

GUSTAVE DORÉ : MAGIC LANTERN SLIDES

Dan Malan

REMEMBER WHEN YOU WERE a student and instructors made you do boring, tedious research? Who knew the day would come when researching a hobby would be exhilarating? The purpose of this article is to share research and appeal for assistance concerning the 19th century's most famous illustrator, one of the few artists individually identified in magic lantern slide catalogues.

The French illustrator, painter and sculptor Gustave Doré (1832–83) was the most prolific and popular illustrator of all time. He produced over 10,000 engravings, which have been reprinted in over 5,000 book editions. He achieved a level of popularity that is difficult to fathom. In the 30-year prime of his popularity (1865–95), a new Doré-illustrated edition was published on average *every five days*. Of course, some of these were by unscrupulous publishers who added one Doré reproduction to 200 other engravings and listed their book as 'by Doré and others'. Though Doré was French, it was widely asserted that his Literary Folios could be found in any English-speaking home where they could spell the word ART.

Stories about young Gustave's artistic prowess are legendary, with amazingly detailed drawings produced from the age of five. Hundreds of drawings from his early childhood have survived. At the age of eight, Gustave was in a parade. No one realised he was making clever drawings of spectators in a few seconds and passing them out to shocked recipients. By the age of ten, he was carving his own lithographs on the stone. There are also many humorous stories. When he was first given oil paints, he was so overjoyed he could not wait for canvas. He painted the first thing he saw – a live chicken – bright green! This caused a near riot, as superstitious locals thought the green chicken to be a demonic curse.

Doré burst into prominence on the artistic scene at the age of 15, when he wrote, drew, and did the engravings for his first book, *The Labours of Hercules* (a satire). By the age of 16 he had become France's most highly paid illustrator, making 50 Francs per page for satirical caricatures which delighted readers of the popular periodical *Journal pour Rire*. Who then could have dreamed he would eventually receive 20 times that rate of pay? As a teenager, he made thousands of humorous engravings. In 1854, he turned to more serious literary pursuits with sets of engravings for editions of Rabelais and Balzac. He was the boy-genius darling of Parisian creative circles, with friends including the likes of Dumas, Hugo, Gautier, Delacroix and Rossini.

Every few years Doré became restless for new artistic worlds to conquer. In 1861, he launched a series of Literary Folios with *Dante's Inferno*, which brought him the award of the Légion d'Honneur. This was followed by *Baron Munchausen*, *Perrault's Fairy Tales*, *Don Quixote* and many others. He essentially created a new genre, elevating the popular art of book illustration to the level of fine art.



Gustave Doré aged 27, photographed by Nadar in 1859

No one had believed it possible to achieve such detail and effects in a wood engraving. He trained his own school of some 40 engravers, just to carve the drawings he made directly onto the wood. By 1865, he was France's greatest illustrator, but still little known outside its borders. But that was about to change dramatically.

Christmas 1865 witnessed the publication of the most popular set of illustrations ever made – *The Doré Bible*, so famous that Mark Twain lauded it in *Tom Sawyer*. The amount Doré was paid for that set of engravings would in today's currency be about US\$5 million. I have now catalogued over 1,000 book editions containing Doré Bible prints. The first edition of *The Doré Bible* weighed 40 pounds and contained 228 large folio engravings. Doré then took the English-speaking world by storm with a three-year inundation of Literary Folios – the works of Tennyson, Milton, LaFontaine and many others. Fans and friends feared that his rate of production would be his demise, and eventually it was. Visitors reported observing him produce 20 large engravings before breakfast. He was like one of those hyper-sensitised characters created by Edgar Allan Poe.

While Doré was acknowledged as France's greatest illustrator, the French fine arts establishment was less receptive. But the solution lay just across the English Channel. Doré's artistic renown took on a new dimension in 1868 with the opening of an exhibition of his paintings in London, entitled 'The Doré Gallery'. Few imagined it would remain open continuously in London for 24 years and then tour America in the 1890s. It travelled as far west as Chicago's Art Institute, where it broke every attendance record: 16,000 visitors in one day, 4,000 in one hour, and so on. The exhibition included dozens of large paintings, up to 20 feet high by 30 feet wide, mostly religious

'Peace'. Slide with 3 inch diameter glass in 4 x 7 inch wooden frame, T.H. McAllister, New York. Probably one of a dissolving-view pair. Image after 1867 steel engraving from Doré's 1866 painting.



'Paul Shipwrecked' or 'Landing at Malta'. 3¼ x 4¼ inch glass slide published by A.D. Handy of Boston. Probably redrawn by Joseph Boggs Beale after a Doré Bible engraving, with some changes to the image.



'Jesus at 12'. 3¼ inch square chromolithographic slide. Slide 12 of Primus set 786, 'Doré Bible Chapter II – Life of Jesus' (W. Butcher, London, 1900s). The full set consisted of 24 slides, in three 'chapters' of eight slides.





'Nativity', 'Fleeing', 'Baptism', 'Samaritan'. 2¼ x 8 inch glass slide with four chromolithographic images. From an unidentified 'Life of Christ' set.

scenes. These complemented Doré's famous Bible engravings, and many of his paintings were made into 22 x 33-inch steel engravings, which were offered for sale in the gallery.

But we must go back a bit. Doré continued to produce Literary Folios, including his social commentary masterpiece *London: a Pilgrimage*, his travel book *Spain*, his historical *The Crusades*, plus literary classics like *The Rime of the Ancient Mariner*, *The Raven* and Ariosto's *Orlando Furioso*. In the 1870s, Doré also turned to watercolour landscapes and sculpture. He eventually won praise and is now highly regarded in both fields. But he died aged 51 in 1883, largely due to over-exertion. His last work was the monument he created, free of charge, to the memory of his good friend Alexandre Dumas, which can still be seen in Paris.

Doré's popularity actually increased after his death, with cheap pirated US editions of his folios, as there was no international copyright law until the 1890s. His works finally receded from prominence with the new century. But his influence on the 20th century was still immense. The cinema industry owes him a major debt, with his engravings inspiring scenes in films ranging from *King Kong* to *The Ten Commandments* to *Oliver!* In the 1990s many films – including *The Prince of Egypt*, *Amistad*, *Seven* and *What Dreams May Come* – still showed scenes based on Doré engravings. Recent popular books about angels reprint hundreds of Doré engravings. Doré's name may not now be as familiar as it once was, but his engravings are still all around you. You just have to know where to look.

In recent years my Doré research has expanded beyond fine arts and book and periodical engravings to adaptations of his art in ephemera and popular culture. I have now found Doré art adapted to over 120 pop culture formats. Just recently I discovered two new formats: a leather motorcycle jacket with a Doré engraving painted on the back, and a hubcap decorated with Doré art. Some formats are large: stained-glass windows, circus parade wagons, murals, wallpaper, billboards, tapestries and shower curtains; some are small: metal buttons, tattoos, chess set figures, postage stamps and cancellations, cartes de visite, Sunday School cards and playing cards. There are musical items like the covers of LPs, CDs, sheet music and cantatas, and even operas based on Doré art. There are kitchen items like decorative plates, serving trays and silver relief plates. Some are common items like T-shirts, colouring books, calendars, postcards and posters. Some are very odd, like fruit crate labels, two-sided monochromatic jigsaw puzzles, company icons and bookmarks.

But none of these formats compares to the veritable cornucopia of different Doré engravings (more than 720, plus thousands of variations) which were made into magic lantern slides. So far researchers have found evidence of French, German, Dutch, Australian, British and US Doré slide sets.¹ Most were available either in black and white or hand-tinted. Sets have been found with one, three, four or five images

per slide, and in several sizes, corresponding to the various standard slide sizes in different countries. The first wave of Doré slide sets was from the 1860s–80s in approximately 4 x 7-inch wooden frames with a 3-inch circular or oval image. Then came the standard all-glass slide (known as the Economy Series by some US producers) from the 1880s–1910s, being 3¼ x 3¼ inches in Britain and 3¼ x 4¼ inches elsewhere. At about the same time, multiple-image slides were issued for toy lanterns, the full glass usually measuring about 2 x 7 inches. These images were often very tiny, as small as 1-inch ovals. Finally in the 1910s and 1920s some images appeared as thinner 2 x 3-inch slides with cardboard edges.

Most Doré magic lantern slides were reproduced from his folio engravings, the images of which were about 8 x 10 inches in size. A few were made from Doré paintings. The vast majority of Doré slides were from *The Doré Bible*. Individual Doré slides can also be found in religious slide sets that do not list his name. Most Doré slides are photographic reproductions, but some were from new artwork by artists such as Joseph Boggs Beale, based on Doré scenes.²

Here are the total numbers of Doré engravings for titles for which slide sets are known to have existed. Sets so far only known from catalogue listings are shown by an asterisk (*):

<i>The Doré Bible</i>	252
Michaud, <i>The Crusades</i>	99*
LaFontaine's <i>Fables</i>	86
Dante's <i>Inferno</i>	76
Dante's <i>Purgatory and Paradise</i>	60*
Milton, <i>Paradise Lost</i>	50
Coleridge, <i>Rime of the Ancient Mariner</i>	39*
Poe, <i>The Raven</i>	26*
Baron Munchausen	16*
<i>Legend of the Wandering Jew</i>	12*
(From paintings by Doré)	7+
<i>Sinbad</i> (Arabian Nights)	4+
S.C. Hall, <i>The Trial of Sir Jasper</i>	1*
S.C. Hall, <i>An Old Story</i>	1*

Other Doré book titles which are prime candidates for slide sets, but for which no slides are yet known, include:

Cervantes, <i>Don Quixote</i>	120
Davillier, <i>Spain</i>	112
Jerrold, <i>London: a Pilgrimage</i>	54
Perrault's <i>Fairy Tales</i>	40
Tennyson, <i>Idylls of the King</i>	37
Chateaubriand, <i>Atala</i>	30

The first known reference to Doré slides comes from Jean Mistler's 1964 book *La Librairie Hachette* about the history of that major French publishing firm. Mistler had access to Hachette's archives and found an 1863 letter from a Mr Robin,³ seeking to buy the rights to make lantern slides of Doré's *Dante's Inferno*. We do not know

NOTES

1. Many people have assisted in this research. Terry Borton did extensive research in US slide catalogues, particularly on T.H. McAllister sets and those redrawn by slide artist Joseph Boggs Beale. Richard Crangle did similar research in British catalogues, particularly sets made by York & Son through Doré's major British book publisher, Cassell. Others who have assisted are Jack Judson, Carol Digel and Barb Zucker (US).

Lawrence Currie (Canada), Mark Butterworth (UK) and Annet Duller (the Netherlands).

2. For those unfamiliar with Doré art, there are 14 low-cost Doré reproduction books published by Dover Press. Write to them at 31 East 2nd Street, Mineola, NY 11501-3582, USA, for a free catalogue.

3. Henri Robin (c.1805–74), an optical showman based in Paris. See

what became of that idea, but the earliest known dated Doré slide set was an 1868 German *Dante's Inferno* set by Paul Hoffman. In 1982–3 there was a Doré Centennial Exhibition in France, England and Germany. The German exhibition catalogue⁴ contains a chapter 'Laterna Magica und Film' by Wolfgang Riedl. It includes a reproduction of one of the oval image Hoffman slides, with part of Doré's scene redrawn. I assume there were many more German Doré slide sets.

The next known dated reference to a set of Doré lantern slides is from Australia. This information comes from the R.J. Noye's internet site 'The History of Photography in South Australia 1845–1915':

An exhibition of dissolving views was shown in the Adelaide Town Hall by James Brown during March 1873. The views showed Gustav [sic] Doré's well-known illustrations of the Life of Christ, and the glass transparencies, which had been coloured by Melbourne artist James Moore, were projected on the screen by a powerful oxy-hydrogen limelight. The views had been brought from Melbourne after being shown at the Inter-Colonial Exhibition earlier that year.⁵

But were the slides themselves actually of Australian origin, or from a British set which had been coloured in Melbourne?

The major proliferation of French, British and US Doré slides began no later than the early 1870s. I do not know how long it took for a publisher to actually produce a major set of slides. But Terry Borton has researched many catalogues by T.H. McAllister of New York. Their first catalogue was dated 1875 and listed several Doré slide sets: 250 slides of *The Doré Bible*, 50 *Paradise Lost*, 76 *Dante's Inferno*, and 12 of *The Wandering Jew*. These four book titles all first appeared in English in 1866. But McAllister's 1875 catalogue does not list slides for either *Dante's Purgatory and Paradise* or *LaFontaine's Fables*, both of which first appeared in book form in 1868.

So far little is known about French Doré slides. There was a set of 230 black and white *Doré Bible* slides (3¼ x 4¼ inches) published by Maison de la Bonne Presse of Paris, probably from the 1880s or 1890s. There is also another strange French/British set by an unknown publisher. The Currie Art International website⁶ run by the Canadian artist Lawrence Currie shows colour images of 32 *Doré Bible* slides. They are 3¼ inches square, suggesting British origin. But few people know that there were two French versions of *The Doré Bible*. They were published in December 1865 and December 1866, but both were dated 1866; they are referred to as F1 and F2 respectively. F1 had 228 engravings, while F2 had 230, about 30 of which were either entirely new engravings or variations of F1.

Almost all foreign-language edition engravings came from F2, as did the Maison de la Bonne Presse slide set mentioned above. But the Currie slides are from F1. The paper labels on the Currie set are all missing, but there is English title wording. Lawrence Currie was bold enough to take a slide apart and found different wording on the inner glass, in French. So it seems that there must also have been a French *Doré Bible* F1 slide set.

The vast majority of slides found so far are British or American, coinciding with the Doré popularity explosion in the English-speaking world in the last third of the 19th century. So far, the only 4 x 7-inch Doré slides I have heard of are American, and I would be pleased to hear from anyone with 4 x 7-inch Doré slides from Britain or anywhere else. Although the British firm York & Son had a direct connection with Doré's major British book publisher Cassell, so far we know of only a few York Doré sets. But I must mention one other significant British Doré set. About the turn of the century, the British firm W. Butcher put out 24 brightly coloured *Doré Bible* slides in three Primus boxed sets (numbers 785–787). These are chromolithographic transfer slides made from paintings based on Doré's engraving scenes. Butcher also published the same 24-image set as 'Projection Postcards,' to be viewed directly or through a type of opaque projector. The word 'postcard' is slightly misleading here, as the cards were thick, had no postcard markings, and were never meant to be mailed.

McAllister of New York published many 4 x 7-inch Doré slide sets in the 1870s and 1880s, then began switching to 3¼ x 4¼-inch sets in the 1880s and 1890s. Many US slide sets were actually produced by Briggs of Philadelphia, then sold to firms in various cities who would put on their own labels, giving the appearance of an enormous number of different sets. Starting in the 1890s, the Briggs firm had Joseph Boggs Beale (1841–1926) make hundreds of newly drawn slides, some with new art and some based on art by Doré, Felix Darley (America's first great illustrator, 1822–88), and others. Some of these Doré slides had part of the scene changed. Terry Borton is working on a major reference book on Beale, whose distinctive style has earned him the label of 'the Norman Rockwell of magic lantern slides'. Most of Beale's Doré adaptations were Bible scenes. Many of those were in small Bible story sets, instead of whole Bible sets with hundreds of slides. Many of those Doré slides do not list his name, and there were many sets that included just one or two Doré slides. At this point I can barely keep up with all the US Doré slide variations.

It was probably around the 1880s when small toy lanterns with accompanying multi-image slides became popular. We now know of

'Wise Men' or 'The Star in the East'. 2¼ x 2¼ inch slide in cardboard mount, Victor Animatograph Co., Iowa, 1915. Slide number 2661; from 'Christmas Story' set of 25 slides, including two Doré Bible images.



'The Approach of the Serpent'. 2¼ x 2¼ inch slide in cardboard mount, Victor Animatograph Co., Iowa, 1916. Slide 9 of set 'Adam and Eve'; image from Doré's 1866 illustrations for *Paradise Lost*.



4. Hervig Guratzsch and Gerd Unverfehrt (eds), *Gustave Doré, 1832–1883* (Dortmund: Harenberg, 1982). Official catalogue of an exhibition held at the Wilhelm-Busch-Museum, Hannover (1982) and University of Göttingen (1983); Bibliophilen Taschenbücher series number 348. The chapter by Wolfgang Riedl is at pp. 287–95.

5. R.J. Noye, 'The History of Photography in South Australia 1845–1915' website: <http://www.chariot.net.au/~rjnoye/PhotohistorySA.htm> (address correct at time of going to press). This quotation is from the 'Photographers' page.
6. Currie Art International website: <http://homepages.about.com/currieart/currieartinternational> (address correct at time of going to press).

Doré slides of this type with three, four and five images, in black and white and in colour. In fact, most of the slide sets listed in the following table were available both in black and white and hand-tinted versions. Also, many slides were available as a large set or as a smaller select sample set, and catalogues offered many variations for listed sets. US catalogues referred to the slides for toy lanterns as Ruby Slides or Gem Slides, or some other cute name to disguise a smaller, cheaper format. There was also a smaller single-image slide which apparently began to appear in the 1910s. These were 2¼ x 2¾ inches, on much thinner glass with cardboard edges. The only known sets of this type were produced by the Victor Animatograph Co. in Iowa. The last dated Doré set we know of was in 1918, conveniently exactly 50 years after the first known dated Doré slide set.

So far we know of seven Doré oil paintings made into engravings and then slides, but there may be many more, perhaps 20–30. Five are religious: *The Triumphal Entry*, *Moses before Pharaoh*, *Vale of Tears*, *Christian Martyrs in the Coliseum*, and *Les Ténèbres* (or *The Night of the Crucifixion*). There was also a pair of paintings entitled *War and Peace* (which appeared just a couple of years before Tolstoy's novel). It would be remiss not to mention here the two rarest Doré engravings ever made into slides. Only recently did I find out that Doré had contributed a couple of engravings to two 1870s British temperance books, for which slide sets were made. Both

were by S.C. Hall, and were entitled *An Old Story* and *The Trial of Sir Jasper*. With over 8,000 different Doré engravings in my own collection, I have never seen those two, as engravings or slides.

And finally, a note to collectors. I am not trying to buy all the thousands of Doré slide variations: Doré art is such a vast field that I would be content with sample slides from each title and format. So far I have about 100 Doré slides. My primary goal is to find information about all the other Doré slides not yet discovered. Please compare what you have in terms of actual slides or catalogue listings, and contact me with any new information. It would be helpful if slide collectors would e-mail me a list of their Doré slides. You may think you have common ones, but they may turn out to be rare. Please understand that I may not be able to respond to everyone immediately. Happy hunting and thanks!

Slide reproduction photos by Paul Dugo.

Dan MALAN is an art historian specialising in the field of literary art. He has written several books about Gustave Doré, including *Gustave Doré: Adrift on Dreams of Splendor* (St Louis: MCE Publishing, 1995; 352 pp., ill.) and *Gustave Doré: A Biography* (St Louis: MCE Publishing, 1996; 208 pp., ill.). These books are available direct from the author at a 30 per cent discount to MLS members, and are shipped surface from St Louis, Missouri, USA. E-mail danmalan@aol.com or contact the Editor for more details.

GUSTAVE DORÉ – MAGIC LANTERN SLIDE SETS

Date	Size in inches	No. in Set	Title	Producer	Notes
1868	4 x 7	76	<i>Dante's Inferno</i>	Paul Hoffman, Germany	Only known from Doré biography.
1873	4 x 7?	?	<i>Life of Christ</i>	James Brown, Australia	Coloured by James Moore colouring.
1875	4 x 7	250	<i>Doré Bible</i>	McAllister, New York	Hand-tinted.
1875	4 x 7	50	<i>Milton, Paradise Lost</i>	McAllister, New York	Only known from catalogue list.
1875	4 x 7	76	<i>Dante's Inferno</i>	McAllister, New York	Only known from catalogue list.
1875	4 x 7	12	<i>The Wandering Jew</i>	McAllister, New York	Only known from catalogue list.
1880?	3¼ x 4¼	230	<i>Doré Bible</i>	Maison de la Bonne Presse, Paris	Only black and white copies known.
1880?	3¼ x 4¼ ?	32	<i>Doré Bible</i> (N.T.)	Unknown, from French F1	See Currie Collection website.
1880?	3¼ sq.	32	<i>Doré Bible</i> (N.T.)	Unknown, from French F1	See Currie Collection website.
1880?	3¼ sq.	252	<i>Doré Bible</i>	York & Son, London	Includes 11 'Milton' images. Also sold by Ivens of Nijmegen, the Netherlands.
				(from Cassell edition)	Oval images. Also sold by Ivens.
1880?	3¼ sq.	86	<i>LaFontaine, Fables</i>	York & Son, London (from Cassell edition)	1 Doré image in set of 26 slides.
1880?	3¼ sq.	1	Hall, <i>An Old Story</i>	York & Son, London	Also sold by Ivens.
				(from Cassell edition)	1 Doré image in set of 14 slides.
1880?	3¼ sq.	1	Hall, <i>Trial of Sir Jasper</i>	York & Son, London	Also sold by Ivens.
				(from Cassell edition)	1 Doré image (no. 438) in larger set.
1880?	3¼ sq.	1	(Bible set)	Church Army, London	1 Doré image (no. IH-405) in larger set.
1880?	3¼ sq.	2	(Hymnal pages)	Church Army, London	Only known from catalogue list.
1880?	4 x 7	39	<i>Rime of the Ancient Mariner</i>	McAllister, New York	Hand-tinted paintings.
1880?	4 x 7	2	<i>War and Peace</i>	McAllister, New York	Hand-tinted painting.
1885?	4 x 7	1	<i>Triumphal Entry</i>	McAllister, New York	Only known from catalogue list.
1886	4 x 7 ?	99	<i>The Crusades</i>	McAllister, New York	Only known from catalogue list.
1889	4 x 7 ?	6	<i>Life of St Paul</i>	McAllister, New York	Only known from catalogue list.
1890?	3¼ sq.	1	<i>Vale of Tears</i>	Newton & Co., London	Individual colour painting.
1890?	2 x 7	50	<i>Doré Bible</i>	'Toy Ruby Slides', US	10 slides with 5 images each.
1890?	2 x 7	30	<i>Doré Bible</i>	'Toy Ruby Slides', US	6 slides with 5 images each.
1893	3¼ x 4¼ ?	17	<i>Baron Munchausen</i>	L. Manasse, Chicago	Only known from catalogue list.
1894	4 x 7	1	Masonic set	M.C. Lilley, Ohio	1 Doré image in large set.
1895	3¼ x 4¼	5+	Bible paintings	Williams/Brown/Earle, Philadelphia	Redrawn – by Beale?
1897	3¼ x 4¼	1	<i>Quo Vadis</i>	Little/Brown, Boston	1 Doré image (<i>Martyrs</i> painting) in set of 60.
1897	3¼ x 4¼	60	<i>Dante's Purgatory/Paradise</i>	McAllister, New York	Only known from catalogue list.
1898	2 x 8	96	<i>Doré Bible</i>	Montgomery/Ward, Chicago (Gem series)	32 slides with 3 images each.
1890s	2 x 8	7	<i>Life of Jesus</i>	'Toy Slides', US?	Thin slides – 2 slides with 4 images each, 1 by Schnorr.
1890s	3¼ x 4¼	230	<i>Doré Bible</i>	McAllister, New York	Many J.B. Beale reproductions.
1890s	3¼ x 4¼	230	<i>Doré Bible</i>	A.D. Handy, Boston	Many J.B. Beale reproductions.
1890s	3¼ x 4¼	1	Bible	Victor Animatograph Co., Iowa	At least 1 Doré image
1890s	3¼ x 4¼	1	<i>Onward Christian Soldiers</i>	Unknown	Beale images – at least 1 from Doré. Based on <i>The Crusades</i> .
1890s	3¼ x 4¼	1	<i>Moses before Pharaoh</i>	A.D. Handy, Boston	Hand-tinted painting.
1890s	3¼ x 4¼	1	<i>Les Ténèbres</i>	McAllister, New York	Coloured painting.
1900s	3¼ sq.	24	<i>Doré Bible</i>	W. Butcher (Primus), London	3 sets of 8, set nos. 785–787, chromolithography.
1900s	Postcards	24	<i>Doré Bible</i>	W. Butcher (Primus), London	Projection postcards, same images as Primus slides.
1915	2¼ x 2¾	2	<i>Christmas Story</i>	Victor Animatograph Co., Iowa	2 Doré images among 25 Bible story slides.
1915	2¼ x 2¾	11	<i>Adam & Eve</i>	Victor Animatograph Co., Iowa	11 Doré images among 15 Milton/Bible slides.
1916	3¼ x 4¼	40	Poe, <i>The Raven</i>	McIntosh, US? (list only)	Only known from catalogue list.
					Doré did 26 illustrations for <i>The Raven</i> .
1918	3¼ x 4¼	76	<i>Dante's Inferno</i>	Briggs, Philadelphia	Only known from catalogue list.