNSTEIN, J. De VRIES and J. WOLFF, with the instruction to investigate the desirability of extending the mathematics program at the Dutch universities. As a consequence of the work of the Committee, the Society in 1918 sent a letter to the Minister of State responsible for Higher Education, in which a program for mathematics at the universities is proposed. On the base of this program (and some general considerations) a plea is entered for additional mathematical staff. Some of the terminology used has become a little bit archaic, but the issue not at all [27].

7. A few remarks are in order on the publications of the "Wiskundig Genootschap" and on its Library.

In the first place the Society has always published at least one journal. During the first century of its existence it was the habit to change the title of the journal as soon as a few volumes had been completed. Since 1875, the main journal has been named "Nieuw Archief voor Wiskunde" (although through the years it has been split in a number of series; presently, the third series is running). The reader is referred to Appendix III for a list of the journals published by the Society. At this place we only mention yet that the "Revue semestrielle des publications mathématiques" (at its time an important and highly useful bibliographic journal) was published on the initiative and under the auspices of the "Wiskundig Genootschap".

In the previous section we already mentioned that the Society published several books. The first was a translation by STRABBE of MONTUCLA's *Histoire des mathématiques*, which appeared in 4 volumes in the years 1782-1804 (see illustration 6); several text books for use in schools followed. Here we can only mention a very few more editions of the "Wiskundig Genootschap". They are the *Oeuvres Complètes* of Th.J. STIELTJES and the *collected Works* of L.E.J. BROUWER, both already mentioned before, and the festive edition in 1879, at the occasion of the centennial celebration, of a facsimile reproduction of two old works on actuarial mathematics: *Corte onderrichtinghe dienende tot het maecken van de reductien van de Jaercustingen tot gereede penningen*", from 1599, and Johan De WITT's *Waerdije van Lijf-*

renten naer proportie van Losrenten, from 1671. The re-issue, titled *Feestgave van het Wiskundig Genootschap,* was prepared by D. BIERENS De HAAN. M. Van HAAFTEN [12] offers a description of this work (in a more general discussion of the relations, at times very lively, between the "Wiskundig Genootschap" and Actuarians and Life Insurance people). Finally, it may be mentioned here that at the occasion of the bicentennial again a special publication has been prepared, entitled *Two decades of mathematics: 1920-1940,* and edited by E.M.J. BERTIN, H.J.M. BOS and A.W. GROOTENDORST [28]; moreover, under the care of the "Wiskundig Genootschap" a re-issue will appear of G. MANNOURY's *Mathesis en Mystiek* [32].

Concerning Library of the "Wiskundig Genootschap" not much needs to be added to the account in M. Van HAAFTEN [12]. Some of the oldest books in the Library were received as gifts from the Society in Hamburg; most of the others were donated by the authors. Also, several members bequeathed (parts of) their own library to the "Wiskundig Genootschap", e.g. A.N. GODEFROY (1822-1899) and D.J. KORTEWEG (1848-1941). Later, additional works were regularly bought, and members could request works which they wanted to use to be purchased for the Library.

At first the Library was kept in the residence of the Librarian of the Society, and had to be moved whenever a new Librarian took office. MATTHES [29] mentions the following Librarians: Jacob De GELDER (1813-1814), H. Van WESSEM (1814-1822), O.S. BANGMA (1822-1827), J. Van Der LINDEN (1827-1842), H. WEYTING (1842-1857), H.W. WEYTINGH (1857-1862), J. BRAVE (1862-1868) and D. BOSCH (1878-1880). In 1880 an Agreement was made with the University Library of the newly instituted (1876) University of Amsterdam; since then, the Library of the "Wiskundig Genootschap" is in the care of the University Library, while remaining property of the Society. (The Agreement with the University Library was modified twice: in 1934 and in 1965).

8. We have seen how the "Wiskundig Genootschap" originated in a period in which the level of mathematical activities in the Netherlands was low, and how the first century of its existence hardly brought any real change for the better.

H I S T O R I E

D E R

W I S K U N D E.

In welke bericht gegeeven wordt van haare vorderingen, ſedert haaren oorſprong tot in onzen tyd; waar in het tafereel en de verklaaringen van haare voornaamſte ontdekkingen, de verſchillen, waar toe zy aanleiding gegeeven heeft, en de voornaamſte voorvallen van het leven der beroemdſte Wiskundigen voorgeſteld worden.

D O O R

DEN HEERE MONTUCLA,

Lid van de Koninglyke Academie der Weetenſchappen en fraaije Letteren van Pruiſſen.

Uit laſt van het Genootſchap der Mathematiſche Weetenſchappen, onder de Spreuk: *Een onvermoeide arbeid komt alles te boven*, uit het Franſch vertaald, en met eenige byvoegſelen, en opheldèrende aanmerkingen vermeerderd,

D O O R

ARNOLDUS BASTIAAN STRABBE,

Lid en Secretaris van het zelfde Genootſchap; Lid van de Hamburgſche Kunſtrekenings-lievende en oeffenende Societeit, tot aanmoediging en voortplanting der Mathematiſche Weetenſchappen, en Leermeeſter der Wis- en Sterrekunde te Amſterdam.

E E R S T E D E E L.

Te A M S T E R D A M,

By DE ERVEN VAN F. HOUTTUYN.

M D C C L X X X I I.

Illustration 6.

The "Wiskundig Genootschap" published many books. The first of these was MONTUCLA's history of mathematics in a translation by STRABBE.

BAAYEN

WISKUNSTIGE OPGAVEN

MET HARE

ONTBINDINGEN,

UITGEGEVEN

DOOR DE LEDEN

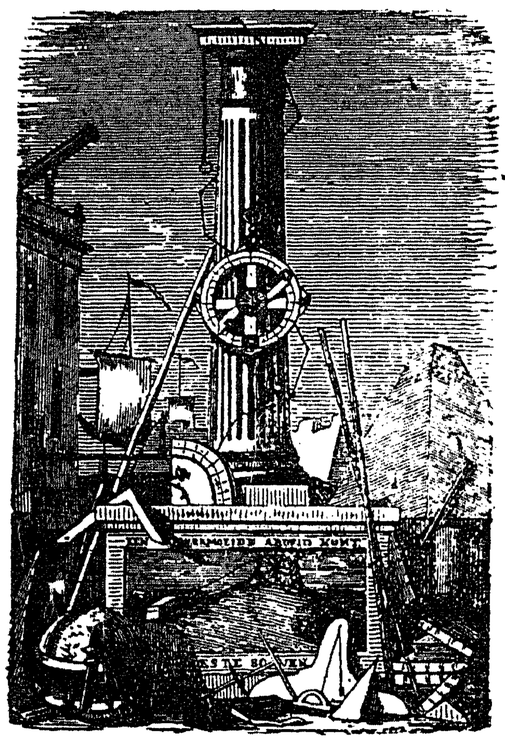
VAN HET

WISKUNDIG GENOOTSCHAP:

EEN ONVERMOEIDE ARBEID KOMT ALLES TE BOVEN.

VAN

1855—1859.



AMSTERDAM,

H. W. WEYTINGH

1859

Illustration 7.

The representation in frontispiece from the first journal (cf. illustration) is also used as a vignette during several decades in the second half of the 19th century.

Of course contemporaries lack true perspective. *Kunst-Oeffeningen I* (1782) contains a panegyrical poem in 11 six-line stanzas (by the member P. Van CAMPEN) in which the Society and the heroic importance for mathematics and general culture of its "Untiring Labor" are glorified [33]. In his centennial lecture [29] MATTHES somewhat condescendingly quotes the first strophe; but in his turn he evaluates quite positively the "Wiskundig Genootschap" of his own days - while we think otherwise.

(Some small consolation may be derived from the observation that the state of mathematics in the first part of the 18th century is not exceptional. All of Science and of University Education remain below par in the early period of the Kingdom of the Netherlands. An excellent and highly elucidating lecture on these historical facts, indicating several possible causes, was delivered by J. HUIZINGA at the occasion of the 125th year-celebration of the "Koninklijke Akademie van Wetenschappen" [30].)

It is tempting to proceed and state now that low ebbs are followed by high flows. But let us learn the lessons taught us by our predecessors and abstain from any estimation of importance and value of the "Wiskundig Genootschap" of 1978. Also, we should keep in mind the high degree of complexity of our present-day Society, in which the "Wiskundig Genootschap" is but one organization among many concerning mathematics and mathematicians. Nevertheless, one thing we may conclude without prejudice: the "Wiskundig Genootschap, onder de zinspreuk *Een onvermoeide arbeid komt alles te boven*" is full of vitality and cannot be thought away from mathematical life in the Netherlands.

APPENDIX I. *Presidents and Secretaries of the Wiskundig Genootschap.*

At first the members of the Board (the Secretary excluded) took turns in being President; their terms were limited to three months. Only since 1879 the term of the Presidency is a year or longer.

Presidents since 1879

1879 KNAPPER
1880 VAN PESCH
1881 VAN PESCH
1882 VAN LANKEREN MATTHES
1883 VAN LANKEREN MATTHES
1884 VAN PESCH
1885 KORTEWEG
1886 KORTEWEG
1887 J. VERSLUYS
1888 VAN PESCH
1889 GODEFROY
1890 GODEFROY
1891 KORTEWEG
1892 KORTEWEG
1893 J. VERSLUYS
1894 J. VERSLUYS
1895 G. SCHOUTEN
1896 G. SCHOUTEN
1897 KORTEWEG
1898 KORTEWEG
1899 SCHOUTE
1900 SCHOUTE
1901 LANDRE
1902 LANDRE
1903 KAPTEYN
1904 KAPTEYN
1905 KLUYVER
1906 KLUYVER
1907 CARDINAAL
1908 CARDINAAL
1909 J. DE VRIES
1910 J. DE VRIES
1911 H. DE VRIES
1912 H. DE VRIES
1913 BARRAU
1914 BARRAU
1915 BROUWER
1916 BROUWER
1917 MANNOURY
1918 MANNOURY
1919 SCHUH
1920 SCHUH
1921 WOLFF
1922 WOLFF
1923 VAN DER WOUDE
1924 VAN DER WOUDE
1925 KLUYVER
1926 KLUYVER
1927 H. DE VRIES
1928 H. DE VRIES
1929 J. A. SCHOUTEN
1930 J. A. SCHOUTEN
1931 J. A. SCHOUTEN
1932 VAN DER CORPUT

1933 VAN DER CORPUT
1934 BARRAU
1935 BARRAU
1936 BROUWER
1937 BROUWER
1938 MANNOURY
1939 VAN DER WOUDE
1940 VAN DER WOUDE
1941 KOKSMA
1942 KOKSMA
1943 DROSTE
1944 DROSTE
1945 DROSTE
1946 BREMEKAMP
1947 BREMEKAMP
1948 KLOOSTERMAN
1949 KLOOSTERMAN
1950 VAN DANTZIG
1951 VAN DANTZIG
1952 KOKSMA
1953 KOKSMA
1954 J. A. SCHOUTEN
1955 HAANTJES
1956 LOONSTRA
1957 LOONSTRA
1958 DE BRUYN
1959 DE BRUYN
1960 VAN DER BLIJ
1961 VAN DER BLIJ
1962 KUIPER
1963 KUIPER
1964 FREUDENTHAL
1965 FREUDENTHAL
1966 DIJKMAN
1967 DIJKMAN
1968 VAN LINT
1969 VAN LINT
1970 ZAANEN
1971 ZAANEN
1972 PEREMANS
1973 PEREMANS
1974 VAN EST
1975 VAN EST
1976 FREUDENTHAL
1977 FREUDENTHAL

From 1789 till 1896 the "Wiskundig Genootschap had a First Secretary (whose concern were the journal and other publications of the Society) and a Second Secretary (who did all the other secretarial work).

*(**First**) Secretaries*

A.B. STRABBE	1778-1804	D. BIERENS De HAAN	1875-1896
O.S. BANGMA	1804-1817	M.C. PARAIRA	1896-1914
I.R. SCHMIDT	1817-1826	J. WOLFF	1914-1917
I.P. DELPRAT	1826-1830	H.B. BONE	1917-1924
J. BADON GHYBEN	1830-1858	M. Van HAAFTEN	1924-1928
C.J. MATTHES	1858-1873	P.J.L. De CHATELEUX	1928-1946

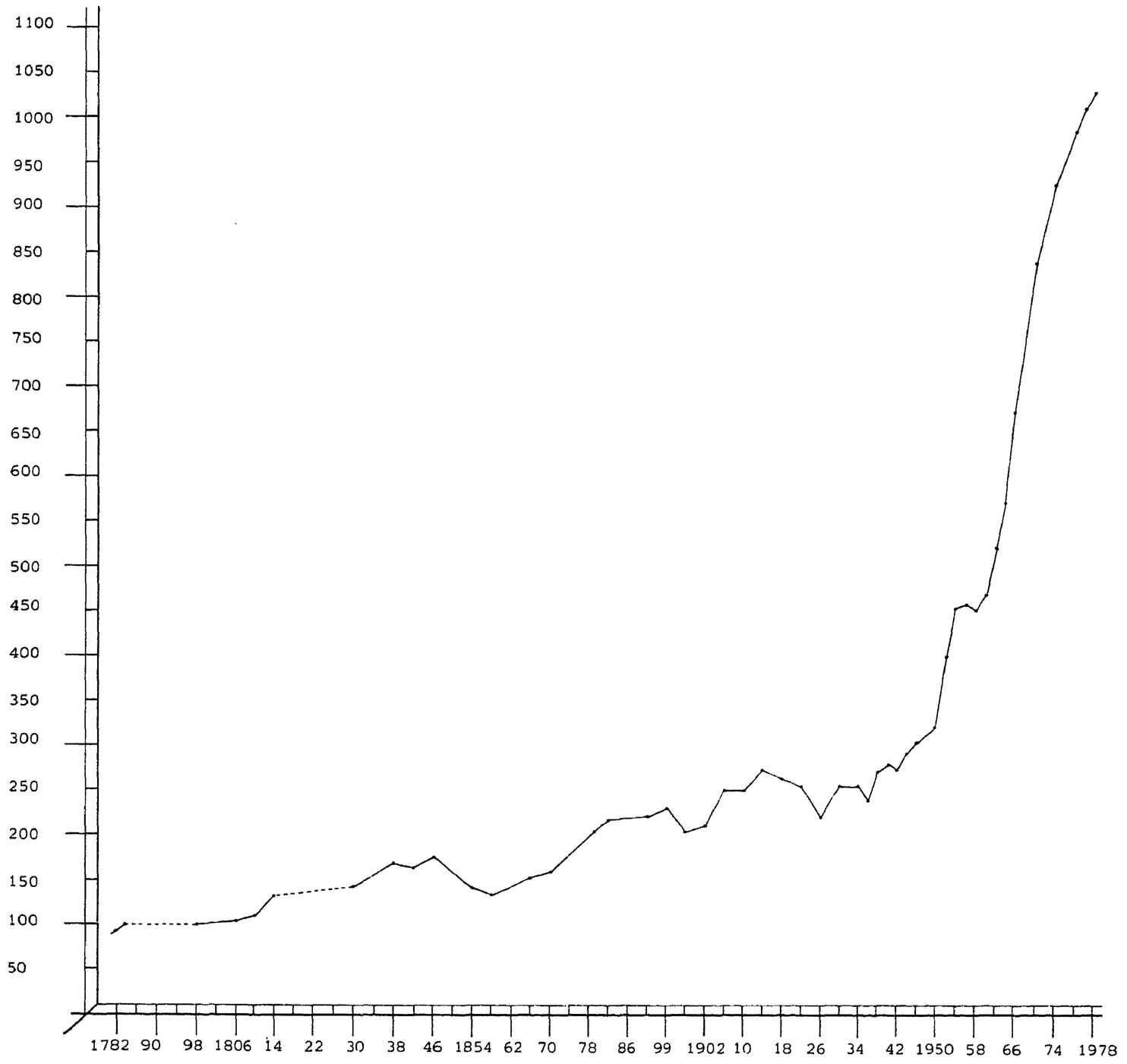
J.P. Van ROOIJEN	1946-1958
J.G. DIJKMAN	1958-1966
A.W. GROOTENDORST	1966-1970
R. SATTLER	1970-1973
H. BAVINCK	1973-

Second Secretaries

Coenr. WERTZ	1789-1791
Coenr. WERTZ	1794-1797
Gerrit SCHUT	1797-1798
Klaas SMIT	1802-1807
J. Van WIJK ROELANSZ	1807-1810
Klaas SMIT	1810-1813
L.C. MAZEL	1813-1814
J. DEELEMAN BOM	1814-1818
H.G. WITLAGE	1818-1864
L. JANSE Bzn	1864-1874
J.W. TESCH	1874-1877
A.N. GODEFROY	1877-1878
N.P. KAPTEYN	1878-1885
G. SCHOUTEN	1885-1894
M.C. PARAIRA	1894-1896

APPENDIX II *Size of membership*

The oldest list of members, (1782) mentions 95 names. In 1783 the count is 101; the 150 mark is passed somewhere between 1830 and 1836, and the minutes of the centennial meeting in 1879 mention an all-time high of 202 members. In 1900 there are about 216 members; in 1929, when the Society existed 150 years, the count was approximately 250. The 300 was passed in 1946, the 400 was passed in 1953, the 500 in 1961. Since 1961 the membership has more than doubled: the 1000 mark was passed already in 1974.



APPENDIX III *Journals published by the "Wiskundig Genootschap"*

Kunst-Oeffeningen over verscheide nuttige onderwerpen der wiskunde, door het Genootschap der mathematische weetenschappen, onder de spreuk: Een onvermoeide arbeid komt alles te boven. 2 vols., Amsterdam 1782-1786.

Wiskunstige Verlustiging in eene aaneenschakeling van uitgeleezene voorstellen met derzelver Ontbindingen, door het Genootschap der mathematische weetenschappen onder de spreuk: Een onvermoeide arbeid komt alles te boven. Amsterdam, 1 vol., 1793 and 1795.

Mengelwerk van uitgeleezene en andere wis- en natuurkundige Verhandelingen, door het Genootschap der mathematische weetenschappen onder de spreuk: Een onvermoeide arbeid komt alles te boven, 2 vols., Amsterdam 1796, 1816,

Wiskundig Mengelwerk, in eene aaneenschakeling van uitgeleezene voorstellen met derzelver ontbindingen, door het Genootschap der mathematische weetenschappen onder de spreuk: Een onvermoeide arbeid komt alles te boven, 2 vols., 1798, 1802.

Wiskunstige Oeffeningen, in eene aaneenschakeling van uitgeleezene voorstellen, benevens een Mengelwerk van uitgeleezene en andere wiskundige verhandelingen. Onder de spreuk: Een onvermoeide arbeid komt alles te boven, 2 vols., Amsterdam 1806, 1809.

Verzameling van voorstellen door de leden van het Genootschap ter spreuke voerende: Een onvermoeide arbeid komt alles te boven, elkander tot onderlinge oefening opgegeven, 2 vols., Amsterdam 1811, 1815.

Wiskundige Verhandelingen van het Genootschap te Amsterdam, onder de spreuk: Een onvermoeide arbeid komt alles te boven, only 1 partial volume, 1817.

Verzameling van wiskundige Voorstellen door de leden van het Wiskundig Genootschap onder de zinspreuk: Een onvermoeide arbeid komt alles te boven, elkander tot onderlinge oefening opgegeven, 6 vols., Amsterdam 1820-1836.

Verzameling van nieuwe wiskundige voorstellen door de leden van het Wiskundig Genootschap onder de zinspreuk: Een onvermoeide arbeid komt alles te boven, elkander tot onderlinge oefening opgegeven, 2 vols., Amsterdam 1841, 1846.

Nieuwe wis- en natuurkundige Verhandelingen van het Genootschap te Amsterdam, ter spreuke voerende: Een onvermoeide arbeid komt alles te boven, 2 vols., Amsterdam 1844, 1854.

Verzameling van Wiskunstige Opgaven, door de leden van het wiskundig genootschap ter spreuke voerende Een onvermoeide arbeid komt alles te boven, elkander tot onderlinge oefening opgegeven, 2 vols., Amsterdam 1850, 1854.

Wiskundige Opgaven met de oplossingen door de leden van het Wiskundig Genootschap: Een onvermoeide arbeid komt alles te boven; first series 4 vols., (1855-1874); second series 21 vols., (1875-1961).

Verslagen van het Verhandelde op de Wetenschappelijke wintervergadering van het Wiskundig Genootschap, onder de spreuk Een onvermoeide arbeid komt alles te boven, gedurende 1842-1852. Amsterdam, 1856.

Archief uitgegeven door het wiskundig genootschap onder de zinspreuk: Een onvermoeide arbied komt alles te boven, 3 vols., Amsterdam 1859-1874.

Nieuw Archief voor Wiskunde, uitgegeven door het Wiskundig Genootschap te Amsterdam; first series: 20 vols., 1875-1893; second series: 23 vols., 1894-1951; third series: 1953-

Revue semestrielle des publications mathématiques, sous les auspices de la Société mathématique d'Amsterdam, 39 vols., Amsterdam 1893-1934.

Mededelingen van het Wiskundig Genootschap, 1958-

APPENDIX IV. *Text of the letter sent by the "Wiskundig Genootschap" to the Minister of State in 1918* (cf. section 6).

1° *Aan Burgemeester en Wethouders van Amsterdam.*

2° *Aan zijne Excellentie den Minister van Staat, Minister van Binnenlandsche Zaken.*

Het Wiskundig Genootschap neemt de vrijheid onder de aandacht van Uwe Excellentie en tegelijkertijd van Burgemeester en Wethouders, van Amsterdam te brengen, dat naar zijn oordeel de bloei en de ontwikkeling der wiskundige wetenschappen in ons vaderland ten zeerste worden belemmerd door de in vergelijking met het buitenland geheel onvoldoende bezetting der Nederlandsche Universiteiten met wiskundige leerkrachten, welke tengevolge heeft:

1. dat de arbeidskracht als docent der hoogleeraren in de mathesis voor het grootste deel in beslag wordt genomen door het propaedeutisch onderricht in de voor mechanica, astronomie, en physica onontbeerlijke rekenmethoden, en een universitaire behandeling van de hoogere gebieden der wiskunde, dus ook een opleiding der studenten tot zelfstandig onderzoek op deze gebieden ten onzent vrijwel noch bestaat, noch bestaanbaar is;
2. dat het voor de hoogleeraren in de mathesis bezwaarlijk is, aan de ontwikkeling hunner wetenschap een duurzaam aandeel te nemen, aangezien het daartoe volstrekt noodzakelijk is, dat ieder van hen in zijn omgeving een groep van vakgenooten aantreft, die tezamen de voornaamste onderdeelen der wiskunde, althans in hoofdtrekken, beheerschen, opdat hij, wanneer hij bij zijn werk behoefte heeft aan het antwoord op een elementaire vraag uit een nevengebied, van een vakgenoot, hetzij dit antwoord zelf, hetzij een daartoe leidende literatuur-aanwijzing kan bekomen.

Waar dus de tegenwoordige toestand eenerzijds het peil van de wetenschappelijke onderzoekingen der tegenwoordige generatie van Nederlandsche wiskundigen in ernstige mate drukt, anderzijds de Universiteiten zoowel verhindert, belangrijke onderdeelen der wiskundige

wetenschappen voldoende te behartigen, als regelmatig behoorlijke reserves van wetenschappelijke onderzoekers te kweeken, neemt het Wiskundig Genootschap de vrijheid, bij Uwe Excellentie en tegelijkertijd bij Burgemeester en Wethouders van Amsterdam aan te dringen op een belangrijke uitbreiding der wiskundige leerkrachten aan de Nederlandsche Universiteiten. Het veroorlooft zich daarbij onder Uwe aandacht te brengen, dat gedurende het laatste veertigjarige tijdvak de natuur- en scheikunde reeds hunne universitaire leerkrachten ongeveer zagen verdubbelen en ook de plant- en dierkunde de hunne belangrijk zagen toenemen.

Komt deze dringend noodzakelijke uitbreiding tot stand, dan zou daarbij rekening dienen te worden gehouden met de volgende classificatie der wiskundige wetenschappen, die tegenwoordig de meest logische moet worden geacht, en waarvan elk onderdeel door een enkelen geleerde althans in hoofdtrekken kan worden beheerscht:

1. Propaedeutische wiskunde (elementaire analytische, synthetische en beschrijvende meetkunde, differentiaal- en integraalrekening, differentiaalmeetkunde en reëele differentiaalvergelijkingen), benevens de voornaamste in mechanica en astronomie gebruikelijke numerische rekenmethoden.
2. Epistemologische wiskunde (verzamelingsleer, analysis situs, axiomatiek, wiskundige grondslagen der natuur-philosophie).
3. Mathesis der eindige en aftelbare operatiesystemen (algebra, getallentheorie, getallenlichamen, arithmetische en geometrische eindige en discontinue groepen, kristalstructuur en vectoranalyse).
4. Mathesis der operatiesystemen van de continue machtigheid (reëele functies en reëele continue groepen, approximatie van reëele functies door reeksen van polynomia of orthogonaalfunkties integraal- en integrodifferentiaalvergelijkingen).
5. Theorie der geometrische transformaties en verwantschappen.
6. Theorie der analytische functies van een of meer veranderlijken, inclusief de leer der algebraïsche krommen en oppervlakken en der continue groepen in complexe veranderlijken, benevens de functietheoretische behandeling der differentiaalvergelijkingen.

Het zou wenschelijk zijn, dat althans ééne Universiteit een met het bovenstaande schema overeenstemmende bezetting der wiskundige afdeeling verkreeg, terwijl ook voor de overige Universiteiten een uitbreiding op beperkter schaal urgent moet worden geacht.

Voorzitter:
G. MANNOURY.

Voor het Wiskundig Genootschap
Secretaris:
H.B. BONE.

APPENDIX V. *Nederlands Wiskundig Congres: years, sites and attendance.*

	Year	*Place*	*Attendance*
1.	1965	Technical University, Twente	about 300
2.	1966	Heerlen/Valkenburg	215
3.	1967	Catholic University, Nijmegen	226
4.	1968	Technical University, Eindhoven	297
5.	1969	Agricultural University, Wageningen	318
6.	1970	Technical University, Delft	about 250
7.	1971	University of Amsterdam *)	
8.	1972	University of Groningen	201
9.	1973	University of Leiden	186
10.	1974	Technical University, Twente	377
11.	1975	University of Utrecht	342
12.	1976	Free University, Amsterdam	about 400
13.	1977	Erasmus University, Rotterdam	about 400
14.	1978	Free University, Amsterdam **)	

---

*) Organized by (the Mathematical Institute of) the University of Amsterdam together with the Mathematical Centre in Amsterdam

**) Jointly organized by the Mathematical Institutes of the Free University and the University of Amsterdam, and the Mathematical Centre.

Notes and References

[1] Christian WOLFF, *Anfangs-Gründe aller Mathematischen Wissenschaften* (HALLE 1710) was translated by J.C. Van SPROGEL (*Grond-beginzelen van alle mathematische wetenschappen,* 1738). The *Vollständiges Mathematisches Lexikon, darinnen alle Kunst-Wörter und Sachen, welche in der erwegenden und ausübenden Mathesi Vorzukommen pflegen, u.s.w.* (Leipzig 1734) was translated by J.L. STAMMETZ with coöperation of W. La BORDUS (*Volkoomen wiskundig woordenboek, daar in alle kunstwoorden en zaken, welke in de beschouwende, en oeffenende Wiskunst voor koomen, duidelijk verklaart worden, enz.,* Leiden 1740). L. EULER, *Vollständiger Anleitung zur Algebra* I, II (St. Petersbourg 1771) was translated by M.J.S. BEVEL (*Volledige inleiding tot de algebra,* 2 dln., Amsterdam 1773). A.C. CLAIRAUT, *Éléments d'algèbre* (Paris 1749) and *Éléments de géométrie* (Paris 1741) were translated by A.B. STRABBE (*Gronden der Algebra,* Amsterdam 1760, and *Beginzelen der geometrie,* Amsterdam 1760). A.B. STRABBE, *Gronden der meetkunst, behelzende een beknopt samenstel der eerste beginselen van deeze wetenschap; benevens derzelver toepassing in de oplossing van eenige meetkunstige voorstellen; de meeting der vlakken en lighaamen; en de Maxima en de Minima van Meetkundige Grootheden. Tendienste der geene, welke zich in de eenvouwdigdste Grondbeginselen deezer Weetenschap willen oefenen* (Amsterdam 1770) goes back to Thom. SIMPSON, *Elements of geometry, with their application to the mensuration of superficies and solids, etc.* (London 1760).

Of course the availability of good mathematical literature in the Dutch language does not imply that it also was widely used. In a letter to the Board of the "Wiskundig Genootschap" dated November 5, 1810, J. De GELDER complains: "Strekt het niet M.H. ten bewijze van den bedorven smaak, wanneer de vertaling van de voortreffelijke Algebra van EULER zederd 40 jaren op de zolders onzer Boekhandelaars beschimmelt en bij sommige leden van de kunst niet eens bekend is (...) en moeten wij ons voor vreemden niet

schamen, wanneer men onbeschaamd genoeg is om in (nieuwere) leerboeken openlijk te zeggen: dat niemand nog eene cubische vergelijking heeft opgelost?" ("Doesn't it prove the corruption of taste, when the translation of the excellent Algebra by EULER since 40 years lies mouldering in the atticks of our Booksellers, some members of the Art not even being acquainted with it (...) and should we not feel ashamed in the face of foreigners when some are so unabashed as to write in (recent) text books: that as yet nobody ever solved a cubic aequation?').

[2] Monthly issues of about 40 pages each were sold for 4 Stuivers; they contained mathematical problems and solutions, and also notices on vacancies, appointments, deaths, examinations, and similar news.

[3] See D. BIERENS De HAAN, *Materialien für die Geschichte der Mathematischen Gesellschafts-Mitglieder in den Niederlanden,* in: *Festschrift, herausgegeben von der Mathematischen Gesellschaft in Hamburg anlässlich ihres* 200 *jährigen Jubelfestes* 1890, Erster Teil, *Geschichte der Gesellschaft von* 1690 *bis* 1890, Leipzig, 1890, p.79-83.

In the old membership lists of the "Wiskundig Genootschap" te Hamburg Society is always referred to as the "Kunstrekeningslievend en oeffenend Genootschap tot aanmoediging en voortplanting der Mathematische Weetenschappen te Hamburg".

[4] P. ROMOND, in his (printed) lecture at the occasion of the sixth General Meeting of the "Wiskundig Genootschap" in 1785 (cf. illustration 3) mentions in addition as founders Johannes Te VELTRUP (member of the Hamburg Society since 1786, with guild name "der Venerierende") and Albert VRIJER ("der Vigitierende", one of the first Dutch members of the Hamburg Society (1770)). In the oldest printed membership list extant, (1782, printed in the second part of the first volume of "Kunstoeffeningen", cf. illustration 2) the six men named as founders by ROMOND are listed as the Board ("Bestierders") of the Society, together with Jean CORRECH. In

the list, which appears to adhere to the chronological order of membership, STRABBE, BOLTEN, RAKERS, HEYNIS and TE VELTRUP are mentioned first, in this order, while CORRECH and VRIJER take 20th and 42th place. So it seems that in any case concerning the Reverend Albert VRIJER, "Leeraar der Doopsgezinden te Wormerveer", ROMOND certainly is wrong in counting him among the founding members of "Een onvermoeide arbied komt alles te boven". Also, the article mentioned in note [31] states that *four* men founded the Society.

[5] "Ik geef de Begunstigers van dit *Oeffenschool* (volgens den raad van een der Contribuanten tot hetzelve, wiens yver voor de bevordering der Wiskunde my meermalen gebleeken is), in bedenking, of wy ons loffelijk oogmerk ter voortzetting van dit nuttige werk niet ontwyffelbaar zouden bereiken, wanneer wij ons by wijze van een Kunstgenootschap vereenigden, om hetzelve voor onze gezaamentlijke rekening te laaten drukken en uitgeeven. Ik hoope, dat dit mijn Voorstel niet geheel vruchteloos zal zijn, en zal uit het antwoord, dat myne geeërde Kunstvrienden (...) my gelieven te zenden, kunnen afneemen, in hoe verre ik voortaan op hunne gunstige ondersteuning, ter verbreiding en voortplanting van Mathematische Weetenschappen, zal kunnen staat maken".

[6] See section 3 for a discussion of the year of foundation of the "Wiskundig Genootschap".

[7] See appendix IV for a list of the journals published by the "Wiskundig Genootschap" during the two centuries of its existence.

[8] WETTEN van het Genootschap der Mathematische Weetenschappen te Amsterdam. Onder de Spreuk: *Een onvermoeide arbeid komt alles te boven*. In: *Kunst-oeffeningen over Verschede nuttige onderwerpen der Wiskunde. Eerste deel, Tweede stuk,* (Amsterdam 1782), pages III-XXVI. See in particular Law XIV.

[9] J. De GELDER, *Redevoering uitgesproken bij de opening van de* 35e *Algemeene Vergadering van het Wiskundig Genootschap ten spreuke voerende: Een onvermoeide arbeid komt alles te boven, op den* 12e

van Grasmaand 1814. Gedrukt voor rekening van het Genootschap en ten behoeve van deszelfs boekerij: Amsterdam, 1814.

[10] Not only was EULER a member of the "Zeeuwsch Genootschap", he also published his important paper on what nowadays are called "Euler squares" in its Proceedings:
L. EULER, *Recherches sur une nouvelle espèce de carré magique*, Verhandelingen Zeeuwsch Genootschap der Wetenschap 9 (1782), 85-239.

Since 1969 the correct name of the Society is *Koninklijk* Zeeuws Genootschap der Wetenschap.

[11] The request was for information to be used in the Royal Almanak of 1808; it was received on May 4th, 1808. In the reply (a concept of which is in the archive) the events leading to the founding of the Society are described, 1779 is given as the founding year, the publications of the Society are listed, and the members of the Board are named.

[12] M. Van HAAFTEN, *Het Wiskundig Genootschap, zijn oudste geschiedenis, zijn werkzaamheden en zijn beteekenis voor het verzekeringswezen* (P. Noordhoff, Groningen, 1923).

[13] In 1945 no General Meeting was held, due to the difficult circumstances caused by the war. The meeting of 1946 was registered as the 166th-167th.

[14] D. Van DANTZIG, *Gerrit Mannoury's significance for mathematics and its foundations*. Nieuw Archief voor Wiskunde (3), 5 (1957), 1-18.

[15] H. FREUDENTHAL, *In memoriam David van Dantzig*. Nieuw Archief voor Wiskunde (3), 8 (1960), 57-73.

[16] *Oeuvres complètes de Thomas Jan Stieltjes, publiées par les soins de la Société Mathématique d'Amsterdam*, 2 vols., 1914 and 1918; éd. W. KAPTEYN, J.C. KLUYVER & E.F. Van De SANDE BAKHUYZEN, (P. Noordhof, Groningen).

[17] Roger HURON, *Le destin hors série de Thomas Jan STIELTJES* (1856-1894). Mémoires de l'Académie des Sciences, Inscriptions et Belles-lettres de Toulouse 136 (1974), 93-125.

[18] J.G. Van Der CORPUT, *Wiskunde*. In: K.F. PROOST & J. ROMEIN (red.), *Geestelijk Nederland 1920-1940*, Deel II, *De Wetenschappen van Natuur, Mens en Maatschappij*, Amsterdam/Antwerpen 1949, pages 225-291.

[19] They were M.J. BELINFANTE, M.M. BIEDERMANN, E.L. ELTE, M.M. FULD, J. WOLFF and M. WORMS.

[20] Their names are L.W. NIELAND, W. OOSTERBAAN and G. Van Der TUUK.

[21] See appendix V for a list of "Nederlandse Mathematische Congressen" 1965-1978.

[22] *Collected works of L.E.J. BROUWER* Vol. 1: *Philosophy and Foundations of Mathematics*, ed. A. HEYTING, 1975; vol. 2: *Geometry, Analysis, Topology and Mechanics*, ed. H. FREUDENTHAL, 1976 (North-Holland Publ. Cy., Amsterdam).

[23] In [12], page 19.

[24] On the concept of the answer to the request of information for the Royal Almanak, mentioned in [11], a remark is entered of the following content: "denkt men ook niet iets te melden dat ook dit genootschap wiskundige werken onder deszelfs opzicht laat verwaardigen *ten gebruike der scholen*: premieën uitlooft enz." (shouldn't one also mention that this Society causes mathematical texts to be written *for use in the schools*; sets prizes etc.; my cursivation). This exemplifies clearly the involvement of the early Society in secondary mathematical instruction.

[25] The full title reads as follows: *Meetkundige Analysis, bevattende hoofdzakelijk de toepassing der algebra op de meetkunst, bijzonderlijk in het oplossen der werkstukken en het nasporen van de eigenschappen der figuren; voorafgegaan door eene inleiding handelende over de analysis der ouden benevens de behandeling en het gebruik der meetkundige plaatsen. Doorvlogten met belangrijke*

aanmerkingen en toepassingen. Uitgeg. voor rekening van het Wiskundig Genootschap onder de zinspreuk: "en onvermoeide arbeid komt alles te boven". (Amsterdam, 1811-1813)."

[26] One activity of the "Nederlandse Onderwijscommissie voor de Wiskunde" is the publication, since 1960, of a mathematical periodical for young people (secondary school students), *Pythagoras*; subscription to this journal fluctuate between 15000 and 20000, which may be taken as an indiciation for the remarkable succes of this venture.
This paper is not the right place to deal with the "Commissie Modernisering Leerplan" (Committee for modernisation of the Mathematics Curriculum) and the I.O.W.O. ("Instituut voor de Ontwikkeling van het Wiskunde-Onderwijs": Institute for the Development of Mathematical Instruction) which may be said to have originated from actions of the "Nederlandse Onderwijscommissie voor de Wiskunde".

[27] The text of the letter (which can be found in extenso in the report of the 139th General Meeting in 1918) is reproduced here in appendix IV.

[28] E.M.J. BERTIN, H.J.M. BOS and A.W. GROOTENDORST (ed.), *Two Decades of Mathematics in the Netherlands*, 1920-1940. A retrospection on the occasion of the bicentennial of the WISKUNDIG GENOOTSCHAP Amsterdam, 1978.

[29] C.J. MATTHES, *Feestrede ter gelegenheid van het honderdjarig bestaan van het Wiskundig Genootschap onder de zinspreuk: Een onvermoeide arbeid komt alles te boven, gehouden den* 3den *Mei* 1879 (Amsterdam, 1879).

[30] J. HUIZINGA, *De wetenschappen in het Algemeen en die der afdeling letterkunde*, in: *Vijf maal vijfentwintig jaar wetenschap in Nederland*, Redevoeringen gehouden in de vereenigde vergadering der Nederlandse Akademie van Wetenschappen op 7 april 1941, door de beide voorzitters, ter herdenking van hare oprichting op 6 april 1816. Amsterdam, 1941.

[31] *Algemene KONST- en LETTER-BODE voor meer- en min-geoeffenden*, 43, 24th April 1789, pages 131, 132. The passage containing a reference to 1778 as the year in which the "Wiskundig Genootschap" was founded reads in full:

"Op het einde des Jaars 1778 werd door vier Beminnaren der Wiskunde den eersten grond tot dit Genootschap gelegd: het zelve nam in korten tyd zodanig toe in Leden, dat de Bestierders zig weldra in staat bevonden, om, ingevolge de ontworpen Wetten, alle drie maanden een Stukje in 't licht te geven, bevattende enige nuttige Voorstellen met derzelver Oplossingen, welke of tot opscherping van het verstand kunnen dienen, of op de belangen der menschelyke zamenleving enen onmiddelyken invloed hebben".

[32] As already mentioned, MANNOURY was member of the Board of the "Wiskundig Genootschap" from 1905 to 1947. He presided the Society in 1917-1919 and in 1938. He prepared a systematic catalogue of all mathematical works in the University Library of the University of Amsterdam, including the Library of the "Wiskundig Genootschap" (G. MANNOURY, *Systematische catalogus* van de boekerij van het Wiskundig Genootschap "Een onvermoeide arbeid komt alles te boven" te Amsterdam, tevens bevattende de Wiskundige werken toebehoorende aan de Universiteitsbibliotheek der gemeente Amsterdam, Amsterdam 1907).
His book *Mathesis en Mystiek* first appeared in 1925 (published in Amsterdam by the "Maatschappij voor goede en goedkope lectuur"). The re-issue in 1978 under the auspices of the "Wiskundig Genootschap" will be published by Oosthoek (Utrecht).

[33] *Kunst-Oeffeningen 1*, second part (1782), 40-42. For the Dutch readers it may be in place to quote here one stanza, (the penultimate one), to give them the flavour of the poem:

Dit zy genoeg, op dat u braafheid blyken mag,
ô Rei van Pallas gunstgenooten!
Die's Wiskunsts luister, dag aan dag,
Door onvermoeide Vlyt en Arbeid, wilt vergrooten;
Wat is het lieve Vaderland
Niet veel verschuldigd aan de vrucht van uw verstand!