# JAN VETH'S PAINTINGS OF JACOBUS KAPTEYN

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**Abstract:** Jacobus C. Kapteyn was one of the most prominent astronomers worldwide in the beginning of the twentieth century and is nowadays regarded as one of the coryfees of the University of Groningen. His legacy is not only the prominence of Dutch astronomy during the twentieth century through his students like Jan Oort and Willem de Sitter and the Dutch school that followed. Part of his legacy is also the two paintings of him, produced in oil on canvas by prominent Dutch painter Jan Pieter Veth. One, showing him working at his desk, decorates the Kapteyn Room in the Kapteyn Astronomical Institute together with a painting of Mrs. Kapteyn by a different artist, and the other one, displaying Kapteyn in academic attire, is part of the University of Groningen's gallery of professors in the Senate Chamber of the central Academy Building. The first was offered to Kapteyn and his wife on his 40th anniversary as Professor in 1918 and the second to the University after his retirement in 1921.

There has been some confusion about the way in which these paintings have been produced, to the extent that it has been suggested that there must have been a third portrait that now is lost. Former Director of the Kapteyn Astronomical Institute Adriaan Blaauw has proposed that the one in the Senate Chamber actually is a first version meant to be offered to Mrs. Kapteyn in 1918, but at her request replaced by the one now in the Kapteyn Room. The first version was then later adapted to the requirements of the gallery of professors by Veth himself by overpainting it with academic gown, jabot and beret. A preliminary trial version in oil on wood by Veth, in the possession of Kapteyn's namesake and greatgrandson Jack Kapteyn, shows what this painting would have looked like before the adaption by Veth.

Recently an exhibition of Veth's work (including the two Kapteyn paintings) was held in the Dordrechts Museum, in Veth's city of birth, where it was stated as a fact that three paintings were produced of which one now is lost. The following reports on a critical evaluation of the available evidence, including the biography of Jan Veth that well-known historian Johan Huizinga, friend of Veth, wrote not long after the latter's demise, and letters Veth wrote to his wife while he was working on these paintings in Groningen.

I conclude that the evidence provides strong support of Blaauw's proposed sequence of events with a few modifications, and that no third, now lost, painting has been produced. For those readers less familiar with Kapteyn, or those that want to read more background on Jan Veth or wishes to read more extended parts of transcripts of Veth's letters, a much longer version in manuscript form of this paper is available as van der Kruit (2024).

**Keywords:** History: Galaxy research; University of Groningen; Jacobus C. Kapteyn; painted portraits; Jan P. Veth; Professors Gallery

#### **1 INTRODUCTION**

One of the giants of Dutch astronomy, and in his days one of the most important astronomers in the world, is Jacobus Cornelius Kapteyn (1851-1922; Figure 1). After his studies in mathematics, physics and astronomy in Utrecht and a brief spell at the Observatory of the University of Leiden, he was appointed Professor at the University of Groningen in 1878. He remained in this position until his retirement in 1921, about a year before his death. Of the three state-financed universities, Leiden and Utrecht had well-equipped observatories that had been founded in the nineteenth century by respectively Frederik Kaiser (1808-1872), Professor of Astronomy in Leiden, and by Christophorus Henricus Diedericus Buys Ballot (1817-1890), Professor of Physics, particularly teaching meteorology and astronomy in Utrecht. Efforts of Kapteyn to obtain his own observatory failed, not because of lack of support from his own university but mostly due to opposition from the directors of the two other observatories, who were loath to share available resources

with a third party. Therefore, he founded his Astronomical Laboratory, where photographic material from other observatories was measured and interpreted. From this he rose to become one of the most influential astronomers in the world, being appointed in 1908 Research Associate of the Carnegie Institution of Washington and having his Plan of Selected Areas adopted by almost all major observatories to contribute, in particular as the primary observing program for the largest telescope in the world, the new 60-inch Telescope on Mount Wilson in California, when it became operational in that same year. For an extensive, academic biography of Kaptey see van der Kruit (2015), and for a more general one van der Kruit (2021).

The University of Groningen rightly cherishes Kapteyn as one of its absolute champions. Not surprisingly he is depicted with only a few others in the large stained-glass windows that decorate the Aula, the Main Auditorium in the University's Central Academy Building (see Figure 14.10 in van der Kruit, 2015, or Figure 10.7 in van der Kruit, 2021, for a full view, or for a



Figure 1: Jacobus Cornelius Kapteyn was Professor of Astronomy, Probability Theory and Mechanics at the University of Groningen between 1878 and his retirement in 1921, and from 1908 onwards a Research Associate of the Carnegie Institution of Washington. From 1908 to 1914 he annually visited the Institution's Mount Wilson Observatory near Pasadena (close to Los Angeles) to oversee progress in the Observatory's contribution to his *Plan of Selected Areas*. This photograph shows him in the library of the 'Monastery', the residence of observing astronomers, at Mount Wilson (courtesy: Kapteyn Astronomical Institute).

zoom in on Kapteyn's head Figure 30 in van der Kruit, 2023). And more recently, on the centenary of his death, 2022, Kapteyn was the second to be honored with a large wall painting in the center of Groningen, giving precedence only to the first female university student in the Netherlands. On the occasion, the Kapteyn Astronomical Institute published a bi-lingual booklet on the history of Groningen astronomy to commemorate Kapteyn (van der Kruit, 2022b).

The University of Groningen and the Kapteyn Astronomical Institute own two paintings of Kapteyn, both produced by one of the most celebrated portrait painters of the time, Jan Pieter Veth (1862–1925). One has been presented by friends and colleagues at the celebration of his forty years' Professorship in 1918 and a second one on the occasion of his retirement in 1921. The first of these depicts him working behind his desk and resides in the Kapteyn Room in the Kapteyn Astronomical Institute, where most of his books, his desk and some other belongings that decorated his office are kept. The second painting shows him dressed in academic gown, jabot (or bavette) and beret and is part of the extensive collection of paintings of professors in academic attire that decorate the Senate and more recently Faculty Chambers in the Academy Building.

According to Adriaan Blaauw, third Director of the Kapteyn Astronomical Laboratory, Veth originally produced a different painting to be presented in 1918, but this was rejected by Mrs. Kapteyn, because it did not depict him as she knew him, i.e. working at his desk. Blaauw has suggested that the painting in the Senate Chamber is in fact the original 1918 one, overpainted by Veth himself with academic attire. The biography of Veth by Johan Huizinga and availability of online versions of Veth's letters to his wife, when he was away from home working on the paintings, shed new light on this. And these are the subject of this paper.

For those not familiar with the Dutch language I add that the 'h' in Veth is silent and the name Veth is pronounced like 'vet', the often used short for a veteran or a veterinarian.

## 2 JAN P. VETH

There are three authoritative publications on Veth. The first is the biography by famous historian Johan Huizinga (1927), who had known him well. The book by Fusien Bijl de Vroe (1987) is a very detailed description of Veth's life based mainly on citations from his letters and illustrated with many of his drawings and paintings. She is an art historian, but in addition a greatgranddaughter of Veth. Bijl de Vroe et al. (2023) is a catalogue accompanying a major exhibition of Veth's paintings in the Dordrechts Museum in 2023. Dordrecht, some 20 km Southeast of Rotterdam, is the city of his birth. The exhibition displayed the two paintings of Jacobus C. Kapteyn that are part of the collection of the University of Groningen and the Kapteyn Astronomical Institute. For a summary of what is known of painter Jan Veth, see also the corresponding section in van der Kruit (2024).

Jan Pieter Veth was born in 1864 in the city of Dordrecht, son of an ironmonger. On his maternal side, he descended from a well-known Dordrecht family of painters and a lineage of gold- and silversmiths and from his paternal side of copper- and blacksmiths. He studied at the Rijksacademie van Beeldende Kunsten (National Academy of Fine Arts) in Amsterdam. Figure 2 shows Veth in this period in a selfportrait. In 1888 he married Anna Dorothea Dirks (1863–1929). They had five children: first four daughters, of which the youngest died as a baby, and then a son. After this marriage the couple settled in the city of Bussum in the district het Gooi (often written as 't Gooi), 20 km SE of Amsterdam around the city of Hilversum. In those periods Veth, who himself also wrote poetry, became intimately acquainted with the movement of the Tachtigers (Eightiers), a group of writers and poets who developed a new approach to literature. Veth the poet is seen as part of this movement.

While originally a painter of landscapes, Veth quickly developed into a maker of portraits. In order to generate commissions he needed to become known by a wider audience.

Around 1890 he turned himself into a lithographer. He had taken up the plan to publish a series of lithograph portraits of well-known contemporaries. Lithography was a process well suited for mass reproduction and on top of that relatively cheap. He was able to convince the Editor and publisher of the weekly magazine *De Amsterdammer* to publish such a series of portraits. This magazine was founded in 1877 as a weekly for commerce, industry and art. One condition was that the lithograph was good enough to produce 5000 to 6000 copies. The magazine became popularly referred to as *De*  Groene Amsterdammer (The Green Amsterdammer, as on the first page green ink was used). In this magazine and later also in the social-cultural and literary weekly *De Kroniek* (*The Chronicle*), which has been published from 1895 to 1907, altogether more than fifty lithographic portraits made by Veth appeared of well-known Dutch people. With the publication of these lithographs, he became known to a wider audience as an able and leading portraitist. His name established, he started receiving commissions from home and abroad. His portraits of professors and other important people are widely regarded as among the best ever produced. Figure 3 shows Veth, as he look-



Figure 2: Self-portrait of Jan Veth, painted in 1887. Oil on panel, 35 × 26 cm, Dordrechts Museum, Dordrecht(commons.wikimedia.org/wiki/File:Jan\_Pi eter Veth.jpg).

ed at the time he was involved in painting Groningen professors, the subject of this paper.

But in addition to painting and writing poetry, Veth published articles and books, particularly on art history and art criticism. For example, he wrote about his contemporaries such as Jozef Israëls (1824–1911), a well-known landscape painter and leading member of De Haagse School (The Hague School). There also was a book about Rembrandt van Rijn (1606–1669) as part of the preparation for the Rembrandt commemoration in 1906. On that occasion the University of Amsterdam bestowed an honorary doctorate upon him, along with a few other Rembrandt connoisseurs. He was also active in or-

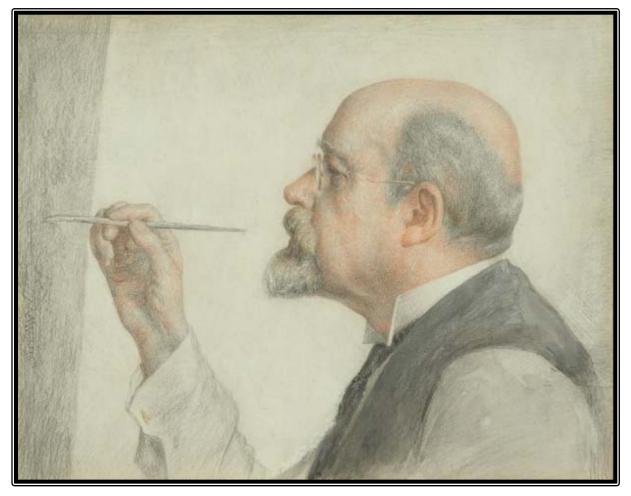


Figure 3: Jan Veth by Wilhelm Christian 'Georg' Rueter. Undated, from Veth's appearance it must have been produced around the same time when he producing the paintings discussed in this paper (courtesy: Simonis & Buunk, art dealers. Credit line: 'W.C. 'Georg' Rueter (1875–1966), Professor Jan Veth behind his easel, colored pencil on paper, 27.1 × 33.6 cm. Private collection; formerly collection Simonis & Buunk').

ganizations concerning conservation of monumental buildings and their interiors. In 1917 he was appointed Extraordinary Professor at the National Academy of Fine Arts in Amsterdam.

In 1925 problems with his gallbladder, that had been manifest for some time, caused Veth to resign from a number of functions, including his Professorship. Surgery was in order, but the operation did not produce the intended improvement and he died soon after this at age 61.

### 3 KAPTEYN'S FORTY-YEAR PROFESSORSHIP IN 1918

In 1918, Kapteyn celebrated his 40th Anniversary as Professor at the University of Groningen. For this occasion, his portrait was painted by Jan Veth. In the Kapteyn Room of what is now the Kapteyn Astronomical Institute an album is kept that must have been presented to Kapteyn and his wife on this occasion (see Figure 4). The album shows on small pieces of cardboard paper, pasted into the album behind a passe-partout frame, the signatures of all contributors, in alphabetic order. The first two pages, however, had been reserved for the signatures of a few persons who were very special to him (see Figure 5). Here I identify these, while very briefly summarizing some aspects of Kapteyn's career.

First there were colleague astronomers who meant most for Kapteyn's career and had grown to be special friends: Mrs. Isobel S. Gill, widow of Sir David Gill (1843-1914), Director of the Royal Observatory at Cape of Good Hope, George Ellery Hale (1868-1938), Director of the Mount Wilson Observatory near Pasadena, California, Edward Charles Pickering (1846-1919), Director of Harvard College Observatory, Cambridge, Massachusetts and very important contributor to the Plan of Selected Areas, Anders Severin Donner (1854-1938), Director of Helsingfors Observatory at Helsinki and long time collaborator and supplier of photographic material, Karl Friedrich Küstner (1856-1936) also providing photographic material as Director

Figure 4: The album accompanying the presentation of a portrait of Kapteyn to his wife painted by Jan Veth on the occasion of his Fortieth Anniversary as a Professor at the University of Groningen. It resides in the Kapteyn Room in the Kapteyn Astronomical Institute. The text on the first page on the right reads in English (my translation): "On the 20th of February 1918, when it was 40 years after Jacobus Cornelius Kapteyn took up the professorship in astronomy at the University at Groningen, his friends and students have presented his portrait, painted by Dr. Jan Veth, to Mrs. C.E. Kapteyn-Kalshoven." (courtesy: Kapteyn Astronomical Institute).

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Figure 5: The first pages with names of contributors of the album accompanying the presentation of a portrait of Kapteyn, painted by Jan Veth on the occasion of his fortieth anniversary as a Professor at the University of Groningen. The album contains signatures of those that contributed to the costs. The first two of these pages have the signatures of people who were special to Kapteyn. On the left Kapteyn's closest colleagues, friends and most important collaborators (Mrs.) Gill, Hale, Pickering, Donner, Küstner and Innes; on the right his friends Boissevain, Heymans, Molengraaff and Moll; and his students van Rhijn and de Sitter (courtesy: Kapteyn Astronomical Institute).

of the Bonner Sternwarte and Robert Thorburn Ayton Innes (1861–1933), a protégé of David Gill. They all were strong supporters of the *Plan* of *Selected Areas* and important contributors to its progress, Innes having taken over responsibility for the contribution of the Cape Observatory after Gill's retirement.

Then there were four of his longtime closest friends: Ursul Philip Boissevain (1855–1930), Professor in Ancient History at Groningen, Gerard Heymans (1857-1930), Professor of Philosophy and Psychology, also at Groningen, Gustaaf Adolf Frederik Molengraaff (1860–1942), Professor of Geology at the Delft Polytechnic School (before 1905 the Delft Institute of Technology and now since 1986 the Technical Uniersity of Delft), and Jan Willem Moll (1851-1933), Professor of Botany and Plant Physiology. Boissevain and Heymans were very special friends. On most Monday afternoons Kapteyn and these two friends walked from Groningen to the nearby village of Haren, a walk of some 6 km (and back of course). They talked about all kinds of subjects, watched birds and explained to each other how their work was going. Molengraaff was another special friend indeed; Kapteyn's second daughter, Henriette Hertzsprung-Kapteyn in 1928 wrote in her biography of her father (Hertzsprung-Kapteyn, 1928: 59; from my translation):

He asked Prof. Molengraaff, the geologist from Delft, who every year undertook an excursion with his students, if he could join in these trips, and this was gladly granted. So, a few times he went along to far away places as if he were the youngest and most enthusiastic of students.

Moll had been Professor in Groningen since 1890, while both were born in the same year. Kapteyn had spent quite an effort making the biologists familiar with statistics.

Finally, there were his two most prominent students up till then (Jan Hendrik Oort is the third in this category, but in 1918 he was only a first-year student of astronomy, physics and mathematics in Groningen). Pieter Johannes van Rhijn (1886-1960) succeeded Kapteyn as Director of the Astronomical Laboratory in Groningen upon the latter's retirement in 1921 (on that occasion named after Kapteyn), and dedicated his career to continuing the research program of his famous teacher, among which overseeing the completion of the Plan of Selected Areas. Willem de Sitter (1872-1934) had become Director of the Observatory at Leiden; he did fundamental work on the system of Galilean satellites of Jupiter, but is now best known to a wider audience for his work on cosmology and Einstein's theory of General Relativity, culminating in the model of the Universe that became known as the 'Einstein-de Sitter Universe'.

The painting that is believed to have been offered is shown in Figure 6. The person in the top-right is David Gill. The desk and a globe covered with blackboard coating so that one can draw with chalk on it, are indeed from Kapteyn's office and now reside in the Kapteyn Room (there are actually two such globes). Figure 7 shows the painting at its present location in the Kapteyn Room in the Kapteyn Astronomical Institute. The painting to the right is of his wife, Catherina Elisabeth (Elise) Kapteyn-Kalshoven (1855-1945). It is a gift to the Kapteyn Astronomical Institute by Kapteyn's and his wife's great-granddaughter Wilhelmina Henriette de Zwaan-Kaars Sypesteyn under the condition that it be displayed next to Veth's painting of Kapteyn at his desk. The book she holds in her hands is a copy of the biography J.C. Kapteyn; Zijn Leven en Werken by their daughter Henriette Hertzsprung-Kapteyn (1928). This portrait has been painted in the 1930s by Lizzy Ansingh (1875-1959), who belonged to a group of female post-impressionist painters called 'the Amsterdamse Joffers'. A 'joffer' is best translated as 'missus'; these women painters, usually from well-to-do backgrounds, did not rely on painting to support themselves, and promoted acceptance of female artists. Kapteyn's globes are shown on the right.

On 16 September 1918, during the ceremony of the opening of the Academic Year 1918–1919, the Rector Magnificus referred to Kapteyn's Jubilee in his summary of the *Lotgevallen* (Fates) experienced by the University in the previous year. His words are recorded in the *Yearbook of the University of Groningen* for the Academic year 1917–1918 as follows: (University of Groningen, 1918: 29; my translation):

Among the events, which further concern the members of the Senate and deserve mention here, a rare anniversary of special character stands out, the fortieth year of the professorship of our Kapteyn. How his scientific work brought world fame to his name and made the astronomical laboratory of this university world famous ... all of this and more was expressed on February 20, 1918 by a series of speeches on behalf of the Board of Trustees, Senate, Faculty, alumni, students, friends and corporations of female and male students at a tribute meeting in this auditorium, at which his portrait painted by Jan Veth was presented as a proof of veneration and affection among a wide circle of persons ... He and his descendants will excuse me if I express here the quiet hope which is cherished in our academic community, that in due course the University may become owner of this likeness of Kapteyn, so that for future generations of teachers and students who will work there, a visible memory of one of the greatest scholars who worked here will be preserved. The fact that the portrait is a living work of art, and therefore has its own design and dimensions,



Figure 6: Painting by Veth of Kapteyn working behind his desk. It resides in the Kapteyn Room in the Kapteyn Astronomical Institute of the University of Groningen. The painting has been produced in 1917. Oil on canvas, 74.5 × 84.5 cm (courtesy: Kapteyn Astronomical Institute).

as a result of which it differs somewhat from what we are accustomed to seeing in the Senate Chamber, will certainly not be an obstacle to its acceptance and placement.

# 4 THREE PAINTINGS?

Before continuing I need to say a few words on this collection of paintings in the Senate Chamber, that the Rector Magnificus referred to. The history of the portrait gallery of Groningen University has been described in much detail in a publication entirely devoted to it, In vol Ornaat (In full Regalia), by Oosterheert (2009). Collecting paintings by universities of (former) professsors associated with it was a tradition that originated in Germany. The first beginning in the Netherlands of a collection of paintings of a university's own professors dates back to 1618, when the University of Groningen, four years after its foundation, had opened its Academy Building, the center of the University, with a Senate Chamber. This room was used by the

Senate, the collection of its professors, at that time six in number, to meet and discuss things and decide on matters. The walls of this small room were decorated by paintings of the first four Rectores Magnifici, who had been in office each for one year. These were produced for this occasion and purpose.

Before 1850, when the second, much larger Academy Building was built, there was no organized tradition for extending the collection, and few paintings had been added to it in this period in spite of this early start. In 1851 the Senate decided to use the additional space in the new Senate Chamber to decorate it with a gallery of its professors and adopted a set of rules to which such portraits should conform, including size and the condition that the person portrayed should wear an academic gown and jabot (bavette), sometimes with a with bow tie, and if preferred a beret, and if applicable distinctions such as Royal decorations.

The collection was almost lost at the begin-



Figure 7: Veth's painting at its present location in the Kapteyn Room in the Kapteyn Astronomical Institute of the University of Groningen. Below is his desk, which is the same one as in the painting, with his most important publications on top. The box on the left contains the album of signatories contributing to the commission of the painting. The chair is almost certainly not the one Kapteyn used. The painting on the right is his wife, painted in the 1930s, when she had been a widow for more than a decade. This painting is by Lizzy Ansingh, and is a gift to the Kapteyn Astronomical Institute by the Kapteyns' great-granddaughter Wilhelmina Henriette de Zwaan-Kaars Sypesteyn for display in the Kapteyn Room and stipulated by her to be located next to the Kapteyn painting. On the right Kapteyn's globes with blackboard coating to use for drawings with chalk, to represent features or check constructions or orientations on the celestial sphere (courtesy: Kapteyn Astronomical Institute).

ning of the twentieth century, when a major fire destroyed the entire building. Fortunately, all paintings could be removed in time, including the four original ones. It did not take very long to rebuild, and a new Academy Building was inaugurated in 1909. It had a further expanded Senate Chamber where the gallery has since been displayed on the walls (see Figure 8).

Adriaan Blaauw (2000) told an interesting story in his chapter in the *Legacy Symposium* (van der Kruit & van Berkel, 2000: 4): I was told by the late Pieter J. van Rhijn, who was Kapteyn's close collaborator and successor and my predecessor, that Veth was inspired to paint Kapteyn the way we see him here, by a remark made by Mrs. Kapteyn. She felt little sympathy for [the original] version, also made by Veth and donated to Kapteyn by friends and colleagues of Kapteyn, which shows Kapteyn posing for the painter. 'This is not how I am used to seeing my husband',



Figure 8: View of part of the Senate Chamber in the Academy Building of the University of Groningen. Kapteyn's portrait is on the right, second row from the bottom, fifth from the right of the picture. In this setting newly appointed professors up to this day are being installed member of the Senate before delivering their inaugural lecture. Having become a member they are asked to be seated in the chair at the table with the Rector Magnificus, Dean of the respective Faculty and a few other high officials seated in the chairs in the front (commons.wikimedia.org/wiki/File:Senaatskamer\_in\_de\_oostvleugel\_van\_het\_academiegebouw\_op\_de\_eerste\_verdieping - Groningen - 20416188 - RCE.jpg).

she said, as van Rhijn conveyed to me. The way she did see him – at work at his desk – is depicted by the portrait in the Kaptevn Room. In the upper right corner of the painting, Veth sketched David Gill, the close collaborator and a friend of the Kapteyn family. The painting was acquired by the family and donated by Kapteyn's heirs to the University of Groningen around the year 1960, to be placed in the Kapteyn Laboratory. The donation was the result of an approach, initially by van Rhijn in September 1957, to Kapteyn's heirs, in particular to his daughter Mrs. Noordenbos-Kapteyn (widow of the Amsterdam professor of surgery W. Noordenbos [this is Kapteyn's elder daughter Jacoba Cornelia]), who at that time lived in England near her daughter Maria Newton-Noordenbos. After consulting Mrs. Noordenbos-Kapteyn and the children, it was decided that the painting would be donated to the Laboratory after her decease. A lucky circumstance, which may well have facilitated the transfer. was the fact that the late Maria NewtonNoordenbos, Kapteyn's grand-daughter, was a class-mate of this author [that is Adriaan Blaauw] in grammar school in Amsterdam in the years 1928–1932 ...

So there was an earlier version that Mrs. Kapteyn did not like. What happened to it? Also, there is a painting of Kapteyn in the Senate Chamber in the Academy building (see Figure 9), also painted by Jan Veth. Are there three paintings of Kapteyn? I continue with Blaauw's narrative.

But what became of the 1918 painting donated by friends and colleagues? The walls of the Senate of Groningen University are covered with a mosaic of paintings of retired professors. Among them, somewhere near the center of the west wall, we see the one of Kapteyn. According to the rules set by the University for such portraits, it shows Kapteyn dressed in his University gown and cap. It is signed by Jan Veth and carries the year 1921, i.e., that of Kapteyn's retirement. This raises the question: did Veth paint Kapteyn again in 1921, three years after he



Figure 9 (left): The painting of Kapteyn that decorates the Senate Chamber of the University of Groningen. It is signed by Veth in the top-right corner and dated 1921. Oil on canvas, 70 × 55 cm (courtesy: University of Groningen).

Figure 10 (right): Reproduction of a painting of Kapteyn, produced by Jan Veth as a preliminary design of his first painting of 1917. It is in the possession of Kapteyn's great-grandson Jacobus Cornelius ('Jack') Kapteyn, apparently originally donated by Veth to George Reuter, but returned to the Veth family after Rueter's decease and subsequently passed on to the Kapteyn family. Oil on wood, 48 × 40 cm (courtesy: Jack Kapteyn).

produced the two paintings mentioned before? The question has puzzled historians - for if indeed Veth did so, where then is the 1918 painting? It is nowhere referred to among Veth's descendants who are known to guard so preciously the whereabouts of what reminds them of their famous ancestor, and also van Rhijn never referred to it. The most natural solution seems to be that, when the time came for delivering a 'retirement portrait', the 1918 painting was adapted by Veth himself to the University's special conditions: he adjusted Kaptevn in the way prescribed. A close inspection of the painting performed in February of the year 1992, in the presence of the curator of the University Museum, Mr. F.R.H. Smit, supported this supposition: traces of Kapteyn's head of hair seem to betray Veth's disguising efforts.

It is important to stress that if Blaauw's hypothesis is incorrect there has to have been a third painting of which there is no trace left. The usual remark made for this case is that this painting, produced in 1917 before Veth started painting Kapteyn behind is desk, is lost. This is a very unsatisfactory explanation, because Veth paintings do not easily get lost without any reasonable explanation or realistic sequence of events.

The presentation of my scientific biography Jacobus Cornelius Kapteyn: Born Investigator of the Heavens (van der Kruit, 2015) in January 2015, was attended by Jack Kapteyn (Jacobus Cornelius!), grandson of Kapteyn's son Gerrit Jacobus. He had a painting with him to be displayed during the proceedings, that also was painted by Jan Veth (see Figure 10). It is painted on a wooden panel, but not signed or dated. A note glued to the back (Figure 11) reads:

Portrait Prof. J.C. Kapteyn [illegible] bestowed to Georg Rueter. In 1967 when clearing out his studie returned to the Veth family.

Rueter is the person who made the drawing of Veth in Figure 3. Maybe Veth gave it to Rueter in appreciation of this. It ended up in an unknown manner with a Jaap Kapteyn, a cousin of Jack, who passed it on to the latter. The Veth descendants must have felt it appropriate to donate it to the Kapteyn family.

This is clearly a preliminary study. The facial expression and posture, as well as the angle from which he is seen, are strikingly the same as in the painting with the academic gown; Kapteyn is wearing the same clothes as behind his desk in the other painting. The conclusion would be that this is a preliminary study for the original painting Veth produced. Then this shows what this painting looked like. The painting Veth produced subsequently of Kapteyn behind his desk shows him in the same clothes, because Kapteyn would have had to pose again for Veth and quite naturally would have chosen the same neat clothes, possibly especially acquired for the occasion.

I note that there is no doubt that indeed it was Veth who produced this preliminary version. However, the question arises, why Veth produced this. Was it common practice for him? If he did this on a regular basis, what did he do with them? And if not, why did he do this in Kapteyn's case? I will encounter a possible second case of this practice below (see end of Section 6).

It is of interest to also have a look at what Veth's biographer Huizinga (1927) had to say about this. Johan Huizinga (1872-1945) was a famous historian, particularly known for his monumental work Herfsttij der Middeleeuwen (Autumn of the Middle Ages), published in 1919. He was the son of Groningen Professor Dirk Huizinga (1840–1903), a Professor of Physiology. The elder Huizinga had been a very good friend of Kapteyn. He had allocated a few rooms in his Physiological Laboratory when Kapteyn set out to measure the plates from Cape Town for the Cape Photographic Durchmusterung. Actually, when under Huizinga's successor Hartog Jacob Hamburger (1859–1924) the laboratory moved to a new, larger location in 1911, this building behind the Academy Building had been assigned to Kapteyn to house his Astronomical Laboratory. Johan Huizinga had studied history in Groningen, obtaining his PhD in 1897. In 1905 he had been appointed Professor of General and Dutch History in Groningen, until he moved to Leiden in 1915, where he became a Professor of History.

Huizinga the historian was well acquainted with Kapteyn; in fact he and his friend Willem de Sitter (1872–1932), the first student to obtain a PhD under Kapteyn and Professor of Astronomy in Leiden, in 1925 would take up the plan to write a biography of Kapteyn (see Preface in van der Kruit. 2015). Nothing came of this, and we do not know why. Now in his biography of Veth, Huizinga (1927: 83) wrote:

Veth liked to paint a model, that interested him, more than once ... He did it with Kapteyn and Kuenen. J.C. Kapteyn, the astronomer at Groningen, was a man after Veth's heart. In 1917 he finished his portrait. 'Professor Kapteyn is one of the most brilliant Dutchmen I have met. A man of world renown with the simplicity of a simple ship's captain, and thereby of incredible vivacity and clarity of mind.' When the first proof was ready, a colleague's wife came to see it, and said in all innocence, that the portrait really looked more like Prof. Kapteyn than ... Kapteyn himself, who was sitting next to it.

[Huizinga then quotes Veth as follows:] 'I don't believe this is a bad painting, but tomorrow I will start another one of the same remarkable man. He usually spends five or six hours a day working on mathematical tables, and that's how I see him sitting in front of his window when I approach to enter the laboratory. Well, that's how I wanted to paint him also a

Figure 11: The note pasted to the back of the wooden board on which the preliminary study in Figure 10 of a Kapteyn painting had been painted by Jan Veth. See the text for a transcription and translation of the note (provided and courtesy, J.C (Jack) Kapteyn, owner of the painting).

second time, because I think I could make something very convincing that way. For he is really sitting at that table in concentrated self oblivion.' (my English translation).

Unfortunately, that is all that Huizinga wrote about Kapteyn. Interestingly—and importantly for this discussion—in his *Preliminary Catalog of the Painted and Graphic Works of Jan Veth* at the end of the biography, Huizinga lists two paintings of Kapteyn, both in the year 1918 as the following entries (Huizinga, 1927: 236–237; my English translation): 848 Prof. Dr. J.C. Kapteyn, bust, oil,Senate Chamber Groningen849 Prof. Dr. J.C. Kapteyn, half-length,oil, Mrs. Kapteyn-Kalshoven, Hilversum

The final entry in each line is the location at the time of Huizinga's writing of the book and preparing the list.

The 'half-length' is my translation of 'kniestuk' (literary knee piece), which refers to a portrait, in which the person is depicted intermediate between bust and full-length. According to Huizinga the painting in the Senate Chamber has been painted in 1918(!) and even precedes the one with Kapteyn at his desk. This would fit perfectly with Blaauw's hypothesis. There is no entry for 1921, when Veth would have produced a separate one for the Senate Chamber. This is also what would be expected if the Blaauw hypothesis were correct. Huizinga does not tell in detail on what he based all of this, but even then it is strong support for the notion that the painting in the Senate Chamber actually is the one produced first in 1918.

That Huizinga could speak of all this with some authority is evident from the following citation (Huizinga, 1927: 81; my translation):

It was also the interesting man, provided he had a striking face, whom he wanted to portray. He looked for him everywhere, and with a certain preference for one having an active or scientific life. He wanted workers and doers. It is not a preference for the professors, nor for the letter K, which, to be more specific for a few cases in which Veth pursued important compatriots with pen and brush, that determined the choice of the foursome Kuyper, Kern, Kuenen and Kapteyn. It is, even though it may definitely be called an illustrious group, mainly because this author has known three of them well and has been able to observe the creation of the portraits to some extent, in addition because all four pieces represent Veth's art from different sides at its best.

Huizinga's father had been a very close friend of Kapteyn and Huizinga himself had been a Professor in Groningen for a decade, so undoubtedly Kapteyn will be one of those three. There is no doubt that Huizinga was very well informed on most if not all aspects of the creation of the Kapteyn paintings.

In the *Lotgevallen* of the University in the academic year 1920–1921, the Rector Magnificus reported (University of Groningen, 1921: 37–38; my translation):

Two portraits were offered and gratefully accepted by the Senate this year ... the

other of colleague Kapteyn, painted by Jan Veth, offered by his students and to which a place will be assigned by the Trustees in the Senate Chamber. To the givers we offer our warmest thanks.

This suggests Veth producing a painting in 1921 with academic attire, especially for the Senate Chamber. It apparently was commissioned by his students, who at least for the larger part already would have donated to the 1918 painting.

#### 5 VETH'S LETTERS OF MAY–JULY 1917

These remarks by Huizinga provide strong support for Blaauw's hypothesis. One final source appeared only recently in connection with a large exposition by the Dordrechts Museum, referred to above, of Veth's works in 2023, where many paintings, drawings etc. were displayed. The painting of Kapteyn at his desk from the Kapteyn Room was displayed there. The Kaptevn Astronomical Institute was invited to send a representative to attend the opening of this exhibition, for which my wife and I were chosen. The two paintings of Kapteyn in Figure 6 and 9 were displayed prominently next to one another and some accompanying text quoted from letters of Veth. These descriptions for visitors to the exhibition in addition to these quotes stated as a fact that a third painting by Veth was produced and is now lost.

As it turned out these were letters that Veth wrote to his wife when working away from home. Through some correspondence afterwards with the staff of the Museum, particularly the Curator 19th Century, Mrs. Quirine van der Meer Mohr, I learned that these letters, residing in the 'Regionaal Archief Dordrecht', had recently been made available in electronic form on their Website (Regionaal Archief Dordrecht, 2023).

In all, there are thirteen letters in which, according to the search function, the name Kapteyn appears. Two concern a different Kapteyn. One letter is from his wife Anna Dirks from 1917, the rest are from Veth to his wife, seven from 1917 and three from 1921. All ten letters have remarks concerning the paintings of Kapteyn. The first one is from 1917:

Groningen, Thursday evening 24 May '17 This is a very different atmosphere here than in Rotterdam. Special people and people with ideas. Mr. Moll is wise, reflective and interested in everything. Mrs. Moll is a Mrs. Bastert of many times more intelligence and very well-read. Prof. Kapteyn is one of the most brilliant Dutchmen I have met, a man of a world name with the simplicity of a simple ship's captain, and thereby of an incredible vivacity and clarity of mind ...

The portraits themselves have only just begun, — that of Kapteyn further advanced than that of Moll — and I shall probably have to come here several times more which, at least intellectually, will not be boring at all.

But I shall be home late on Saturday evening.

Bye dear Mom (Veth, 1917a; my English translation).

Moll and his wife must have invited Veth to stay with them and work on both paintings. Kapteyn and Moll were very good friends. Moll was on the first page of the album in the Kapteyn Room, described above, and was most likely involved in organizing the celebration of Kapteyn's Jubilee. Moll and Kapteyn were the same age (born in 1851), so both were due to retire in 1921. Moll had been appointed Professor in 1890 (Kapteyn in 1878), but resigned in 1917 as Ordinary Professor because of poor health (particularly deteriorating eyesight), but was appointed Extraordinary Professor until his retirement. He too was presented with a painted portrait offered by 'a limited group of former students and friends' (see citation below), to which Kapteyn must have belonged.

There appears a difference between the two men. Moll disliked the idea of any formal or public celebration of the milestone of 25 years Professorship, but Kapteyn seemed to have approved this on the occasion of his 40 years in that position. Yet, Kapteyn was a very modest man as well, but may have felt that he could not oppose this in the case of the very special milestone of four decades. Moll and Kapteyn were actually more than simply good friends, and I will briefly explain this special relationship. As I mentioned already, Kapteyn had helped biologists, particularly Moll and his assistant Jantine Tammes, with problems of statistics, particularly skew or log-normal frequency distributions. For more details see van der Kruit (2015; 2021). For those not familiar with statistics I note that, although in nature many properties (e.g. the size of humans or of berries) are distributed like the so-called normal distribution, more or less symmetrical and Gaussian around a mean, many distributions in nature and particularly in biology are far from symmetrical (e.g, the volumes, proportional to cubes of diameters, of berries, which is more relevant than diameters). Kapteyn had given lectures for the biologists and biology students on properties of skew distributions and had actually published on this and because of this had entered into a harsh

controversy with British statistician Karl Pearson (1857–1936). In this context he had also built a quincunx, a demonstration device for lognormal distribution functions. This beautiful apparatus, an notable piece of Kapteyn heritage, was for many years kept in the Biology Department, but at some time was lost (one for the regular normal distribution has survived). However, it has recently been rebuild using Kapteyn's specifications (Lucas and van der Salm, 2017).

We learn from this letter from Veth to his wife that Veth started the painting very well in advance of Kapteyn's Professorial Anniversary in February of the following year, 1918. The first work on it had already taken place in May 1917. And it was synchronous with a painting of his special friend Jan Willem Moll. Two and a half weeks later, Veth was back in Groningen. He wrote to his wife:

Groningen, Monday evening, June

Again I am working very hard, and curiously — while the last time the portrait of Prof. Kapteyn seemed to come along much better, this time that of Prof. Moll proceeds more vigorously. The long light gives me long days, because actually I paint pretty much until eight in the evening. Of course not all the time while my model is sitting in front of me, but partly still working on it from memory ...

Bye dear mom (Veth, 1917b; my English translation).

Veth was back again a month later:

Groningen July 10, 1917 Nay, it was not easy this time in Groningen. No really major difficulties, but really no easy ride either. In the first place perhaps because, especially in the mornings, I felt all the time a bit dizzy. It's better in the afternoons and evenings and also once I'm at work, it doesn't bother me really. But then I had a misfortune with the portrait of Prof., who told me that he would leave for Eerbeek on July 13, and I had arranged my visit here so that I could have his portrait finished, or nearly finished, before then. But he told me on Saturday, that he needed the last four or five days before his vacation to prepare for it. So I can do no more work after Sunday. This was a setback for me. And with Prof. Kapteyn things didn't go quite as I hoped. It is so terribly difficult, this painting of portraits! I find it more difficult almost every day. Sometimes I think I will not be able to do this work, moving around from here to there all the time, for

very much longer. But then again I find it so beautiful and worthy that I resolve to defy all difficulties and quietly continue on. Only it frightens me sometimes so much to be away from home, and let life pass so quickly without catching my breath.

This afternoon I just about finished Prof. K's portrait. And a professor's wife whom he knows, came to see it, who had not seen it yet. And she was so delighted that, without any 'Schöngeisterei' and in all innocence, said, that my portrait really resembled Prof. Kapteyn much more than ... the man who sat next to it did, who was none other than my model himself. I wished with all my heart, that I would be convinced myself, – although I don't believe, that it is a bad painting.

But tomorrow I shall begin another painting of this remarkable man. He usually sits about five or six hours a day at his desk, working on mathematical tables, and that is how I see him sitting behind his window when I am coming from outside going into the laboratory. Well, that is how I want to paint him again, because I believe I could make something very convincing. For he is sitting at that table in concentrated self-forgottenness. I am now starting a sketch of it, more or less like that painted sketch of the old Bosman, which is somewhere in my box. In September, when I come to finish Moll, I will continue it further ...

Bye dear Mom (Veth, 1917c; my English translation).

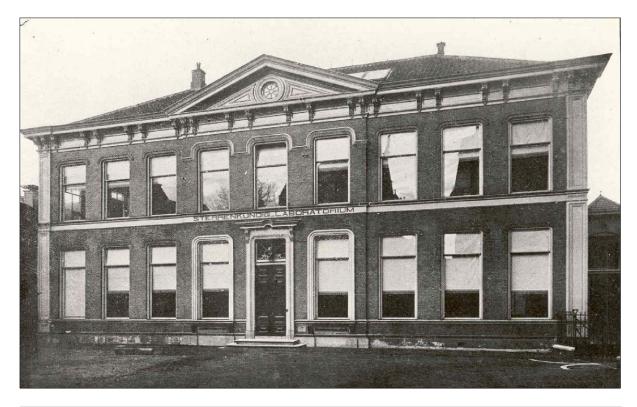
The sketch Veth announced he would make apparently did not survive. I will comment on the Bosman sketch below. The story Blaauw told suggested that the first portrait was not offered until February of the following year. And that subsequently Mrs. Kapteyn was not satisfied with it ('this is not how I know my husband, I know him working at his desk') and Veth therefore started another painting. So, this timeline of Blaauw's story is incorrect. Already in the summer of 1917, Veth decided to make a second painting with Kapteyn at his desk. We should not dismiss Blaauw that easily, since in a sense he had heard it firsthand, because van Rhijn, who told him the story, was an important member of the committee organizing the celebrations and will have been involved in this development. On the other hand, when writing the Oort biography I have also experienced cases, where Adriaan's memory proved to be not so accurate in the details. The fact that Mrs. Kapteyn did not like the first painting and preferred to see him painted behind his desk, we need not question.

The question now is what prompted Veth to start a new painting of Kapteyn to begin immediately after the first was finished. Only the fascination with the man? And then what would he do with it when finished? Of course, there probably was no money with the patrons to commission another painting by Veth. The story of the professor's wife suggests that several others visiting Moll saw the portrait in development. So perhaps Mrs. Kapteyn saw it too (Kapteyn and Moll lived only a short distance from each other) and had already made her objections known at the time. That may then have played a role in Veth's decision to start the new painting, and because doing this appealed to him so much, he would have decided to do it without a fee.

It may also be possible that Veth started the second painting completely on his own initiative for his own satisfaction and pleasure, and then with the intention of keeping that second work himself. So that when it turned out that Mrs. Kapteyn did not like the first, he gave the second painting to her and instead kept the first one for himself. A fact is that in February 1918 the second, and definitely not the first painting was offered.

And then there is Kapteyn himself. Veth could well decide to make another painting, but Kapteyn had to be prepared to pose for many hours again, even while he was probably experiencing this as extremely unpleasant. So there also had to be a very good reason for Kapteyn to agree to it. To please Veth when he announced he was willing to do another painting would be a valid reason, although unlikely to convince Kapteyn (he was experiencing increasing urgency to finish at least a first version of a model of the Sidereal System while his retirement was quickly approaching) to spend his precious time on. It would very likely be acceptable to make the sacrifice, however, if it was because his wife then got a painting she really liked. Whatever the case, there must be more to it than just a wish by Veth to make a second painting of Kapteyn sitting behind his desk.

The description that Veth saw Kapteyn at his desk from outside the Laboratory gives rise to the following remarks. The top photograph in Figure 12 shows the front of the Astronomical Laboratory as seen from the outside by a visitor approaching it. So where was Kapteyn's office? In an article for the commemorative book for the 300th Anniversary of the University, Kapteyn (1914) presented a layout of the building and a plan of the rooms on each floor (see Figure 12, bottom panel). He wrote (my English translation):



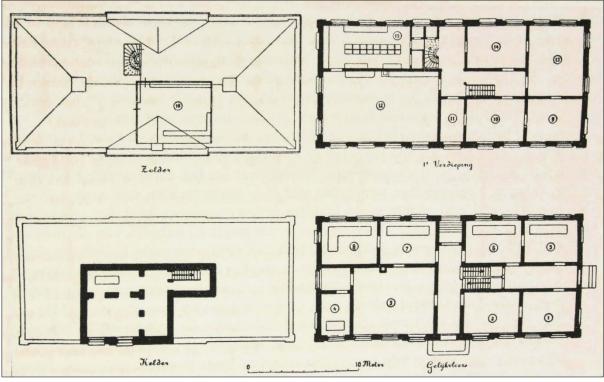


Figure 12 (top panel): The Astronomical Laboratory seen from the front as one approached it in the days when Kapteyn was still working there (after his retirement it was renamed Kapteyn Astronomical Laboratory and this was written out in full above the entrance). Bottom panel: layout of the rooms in the building, clockwise from top-left attic, first floor, ground floor, cellar. Some rooms are identified by their numbers in the text (top panel courtesy: Kapteyn Astronomical Institute; bottom panel after Kapteyn, 1914).

The upper floor has the office of the professor (10), of the assistant (9), the library (15) and three rooms for the calculators (12), (13), (14). Room 10 in Figure 12 is located behind two windows on the upper floor, the third and fourth from the right. The laboratory was located behind the Academy Building, seen from its front a bit to the left (e.g. van der Kruit, 1922a: Figure 22), and walking up to the front you could perhaps see Kapteyn sitting behind his desk on the first floor from afar, if it was not too bright outside and Kapteyn's study happened to be lit up brightly. It was certainly not so obvious for a casual visitor to the premises, as Veth's remark would suggest.

Anna Veth-Dirks (1917) wrote a response to the last letter above on the next day in a long letter with personal information. She had a paragraph with a reaction to her husband's letter as follows:

This afternoon I was very happy to receive your letter, which I have been looking forward to for a long time ... It is a pity that you will not be able to finish the Moll portrait this week, but that of Kapteyn seems to be going very well and that second one like the Bosman portrait that you have here, seems beautiful to me too; and full of expression.

This very likely was Cornelis Bosman (1830-1911) from Alkmaar, some 40 km to the North of Amsterdam, industrialist and director of a steamboat company. According to the Huizinga inventory Veth had made a drawing (not further specified) of him in 1904 and an oil painting in 1905, and at the same time also an oil painting of his wife Geertje de Groot (1834-1916). These were at the time of the writing of this biography in the hands of members of the Bosman family in Alkmaar. So, why did Veth in 1917 have a Bosman portrait in his home, when he had painted his portrait in 1905? My guess would be that maybe in this case he did also produce a preliminary version that he kept for himself. This either got lost more recently, or may in fact be the drawing he made in 1904 that he at first had kept for himself and which then ended up after Veth's demise (and before Huizinga put together his listing) in the hands of a Bosman family member.

## 6 CORRESPONDENCE IN THE FALL OF 1917

The next letter is from after the summer and in November of the same year:

Groningen 17 Nov, 1917

... in the meantime I am hoping for a tailwind. These two days, even though it turned out to be pitch dark at three o'clock, I have carried the painting much further. And I have now agreed that I will work on Prof. Moll on Sunday, Monday and Tuesday. Then it must be finished and then I will work on the writing portrait of Prof. Kapteyn, on which I hope to continue directly. At his laboratory at least there is a lot of heating ...

Write soon. Lots of love (Veth, 1917d; my English translation).

So, it is clear that in November Veth started working on Kapteyn's painting, in which he is sitting behind the desk, and that it was painted at the Astronomical Laboratory.

A few days later,

Groningen Nov 23, 1917 Friday evening The portrait of Mr. Kapteyn (notwithstaning the very short days) now comes along well. It is a very nice painting, but the sitter's posture is extremely inconsistent and so it happens that I spend half an hour sometimes staring at my model without seeing him in the proper posture. But because of this circumstance one never comes to getting stuck in the details and keeps working on the whole thing all the time. In the course of an hour this afternoon I've take the painting a good deal further by changing the interplay between the coat and the head. The first has become less blue and the shades in the face finer. Tomorrow Mr. K. is away and then I will work on the background, which also requires I a lot of work. Then he will be back on Sunday and Monday, and I wonder if I will not then gradually see the end of this fascinating portrait. I only would want it to be more striking ...

Bye dear (Veth, 1917e, my English translation).

Kapteyn indeed seems to have great difficulty sitting still. The work on this painting was done fairly concentrated in time at the location of the Astronomical Laboratory. The next letter a few days later has little on Kapteyn's painting, but reports extensively on a narrow escape by Veth from serious injury or even death by an accident in the street, when strong winds caused the top of a chimney to fall down on Veth's head, which he miraculously survived. There is a short piece on the painting of Kapteyn

Groningen Nov 27, 1917 ... the painting becomes more and more fascinating the longer I work on it. I haven't produced anything so much mature in a long time. And now I want to make it really good. That is why, while my intention was to stay here no longer than fourteen days, I will work on it during the rest of this week ..

Bye dear Mom [Veth, 1917f; my English translation).

So Veth considered the Kapteyn painting very special. And indeed it was. He felt an urge to finish it as soon as he could and he was extending his stay in Groningen for that. We may conclude that it had been finished by November 1917 and then was presented to Mrs. Kapteyn three months later. What happened to the first portrait has not been mentioned anywhere in these letters. Most likely Veth kept it for himself.

### 7 VETH'S LETTERS IN 1921

In 1921 Veth returned to Groningen. Although he did work on a painting of Kapteyn for the Senate Chamber, his reason for coming to Groningen was more than just that. He had been commissioned to produce a painting of another Groningen Professor, Barend Sijmons (1853– 1935), Professor of German Language and Literature. Sijmons and Kapteyn were very good friends. Indeed, Sijmons features among the signatories of the Album accompanying the presentation of Kapteyn's painting in 1918. The Sijmons painting indeed is now displayed in the Senate Chamber. There were at least two visits by Veth to Groningen. From the first one there are two letters to his wife:

Groningen Thursday, Feb. 10, 1921 [Reports on some very serious pains he experienced, which were diagnozed as resulting from gall stones]

This morning I painted and this afternoon, with Isaac, I went to see the Israel Room in the museum. And I feel a little weak, but otherwise quite normal. A pleasant advantage is, that now, on medical authority, I can call off things, that would make life too busy, which is welcome to me ... Soon I will write more. (Veth, 1921a; my English translation).

Isaac must be Isaac Lazarus Israëls (1865– 1934), a Dutch painter belonging to the impressionists. In the Veth archives in Dordrecht there are various letters between the two. The Museum for Ancient Art, the Predecessor of the current Groninger Museum used to have an Israëls Room, in remembrance of Isaac's father Jozef. Isaac Israëls, and Veth had been planning to visit this room for some time according to their correspondence.

Veth wrote again two days later.

Groningen Feb. 12, 1921 ... but I am taking it easy, eating little and slowly, and devoting myself to the painting, that I am here for.

Your Jan (Veth, 1921b; my English translation).

Note that he stated he is in Groningen for the

painting, i.e. a single painting. Moreover, 'painting' cannot refer to the act of painting because in Dutch a different word would have been used. One would think this concerns Sijmons, since had it referred to Kapteyn he would probably have identified him.

Later in February of 1921 Veth again visited Groningen, and there is one letter to his wife from this period:

> Bussum 25 Febr. 1921 (read: Groningen)

... I am working hard and doing very well. The portrait of Prof. Sijmons will probably not be finished, because after Sunday he probably won't be able to sit. But then I may still work on Monday and Tuesday on Prof. Kapteyn and therefore, since I am here anyway, I will stay until at least Tuesday evening. I will report later when I will get home.

With much love to Polle.

Your Jan (Veth, 1921c; my English translation).

This is the only mention of Kapteyn in this period. Maybe the job was not a very timeconsuming one. It does show that about six months before Kapteyn retired (at the end of the academic year 1920–1921) Veth was back in Groningen working on a painting of Kapteyn, undoubtedly for the Senate Chamber, that was later offered to the University. Even if it were an overpainting of the first portrait with gown, jabot and beret, the careful Veth must have insisted that Kapteyn pose for it. There is nothing in this that contradicts Blaauw's hypothesis.

### 8 WHAT CAN WE MAKE OF ALL THIS?

On the basis of these letters we know for certain that Jan Veth worked in 1917 on a first painting of Kapteyn in Groningen during a number of visits between May and July. He also produced a painting of Jan Willem Moll during these visits. It is very likely that this first painting of Kapteyn that Veth produced in this period looked very similar to the preliminary version that was painted on wood.

Immediately after this first painting had been finished, Veth started on a second painting with Kapteyn sitting at his desk. It seems unlikely that it was solely his decision, but it might have been in response to the opinion of Mrs. Kapteyn who disliked the first result of a stationary pose, preferring instead one in which he was shown at work. Veth appeared delighted by the prospect of producing a second painting of Kapteyn as he saw him as he approached his astronomical laboratory.

Who financed the new exercise is not clear;

maybe Veth did not charge anyone for it. Kapteyn is wearing the same clothing at his desk as in the preliminary version and very likely also on the first painting, so Kapteyn simply continued posing in the same apparel. In November 1917 Veth returned to Groningen, during which time it was finished. It then was presented to Mrs. Kapteyn in February 1918 at the celebration and the Jubilee of the Forty Years Professorship. Veth would have kept the first portrait and the preliminary version.

In 1921 Veth was in Groningen to produce a painting of Barend Sijmons and he did mention work on a painting of Kapteyn. This must have resulted in the Kapteyn painting in the Senate Chamber. The similarity in facial ex-pression in the preliminary study and that in this portrait is striking; this supports the hypothesis of an overpainting of the first portrait with gown, jabot and beret. In addition, the fact that the first painting no longer seems to exist is also easily explained this way. It would be likely anyway that when the second painting at the desk was the one going to be offered at Kaptevn's Professorship anniversary, Veth would have decided to keep the first one himself. And finally, there is in addition to the facial expression the similarity in pose, expression and angle of view between the preliminary version and the one in the Senate Chamber, even in details like the position of eyelids, direction in which Kapteyn is looking, etc. Had in 1921 Veth produced an independent portrait starting again from scratch with Kapteyn posing again for many hours there would unavoidably have been more than minor differences.

The only piece of evidence that points away from Blaauw's hypothesis is that the Director of the University Museum, Lars Hendrikman, while I was present, carefully examined the painting from the Senate Chamber and concluded that it shows no sign of an overpainting of the gown, jabot and beret. UV lightning did not show color changes due to the background having been varnished twice and the gown, etc. only once. Definite confirmation on this should be obtainable by an examination with modern imaging techniques such using X-ray or infrared radiation, or other electromagnetic radiation or bundles of elementary particles. Unfortunately, this is not feasible without dedicated funding. Blaauw's remark that traces of hair betrayed Veth's overpainting exercise were not corroborated. But then it seems to me against Veth's extreme care for details and perfectionist approach to leave such traces in the first place. That he signed the painting with the year 1921 is also understandable, even if it was produced by overpainting, since after all it had been finished that year.

A very strong piece of evidence, corroborating the Blaauw overpainting scenario, is the listing of Veth's paintings in the biography by Veth's good friend Johan Huizinga. The painting now in the Senate Chamber is dated before the painting of Kapteyn behind his desk. Huizinga should be well informed. The dating fits the notion that the Senate portrait is produced by overpainting the original from 1917 with academic attire. Huizinga lists only two paintings; if the Blaauw hypothesis is false there should be a third painting in the Huizinga listing, produced in 1921 and meant for the Senate chamber. Huizinga's dating and absence of a third painting constitute guite strong evidence; he himself described his intimate familiarity with the making of some paintings of professors, including the ones of Kapteyn.

The most consistent scenario seems to me the following.

- In the spring of 1917 Jan P. Veth was asked to paint two portraits in Groningen: one of Jan Willem Moll to be offered to him after his resignation as Ordinary Professor, and one of Jacobus C. Kapteyn on the occasion of his Jubilee of 40 years as a Professor in February 1918.
- Veth picked this up by painting in Groningen in the home of the Moll family, where both Moll and Kapteyn sat.
- Of Kapteyn he made a first design on a wooden panel, which he kept for himself. He gave it later to his friend and colleague Georg Rueter, and it is now in the possession of Kapteyn's great-grandson Jack (also Jacobus Cornelius).
- The painting by Moll shows the latter sitting with his arms crossed in ordinary clothing, so was also not intended for the Senate Chamber.
- The first painting of Kapteyn must have looked very much like the preliminary study, with Kapteyn wearing ordinary clothes, since it likewise was not intended for the Senate Chamber.
- After the paintings were finished, Veth immediately began a second one showing Kapteyn working at his desk. So it was probably produced without a fee, quite possibly because Mrs. Kapteyn, to whom the portrait was to be presented, was not satisfied with the first portrait, as Adriaan Blaauw learned from Pieter van Rhijn.
- Veth was delighted with the prospect, because it offered a far more attractive perspective than the 'standard' portrait. It shows Kapteyn in the same clothes as in the pre-

liminary study, who would have agreed to sit for the painting since it was to please his wife.

- It was finished in November 1917 and in February 1918 the second painting was offered at the Jubilee celebration. According to the Rector's remarks, he hoped it would be offered later to the University, in spite of the differed setting and format compared to those in the Professors Gallery in the Senate Chamber. This scenario fully agrees with Johan Huizinga's listing of Veth's works.
- In February 1921 Veth was back in Groningen to make a portrait for the Senate Chamber of Barend Sijmons as well as one of Kapteyn for the same destination.
- Of Kapteyn's first portrait, nothing was ever heard of again. Veth paintings do not get lost so easily one would think. A very straightforward explanation would be that during this 1921 episode in Groningen it was overpainted with gown, jabot and beret. Kapteyn must have been pleased that he then did not have to sit and pose for it for many hours. This explains Huizinga's statement that the first painting produced in 1917 ended up in the Senate Chamber.
- We can infer from the preliminary study what the original portrait would have looked like before the repainting. The striking similarity with the painting in the Senate Chamber in pose, expression, angle of view and many details support this course of events.

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For further details, see his 'Reminsciences', titled "Excited States and Spontaneous Transitions: Astronomer, Lecturer, Administrator, Biographer", which was published in the March 2023 issue of *JAHH* on pages 203–251.