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# MUSEEN – ORTE DES AUTHENTISCHEN? MUSEUMS – PLACES OF AUTHENTICITY?

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# **EDITORS' PREFACE**

Museums acquire, conserve, research, communicate and exhibit according to their own definition the heritage of humanity (cultural heritage) as well as the environment in which it is integrated (natural heritage). The institutions see themselves as the guardians, preservers and labelling institutions of »authentic« things and thus »singled out« in many ways. With the claim of presenting original, thus »real« objects in exhibitions and collections, they generate the feeling of a supposedly direct encounter with the past but also with the unknown or the otherwise unreachable. In their own claim, this makes them »authentic places« like historical buildings, urban ensembles or memorial sites that appear in a similar way. All of them fulfil the widespread longing for authenticity, which seeks to connect the present with the past, one's own self with the other, one's own questions with scientific knowledge in the mode of the genuine, true and real.

However, whether and to what extent museums, as well as archives and similar institutions are actual places of authenticity should certainly be questioned. The contributions collected in this volume show, in a fundamental way and using selected case studies, the different dimensions of dealing with the phenomenon of »authenticity«. Relevant aspects in collections, research, conservation, restoration, exhibition and learning in museums and in dealing with cultural heritage have been highlighted. The contributions reflect the most diverse disciplinary perspectives and approaches of the authors to a topic that is of great relevance across all disciplinary boundaries and can only be researched on an interdisciplinary basis. The »types of museums« covered range from history, archaeology and natural history to science and art-museums. Specific topics are dealt with in university museums and biographical museums. However, contributions also go beyond this in that they touch on other collecting institutions such as libraries and archives. The collections represented range from archaeology and art to scientific and musical instruments as well as books.

The present volume, »Museums – Places of Authenticity?« for the most part is based on the international conference of the same name, which took place in Mainz, in 2016. Around 200 scholars from various disciplines as well as representatives of practice from museums, collections and educational institutions discussed the »authentic« – the supposedly »real«, »true« and »original« – in fifty contributions in thirteen panels and discussion groups. The good international participation included speakers and attendees from Germany, Austria, Switzerland, the Netherlands, France, Great Britain, Italy, Portugal, Hungary, Qatar, the United States and Australia. Another part of the contributions in this volume result from two jointly organized conferences of the Leibniz Research Alliance Historical Authenticity and the Museums and Collections of the University of Cambridge in Cambridge 2017 and 2019.

With this publication, we would like to inspire the continuation of the debate on the at first sight unambigous value of »authenticity« in institutions for the preservation of cultural heritage. Beyond this we hope that the contributions collected here will encourage fundamental reflection on collection strategies, conservation and restoration practice, as well as the engagement- and learning activities of museums and other collection-led research institutions. While the aim of the conferences was to take stock of and discuss as broadly as possible the discipline-based views and approaches to the topic of »authenticity«, the present publication presents a specific selection of these perspectives. The conference and the publication are intended as a contribution to further advance the discussion in research, but also to having an impact on the public.

The publication is a result of the close cooperation within the Leibniz Research Network Historical Authenticity – which also organised the conferences together with the research museums in the Leibniz Association. With its research alliances, the Leibniz Association has created an instrument for pooling the research of its member institutes on certain socially relevant topics. In the Alliance on Historical Authenticity, the thematic focus of »Identification and communication of authenticity in museums« in particular has contributed to the linking of players from the collection, restoration, exhibiting and learning and in doing so has jointly discussed questions of different collection logics, restoration ethics and the reception of the authentic by visitors.

The content of the conference was planned by a programme committee consisting of representatives of the research museums and other research institutions. The Deutsche Museumsbund was involved as a cooperation partner, as was »mainzed«, the Mainz Centre for Digitality in the Humanities, which accompanied the conference digitally on Twitter. The conference in Mainz was supported by the Daimler and Benz Foundation. The conferences in Cambridge were supported by the DAAD-University of Cambridge Research Hub for German Studies with funds from the German Federal Foreign Office and the Arts Council England.

We would like to thank all the authors and the members of the conference committee, who also formed the editorial board for this publication, especially Achim Saupe, the coordinator of the research association. Many thanks go to the Römisch-Germanisches Zentralmuseum as publisher, to the colleagues of the publishing house at the RGZM, especially Claudia Nickel, Marie Reiter, Martin Schönfelder and Michael Braun for editing and typesetting, Anna Kleuser and Friederike Mangelsen for the editorial support of the editors and the organisation of the conference and Joy Titheridge, Alex Kay, Debbie Jenne and Sophie Leighton for translations and the English editing.

The Leibniz Research Alliance Historical Authenticity has led to an enormous increase in the exchange and discussion between Leibniz research museums and far beyond. We hope that this book will help to advance the discussion about a central value for our society internationally. It is therefore our concern that the publication, which also appears as an open access e-book, is discussed, shared and received as »open« as possible.

Mainz/Bochum, June 2020 Dominik Kimmel Stefan Brüggerhoff

# INTERNATIONAL CONFERENCE »MUSEUMS, PLACES OF AUTHENTICITY?« MAINZ, MARCH 3-4, 2016

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## The Leibniz Research Alliance Historical Authenticity

The Leibniz Research Alliance Historical Authenticity seeks to explore how contemporary conceptions of authenticity affect the way we deal with our cultural heritage. It currently brings together 21 Leibniz institutions and other cooperation partners including historical, educational, social sciences and spatial research institutes as well as research museums. The aim of the Research Alliance is to analyse the public, museal and scientific construction of authenticity in dealing with the past as well as its significance in terms of theory of science, culture, society and politics across countries and epochs. (www.leibniz-historische-authentizitaet.de/en/)

## The Research Museums of the Leibniz Association

The eight research museums of the Leibniz Association combine research and educational mission in a special way. In addition to permanent and special exhibitions, extensive research on the history of the earth, biodiversity and the history of culture and technology is carried out here. The unique collections comprise well over a hundred million objects and form the foundation for science. With their exhibitions, the museums reach millions of people every year and thus make an important contribution to the transfer of knowledge. The research museums of the Leibniz Association are:

Deutsches Bergbau-Museum Bochum – Leibniz-Forschungsmuseum für Georessourcen
Deutsches Museum, München
Deutsches Schifffahrtsmuseum – Leibniz-Institut für Maritime Geschichte, Bremerhaven
Germanisches Nationalmuseum – Leibniz-Forschungsmuseum für Kulturgeschichte, Nürnberg
Museum für Naturkunde – Leibniz-Institut für Evolutions- und Biodiversitätsforschung, Berlin
Römisch-Germanisches Zentralmuseum – Leibniz-Forschungsinstitut für Archäologie, Mainz
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# LEARNING FROM FAKE ANTIQUE SCIENTIFIC INSTRUMENTS

In 1956 historian of science Derek J. Price announced that antique scientific instruments had attained the status of fine art in one specific and unwanted sense: they were being faked<sup>1</sup>. D. J. Price's discovery was based on his work at the University of Cambridge's Whipple Museum of the History of Science, which had been founded in 1951, the year that he joined the staff<sup>2</sup>. Among the Whipple's collection Price found evidence that five instruments were fake, and moreover that these were of a piece with similar fakes in collections across Europe and in the United States. Strikingly, these could all be traced back to a single source: the dealership Frederik Muller & Co., under the direction of Anton Mensing, two of whose sales, in 1911 (of the Strozzi collection) and 1924 (of Mensing's own collection), seemed to be linked to all of the questionable instruments Price found<sup>3</sup>.

Although Price was tentative in his conclusions, he effectively opened up all collections and sales of historical scientific instruments to a scrutiny entirely unknown before. As Price pointed out, this revelation could be hugely damaging, not just for the pride of collectors and curators of early instruments, but for scholars working in the relatively young field of the history of science.

After Price's initial foray, however, the problem of fakes seemed to loom less large. Work on instruments became mainstream, even crucial in large areas in the history of science – yet the authenticity of high-value and often decorative early modern instruments seemed, if anything, less and less likely to undermine any of the main claims made for the role of craftsmanship in the growth of natural knowledge. Rather, the problem became curatorial and commercial.

In the 1990s a group of curators, scholars and dealers returned to Price's work. Price had argued that there had been a single source for all of the forgeries that he had found, and that, whoever that person was, Anton Mensing had been a consistent if innocent intermediary<sup>4</sup>. Because Mensing had been involved in numerous sales of instruments over the years, and had in the end sold the remainder of his collection to the Adler Planetarium, Chicago, in 1929<sup>5</sup>, the question had lingered: how many more »Mensing fakes« were there in collections around the world? Between 1992 and 2003 the »Anton Mensing Scientific Instrument Project« sought to provide an answer.

Through exceptionally diligent work, the researchers involved in this project found that although Price had been wrong to suppose that there had been a single source for the forgeries<sup>6</sup>, he had not in fact revealed »the tip of an iceberg« – rather he had »already collected the majority of the notable specimens« in his 1956 paper<sup>7</sup>. But as the name of the project suggests, it was confined to a single provenance – Anton Mensing – even as the net was widened when it came to the actual forger<sup>8</sup>.

Recent research at the Whipple Museum has reopened the question posed by Price – not just of how many fakes were associated with Anton Mensing, but whether or not there were fakes from other sources. We have found that if provenances beyond Mensing are included, it becomes clear that the question of fake antique scientific instruments has by no means been solved<sup>9</sup>. We begin with a brief account of how and why Price came to look at the instruments he did, as it was by following some of the leads that Price opened up that we first managed to make progress. One dealership in particular seems to have supplied a number of dubious instruments, namely Antique Art Galleries, Grafton Street, London, which was run by the Nyburg family. In conclusion we offer some remarks about the ongoing problem of fake scientific instruments,



**Fig. 1** Astrolabe, signed »loannes Bos I / 1597 / Die 24 Martii«, acquired by R. S. Whipple from the Parisian dealer Gertrude Hamilton (trading as »Mercator«) in 1928. It is now known that a near-identical astrolabe in the Adler Planetarium (carrying the same inscription) is authentic, while five other similar instruments, including this one, are fake. – (Image © Whipple Museum of the History of Science, University of Cambridge [Wh.0305]).

and the role their detection and analysis can play in helping us better understand the history of major instrument collections.

## THE PROLIFIC JOHANNES BOS

Price began his research at the Whipple Museum around Easter 1951, working under Rupert Hall, the first director. Although Price was soon to become well known for his work on medieval astronomy, and later his pioneering research into the »Antikythera mechanism«, he began with a study directly into the craft of scientific instruments: the working title of his research project was »The History of Scientific Instrument Making«<sup>10</sup>.

As early as August 1951 Price was in discussion with colleagues at the Cavendish Laboratory over metallurgical analysis of instruments<sup>11</sup>. It is unclear precisely why he had become suspicious so early in his research. However, Price's supervisor Rupert Hall later claimed that the instrument that roused their suspicions was a small astrolabe, signed »loannes Bos I / 1597 / Die 24 Martii« (**fig. 1**)<sup>12</sup>.

This instrument, Price noted in his 1956 paper, was listed as item 33a in the 1924 auction catalogue

»Collection Ant. W. M. Mensing«, sold by Frederik Muller & Co. But note the very specific date: 24 March 1597. In addition to the 1924 astrolabe and the Whipple astrolabe – which may or may not be the same – Price was able to identify two more Bos astrolabes with the very same date. Hence there were three or possibly four astrolabes made by Johannes Bos on the very same day (the uncertainty over the total number stemmed from the fact that Price could not be sure whether the astrolabe pictured in the catalogue was one of the ones he had identified)<sup>13</sup>. This was the first clue, and from here on Price was hot on the trail:

»We started with a very few suspect instruments, found where these had been purchased, and investigated instruments which had been bought from the same source at the same time. We then sought the cooperation of the dealers concerned and traced the collections back, all the time discovering that associated instruments fell into the same category of Strozzi-Mensing copies«<sup>14</sup>.

Although Price's findings were striking, in 1956 he did not reveal all that he had found – or all that he suspected.

### FOLLOWING THE LEADS

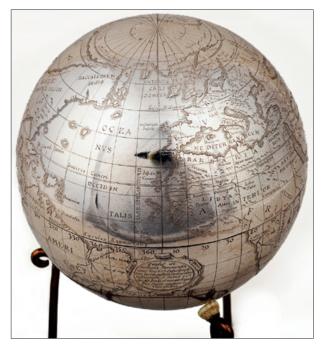
We already know from the Anton Mensing Project that Price was wrong to suppose that there had been a single source of fake scientific instruments behind the group that came through Mensing's hands. But were other dealerships, possibly acquiring from sources unrelated to Mensing, also selling fakes?

	TELEPHONE MAYPAIR 6668.		ESTABLISHED 40 YEARS.		
	TELEORAPHIC ADDRESSI GRUBYN, PIOD	Y, LONDON.	A		
	ANTIQUE WORKS OF ART		ANTIQUE ART GALLERIES LTD.		
	OF ALL PERIODS. Jewellery. Furniture. Interior decoration.	S. N. NYBURG	169 GRAFTON STREET,		
	TRIERIOR DECORATION.		BOND STREET,		
	Dr. D.J.F 18 Maid's Cambridge	S CAUSEWAY,	LONDON, W. <u>FEBRUARY</u> 16TH., 1955		
		DEAR DR.PRICE,	1		
	THANK YOU FOR YOUR LETTER.				
	I AM AFRAID I AM NOT ABLE TO GIVE YOU MUCH				
	DETAILED INFORMATION ABOUT THE INDIVIDUAL ITEMS WHICH				
	MR. WHIPPLE BOUGHT FROM US, BUT THE FOLLOWING MAY BE				
	OF SOME INTEREST.				
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**Fig. 2** Letter from Henry Nyburg to Derek Price, 16 February 1955. Antique Art Galleries sold over 80 instruments to Whipple between the mid 1920s and the early 1950s. Amongst these around 20 are either suspicious, are composites or heavy restorations, or are known forgeries. – (Image © Whipple Museum of the History of Science, University of Cambridge [Wh.0365, Object History File]).

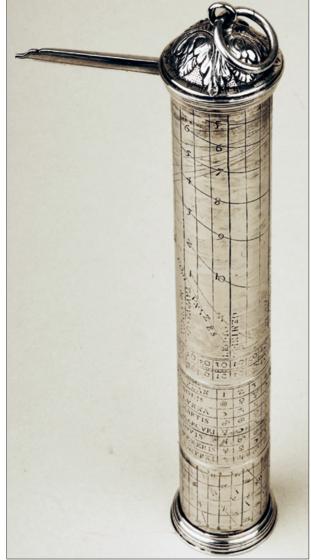
The answer is, unequivocally, yes. And in fact it was Price who first seems to have suspected this. In the archives of the Whipple Museum there is a tantalising glimpse of an inquiry that Price started but did not finish: a letter from the dealer Antique Art Galleries, Grafton St, London, dated 16 February 1955 (**fig. 2**)<sup>15</sup>. This curt letter is a reply to Price's inquiry into the provenances of eight instruments, supplying minimal information on six of them. But these instruments do not have any connection to Anton Mensing, nor are they mentioned in the 1956 paper. Taking Price's letter as our lead, in 2014 we returned to these and a range of other objects in the Whipple Museum's collection. Our critical investigation of them included both traditional techniques of curatorial analysis – exploring provenance; cross-comparison with other collections; scrutiny of engraving accuracy, palaeographic style, size, and quality of craftsmanship – and metallographic analysis conducted by researcher on early mathematical instruments John Davis<sup>16</sup>. Of the eight instruments listed in the letter to Price, we have discovered that one is certainly a forgery (the silver globe, Wh.0365 [**fig. 3**]), one is almost certainly a forgery (the silver shepherd's dial, Wh.0776 [**fig. 4**]), three would be best described as »imitations« (the astrolabes, Wh.1144, 1145, 1147<sup>17</sup>), one is potentially a composite of original and modern parts (the universal dial, Wh.0781<sup>18</sup>), and two are almost certainly authentic (the Volckmer dial, Wh.0574, and the compass, Wh.0570).

X-ray fluorescence analysis of the two silver objects was particularly revealing. Both had previously been identified by specialists other than Price as suspicious, but the range of evidence drawn together was not conclusive. Robert Jenks had questioned the attribution of the terrestrial globe as an important 16<sup>th</sup> century survival from Italy, using cartographic and palaeographic analysis to suggest alternative origins in either 16<sup>th</sup> century Germany or 19<sup>th</sup> century England<sup>19</sup>. Ernst Zinner identified the pillar dial as suspect at around the same time that Price was working, describing it as »Wohl ein Fälschung« (»probably a forgery«), likely recognising



**Fig. 3** Silver terrestrial globe, 100 mm diameter, purportedly by Paulus de Furlanis, c. 1575, but actually a modern fake, c. 1925. – (Image © Whipple Museum of the History of Science, University of Cambridge [Wh.0365]).

the engraving to be far below the standard of other instruments bearing the signature of Christopher Schissler (a name which in addition is misspelled on this instrument)<sup>20</sup>. Decisively, we found both objects to be manufactured from modern sterling silver that had then been rhodium electroplated. Since rhodium electroplating is a technique first deployed commercially in the 1920s<sup>21</sup>, we can surmise that these objects were manufactured as deliberate forgeries for the collectors' market immediately preceding Robert Whipple's purchase of them from Antique Art Galle-



**Fig. 4** Silver pillar dial with sand caster, signed »CHRITOPHURUS [sic] SCHISSLER FECIT '79«, but actually almost certainly a modern fake, c. 1935. – (Image © Whipple Museum of the History of Science, University of Cambridge [Wh.0776]).

ries in 1927 (globe) and 1935 (dial) for the considerable sums of £ 60 and £ 75 respectively<sup>22</sup>.

However, Price's inquiry – assuming these were all and the only instruments about which he inquired – only scratched the surface of Antique Art Galleries' presence in the Whipple collection. In all we have been able to trace 81 objects bought directly by R. S. Whipple from Antique Art Galleries between 1927 and 1952. Of these, nine are certainly not authentic – though we should note that even these nine fall into very different categories, including the imitation Persian astrolabes and a miniature portrait that appears to be 16<sup>th</sup> century but was most likely created at least a century later (**fig. 5**)<sup>23</sup>. In these cases it might be best to call the objects »misattributed«. Others, meanwhile – including the two rhodium-plated silver objects and two of the »Mensing« fakes from Price's 1956 paper – are more serious cases. In total, 19 of Whipple's Antique Art Galleries purchases (that is, nearly a quarter) are either known to be dubious or have strong doubts hanging over them<sup>24</sup>. What's more, having said that in some cases they may have been innocent dupes, there is some evidence that the Nyburg family had prior experience selling fakes.

### »A GANG OF FORGERS«?

The origins of Antique Art Galleries, Grafton Street, are not at all clear. As can be seen from the letter, Price had received a reply from Henry Nyburg – but it was Henry's father Solomon Nyburg (still listed as Managing Director in the letterhead) who had originally set up shop. Solomon was born in Oxford in 1866, and had been trading antigues since at least the 1890s. A series of court cases and insolvencies reveal the shifting fortunes of what was to become the Nyburg family business. In the early 1890s Solomon moved to America, returning soon afterwards with over \$6000 won in damages from another antique dealer<sup>25</sup>. By 1908 his company went into receivership, with his stock being forcibly sold through the auctioneer Puttick and Simpson. Around the same time, Solomon's brother Jacques set up his own business – a do-it-all antiques firm offering a wide range of goods<sup>26</sup>. Soon the records of this company come to an end, replaced with only a record of the authorities trying and failing to make contact.



**Fig. 5** This miniature portrait was described in G. C. Williamson's catalogue of the Pierpoint Morgan Collection as »portrait of Nicholas Kratzer, school of Hans Holbein the Younger, « and was therefore sold by Christie's to Antique Art Galleries as such. Subsequent analysis has called Williamson's attribution into question, suggesting it may rather be from the school of Horenbout, or even from the early 18<sup>th</sup> century, and not of Kratzer at all. – (Image © Whipple Museum of the History of Science, University of Cambridge [Wh.0791]).

Even more revealing, however, are the court records

of a number of trials involving the Nyburgs. Jacques, for instance, was called as an expert witness in 1909 in a dispute about the authenticity of a snuffbox that had changed hands for £250. Although the box was apparently 18<sup>th</sup> century, Jacques claimed that it had been made recently in Paris. When asked how he knew this, he replied that he and his brother Solomon Nyburg had regularly sold fake snuffboxes during their partnership: »The business of selling faked boxes« had been, he said, »successful«<sup>27</sup>. Solomon Nyburg also had a colourful career in court. In 1901 he brought a case of his own, during which one witness claimed under oath that Solomon was »one of a gang of forgers«<sup>28</sup>.

Subsequent to these intrigues the records become sparse. Judging by auction results, which were recorded in The Times and can be searched at the British Library, the 1920s and 1930s were boom years for Solomon Nyburg and Antique Art Galleries – tens and then hundreds of pounds were regularly spent on a range of antiques. Scientific instruments must have formed a rather small part of the company's trade, which was focused on jewellery and *objets d'art*, in particular snuffboxes. In fact, Whipple was still purchasing from Antique Art Galleries into the 1950s. Five of the suspect instruments were purchased by Whipple in 1952, including two of the so-called Mensing fakes. These transactions were with Henry Nyburg, as Solomon had died in 1950. A letter survives in the A. R. Hall archives at Imperial College, London, dated 6 June 1951, in which Whipple says that he has just been to see Henry Nyburg, who is said to have »intimate contacts on the Continent«, and to have just sold a Habermel astrolabe<sup>29</sup>. The company is known to have been wound up in 1964, and its extensive holdings sold over the next few years<sup>30</sup>.

Taken together, the evidence must be recognised as circumstantial with respect to the Whipple Museum's forgeries. The point, however, is that forgery was well known to the Nyburgs in areas other than scientific instruments – clearly it was commonplace in the antiques trade. Hence it is in no way surprising to find



**Fig. 6 a-b** »Mensing fakes«, after Erasmus Habermel, sold as such by Christie's in 2011, and now in the collections of the Science Museum, London (inv. nos 2012-32 and 2012-33). – (Image © by permission Christie's South Kensington).

dubious objects in collections like the Whipple's. Following Price's initial work, the assumption was always that curators and historians ought to assume each object was genuine unless it was tainted by association with Anton Mensing. Our conclusions are quite different.

## CONCLUSIONS

Our first conclusion is simply that we do not know enough about the networks of collectors and dealers that played a role in forming collections great and small. Following the trail of Antique Art Galleries has allowed us to uncover a number of additional composites and forgeries, and to make a tentative foray into the complex task of piecing together connections between collectors, restorers, dealers and forgers who operated in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries. The clandestine and quotidian nature of these networks makes them exceptionally hard to reconstruct, and the sheer number of different kinds of forgery, imitation, replica and composite only adds to the confusion. Forgeries certainly passed through the hands of a number of the era's most prolific scientific instrument dealers, including Gertrude Hamilton (trading as »Mercator«), Percy Webster, and Antique Art Galleries<sup>31</sup>. But knowing which parties within this diverse network were doing the deceiving, and which were being deceived, is

very difficult to assess. One thing is for sure – the web linking fake scientific instruments to major museum collections encompasses more than the notorious Anton Mensing milieu.

Second, it is important to note that the problem has not gone away. The methodology deployed by Price, which relied upon the marshalling of multiple corroborating strands of evidence, has become above all the purview of curators and especially experts in the antiques trade, for whom the detection of forgeries has remained a direct professional concern. Would-be fine instruments by Erasmus Habermel, Johannes Bos and others occasionally still appear in provincial sale rooms where they are catalogued by non-instrument specialists as 16<sup>th</sup> century originals. The cycle can only be broken once these objects are recognised as fakes and sold or published as such. A recent case in point is the pair of lots offered by Christie's South Kensington in 2011, described as

»an early 20<sup>th</sup> century hour-conversion table, after the original by Erasmus Habermel [and] an early 20<sup>th</sup> century sundial after the original by Erasmus Habermel«<sup>32</sup>.

These were purchased by the Science Museum, London, as examples of the so-called Mensing fakes (fig. 6a-b), now available to scholars of the history of the instrument trade.

Our third and final conclusion is that when examining instruments, provenance is never secondary to questions of function, aesthetics or historical importance. One should always ask: How has this object come down to us? Why did it survive, how has it been used, altered and preserved? There are two reasons for proceeding in this manner. First, as our research has shown, antiques are not suspicious simply by association with a known problem (e.g. Mensing). Rather, they survive through networks that (in part) relied on forgery, aggressive restoration practices and misinformation. This is related to a second reason for treating artefacts as products of their passage through time: the history of collections has shown how complex and historically specific acts of collecting are. These circumstances leave their marks on objects. And, for collections, historical reasons for survival or loss are a crucial part of their meaning.

For Price the task had been simply to purify the historical record of false artefacts. Our research shows that this is an impossible task. Even the eight instruments he quizzed Antique Art Galleries about do not break along real/fake lines<sup>33</sup>. The other suspect objects are composites, »aggressive« repairs, imitations and cases of mistaken attribution. Outright forgeries lie on a continuum with the most carefully provenanced survival, and in both cases it is the life history of the instrument that is of interest.

### ACKNOWLEDGEMENTS

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#### Notes

- 1) Price 1958, 380.
- 2) See Taub/Willmoth 2006, in particular the Introduction and Part I.
- 3) See Mörzer Bruyns 2004, 211-239.
- 4) On Mensing, see Mörzer Bruyns 1995; 2004.
- 5) See Taub 1995, 243-250. Another important collection with a Mensing connection is the Henze Collection at the Natural History Museum of Los Angeles County; see Cumiford 1991.
- 6) Deiman 2000, 106.
- 7) Johnston et al. 2003, 30.
- Mensing himself was exonerated by Mörzer Bruyns, who writes in his article that »there is no reason to believe in Mensing's personal involvement« with the fakes (Mörzer Bruyns 2004, 211).
- 9) Of course, another method is to look at the work of lesserknown collectors. See, for example, the fascinating recent treatment of David H. H. Felix: Holland 2015.
- 10) Falk 2014, 115.
- 11) Letter from A. A. Moss to D. J. Price, 15 August 1951, Whipple Museum Archives, D 076.
- 12) Hall 2006, 66.

- 13) Recording of the 1981 conference »Fakes and Facsimiles«, held at the National Maritime Museum, Greenwich, discussion with D. J. Price on tape 5. – Many thanks to Richard Dunn for his help in gaining access to these recordings. – Recent research has shown that the only genuine Bos astrolabe is held at the Adler Planetarium, Chicago; see Stephenson/Stephenson/Haeffner 2001.
- 14) Price 1958, 391.
- Whipple Museum, Cambridge, Object History File for Wh.0365.
- 16) We are extremely grateful for John Davis's considerable contributions and his ongoing collaboration, as well as his continued insights into the lessons that can be drawn from X-ray fluorescence analysis of metal instruments. – Some of John's important work in this field, and details of his technical setup, can be found in: Davis/Lowne 2015; Davis 2017.
- 17) Wh.1144 and 1145 were identified as recent imitations by D. J. Bryden, see Bryden 1988, nos 388 (Wh.1144) and 387 (Wh.1145). – Recent XRF analysis corroborates this assessment and suggests a modern date of manufacture for both (probably 20<sup>th</sup> century). – Bryden (1988, no. 367) and Price (1958, 368) both accepted Wh.1147 as genuine; however, the rete is purely decorative and recent XRF analysis suggests that only the mater of the instrument is original (dated 1122 AH = 1710 AD), with the plates, rete, alidade, and inset shackle compass all modern replacements.

- Only the compass box of Wh.0781 is certainly old brass; the remainder of the instrument may postdate its purported maker, Johan Simon Lubach.
- 19) Jenks 2006, 211-231.
- 20) Zinner 1956, 513.
- 21) Kushner 1940.
- 22) It is of course possible for a dealer to polish and electroplate a genuine antique silver object. In this instance the range of corroborating evidence suggesting forgeries, combined with the purity of the silver used, make this highly unlikely.
- 23) On the uncertain status of the miniature portrait, see: www. sites.hps.cam.ac.uk/whipple/explore/astronomy/thekings astronomer (26.09.2019) and Lindsey Cox's blog: https:// lindseycox.wordpress.com/2014/08/15/issues-of-attribution (26.09.2019).
- 24) A preliminary report on this analysis was presented in the session »Learning from forgeries«, at the XXXIV Scientific Instrument Commission Symposium, Turin, 7-11 September 2015.
- 25) New York Times, 29 May 1898, p. 21.
- 26) The records are at the National Archives: »Company No: 95790; Nyburg and Sheraton Ltd. Incorporated in 1907. Dissolved before 1916«, reference BT 31/12196/95790.
- 27) The Times, 9 March 1909, p. 3. At this trial another witness, one Mr Rochelle Thomas, spoke up for the genuineness of the snuffbox. »The snuffbox must have been executed by a great

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artist«, he said. »It was unmistakably genuine [...] The box spoke for itself. No evidence is so good as the evidence that cannot speak.« The Christie's expert, meanwhile, dodged all questions, saying that he was an auctioneer, not an expert.

- 28) The Times, 22 June 1901, p. 17.
- 29) A. R. Hall archives, Imperial College, London. Uncatalogued; letter from Whipple to Hall dated 6 June 1951. Many thanks for Seb Falk for bringing this source to our attention.
- See https://www.thegazette.co.uk/London/issue/43464/page/ 8765/data.pdf (26.09.2019).
- 31) On Hamilton, see Mörzer Bruyns/Turner 2002.
- 32) Christie's South Kensington, Sale 2362: Travel, Science and Natural History, 29 September 2011, lots 107 and 108.
- 33) We are aware that the terminology surrounding fakes/forgeries is itself problematic. Following Price, we have not been strict in our usage. Gerard Turner, for instance, proposed that the term »fake« should refer to instruments that have been amended for the purposes of deception (for example, when a false signature has been added); »forgery« would then mean something more fundamental an instrument made from scratch to deceive. However, this introduces a distinction that does not reflect common usage and is hard to deploy consistently. It also does not solve the further problem that there are countless other classes of what we could most broadly term »false« instruments.
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### Zusammenfassung / Summary

#### Von Fälschungen antiker Forschungsinstrumente lernen

Auf Grundlage seiner Recherchen am Whipple Museum für Wissenschaftsgeschichte der Universität Cambridge, machte der Wissenschaftshistoriker Derek J. Price 1956 zum ersten Mal öffentlich bekannt, dass es sich bei manchen der ausgestellten antiken Forschungsinstrumente um Fälschungen handelte. Price stellte fest, dass fünf der gefälschten Instrumente des Whipple Museum in Zusammenhang mit ähnlichen verdächtigen Objekten anderer bedeutender Sammlungen in Europa und den Vereinigten Staaten gebracht werden konnten. Alle ließen sich auf eine gemeinsame Quelle zurückverfolgen: die von Anton Mensing geführte Verkaufsstelle Frederik Muller & Co. In diesem Artikel wird ein aktuelles Forschungsprojekt am Whipple Museum vorgestellt, das sich zum Ziel gesetzt hat, die von Price eingeleitete Identifizierung der »Mensing Fälschungen« zu erweitern. Wenn die Provenienz antiker Forschungsinstrumente über die »Mensing Fälschungen« hinaus betrachtet wird, zeigt sich, dass das Problem der Fälschung dieser Instrumente weiter verbreitet ist, als bisher angenommen wurde. Im Rahmen dieser Arbeit werden neue Fälschungen identifiziert und deren Verbindung zu einem verdächtigen Londoner Händler untersucht, wodurch die entscheidende Bedeutung solcher Recherchen für das Verständnis der Geschichte wichtiger Sammlungen von Forschungsinstrumenten und die damit verbundenen Fragestellungen um deren Authentizität hervorgehoben wird.

#### Learning from Fake Antique Scientific Instruments

In 1956, historian of science Derek J. Price made the first published announcement that antique scientific instruments were being faked, based on work at the University of Cambridge's Whipple Museum of the History of Science. Price found that five fake instruments in the Whipple could be linked to similar suspect objects in a range of important collections across Europe and the United States, all traceable to a single source: the dealership Frederik Muller & Co., under the direction of Anton Mensing. This chapter describes recent work at the Whipple Museum that seeks to expand on Price's identification of the »Mensing fakes«. It argues that if provenances beyond Mensing are considered then it becomes clear that the problem of fake antique scientific instruments may be more widespread than previously thought. New forgeries are identified and their links with a suspect London dealer are explored. This work, it is argued, remains crucial in helping us better understand the history of major instrument collections and the problem of authenticity.