

Discovery of the real man behind the name of the lunar crater Kinau

Robert A. Garfinkle & Bernd Pfeiffer

Detailed research by the authors has led them to correct the identity of the person named in the BAA's 1938 *Memoir 'Who's Who in the Moon'* as the eponym for the lunar crater Kinau, as being a German priest, teacher and amateur astronomer Adolph Gottfried Kinau, instead of the incorrectly listed C. A. Kinau.

Robert A. Garfinkle (RAG) is in the process of writing a major lunar observers' handbook. Most of the astronomy books and lunar atlases that mention the lunar nomenclature contain numerous errors that make them unreliable biographical source materials. As a trained historian, RAG was trying to verify the biographical information, full names, and life dates for all of the people for whom lunar features on the nearside are named, so on 2003 August 10, he posted a request on the online group HASTRO-L (History of Astronomy) for information on C. A. Kinau. RAG was surprised to learn from Dr Bernd Pfeiffer (BP) of Mainz, Germany and others that the man RAG was looking for was probably not the man the International Astronomical Union (IAU) intended to honour when in 1932 they adopted the name Kinau for a lunar nearside crater (lat. $60^{\circ}.8$ S; long. $15^{\circ}.1$ E), as first used on a lunar map by English astronomer Edmund Neison (1851–1940) in his book *The Moon; and the Condition and Configuration of its Surface* (1876), as shown in Figure 1.¹ The crater is shown in Figure 2. First, let us give the clues that we had to work with.

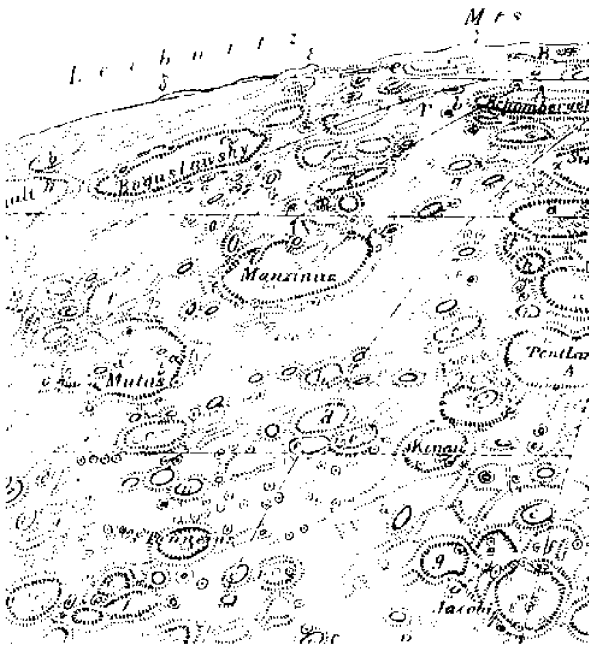


Figure 1. A portion of Section XVII of Neison's lunar charts showing the crater Kinau, from *The Moon; and the Condition and Configuration of its Surface* (1876). From the collection of RAG.

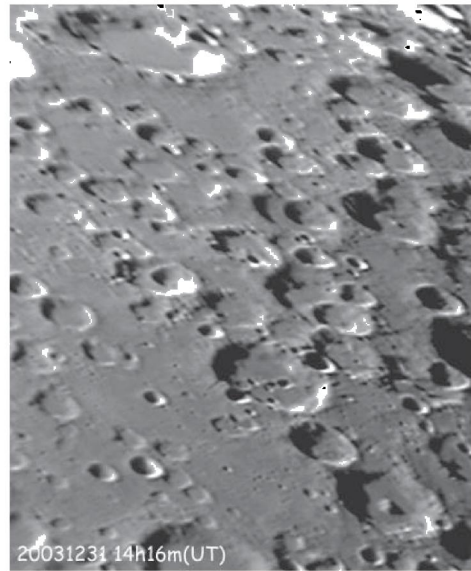


Figure 2. The lunar crater Kinau is in the centre of the figure. This southern highlands crater has rounded walls that gently slope down to the floor. An impact crater has displaced part of its northeastern wall (left side in this image). The bright crater on the rim of Kinau is Kinau M. A catena of craters crosses the shallow flat floor of the crater Jacobi. This crater also has a notch of small craters in its northeastern rim. Lilius is the crater with the sharp central peak in the lower right corner of the image. (North is up, east to the left.) Image taken by K. C. Pau of Hong Kong on 2003 December 31 at 14h 16m UT.

In 1938, the Historical Section of the BAA published *Who's Who in the Moon*. Their write-up for the feature Kinau is as follows:

'KINAU. C. A. Kinau, fl. 1850 (N)

Botanist and selenographer. He had an official post on the estate of the Prince of Schwarzenberg in southern Bohemia, and published in 1842 two works on Poisonous Plants and Fungi. Some lunar observations of his were published in Jahn's *Wochentliche Unterhaltungen*, 1848. He made a specialty of 'rills': Neison mentions his discovery of six, made 1847–1848; and the *Selenographical Journal* for January 22, 1879, refers to 'large number of drawings of the lunar rills' which Kinau had accumulated, representing 'nearly 30 years' work with a 5½-inch equatorial refractor of fine quality,' and expresses a hope that these may be published.'²

On the general subject of rilles, in his 1876 Moon book, Neison wrote that: 'Schröter first discovered these forma-



Figure 3. The lunar craters Manzinus and Mutus drawn by Kinau and published in *Sirius* in 1882. Manzinus is the larger oval-shaped crater with a series of craters leading to the southeast. Mutus is the oblong crater with two smaller craters on its floor. (South up). The crater Kinau would be toward the lower right. *From the collection of RAG.*

tions, and named them rills, and from 1787 to 1801 detected eleven ... whilst six were seen by Kinau in 1847 and 1848.⁷³

In the Selenographical Society's issue of the *Selenographical Journal* for 1879 January 22, in the section labeled 'Notes' is written:

'LUNAR RILLS – It is understood that Herr Kinau, who many years back was well known as a Selenographer, has accumulated a large number of drawings of the lunar rills. It is hoped that he may be induced to forward these observations to the *Selenographical Society*, with the view of ultimate publication. They represent nearly 30 years' work with a 5½-inch equatorial refractor of fine quality, and will prove a great acquisition to Selenography.'⁴

Apparently, the Selenographical Society never published these requested lunar drawings, but at least one was published in 1882 in the German astronomical magazine *Sirius: Zeitschrift für populäre Astronomie*. Kinau's published draw-

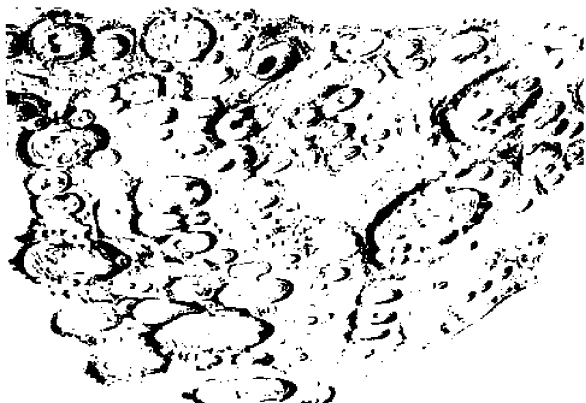


Figure 4. Drawing published in the 1883 October issue of *Sirius*, which 'represents the entire northeast neighbourhood of the South Pole of the Moon, and which was drawn by Mr Pastor Kinau in Suhl.' This drawing, in sunrise illumination with North up, includes the crater now known as Kinau. The drawing covers the area from the vicinity of Lilius and Zach toward the east of Mutus and Manzinus. Refer to Rühl's *Atlas of the Moon*, pages 73 and 74. *From the collection of RAG.*

ing is shown in Figure 3.⁵ Another drawing by Kinau published in *Sirius* is given in Figure 4.

Kinau's 1848 lunar rille article is given as a reference in *Über Rillen auf dem Monde*, (1866) by Johann Friedrich Julius Schmidt (1825–'84) as the source for a rille (item 11). This rille was first catalogued in 1824 by the German selenographer Wilhelm Gotthelf Lohrmann (1796–1840) and was also observed by Johann Heinrich Mädler (1794–1874) on 1833 January 26, and by Kinau in 1848 (no day given). This reference list is under the heading *Anmerkungen zum Catalogue der Rillen*. Schmidt listed 11 rilles (nos. 11, 19, 20, 22, 83, 170, 192, 218, 243, 288, and 306) as being observed by Kinau.⁶

In the actual list of rilles, Kinau is listed as the discoverer of the following four rilles:

No. 20, 1848 April 9 Quadrant I. This is given as a possible Kinau first observation, because Schmidt lists Kunowsky (the Silesian clergyman and amateur selenographer Georg Karl Friedrich Kunowsky (1786–1846)) for 1822, but he questions the observation.

No. 83, 1848, Quadrant I

No. 192, 1848 April 12, Quadrant II

No. 306, 1848 April 12, Quadrant III.

Neison wrote that Kinau discovered six rilles, and Schmidt wrote the same thing ten years earlier in the text for his book, but then Schmidt gave Kinau credit for only four new rilles in his list of rilles and their discovery. I wonder why Schmidt mentions that there are six rilles first observed by Kinau, but then lists only four?

In the *Report on the Thirty-Fifth Meeting of the British Association for the Advancement of Science; Held at Birmingham in September 1865*, there is a translation of a letter sent by Schmidt to William Radcliff Birt (1804–'81) about lunar rilles. Schmidt mentioned his soon to be published 'small pamphlet, in which are classified up to February 1865, all those [rilles] known to me.' In the letter, Schmidt gave credit to the first observers of the 425 rilles that had so far been discovered. He gave Kinau credit for having discovered 6 rilles between 1847 and 1848. Schmidt did not give Kinau's first name. Birt was the head of the Association's Committee for Mapping the Surface of the Moon.⁷

The details for Kinau's article are: *Wochentliche Unterhaltungen für Dilettanten und Freunde der Astronomie, Geographie und Witterungskunde, herausgegeben von G.A. Jahn*. 2ter Jah., nr. 25 (1848), 201–204, Correspondenznachricht, schreiben des Herrn Predigtamts-Candidaten Kinau, Lehrer an der Bürgerschule zu Schönebeck bei Magdeburg, an den Herausgeber. This indicates that the selenographer Kinau that we are after had been a 'priest-candidate' and a teacher in Schönebeck at the time he submitted the article to Jahn's. Armed with this scant information, RAG went looking for the historical record of Herr Kinau, primarily interested in finding his full name and life dates and totally unaware of what was about to be discovered about Kinau.

After RAG placed a request on the HASTRO-L list, several messages revealed that the man that RAG was looking for might be an elusive target. Searches conducted by RAG and friends on the List could not easily find any information on Kinau and none of the major public or university libraries had a listing for his botany books. BP made inquiries to church

and observatory archivists in Austria, the Czech Republic, and Germany. The historical record of the priest Kinau began to emerge when photocopies of his personnel records from the Protestant Church in Magdeburg were secured. One clue led to another and for a time it appeared that there were two men named Kinau that could possibly have been the lunar honoree, but a man named Adolph Gottfried Kinau seemed to fit most of the known bits of biographical information. Corroborating primary source information had to be located.

The final convincing information that the man we were looking for is Adolph Gottfried Kinau was the discovery of two extant handwritten letters by him. On 1848 May 30, Kinau states that in summer 1847 he acquired a 6-foot achromatic telescope by Lerebours & Secretan of Paris.⁸ He mentioned that one of the lunar observations was made on 1848 April 12. This observation is mentioned in Schmidt (1866). Enclosed with the letter was a copy of the 1848 article in Jahn's *Wochentliche Unterhaltungen*. The second letter is dated 1849 November 16, and is signed with the title 'Predigtamts Candidat und Lehrer,' which is the same 'Candidate Priest and Teacher' designation that he used in the 1848 article and confirms that in late 1849, he was still a teacher in Schoenebeck. In this 1849 letter, Kinau announced to the town administration (Schoenebecker Magistrate) that he had received a post as principal of a school and minister in Suhl (Thuringia).⁹

The conclusion of this research shows that the lunar crater is actually named to honour the German priest, teacher, and selenographer Adolph Gottfried Kinau (1814–87). Adolph Kinau was born on 1814 January 4, in Winnigen bei Aschersleben, Germany. His father was Ludwig Kinau, who was himself a teacher and pastor. His mother was Henriette Boes.¹⁰ Adolph attended school at the 'Domgymnasium' in Halberstadt from 1828 to 1833. From 1833 to 1836, he studied theology at the university in Halle and passed his first theology exam in 1836. He passed his second theology exam in 1840. We do not have any documentation on the 1840 to 1845 period, but there is speculation that from 1840 to 1845, he worked in the Marienborn region as a Privatlehrer (teacher in private households). During the period 1845 to 1851, he served as a teacher at a school for boys in the German town of Schönebeck near Magdeburg. In 1848, he published an article 'Mondrillen' about his observations of lunar rilles. In 1851, Kinau held positions as a teacher and part-time Pfarrer (pastor) in Rohr. He held this position until he took the pastor post at Kreuzkirche in the German region of Suhl, in 1861. He held that position and served as the head of a school in Suhl until his death on 1887 January 9.¹¹

Adolph Kinau's first fiancée (died prior to their marriage) and wife Clementine (née Blau) were both daughters of priests. Like most people in his times, Adolph Kinau spent his life in a relatively small geographical area, today known as Sachsen-Anhalt and Thuringia. The BAA *Memoir* mentioned that Kinau held an official post on the estate of the Prince of Schwarzenberg in southern Bohemia, but we are unable to confirm this.

With respect to naming the feature now known as Kinau, Johann Mädler and Wilhelm Beer (1797–1850) originally named this feature Jacobi D in 1837, in their book *Der Mond*,



Figure 5. The only known photograph of Adolph Gottfried Kinau. The photograph shows him at the pulpit of the Kreuzkirche in Suhl, circa 1886. The sign on the pulpit reads '25 jaehrig. Dienstjubilaeum', which indicates that they were celebrating his 25 years of service to that church. Photograph courtesy of Mr Rolf Heym of Berlin.

but the IAU accepted another feature as Jacobi D in 1932. The IAU accepted Neison's naming the feature Kinau.

It now appears that in 1938, Rowdon Marrian Frey (1896–1980), editor of the BAA's *Who's Who in the Moon*, may have combined the biographies for at least two men named Kinau, and mislabeled that crater as honouring a man named C. A. Kinau (*fl.* 1850). We have to wonder now if the BAA transposed the initials and that the 'C' is a typo for a letter 'G.' According to the BAA biography, Kinau, in addition to being a selenographer, supposedly wrote two books on 'Poisonous Plants and Fungi,' but extensive bibliographical researches in the USA and Europe found no copies or listings for these two botany books in major libraries, archives, or the German Mycological Society or the Austrian Mycological Society (AMS). A search by the librarian of the AMS turned up no trace of a botanist named Kinau. However, BP did locate two art books named after Camellias (*Camellien*) where an Arnold Kinau is mistakenly listed in the library catalogues as an editor, with editions published in 1841 and 1842.¹² These books are listed in the catalogue of the Austrian National Library. The same basic information was also found in the library catalogue for the Czech National Library in Prague. It turns out that these are not scientific books, but contain mainly articles on the arts, literature, and musicians. Upon examination of the volumes by BP in late 2003, it was discovered that Arnold Kinau wrote two articles; a biography of Franz Liszt and an obituary. These books are dedicated to 'Die Freunde Boehmens.'

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A photograph of Kinau's tombstone conclusively identifies him as 'Pfarrer an der Kreuzkirche Adolf Gottfried Kinau' with the life dates given as 4 January 1814; 9 January 1887. The actual tombstone in Suhl no longer survives. All the documentation from the church archives gives his name as Adolph, but sometime late in life he changed it to the modern spelling of Adolf.

We wish to thank our German friends Wolfgang Dick, and Dipl.-Ing. Friedrich Fleischmann; Jean-Louis Trudel in Canada; and in the UK, Storm Dunlop, and Mary Chibnall, Assistant Librarian at the Royal Astronomical Society, for their assistance in the search to find the actual lunar honoree: Herr Adolph Gottfried Kinau.

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Notes and references

- 1 Edmund Neison, *The Moon; and the Condition and Configuration of its Surface*, London, Longmans Green & Co., 1876, 442. Neison named the crater Kinau on section 17, but gave no biographical information in the text on who he was honouring. Neison's real name was Edmund Neville Nevill.
- 2 R. M. Frey, ed., 'Who's Who in the Moon; Notes on the Names of All Lunar Formations Adopted in 1935 by the International Astronomical Union', *Mem. Brit. Astron. Assoc.*, **34**, Part I, (1938), 66. The IAU actually 'adopted' the nomenclature list in 1932 and 'accepted for publication' in 1935 the list that became the book *Named Lunar Formations*. This book, by Mary Adela Blagg (1858–1944) and Karl Müller (1866–1942) consisted of data on the 1932 nomenclature list. A box of notes and references for this memoir is housed at the library of the Royal Astronomi-

- cal Society in Burlington House, London. A search of the box revealed that the materials for Kinau are missing.
- 3 Neison, *op. cit.* (1876), 72.
- 4 Selenographical Society, *Selenographical Journal*, **2**(11), (1879 January 22), 5
- 5 The text that accompanied the drawing stated: 'Der Güte des Herrn Pastor Kinau der schon länger als ein Drittel-Jahrhundert mit Mondbeobachtungen vertraut ist, verdank ich unter anderen wertvollen Zeichnungen...' *Sirius* **10**(9) (September 1882), 217. In this statement Hermann Joseph Klein (1844–1914), the publisher of *Sirius*, confirms again for us that Kinau is a pastor and has been an active lunar observer for over one third of a century. The same title of 'Pastor' is also used to identify Kinau on page 19 (January 1882) of the same volume of *Sirius*. The lunar feature Klein is named for Hermann Klein.
- 6 J. F. Julius Schmidt, *Über Rillen auf dem Monde*, Leipzig: Verlag von Johann Ambrosius Barth (1866), 23
- 7 *Report on the Thirty-Fifth Meeting of the British Association for the Advancement of Science; Held at Birmingham in September 1865*, London: John Murray, 1886, 305–307
- 8 In an undated letter, Adolph Kinau donated a telescope to his old school in Halberstadt. A search revealed that the school no longer exists and the location of the telescope is unknown at this time. There is a possibility that he also donated a Reinfelder & Haertel telescope to a school in Neunünster in Northern Germany, but we have no confirming data that Kinau owned this second telescope.
- 9 The letters are from the Sachsen-Anhalt town archives; Akte Alter Bestand Shönebeck, St 85.
- 10 The letter containing Kinau's parental background is from the Konsistorium der Kirchenprovinz Sachsen in Magdeburg; reference number Pr-AB 5131-3.
- 11 Information on his schooling and religious life is from the archives of the Protestant Church in Magdeburg.
- 12 *Camellien: Almanach fuer das Jahr 1840*, edited by Ferdinand Graf Schirnding & C. A. F. Hennig. Also two volumes of *Camellien: Vaterländisches/Vaterländischer Album für Literatur, Kunst, Wissenschaft und geselliges Leben*, (*Camellien: Patriotic/Patriotic Albums for Literature, Art, Science and Informal Life*), edited by Ferdinand G. Schirnding & Arnold Kinau, Prague and Vienna: Gerzabek (1841/'42).

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