It was the sheerest coincidence that while we were putting together an exhibition called *xxl Paper* – focusing on the largest works on paper in the Rijksmuseum’s collection – a hand-painted scenic landscape on paper measuring no fewer than 2,309 centimetres in length and 180 centimetres high came to light (figs. 1a, b). The object was discovered in 2018 during the preparations for the move of the museum’s depots to its new location, Collectie Centrum Nederland (CCNL) (fig. 2). Together with five broadly similar, shorter (but still quite long) pieces, the group of objects was briefly described on a museum inventory card in 1962: ‘Six rolls of wallpaper in *papier peint*, exotic landscapes in fresh, bright colours. Some rolls have repeating elongated vertical damp stains or even holes. French (?), first half 19th century’. However, no one seemed to recall, nor was there any documented evidence to suggest that these objects had ever been on display. Although the objects posed many questions and much about them was uncertain – the provenance and maker of the works were unknown, the cited function as wallpaper was questionable and the condition was poor – it was unanimously decided to include the longest piece of the group, the most spectacular example, in the exhibition.

The opening of *xxl Paper* is now in sight and the conservation of the piece is complete; the object will be displayed as a fragment of what is now thought to have been a moving panorama or so-called cyclorama: a popular form of entertainment in the mid-nineteenth century. Moving panoramas created a narrative of some sorts, which was revealed to the public by means of two vertical axes between which a canvas or scroll of paper with painted scenes was moved from one side to the other. In the heyday of the moving panorama, around 1850-60, many dozens must have been travelling through the United States, the British Isles and Europe, to judge from the countless advertisements in contemporary newspapers.
This new viewing experience of moving images made a major contribution to the development of the visual culture that was unfolding at the middle and end of the nineteenth century, in which visual images and their ‘appearance’ could move masses of people and make their producers rich. Moving panoramas and dioramas can be considered the precursor of film, a main feature of Western lifestyles to this day. Only about fifteen original moving panoramas are known to survive today. Most are held in collections in the United States, where the phenomenon enjoyed huge success, such as the moving panorama of the *Monumental Grandeur of the Mississippi Valley* in the Saint Louis Art Museum, *The Grand Panorama of a Whaling Voyage Round the World* in the New Bedford Whaling Museum and the moving panorama of *Pilgrim’s Progress* in the Saco Museum, Maine.

The fragment in the Rijksmuseum collection will, more specifically, be presented as the longest remaining part of what was known as the *Reuzen-Cyclorama* (Giant Cyclorama) or *Cyclorama Reichardt*, named after its German owner, Ferdinand Reichardt (b. 1813). This particular moving panorama was an extraordinary phenomenon that is documented as having travelled through the Netherlands, Belgium and Great Britain between 1853 and 1855. All the moving panoramas of that time were extremely long; the *Reuzen-Cyclorama* measured an astounding one and a half kilometres. Together with three other pieces in the rediscovered group, which also seem to have been part of this cyclorama, fifty-eight metres have now been recovered.

This article will unfold the interdisciplinary quest undertaken and the process that led to the discovery and compelling new understanding of the purpose of four of these long-forgotten lengthy paper landscapes.

**Fig. 1b**
The longest fragment of the *Cyclorama Reichardt*, attributed to the Borgmann brothers and Heinrich Heyl, *Reuzen-Cyclorama*, c. 1853. Distemper on paper, pasted onto cotton, 180 x 2,309 cm. Amsterdam, Rijksmuseum, inv. no. bk-18283-a. The restoration of this part of the *Cyclorama Reichardt* is made possible with the support of the Bank ten Cate & Cie. Fonds/ Rijksmuseum Fonds.
The discovery of fragments of the cyclorama Reichardt in the Rijksmuseum collection, at the same time discarding the previous description of the entire group as ‘rolls of wallpaper’. By shedding light on the results of the archival research and the examination of the materials and techniques that were undertaken – the collaborative efforts of curators and conservators – we show how the new identification of the function and provenance of this remarkable rediscovered object came about (fig. 3).

Wallpaper or Not...
The group of six objects that seem to have been consigned to oblivion over recent decades is listed as ‘oud bezit’ (old property) in the Rijksmuseum’s inventory books. It is quite conceivable that these pieces were already part of the collection at an early stage, perhaps even before the museum moved to its current home in 1885. However, since the Rijksmuseum’s documentation lacked information about the group’s former owner and the circumstances of its arrival in the collection, most of the valuable clues about the objects’ function and provenance had to be ascertained from the works themselves.

Fig. 3
Paper conservators Femke Coevert (left) and Dafne Diamante (right) working on repairs in the most damaged parts of the longest fragment of the Cyclorama Reichardt.
Photo: Kelly Schenk, Rijksmuseum
The idea that the works were produced and/or used as wallpaper, as noted on the old inventory card of the group, was probably based solely on the identification of one of the six rolls. The piece in question, measuring 180 by 1,017 centimetres, is, in fact, a fragment of the scenic wallpaper *El Dorado* by the renowned French wallpaper company Zuber & Cie, founded in 1797 (fig. 4). Originally designed in 1848, it is still produced by the Alsatian company today. The celebrated technique used by this wallpaper manufacturer combines a hand-painted background, applied with large brushes that produce characteristic overflowing shades of pastel colour, with printed scenery created from woodblocks in many different stages and colours. This same printing technique was used for only one other piece in the group of six, a picturesque park-like landscape...
in pastel colours, measuring 180 by 988 centimetres (fig. 5). Although this piece has not yet been associated with any known wallpaper sample, it was probably also produced to decorate an interior space.

The other four objects in the group show a striking stylistic resemblance to the *El Dorado* fragment in terms of the form and structure of their landscape backgrounds, which could very well have been produced using the same wide brush technique. However, the apparent brushstrokes in the middle ground and in the foreground scenery, as well as the absence of traces of so-called rims of ink or ink-squeeze (which typifies woodblock printing), show that these four scenes were entirely hand-painted. Not a single woodblock or printing press was involved. This provided us with what was perhaps the first clue suggesting that we should search for an alternative function.
The longest object in the set – the one that will be on view in *xxl Paper* – is 2,309 centimetres long in total and depicts what one might easily describe as a fairytale setting (see figs. 1a, b). The bright, warm and iridescent colours, such as glowing purples and fiery oranges, transport us to a far-away place. The landscape features an endless array of mountaintops in the background and alternating passages of land and water in the middle ground. Here and there, groups of houses create small towns, mainly in the backdrop of the landscape, while the foreground for the most part consists of rocks and shrubbery. With the smooth transition of different colours in the sky, it conveys the impression that the sun has just set. By and large a Mediterranean atmosphere is suggested, although a more specific region is difficult to pinpoint. Not only does fantasy prevail, recognizable landmarks seem to be
absent: ruins, bridges and buildings are all picturesque, but imaginary. The figures scattered throughout the scene do not seem to offer any further clues as to the location. They appear to be in transit, gesturing and pointing in different directions, as if showing each other the way, but without a coherent story emerging.

In the three other landscapes in the group, measuring 1,478, 1,247 and 825.50 centimetres long and again 180 centimetres high, we find ourselves transported to colder regions (figs. 6-8). The setting no longer has the warm glow of the longest piece and is painted in cooler blues, greens and greys. Nevertheless, these pieces are unmistakably executed by the same hand, and the staging is characterized by the same structure. Small figures are on the move here as well, perhaps in the Alps, as is suggested by the coniferous trees and chalets.
The four hand-painted landscapes consist of multiple vertical strips of paper measuring 180 by 90 centimetres, pasted together to create a continuous landscape – in that respect a format that is still comparable to the production of eighteenth- and nineteenth-century wallpaper. Each individual sheet was first prepared: completely covered with paint (see appendix) – up to the edges of the paper – depicting the overall background in broad brushstrokes, on top of which the mountains, landscape and houses were then painted. In order for the connecting sheets to be joined seamlessly, the artist or artists had to take into account the height of the horizon and the transitions from sky to landscape. The sheets were then assembled by pasting them down onto pieces of fabric, starting from the left, with an overlap of about two centimetres. It was only at this stage that the foliage in the foreground
was painted, creating a more coherent and convincing scene and adding in details that cleverly obscured the joins (fig. 9).

The fabric used as a support for the hand-painted paper sheets is a very fine cotton, each piece approximately 140 centimetres wide and meticulously stitched together by hand. It differs from the coarse sackcloth that was commonly used as a liner for wallpaper: this was normally stretched on walls and covered with a ground layer of plain paper to create a smooth surface on which to affix the wallpaper. Any idea that the four objects in question were ever used as wallpaper was definitively abandoned in light of the absence of such residues on the back of this cotton support; their presence would have indicated that the objects had once been directly applied to a plastered wall. Moreover, the sheer size of the longest piece raised further doubts that these landscapes were ever intended to cover the walls of a single room, not to mention the striking lack of gaps for doors, windows or a fireplace.

In the course of conserving the twenty-three-metre-long object for the exhibition, we discovered a line of small holes slightly larger than pinholes, at more or less regular intervals along the top edge. In certain places, there were even two lines of holes: those closer to the upper edge of the paper were generally torn, with a second row placed further below, probably later substitutions for the damaged ones. The holes seemed to suggest some sort of hanging system.

The idea of a non-wallpaper function was, however, contradictory, even supported by the findings of our research into the materials and techniques used in the fragment of the *El Dorado* wallpaper. This piece had a wooden pole attached to the end of the paper by means of iron nails that had been hammered through a piece of twill tape (fig. 10). Remnants of similar twill tape were also found on the left end of the longest object, and rusty stains at regular intervals at both ends of the paper, suggesting that similar wooden poles were attached in the same manner.

The continuous row of holes along the top edge of the objects in conjunction with the presumed presence of wooden poles contributed to the idea that the landscapes had been suspended in order to be displayed, as well as the possibility that the view was adjusted or altered by rolling the ends around poles, like a papyrus scroll. This would also explain the wavy deformation and creases at the left end of the longest piece – interpreting those as traces of repeatedly rolling the paper and cotton backing.
Taking all these indications into account, we were left with only one convincing conclusion as to the function of these objects: the four hand-painted panoramic landscapes must have once been part of a moving panorama (fig. 11).

**Moving Panorama**

Illusion and spectacle, the unfamiliar and the unknown dominated the popular entertainment of the nineteenth century. Theatre, travelling circuses, pantomimes and grand World Fairs were more popular than ever. Responding to the general population’s curiosity about far-away countries, recent historic battles and different cultures, stimulated by voyages of discovery, the Grand Tour as well as industrialization and changes in transportation (for instance, the railway and hot-air balloons), entrepreneurs developed new forms of amusement. These novel commercial...
enterprises had concrete revenue models (including sales and ticketing) and served an audience that did not exist before. As part of this development, panoramas also came into vogue. The 360-degree circular panoramic paintings shown in specially-built cylindrical constructions and patented in 1787 by Robert Barker (1739-1806) sprang up like mushrooms. Although these static panoramas are still well known today, thanks, for example, to the famous view of Scheveningen (The Hague) by Hendrik Willem Mesdag (1831-1915), the phenomenon of the cyclorama or moving panorama – in its day possibly even more popular with the general public – has been more or less lost sight of in recent decades.

Our own (perhaps somewhat naive) ignorance of the existence and phenomenon of moving panoramas had initially meant that we failed to identify the so-called wallpaper pieces as belonging to that art form. Although the idea of the long landscapes on paper being part(s) of some sort of panorama had come to mind, this theory was dismissed at an early stage for different reasons: the large, but not gigantic height of the paper; the scenes did not represent an accurate geographic place, town or region; and the artistic quality of the objects was at best no more than mediocre. However, it is exactly these characteristics, among others, that distinguish the moving panorama from its static cousins.

The moving panorama, as expert Erkki Huhtamo makes clear, was not a simple spin-off of the ‘circular panorama’ tradition; it had a cultural identity of its own. Instead of audience members being fully surrounded by the image, able to move and turn independently through the space to experience and take in everything, the spectator at a moving panorama show was seated as in a theatre and passively watched the image advance before his or her eyes. A long strip of canvas – or, as it seems in our case, paper pasted onto cotton – was put in motion horizontally from one vertical roller to another by means of a cranking mechanism. This meant that the painting did not present itself in its entirety at once but was constantly only partially visible – in the ‘frame’ created by the distance between the two spools – transient as contiguous views of passing scenery, as if seen from a boat or a train window. A narrator usually stood next to the panorama, explaining the views or telling a story, often accompanied by an orchestra or sound effects; it was a spectacle that stimulated more senses than merely that of sight. The geographical and historical accuracy so sought after in static panoramas mattered far less in the case of moving panoramas. Although static panoramas were often created under the guidance of an academically trained painter, Huhtamo explains, moving panoramas were usually produced by stage painters and craftsmen with little or no formal artistic training. Moreover, the shows of moving panoramas travelled constantly from one town to another, unlike the static panorama that had to be exhibited for months and even years in the same building to cover the initial investment. Given the rigorous travel schedule, moving panoramas had to endure a lot of physical wear and tear and were probably used until they literally broke into pieces.

The small number of moving panoramas still in existence today is not representative of the dozens, perhaps even hundreds, that must have travelled around at the height of this popular entertainment, whether in America, Great Britain or Europe. The newspapers around the middle of the nineteenth century are full of advertisements for the forthcoming shows. John Banvard’s (1815-1891) popular moving panorama The Great Three-Mile Painting of the Mississippi, for example, must have had many performances, but probably also encountered
competition from others. In the Netherlands, the popularity of moving panoramas flourished in the so-called (static) panorama-less period, between roughly 1830 and 1875.\(^{20}\) Foreign fairground entrepreneurs, in particular, brought attractions like moving panoramas to fairs at that time to meet the public’s need for visual display. The Englishman J.B. Laidlaw’s show of Algiers was the first performance of a moving panorama in the Netherlands (Rotterdam, The Hague and Amsterdam) in 1825.\(^{21}\) However, the phenomenon did not achieve the same popularity as on the other side of the channel, or across the ocean. No more than a handful of other moving panoramas repeatedly appeared in Dutch newspapers at the beginning of the second half of the nineteenth century, taking the spectator on a journey to for example North and Central America, Russia and Turkey, from Quebec to the North Pole or along with Colonel Fremont and his Overland Route to the Goldmines.\(^{22}\)

To bring the different shows to the attention of the public in each city, their owners placed announcements in the local newspapers and distributed specially printed brochures and posters. In addition, reviews and comments – encouraging the local community not to miss the grand spectacle – often provided further information. These accurate accounts, now preserved in archival sources and databases, are very useful to historians and art historians eager to reconstruct these performances, a form of entertainment that one might nowadays term ‘virtual travel’.

Reuzen-Cyclorama

In the vast collection of newspaper articles and clippings about aspects of the city of Amsterdam, including ‘Vermaken’ (Entertainment), compiled by the ardent collector Albertus Theodorus Hartkamp (1848-1924) and now held in the Amsterdam City Archives, we came across the key piece of information that led to the identification of our fragments of a moving panorama.\(^{23}\) In a folder about fairs and spring markets, public music performances and exhibitions that took place in Amsterdam, Hartkamp had also created a subcategory devoted specifically to announcements of panoramas. Although most of these referred to static panorama shows, such as the Siege of Haarlem (1880) and Nova Zembla (1896) that took place in the ‘Panorama-gebouw’ at the Plantage Middenlaan,\(^{24}\) there was also a short announcement, cut from the Algemeen Handelsblad of 1853, mentioning a ‘Great extraordinary presentation of the Giant Cyclorama: journey through Tyrol, Switzerland and Italy’ (fig. 12).\(^{25}\) Grounds for assuming this advertisement might refer to the performance to which our fragments belonged came in the first instance from the use of the word Cyclorama – which, to us, implied movement and deviated from the more common term ‘panorama’. This presumption was supported by the locations listed in the advertisement, a journey that
supposedly passed through regions around the Alps and the Mediterranean – regions that were familiar to us for a reason.

Proceeding from this first documentary discovery, research quickly unearthed a plethora of additional evidence. The Dutch newspapers of 1853, 1854 and 1855 were full of announcements and reviews about this *Reuzen-Cyclorama*, from the *Haerlemsche Courant* to the *Tubantia*. In total, we were able to find more than two hundred announcements promoting the performances in different European cities. The extensive advertisements also contained additional information about the object and the events, from ticket prices to detailed reviews, that enabled us – step by step – to associate conclusively the travelling *Reuzen-Cyclorama* with the rediscovered fragments of a moving panorama in the Rijksmuseum’s collection.

First of all, the distinct term cyclorama deviates from the more standard description of panoramas and seems to derive from the world of theatre: ‘a painted canvas on a roll that is pulled vertically to create a backdrop, or unrolled horizontally in a continuous motion to simulate lateral movement’. It thus corresponds to the assumed use of our fragments. Although the term cyclorama seems to have been rarely used in Europe, it usually concerned moving panoramas, with the idea that such an exciting and curious term would arouse the interest of the visitors.

In addition, the regions through which the *Reuzen-Cyclorama* allowed the audience to travel, through Tyrol, Styria, Switzerland and Italy, rather convincingly correspond with the generic settings depicted on our hand-painted landscapes. Within the context of moving panoramas, this show’s purpose was not to ‘teleport’ the spectator to actual places or to raise a real illusion of these destinations by means of geographically accurate representations, but mostly to convey an impression of these regions and to let the audience experience it as passing scenery. In all probability, the audience had not before travelled to these regions and therefore were open to the artistic interpretation conveyed. The description of the performance of the cyclorama being that of a ‘Romanske Reis’ over mountain and valley underscores that. As a novelistic journey, the intention was probably to recreate the experience of travelling, reminiscent of those described in novels. The audience would have been expected to identify with the many figures apparently making similar trips throughout the scenery of the four fragments of the cyclorama held in the Rijksmuseum. From time to time, it seems, a narrator might have accompanied the performance with a lecture to guide the viewer through their imaginary travels, for example, ‘The explication of the Cyclorama will be fulfilled by Mr G. Kleine of Amsterdam’. On other occasions, a brochure was sold to the public to accompany them on their journey as, of course, money had to be made. The brochure provided an extensive commentary on the various regions and cities visited during the show. Given the amount of text, it is likely that this ‘guide’ was taken home as a travel souvenir or memento, to reminisce about and further explore the regions at leisure.

The various ‘destinations’ of the cyclorama’s journey, city by city and highlight after highlight, are also briefly listed on the back of a pamphlet announcing the display of the cyclorama in Haarlem in 1853: ‘Niet te verzuimen!!! Deze reusachtige schilderkunst te bezoeken’ (Not to be missed!!! A visit to this giant painting) (fig. 13). The journey concluded, according to this source, with the ‘vuurspuwende Vesuvius’ (fire-spewing volcano Vesuvius). This correlates to the representation of a volcano at the end of the paper roll of our longest
While the volcano depicted smokes and does not ‘spit’ its molten lava, this discrepancy may be explained by word-of-mouth advertising gone wrong, or perhaps because the fire was not painted on the moving panorama itself but visible to the viewer by means of special effects, as is implied by the Bredasche Courant in 1855, which described the event’s conclusion: ‘and finally Naples with Vesuvius, all strikingly illuminated’. An advertisement in the Alkmaarsche Courant of 15 January 1855 probably hints at this too: ‘everything is illuminated in a striking way, alternating day and night, imitating the moonlight and lightning’.

Barely visible on one of the smaller parts of the hand-painted fragments of moving panorama is a small street sign mentioning the Route du Rocher (fig. 15). This route through the Alps is not explicitly mentioned in any of the advertisements or brochure; however, it exists to this day and is located between two ‘travel destinations’ specifically listed in the pamphlet and in some reviews: namely ‘Geneva (“the summer residence of countless travellers from all countries”)’ and ‘Mont Blanc (“the king of the European mountains, 14,700 feet above sea-level”)’.

Further substantiating the identification of the Rijksmuseum objects as surviving fragments of the Reuzen-Cyclorama of circa 1853 are some of the published comments on the painting technique used to depict the sky: ‘[...] seen with much pleasure; especially the air, mountains and lakes are excellently treated and find the visit of this piece of art for every lover of beauty worthwhile’ and ‘the skies and vistas are treated with artistic freedom and effect’. The skies depicted in the fragments of the moving panorama are indeed remarkable, reminiscent of Zuber’s wallpaper technique, and it is understandable that one would want to elaborate on the eye-catching passing sky.

Potentially undermining our association of the Rijksmuseum fragments with the Reuzen-Cyclorama of circa 1853 is the apparent absence of depictions of other locations specifically listed in the promotional documents, such as Lake Como or Rome. This, however, is easily explained. According to the historical sources, the cyclorama covered a distance of five hundred miles, and the physical object consisted
of thirty thousand square feet of painted surface. Assuming the height of the cyclorama was, as our fragments are, 180 centimetres, the total length of the moving panorama – whether or not divided over different spools – would thus have been one and a half kilometres. The total length of what remains of the fragments held in the Rijksmuseum collection today is only fifty-eight metres, in other words, only a small part of the original cyclorama.

**Ferdinand Reichardt**

The announcements also contained additional information that helped clarify the historical context in which the cyclorama was produced. The owner of the *Reuzen-Cyclorama*, recorded as ‘Ferd. Reichardt’, seems to have been Ferdinand Emil Robert Reichardt, the same person who was active as a book printer, publisher and editor in Berlin from around the eighteen-thirties. Although we know that he was born in Berlin in 1813, the year and place of his death are uncertain. In his early days, he seems to have tried his luck as an actor, but he changed his profession, perhaps encouraged by his stepfather, H. Nortmann (dates unknown), who was a publisher. Reichardt’s involvement in the publication of controversial political pamphlets at the time of the German revolutions or March Revolution between 1848 and 1849, for *Die Locomotive*, among others, led to trouble. Following his publication of a work by the revolutionary poet Ferdinand Freiligrath (1810-1876), he was arrested in February 1849 and banned from running his business as the publisher and editor of the *Berliner Großmaul*. Reichardt, who had already experienced problems with Prussian censorship in previous years, wrote a fierce pamphlet proclaiming his innocence and objecting to the unjustifiable closure of his business by the chief of the police, ‘Von Hinckeldey’.

Reichardt’s name did not re-appear until 1851, again as a publisher, this time of a printed guide (thirty-two pages) titled *Risley’s aus America großes bewegliches Original-Panorama des Mississippi Flusses, von dem St. Anthony Wasserfälle bis zu dem Meerbusen von Mexiko*, the moving panorama of the Mississippi River which rivalled Banvard’s of the same subject. A year later, in 1852, Reichardt is named as the publisher of
a pamphlet in which the cyclorama of John William Robson (dates unknown), Die Reise nach London zur Industrie-Ausstellung, was announced. Although this might suggest that Reichardt resumed his work as a publisher, it is not impossible to imagine that these printing commissions planted the seed for his own future project. It remains pure speculation, but could it be that Reichardt switched to the business of promoting and circulating moving panoramas when the local political situation got too hot for him and his reputation became tarnished? The success of others in this sphere, Reichardt’s own close connection with newspapers and his familiarity with the way publicity worked, and possibly even an abundant left-over supply of paper, perhaps encouraged him to take the plunge, design a moving panorama of his own and take it on the road throughout Europe.

Without a record of Reichardt’s motivations, it is difficult to analyse the subject matter he chose for his moving panorama. Why did he decide to let the audience travel through Austria, Switzerland and Italy? We know, for instance, that American John Banvard took the scenery along the Mississippi River for his moving panorama in order to draw attention to his archaeological finds and encourage tourism to the region. Did Reichardt have similar ulterior motives? More plausible, however, is that he approached the decision simply from the point of view of profit, responding to popular interest in travel. It is striking, after all, that this is exactly what was deliberately emphasized in the advertisements for the cyclorama: ‘Since travelling and hiking have become a general trend, and even a necessity, but one that is not available to everyone, here is the best chance to visit the abovementioned regions for little money, without the risks of falling off the mountains or being buried under snow’.

According to the advertisements, Reichardt commissioned the ‘gebroeders Borgmann’ and the artist ‘Heyl’ from Berlin to depict his landscapes. The Borgmann brothers, who unfortunately could not be identified more precisely, were documented as theatre builders and decorative painters of interiors in Berlin and its surrounding regions. Among other things, they carried out the decoration of the Berliner Victoria-Theater and were commissioned to decorate some of the rooms of the Ressource zur Unterhaltung society in Berlin. Heyl would appear to be the artist Heinrich Heyl (1830-1879) from Friedenau, who concentrated mainly on the decoration of church interiors, such as the Verklärungskirche in Berlin-Adlershof. It is not surprising that these men were chosen to paint the cyclorama; they all had experience in covering large surfaces. Moreover, there is a chance that Reichardt had become acquainted with the Borgmann brothers during his presumed theatrical past. No comparable extant work by any of these artists is known, depriving us of the opportunity to carry out a stylistic comparison with the fragments of the cyclorama in Amsterdam.

It is not clear whether Reichardt initially tried to organize performances of his Reuzen-Cyclorama in Germany. No advertisements have been found in German newspapers, yet a review dated March 1853 suggests that a show did take place in Hamburg. Possibly owing to his ongoing trouble with local authorities, soon thereafter Reichardt decided to seek refuge in the Netherlands. On 12 July 1853 he registered in Amsterdam, according to the city’s register of aliens, which recorded his profession as book dealer, his place of birth and residence as Berlin, his age as sixty-one (sic), and his landlord as Pieter Weijers in Kalverstraat. A mere three months later, on 8 October 1853, Reichardt registered again, this time as ‘Director
of the Cyclorama’, with an assistant on the cyclorama, the Cologne-born Caspar Hackhausen (dates unknown), listed above him.50 Reichardt probably arrived in the Netherlands much earlier that year, however, for his cyclorama was first mentioned in print on 2 May 1853 in an advertisement in the Dagblad van Zuidholland en ‘s Gravenhage.

Reichardt was most probably in charge of his own promotion of the cyclorama showings and must have contacted the newspaper publishers in different cities directly. This assumption is based on a letter Reichardt sent to the Diederichs brothers, George Frederik (1799-1862) and Pieter Arnold (1804-1870), publishers of the Algemeen Handelsblad, on 1 February 1855.51 In this letter, held in the Allard Pierson Museum in Amsterdam, Reichardt emphasized the good relationship they had built up in recent years and requested them to place an advertisement with recommendations before Sunday. This can only relate to his cyclorama, confirmed by the stamp on the letter stating ‘Theatre Cyclorama’. And indeed, an announcement in their newspaper mentioning the cyclorama in the ‘Odéon’ theatre followed a couple of days later.52

The actual tour of the Reuzen-Cyclorama can be reconstructed from the many announcements, advertisements and reviews. From May 1853 until November 1853 the cyclorama travelled throughout the Netherlands; it was shown in Belgium in Antwerp and Brussels in the first months of 1854; it then crossed the Channel to be presented in London between the end of March and the end of July 1854; and finally, it came back to tour the Netherlands from August 1854 until October 1855.53 It was seen in all sorts of venues, from tents at annual fairs to theatres and concert halls. In each major city he visited, Reichardt went to great lengths to secure recommendations and testimonials from local artists and dignitaries. And during the two years in which he travelled through Europe, the list of names in his advertisements grew and grew.54 Such well-known artists as Nicolaas Pieneman (1809-1860), Salomon Leonardus Verveer (1813-1876) and Charles Rochussen (1814-1894), as well as scientists such as Caspar Georg Carl Reinwardt (1773-1854) and Christophorus Buys Ballot (1817-1890) were all quoted. Even the royal family in London visited the cyclorama, and Queen Victoria (1819-1901) bestowed a gift on Reichardt as a token of her approval (fig. 16).55 The show was usually also accompanied by music.
starting in The Hague with the former organist of the late King William II (1792-1849), Henri François Fastré (1816-after 1864), and in the next year by a group of Tyrolean singers formed by Mr Eduard Strümpflí and Mr Rudolph Speckbacker (probably stage names), who during the break not only sang in national costume, but also yodelled and vocally mimicked wind instruments, as well as string and percussion instruments.56

Some cities were visited more than once, and to ensure that the cyclorama continued to attract viewers, Reichardt collaborated with colourful figures such as ventriloquists and magicians, including the famous ‘Professor Lassaigne’, who went down in history by having a horse and rider take off in Amsterdam while suspended from a hot-air balloon.57 One of the last mentions of the Cyclorama Reichardt can be found in an advertisement in the Middelburg Courant of 19 June 1855; there was talk about a final closure, but Reichardt hoped to come back the following year with a new cyclorama about ‘Neerlands Indie’ (the Dutch East Indies).58

Notwithstanding that pledge, things remained quiet in the ensuing years. Neither the Reuzen-Cyclorama nor the pre-announced version featuring the Dutch East Indies was ever heard of again.59 The exact reason for this remains uncertain. One possible scenario might have been the declining interest of his audience, who were tempted by alternative, more realistic, forms of entertainment.60 As Auke van der Woud explains it: ‘with a mass attraction there comes a time when the public has had enough of it.’61 Within this context, we must not ignore the rise of stereophotography – which from about the mid-eighteen-fifties onwards was accessible to a wider audience.62 The invention of this clever use of photography, which, through its suggested depth, convincingly created the illusion of finding yourself somewhere else, would contribute to the final blow for moving panoramas, anticipating, of course, the development of ‘moving pictures’ or the cinema.

Conclusion

Since the results of the research into the materials and technique and the historical evidence complement each other convincingly, there can be little doubt that the four fragments came from Reichardt’s Reuzen-Cyclorama. This makes the objects a rare relic of the moving panorama phenomenon and an important representative of the new visual culture around the turn of the twentieth century. The current condition and status of the cyclorama emphasize the transience of this popular viewing experience.

Some issues remain unresolved. The most pressing question being what happened to the rest of the Reuzen-Cyclorama? Of the one and a half kilometres the cyclorama was thought to have been, only fifty-eight metres are held in the Rijksmuseum. It is relatively safe to assume that parts of this moving panorama were damaged and lost due to its extensive touring and performance schedule. However, there is also a possibility that some of the more recognizable parts, such as Lucerne, Lake Como or Milan, were reused or deliberately preserved and are still rolled up somewhere, as the Rijksmuseum fragments were themselves for years.

It is still unclear how the four surviving parts of the cyclorama ended up at the Rijksmuseum and who was responsible for their acquisition. As part of the group of six, they may have come into the museum’s collection along with a larger donation of wallpaper pieces. In any case, one suspects that they were not brought into the collection as works of art, for their artistic quality was probably never highly valued, and their function was apparently unclear. Alternatively, they may have been acquired for some
other purpose, for instance, to serve as a backdrop for either a costume display or drawing sessions in the museum’s associated Teekenschool.63

The two pieces of actual wallpaper that are part of the rediscovered group, which for the most part have been excluded from this discussion, remain the odd men out. In contrast to the four hand-painted fragments, they do not fit with the concept of the Cyclorama Reichardt letting its viewers travel through different countries. Nevertheless, they are the same height and mounted in exactly the same way as the four pieces of the moving panorama. As we noted above, even the piece of Zuber wallpaper, El Dorado, is attached to a wooden pole that indicates that it was once used the same way. Several possible explanations arise: perhaps these wallpaper fragments were used by Reichardt as an initial trial of his method of displaying scenery on rollers, or as substitutions when pieces of the cyclorama became too worn out and had to be replaced.

The theatrical experience offered by Ferdinand Reichardt with his Reuzen-Cyclorama, which must have been enjoyed by countless members of the Dutch, Belgian and English general public between 1853 and 1855, will be partially reconstructed this summer in the exhibition xxl Paper. Owing to the missing parts and the fragility of the surviving pieces, it is impossible to recreate the movement of the cyclorama in the same way and to let the audience ‘travel’ all five hundred miles through the countryside of Tyrol, Styria, Switzerland and Italy. However, visitors to the exhibition will be able to step into a room encircled by the largest of the fragments and to surround themselves with twenty-three metres of scenic panoramas. A most welcome fantasy, especially at the end of a period when opportunities to travel widely and to enjoy nature’s beauty at first hand were sadly curtailed for too long due to the pandemic.

During the preparations for the Rijksmuseum depot’s move to its new location, Collectie Centrum Nederland (ccnl) in 2018, a hand-painted scenic landscape on paper that is 2,309 centimetres long and 180 centimetres high came to light. Together with five broadly similar, but shorter pieces, the group of objects was briefly described on a museum inventory card in 1962 as six rolls of wallpaper. After extensive research and conservation, it now appears that four of these are in fact fragments of a moving panorama. More specifically, they have been identified as surviving parts of what was known as the Reuzen-Cyclorama (Giant Cyclorama) or Cyclorama Reichardt, named after its German owner, Ferdinand Reichardt (b. 1813). This particular moving panorama, originally measuring an astounding one and a half kilometres, was an extraordinary phenomenon that is documented as having travelled through the Netherlands, Belgium and Great Britain between 1853 and 1855. It was shown to the public, rolled between two wooden poles and accompanied by music or storytelling, in order to give people an experience of travelling the regions of Tyrol, Switzerland and Italy. The article will follow the interdisciplinary quest undertaken by curators and conservators that led to the compelling new understanding of the purpose of these long-forgotten lengthy paper landscapes in the Rijksmuseum’s collection.
We decided to analyze the pigments that have been used in order to test the hypothesis that the fragments were part of a cyclorama in use between 1853 and 1855. Three non-destructive methods were employed in situ: X-ray fluorescence spectroscopy (XRF), fibre optic reflected spectroscopy (FORS) and Raman (fig. 17). These techniques are complementary, XRF providing the elemental composition that supports the identification of the pigments used and FORS and Raman providing molecular or structural information that can give additional information to help identify these pigments. To establish the binder used in the paint, two paint samples were analyzed using Py-GC/MS and proteomics.

The analysis of the blue colours showed that Prussian blue was used for painting the sky. Mixtures of ultramarine and Prussian blue were found in the water. Natural ultramarine was an extremely expensive pigment obtained from ground lapis lazuli. Although cheaper, lower-quality grades of the natural pigment were available, ultramarine did not become more affordable until 1828, when it was successfully synthesized. The artificial version rapidly replaced the natural one. Ultramarine blue was used in large areas of the cyclorama, mainly to depict water. The identification methods we used cannot distinguish differences between traditional ultramarine and the synthesized pigment. However, it is probable that synthetic ultramarine was employed, since it is unlikely that an expensive pigment was used to create a large-scale artwork like this cyclorama. This assumption would place the production of the cyclorama after 1828.

The purples in the panorama were found to contain several mixtures of reds (vermilion and red lead) and blues (ultramarine and Prussian blue). The discovery of a brilliant, purple-coloured synthetic aniline dye in 1856 and other synthetic colours in the following years brought about a revolution in the colour industry. It is likely that if these colours had been available when the cyclorama was created, the artists would have made use of these new, immediately popular colourants, but no aniline dyes were found in the colours used for the cyclorama. In addition to the pigments already mentioned, lead white and chalk were found in many Raman and FORS measurements. The Raman measurements also showed the presence of chrome yellow, a pigment in use since the beginning of the nineteenth century. Although this does not prove that the cyclorama was painted before 1860, because the pigments that already existed continued to be used throughout the nineteenth century and beyond, we found no pigments that contradict our hypothesis that the cyclorama was painted in or shortly before 1853.

The analysis of the binder showed that a significant amount of rabbit glue is present along with small amounts of starch in both the background and the foreground. In addition, the painted scene contained some pine resin. This, together with the chalk found in all the paint samples, indicates that a so-called distemper paint was used. Distemper was widely used for interior house decoration, the painting of theatrical scenery and in the production of wallpaper well into the twentieth century.
Fig. 17
In situ setup for non-destructive Raman measurements by the Dutch Cultural Heritage Agency (rce).
Photo: Inez van der Werf, rce
With thanks to Aafke Weller, Jane Turner, Leila Sauvage, Francesca Gabrieli, Victor Gonzalez, Rika Pause, Inez van der Werf and Saskia Smulders.


2 Auke van der Woud, De nieuwe mens: De culturele revolutie in Nederland rond 1900, Amsterdam 2015, p. 22.

3 An overview of all existing moving panoramas can be found on the website of the Panorama Council: https://panoramacouncil.org/en/what_we_do/resources/panoramas_and_related_art_forms_database/?type=moving (consulted 3 September 2021).

4 John J. Egan (dates unknown), Panorama of the Monumental Grandeur of the Mississippi Valley, c. 1850, distemper on cotton muslin, 228.6 x 10607.1 cm, inv. no. 34:1953 (Eliza McMillan Trust); Benjamin Russell (1804-1885) and Caleb Parrington (1812-1876), The Grand Panorama of a Whaling Voyage Round the World, c. 1848, watercolour on canvas, 259 x 39,624 cm, inv. no. 1918.27.1 (donation Benjamin Cummings, 1918); Edward Harrison May (1824-1887) and Joseph Kyle (1809-1863), Moving Panorama of Pilgrim’s Progress, 1851, see Jessica Skwire Routhier et al., The Painters’ Panorama: Narrative, Art, and Faith in the Moving Panorama of Pilgrim’s Progress, Hanover (NH) 2015.

5 The re-inventory of most of the unregistered objects did not take place until some point in the early nineteen-sixties.

6 This Manufacture de Papier Peints et Tissus was founded by Jean Zuber (1773-1852) in Rixheim, France; www.zuber.fr/en/scenic-wallpapers/eldorado (consulted 2 January 2021).

7 The inventory card mentions an illegible inscription, a possible reference to a publication dating from 1957, in which our piece of El Dorado was featured.

8 The trees resemble the stone pine (Pinus pinea), also known as the Italian stone pine, umbrella pine or parasol pine, a species that is native to the Mediterranean region. In addition, the clothing of the different figures corresponds to the costumes associated with the Ciociaria.

9 The largest object in the set consists of twenty-five sheets of paper. For the other three objects similar sheets were used, fourteen, nine and seventeen sheets; on the history (and application of) wallpaper, see e.g. Richard Harmanni, Papieren behang: Een rijke geschiedenis, 3 vols., coll. cat. Utrecht (Nederlands Centrum voor Volkscultuur) 2007.

10 Ibid., p. 15.

11 No holes were found along the bottom edge.

12 For the expanding market of entertainment in the Netherlands, see Van der Woud 2015 (note 2).

13 See Evelyn J. Fruitema and Paul A. Zoetmulder, The Panorama Phenomenon: Mesdag Panorama 1881-1981, The Hague 1981; for the various forms of moving panoramas, see Marie-Louise von Plessen, Sehsucht: Das Panorama als Massenunterhaltung des 19. Jahrhunderts, Bonn/Basel 1993, pp. 230-51. One possible explanation for the minimal awareness of this form of panorama today is the vulnerability of the object. Its size made it a lot more difficult to handle and, in contrast to static panoramas, it was not housed in a permanent room or building. It would generally be hoisted up in the open air by its owner. This repeated handling inevitably caused wear and tear and meant that few examples have survived.


16 Ibid., p. 3.

17 See e.g. Letter from un Unknown Woman, 1949, https://www.youtube.com/watch?v=dkC7WRla-zS (consulted 15 December 2020).


19 Ibid. See also note 13.

20 Between about 1803 and 1818 was the first heyday of the static panorama in the Netherlands; the second heyday took place between about 1880 and 1920. See Sylvia L. Alting van Geusau and Ester L. Wouthuysen, Kunstzinnig vermaak in Amsterdam: Het Panoramagebouw in de Plantage 1880-1935, Amsterdam 2021 (Jaarboek van het Genootschap Amstelodamum), pp. 24-27.
These moving panorama shows were announced in papers like the Nederlandsche Staatscourant, Leeuwarder Courant, Arnhemse Courant and Nieuwe Rotterdamsche Courant.

For more information on Hartkamp and his collection, see https://archief.amsterdam/inventarissen/details/15001 (consulted 30 July 2020) and http://www.marques.decollections.fr/detail.cfm/marque/7389/total/1 (consulted 2 February 2022).

The first permanent panorama building in Amsterdam (replacing a temporary construction that stood near the Leidse Poort) was built on a stretch of Nieuwe Prinsengracht between Plantage Middenlaan and Muidergracht, and opened in December 1880. The panoramic building was demolished in 1933 to make way for a public garden due to declining interest. For a detailed account of the ‘Panoramagebouw’, see Alting van Geusau and Wouthuysen 2021 (note 20).


Cyclorama: ‘toile peinte disposée sur un rouleau, et qu’on tire à la verticale pour créer un fond de scène, ou qu’on déroule à l’horizontale, en un mouvement continu, pour simuler un déplacement lateral’, Dictionnaire encyclopédie Quillet.

In contrast, in North America the term cyclorama was introduced at the end of the nineteenth century to describe a static panorama (re-introduced from Europe) and distinguish it from the (there) more popular moving panoramas; based on correspondence with Gabriele Koller, IPC International Panorama Council, 21 September 2021.

‘De explicatie van het Cyclorama zal door den Heer G. Kleine van Amsterdam, worden vervuld’, Oprechte Haarlemsche Courant, 21 October 1854.

‘Geschied- en Aardrijkskundige Beschrijv-
ving in het Hoog- of Nederduitsch is à 10 Cents aan het Lokaal te verkrijgen’, Leeuwarder Courant, 19 July 1853.

‘met veel genoegen gezien te hebben; keuren inzonderheid de lucht, bergen en meer uitmuntend behandeld en vinden de bezigtiging van dit Kunststuk voor ieder beminnar van het schoone overwaardig’, Leydsche Courant, 17 October 1853; ‘De luchten en vergezigten zijn met artistieke vrijheid en effect behandeld’, Bredasche Courant, 31 May 1855.

‘Op een 30,000 voet doek’, see fig. 13; ‘Geschilderd op 30,000 voeten Doek’, see fig. 16.

Assuming a Rhineland foot of 0.314 metres was used, 30,000 square feet equals 2,958 square metres. The panorama is 1.8 metres high, so it must have been over 1,600 metres long.


Ibid.

The radical 1848 newspaper Die Locomotive: Zeitung für politische Bildung des Volkes was the most important journalistic work of Friedrich Wilhelm Alexander Held (1813-1872). Ferdinand Reichardt is mentioned as the printer of this paper; http://zefys.staatsbibliothek-berlin.de/kalender/auswahl/date/1848-04-04/25990202 (consulted 3 January 2021).
The poem Zur Eröffnung der Kammern warned the reader to trust neither the government nor the liberals, even though more liberties had recently been given to the common people, https://sammlung-online.stadtmuseum.de/Details/1492308 (consulted 1 January 2021); Robert Justin Goldstein and Andrew M. Nedd (eds.), Political Censorship of the Visual Arts in Nineteenth-Century Europe: Arresting Images, New York 2015, p. 143.


A copy is held in the collection of the Staatsbibliothek Berlin, inv. no. uu 6169.<a>.


‘Daar het Reizen en wandelen eene algemene mode en zelfs een behoefte geworden is, maar een ieder zijne tijd noch beurs toelaat deze mode te volgen, zoo biedt zich daartoe hier de beste gelegenheid aan, om de bovenvermelde landstreken voor weinig geld en zonder gevaar van de bergen te vallen en onder de sneeuw begraven te worden, te bezoeken’, Pamphlet on the Reuzen-Cyclorama, see fig. 1 verso.


The recommendations of Brussels and Antwerp artists are said to be dated 12 February 1854, according to an advertisement on 15 June 1855. No sources have been found to prove the stay of the cyclorama of Reichard in Germany (except for a review of the showing in Hamburg, see note 48) and France, although an advertisement in the Utrechtsche provinciale en stads-courant: algemeen advertentieblad of 26 October 1853 states that the cyclorama was in transit to Paris; see https://resolver.kb.nl/resolve?urn=d3dd:010776127:mpeg21:a0005.

Leiden University Libraries, call no. 21180 B 28, Reuzen-cyclorama [...], [1853], see note 48.

Algemeen Handelsblad, 14 September 1854, p. 1.

Rotterdamsche Courant, 21 November 1854.

Opregte Haarlemsche Courant, 20 September 1853.
As far as we now know, the very last mention of the Cyclorama Reichardt is to be found in *Le Courrier de la Meuse*, 4 October 1855.

According to Carl Rohrmann the last mention of Reichardt is made in 1857 when he marries for the second time in Miro (Germany), see Rohrmann 1980 (note 36), p. 257.

On the declining interest in panoramas, see Alting van Geusau and Wouthuysen 2021 (note 20), chapter 6: ‘Het (panorama) doek valt’; on other forms of cultural entertainment in the Netherlands and the growing market for it, see Van der Woud 2015 (note 2).


The school building was opened in 1892 to allow future drawing teachers of the ‘Rijksnormaalschool voor Teekenonderwijzers’ to gain practical experience in teaching drawing.

X-ray Fluorescence: *XRF Artax Bruker 2.0, polycarpellary lens, Model mcmb 50-0.6, molybdenum tube (focus 0.05 x 0.005 mm2) was used on a loose fragment of the panorama, a portable Olympus DELTA(Premium), Handheld XRF Analyzer was used in situ. FORS (Fibre Optics Reflectance Spectroscopy): FORS and FieldSpec®4 standard resolution, spectral range 350-2500 nm (3 detectors). Raman: Bravo Spectrometer (Bruker), spectral ranges 300-2200 and 1200-3200 cm-1 with duo laser system (785 nm and 853 nm) to reduce fluorescence, 45 mw energy at the paint surface, approx. 0.5 mm distance and a spot size of 1 mm.

The methods and results used are published in Saskia Smulders and Inez van der Werf, *Onderzoek naar 19e eeuws Panorama met Mediterraan fantasielandschap*, 2021. Amsterdam, Dutch Cultural Heritage Agency (RCE), project no. RCE 202-111.


The methods and results used will be published in Inez van der Werf and Rika Pause, *Reichardt’s Cyclorama – Pigmentanalyse met Raman spectroscopie*, 2022. Amsterdam, RCE, project no. RCE 202-069.

Smulders and Van der Werf 2021 (note 65).

For the painting of theatrical scenery, see F. Lloyds, *Practical Guide to Scene Painting and Painting in Distemper*, London 1875. *XRF and FORS analysis were performed by the Rijksmuseum; Raman and py-GC/MS were carried out by the RCE. Detailed results of the technical analysis and of the binding media and pigments and its interpretation will be published elsewhere.*