The Long Lives of Old Lutes

The Cultural and Material History of the Veneration of Old Musical Instruments

Von der Fakultät für Geschichte, Kunst- und Regionalwissenschaften der Universität Leipzig angenommene
DISSERTATION
zur Erlangung des akademischen Grades
DOCTOR PHILOSOPHIAE
(Dr. phil.)
vorgelegt

von Sebastian Kirsch geboren am 03. Februar 1983 in Würzburg

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Tag der Verteidigung: 27. Januar 2023

Bibliographische Information der Deutschen Nationalbibliothek

Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet unter http://dnb.de abrufbar.

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https://nbn-resolving.org/urn:nbn:de:bsz:15-qucosa2-863649

Die Schriftenreihe LM-enc

Forschungsstelle DIGITAL ORGANOLOGY am Musikinstrumenten-Museum der Universität

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Acknowledgements

I am grateful for the support of many colleagues, friends, and family, without whom this work would not have been possible. First of all, I would like thank my supervisors Josef Focht and Gabriele Rossi Rognoni who supported me in my project, and Klaus Martius who pointed me to this topic and shared his knowledge with me. I am deeply grateful for the support of my parents, Dieter and Karin Kirsch, and my wife, Lidia Chang.

I owe a great debt to the following people for their support in various ways: Jean-Marc Anglès, Frank Bär, Christiane Barth, Silke Berdux, Serena Binotto, Markus Brosig, Philippe Bruguière, William Buchanan, André Burguete, Claudio Canevari, Beatrix Darmstädter, Cornelia Demmer, Gwendal Deniel, Jean-Philippe Echard, Wolfgang Emmerich, Anton Englert, Jost Leonhardt Fischer, Uwe Fischer, Eszter Fontana, Manu Frederickx, Bobby Giglio, Barbara Hagen-Walther, Wieland Hecht, Veit Heller, Friedemann Hellwig, Roland Hentzschel, Wolfgang Hiller, Stefan Hindtsche, Hubert Hoffmann, Ina Hoheisel, Michael Holzer, Jörg Holzmann, Andreas Holzmann, Rudolf Hopfner, Alfons Huber, Marguerite Jossic, Richard Khulusi, Karl Kirchmeyr, Olaf Kirsch, Darcy Kuronen, Jakob Kusnick, Urs Langenbacher, Frank Legl, Kathryn Libin, Laurence Libin, Christina Linsenmeyer, Pater Walter Ludwig, Emmanuele Marconi, Günter Mark, Darryl Martin, Andreas Michel, Meta Niederkorn, Niko Plath, Pater Altman Pötsch, Panagiotis Poulopoulos, Pietro Prosser, Markus Raquet, Conny Restle, Thomas Riedmiller, Shigeru Sakurai, Jonathan Santa Maria Bouquet, Andreas Schlegel, Roswitha Schwarz, Stefan Schwenteck, Eva Seifert, Arian M Sheets, Petr Slouka, Marc Strümper, Herr Ulrich, Stéphane Vaiedelich, Heidi von Rüden, Sybe Wartena, Lorenz Welker, Wolfgang Wenke, Walter Wilke, Meike Wolters-Rosbach, Markus Zepf

Contents

1	Intro	oductio	n	7
2	Experiments: The Lute in the 17th Century			
	2.1	Music	al Development of the Lute in the 17th century	16
		2.1.1	Expansion of the ambitus	16
		2.1.2	Experiments with different tuning variations	18
		2.1.3	Instrument types as a result of experimentation	23
	2.2	The L	aute in the 17th Century World of Objects	29
		2.2.1	Cultural framework	29
		2.2.2	The lute as a kingly thing	33
		2.2.3	Affects: The lute in different aesthetic concepts	37
		2.2.4	The lute as a collectible	43
		2.2.5	Materiality: Collectible versus musical instrument	46
		2.2.6	An old instrument is better than a new one: The birth	
			of a myth	48
		2.2.7	Material metamorphosis, fragments, and the Look of Age	54
		2.2.8	Narrative potential of object biographies of old lutes .	58
	2.3	Lutes	as Commodities	62
		2.3.1	Lutes as products on a standard market	63
		2.3.2	Effects of market dominance	66
		2.3.3	Lutes as commodities on the status market	68
		2.3.4	Importance of the brand	70
		2.3.5	Laux Maler and Bolognese lutes	76
		2.3.6	High prices and status: Owners of Laux Maler's instru-	
			ments	81
	2.4	Trans	Transformation of Lutes during the 17th Century	
		2.4.1	Lute types created by transformation	90
		2.4.2	Modifications of the corpus in detail	108
		2.4.3	Specific features signifying age	120
3	The	French	Lute in the Habsburg Empire	131
-			al Adaptations and Stylistic Developments	132

Contents

	3.2	Significance and Agency of Old Instruments in Musical Culture		137
		3.2.1	Evidence of old lutes in Radolt's lute concert Der Aller	
			Treüesten Freindin	141
		3.2.2	Tuning pitch Cornett-Ton	144
		3.2.3	Calculation of maximum string lengths	145
		3.2.4	Lute sizes and the calculation of string diameters	148
		3.2.5	Conclusions concerning lute sizes	153
		3.2.6	The other instruments in Radolt's first lute concert	154
		3.2.7	Diversity of instrument sizes as a precondition for the	
			composition	157
	3.3	Econo	mic Organisation of the Lute Makers in the Habsburg Lands	s159
		3.3.1	The trade in old instruments	159
		3.3.2	Organisation of the craft	162
		3.3.3	The development of a label	167
		3.3.4	Signature of the repair as a marketing strategy	171
	3.4	Techn	ological Analysis	175
		3.4.1	The 11-course lute in French style	176
		3.4.2	The Austrian 11-course theorboad lute	180
		3.4.3	Technological features	187
		3.4.4	Modification of the soundboards	191
4	Exte		Simplification, and Decline	196
	4.1	Music	for Amateurs	197
		4.1.1	The 13-course lute	197
		4.1.2	The last lutenists	200
		4.1.3	Mandora: An instrument for amateurs	207
	4.2		ricist Concepts and the Function of Age in the Discourse	
		on the	e Lute's Decline	210
		4.2.1	Excursus: Object studies as part of academic scholarship	211
		4.2.2	The lute and its historical fetishism	213
		4.2.3	The lute and its material and immaterial fetishism $$. $$	219
		4.2.4	The lute as a stereotype	223
		4.2.5	The loss of the lute's musical habitat	226
	4.3	The T	rade in Lutes as Antiques	228
		4.3.1	Structure and objects of the market	228
		4.3.2	Market players	230
		4.3.3	Prices	233
		4.3.4	Customer engagement	235
		4.3.5	Consequences: Forgeries	238

Contents

	4.4	Lute 7	Transformations during the 18th Century	244	
		4.4.1	The 13-course lute with bass rider	244	
		4.4.2	The 13-course theorboad lute	251	
		4.4.3	The mandora	258	
		4.4.4	Technological features	266	
5	The	Lute-S	haped Guitar at the Beginning of the 19th Century	274	
	5.1	The L	ute-Shaped Guitar and its Music	275	
		5.1.1	The lute-guitar as one form among others	275	
		5.1.2	History, repertoire, and playing technique	278	
		5.1.3	Theodor Körner - a $S\"{a}nger$	284	
	5.2	The L	ute as a Topos in the Romantic and Historicist Concept	294	
		5.2.1	Conceptual history: Redefining the term <i>lute</i> in the poetical discourse	294	
		5.2.2	Romantic and historicist traces in the musico-historical discourse	301	
		5.2.3	Lexical knowledge	305	
		5.2.4	Critique and appeal for revival in the musical discourse	307	
	5.3	New Market Strategies			
	0.0	5.3.1	Last traces of lute repairs	$312 \\ 312$	
		5.3.2	New commercial strategies	316	
		5.3.3	Shift of market-relevant knowledge and value	322	
	5.4		ute-Shaped Guitar: Organology and Transformations	328	
	9.2	5.4.1	Extant lute-shaped guitars and their classification	328	
		5.4.2	The application of guitar technology to lutes	334	
		5.4.3	Layers of paper and parchment as reinforcements: Lutes		
			as carriers of fragments	350	
6	Con	clusion		374	
List of Figures					
Bibliography					

The ship wherein Theseus and the youth of Athens returned had thirty oars, and was preserved by the Athenians down even to the time of Demetrius Phalereus, for they took away the old planks as they decayed, putting in new and stronger timber in their place, insomuch that this ship became a standing example among the philosophers, for the logical question, as to things that grow; one side holding that the ship remained the same, and the other contending that it was not the same. Plutarch, Theseus, Parallel Lives¹

The philosophical problem of the Ship of Theseus, first mentioned by Plutarch in his $\beta \iota \iota \iota \iota \pi \alpha \rho \alpha \lambda \lambda \eta \lambda \iota \iota$ (Parallel Lives), has long been discussed and applied to questions of identity. In the history of philosophy, several attempts have been made to solve this paradox. From the viewpoint of material culture, this thought experiment problematises several important features of the ship as an object. First, as a ship, the object is categorised as functional. Second, it describes the ship in its significance as a relic, as an object which is venerated due to its cultural importance and connection to a national hero, giving it narrative potential. Third, it mentions the measures that were necessary to maintain the structural integrity of the ship. Finally, the material state was so changed from the original that the question of material authenticity, and thus identity, arises. Old musical instruments share these aspects with the ship of Theseus. They were used, venerated, and maintained. Being functional objects, repairs and adaptations were often necessary and, over time, altered their original state. At the same time, old instruments were revered for their high quality, rarity, and often because they were connected with a famous name. As with the Ship of Theseus, questions of material authenticity and identity have been crucial to establishing the socio-cultural value of old instruments.

In the present day, historical musical instruments can be erroneously perceived as unaltered objects when, in most cases, they are actually the sum of various parts, produced and modified at different times by different people. This apparent dichotomy between original and altered makes them diachronic objects that combine different historical and material layers. As a result, these objects hold extensive and valuable information regarding the effects of change in social and musical ideals.

As the material dichotomy between original and altered is particularly evident in lute-type instruments throughout their history, the aim of this study will be

^{1.} Arthur Hugh Clough, ed., *Plutarch's Lives: The Translation Called Dryden's* (London: Sampson Low, Son & Co, 1859), 21.

to understand the underlying cultural motivations and material implications of the reuse of the lute in different musical and historical contexts. One of the most pervasive and consistent of the social and musical ideologies concerning musical instruments is the appreciation of their value in proportion to their age, which has guaranteed their preservation into the present day. The popularity of old lutes at the time of the instrument's golden age is illustrated by the musician and theorist Thomas Mace (1613-1709) in his treatise, *Musick's Monument*, published in 1676. Mace provides the following advice on the acquisition of a lute:

"How to know and choose a good lute: First know that an *Old lute* is better than a *New one*".²

Here, Mace was not only expressing the attitude of his contemporaries but also laying down a principle that would be followed by subsequent generations. To this day, the belief that old musical instruments are better than new ones pervades Western musical culture, even when (as is often the case) these instruments have been significantly altered from their original condition.

By "Old lute" Thomas Mace means an instrument made about 100 years earlier in northern Italy, preferably by Laux Maler in Bologna: an instrument originally designed for an entirely different musical culture and repertoire. Ever since the lute was first introduced into European musical culture, it has been subjected to modifications: changes to the ambitus, to the number of strings, and experimentation with different tuning systems. The progressive approach of a regionally specific and, in some cases, rapid development of the instrument was motivated by the optimization of tonal possibilities and adaptation to modern musical practices. This would seem to contradict Mace's assertion that an old instrument is necessarily better than a new one for realising modern sound ideals. A musical landscape in which old lutes coexisted with new lutes and new musical styles opened up a field between the poles of innovation and tradition.

"Better" is not to be interpreted exclusively as an apparently higher quality of sound. The advantage of the old over the new can be understood within the socio-cultural context of musical instruments as powerful signifiers of status, identity and authenticity. As with other art objects, authenticity – that is, the attribution to a particular author or era – is a central element in the valuation of musical instruments. Old lutes and those of certain makers achieved a cult status over a long period of time and in different cultural contexts, similar to

^{2.} Thomas Mace, Musick's Monument (London, 1676), 48.

that of Cremonese violins. Although valuing of a lute for its age has remained a cultural constant, the reasons why its age is perceived as valuable have shifted over time. In the Baroque period, for example, the search for an old lute could involve musical reasons as well as the the wish to indicate a certain social status of the owner. These motivations differ, however, from those of the individuals seeking a lute-type instrument during the Romantic period, when the lute was elevated as the emblematic instrument of the Middle Ages. Again, in the modern era, different motives guided the desire for old lutes that led to their acquisition by many private and public collections.

According to anthropologist Nicholas Thomas, "Objects are not what they were made to be, but what they have become." Instead of asking about the identity of the Ship of Theseus or for the original state of the objects, this study will analyse the processes of alteration that led to the state of the instruments in which we find them today. The three key elements in the problem of the Ship of Theseus, which are use, cultural significance, and technical maintenance, will guide this examination covering several periods. Furthermore, I will also discuss the role of economics and analyse the exchange value of old lutes to illustrate how their trade was organised. This approach regards old instruments as objects, which in most cases, provide more information about the history of their reception, maintenance, and the socioeconomic networks in which they were valued and traded, than about their production.

Following the musical development of lute-type instruments and their social and economic value from the 17th to the 19th century, this study will examine the function of age on the reception of the lute as well as the material changes that were necessary to ensure their continued use. This multivalent approach aims to enhance the understanding of the social and cultural function of old instruments and connect them to the material history of objects using the lute as a case study. The diversity of sources requires an interdisciplinary methodology as well as a structure that provides opportunities for comparison between the time periods. This study is guided by two primary lines of inquiry. Why were old lutes regarded as particularly valuable at different times, and how were they traded and adapted to serve the changing musical needs? Which discourses in the realms of material culture, ideologies regarding the appreciation of old objects, the canonisation of certain manufacturers, and historicist tendencies have played a constituting role in the establishment of the lute's cult following? While these aspects have often been considered together, this study

^{3.} Nicholas Thomas, Entangled objects: Exchange, material culture, and colonialism in the Pacific (Cambridge, Mass.: Harvard Univ. Pr, 1991), 4.

aims to pull them apart in order to focus on the various cultural functions of the instruments.

In terms of structure, this study will be chronological, covering the period from the earliest reception of old lutes in textual sources in the 17th century to the transformation of lute instruments into lute guitars in the 19th century. Each chapter will focus on a particular region and time period: the French lute in Europe in the 17th and early 18th century, then on the development of the 13-course lute and the Mandora during the 18th century, and finally on the lute-shaped guitar in Germany in the 19th century.

This study concentrates on the reception and discourse of the development of the lute as a solo instrument and does not examine its use as a basso continuo instrument by professional musicians in the context of musical practice at court or church, since these functions led to fewer changes concerning the tuning and layout of the instruments. Furthermore, the lute as a solo instrument was mainly performed for a small audience, in which material and non-material qualities of the instruments were part of the discourse.

The field of view of this analysis gradually sharpens from immaterial, non-object-related considerations to material, object-related aspects. Each chapter will be structured in four sections. The first section will encompass a musico-historical analysis, primarily based on extant lute music, in order to illustrate the musical changes that prompted the physical adaptation of the instruments. Through textual analysis and interpretation of the different tunings presented in the contemporary lute books, this section will outline the known facts about the musical development of the lute and focus on extracting information regarding the material disposition of the instruments. It endeavours to show an organological depiction of music history without going too far into historical or music theoretical details. This section will conclude with a consideration of the material changes made to the instruments.

The second section examines the discourses surrounding the value of old lutes, their cultural significance and the written sources (e.g. lute treatises, musical works, compendia, correspondence, archival materials, and other accessible contemporary publications) that seem to contradict the progressive development of instrumental music. Based on the analyses of these textual and further iconographic sources, the shared knowledge and contemporary discourse around old lutes will be discussed. It is their function of being collectibles, representatives of social status and wealth, as well as their materiality, which makes them comparable to other groups of objects, such as curiosities and antiques. The importance of age and authenticity, and their narrative potential

for the valuation and classification of instruments will be determined in the respective contexts.

The value attached to old lutes made them a sought-after commodity. The instruments from northern Italy from the time of Laux Maler in particular have been extremely popular and expensive items throughout Europe for centuries. Instrument makers and dealers, private individuals and, later, auction houses served as sources of supply. The handling and trading of old instruments was subject to economic principles and became part of the organisation of workshops and other branches of trade. The orientation of the craft and trade is thus directly related to the needs of the constantly changing musical fashions of the upper class.

Consulting sources on sales, advertisements, inventories and craft regulations, the third section of each chapter examines lutes as commodities and the role of instrument makers as suppliers of old instruments. The extent to which traditional structures affected the culture of musical instrument craftsmanship is explored through a comparison of the different traditions of the transfer of knowledge. By comparing the organisation of trade with economic models, the importance of status, market knowledge, brands, and age of the instruments for their function as commodities will be analysed.

The fourth part of each chapter analyses the technical solutions necessary for adapting lute-type instruments to the musical fashion of the time. On a material level, musical change means that the instruments have to be constantly adapted to the new musical requirements. These interventions are to be distinguished from the general repair and maintenance measures performed on all objects of use. Whilst a repair preserves or restores a condition, an adaptation creates a new musical-practical disposition. This means that after the intervention the instrument might, for example, have more or fewer strings, causing it to fall into a different category of instrument from today's taxonomic point of view.

An adaptation might require a different interface, which would in turn change the operability of the instrument. These kinds of interventions result in technical solutions that must adapt to the material condition of the instrument and therefore differ from the possibilities inherent to creating a brand new instrument. Of central importance for the reception of the instrument is the question of which parts have to be preserved (or reconstructed in the context of museum collections) so that it continues to be perceived as an old instrument. These technical solutions signify reuse and can be regarded as reliable

evidence of the instrument's age. The material aspects of the transformation of the instruments thus form another important angle of this study.

Through stratigraphic documentation in which each historical layer of the lutes is documented, the different alterations can be identified and systemised. Based on the examination of more than 100 lutes in international institutional and private collections, the materiality of the objects is put into context with the cultural aspects surrounding these objects in order to define their interdependencies. During the research, the *Lautenweltadressbuch*, first created by Klaus Martius as a database for lutes,⁴ was extended to 885 lutes, categorised and integrated in the MusiXplora. In this digital environment, the instruments and their different alterations are linked to the involved entities such as people, institutions, and places.

In the problem of the Ship of Theseus, the philosophical discourse addresses "things that grow". This study aims to be a contribution to the field of the analysis of musical instruments with several diachronic layers as well as a thorough study of the materiality of these instruments over a long period of time. The importance of repairs and alterations of other instruments has usually featured in smaller studies concerning the transformations of keyboard instruments ⁵ or wind instruments. ⁶ Klaus Martius has already remarked on the importance of repairs and alterations executed by different lute makers. ⁷

^{4.} Last updated in 2008, the *Lautenweltadressbuch* was hosted by The Lute Society of America, but is no longer available.

^{5.} Michael Latcham, 'Soundboards Old & New', The Galpin Society Journal 45 (1992): 50–58, Christine Laloue and Jean-Philippe Echard, 'Harpsichords Transformed to 'Please Ear & Eye Alike' over Centuries', in Making and transforming art, ed. Hélène Dubois (London: Archetype Publ., 2014), 75–85, Grant O'Brien, Ruckers: A harpsichord and virginal building tradition, Cambridge musical texts and monographs (Cambridge: Cambridge University Press, 2008), 204–217.

^{6.} Markus Raquet and Klaus Martius, 'Metallblasinstrumentenbau in Nürnberg im 16.-18. Jahrhundert – Herstellungstechnologie', Forum Historische Musikinstrumente (Nürnberg, 24 January 2013); Frank P. Bär, 'Vom Wert der Veränderung – Das Nicht Originale als historisches Zeugnis', in *Mozart im Zentrum*, ed. Ann-Katrin Zimmermann (Tutzing: Schneider, 2010), 439–458.

^{7.} Klaus Martius, 'Reparaturen der Nürnberger Geigen- und Lautenmacher', in Leopold Widhalm und der Nürnberger Lauten und Geigenbau im 18 Jahrhundert, ed. Klaus Martius and Thomas Drescher, Veröffentlichung des Instituts fur Kunsttechnik und Konservierung in Germanischen Nationalmuseum (Frankfurt/Main: Bochinsky, 1997), 94–103; Klaus Martius, 'Lautenreparaturen und -umbauten von Johann Christian Hoffmann', in Martin und Johann Christian Hoffmann, ed. Eszter Fontana, Veit Heller and Klaus Martius (Leipzig: Friedrich Hofmeister Musikverlag, 2015), 145–165; Klaus Martius, 'Peter Harlan als Restaurator alter Musikinstrumente: "Seid aus eurer Leidenschaft und nehmt euch nicht zu viel aus alten Epochen, denen ihr nicht gewachsen seid", Concerto 25, no. 221 (2008): 23–28.

The latest study on musical instruments as changing artefacts was presented by Panagiotis Poulopoulos on the basis of the Hans-Hahn-collection in the Deutsches Museum München.⁸ One reason for the limited attention paid to object careers in previous research is "that our perception of instruments is often clouded by our reverence for their age and for their makers".⁹ Even when only little of an object's original state remains, far greater importance has been attached to the maker and the creation than to the measures taken to preserve and transform it and to the craftsmen who executed it. The few studies that have been done on instruments reassembled from old parts¹⁰ were, therefore, considered sensational when they questioned a generally accepted authorship and integrity of the objects. This method of inquiry, however, was not continued by other scholars in the field.

This methodological approach examines the trove of information within the diachronic layers of altered lutes. Objects consisting of parts dating from different periods have a "biography" or "itinerary" that mirrors the developments of the broader social and cultural framework. The way in which those developments are expressed through the materiality of the object makes the process of alteration just as significant as the original iteration of that object. This study seeks to examine how the objects have become what they are today. By relating the aspects of musical development, social representations, economic organisation, and materiality, it is possible to determine the duration of cultural concepts and compare their interdependencies. This method aims to shed light on a wider understanding of the subject-object relations involving old instruments in the musical culture of the past.

^{8.} Panagiotis Poulopoulos, New Voices in Old Bodies: A Study of 'Recycled' Musical Instruments with a Focus on the Hahn Collection in the Deutsches Museum, vol. 2, Deutsches Museum Studies (München: Deutsches Museum Verlag, 2016), 67.

^{9.} Latcham, 'Soundboards Old & New', 51.

^{10.} Klaus Martius and Karel Moens, 'Wie authentisch ist ein Original? Untersuchungen an zwei alten Streichinstrumenten des Germanischen Nationalmuseums Nürnberg', Concerto 5, no. 6 (1988): 15–21; Karel Moens, 'Problems of Authenticity of Sixteenth Century Stringed Instruments', CIMCIM Newsletter 14 (1989): 41–49; Karel Moens, 'Problems of Authenticity in Sixteenth-Century Italian Viols and the Brussels Collection', in Proceedings of the International Symposium on the Italian Viola da Gamba; Magnano, Italy, 29 April-1 May 2000, ed. Susan Orlando (Torino, 2002), 97–113.

2 Experiments: The Lute in the 17th Century

2.1 Musical Development of the Lute in the 17th century

The two essential aspects of the lute's transformation from an instrument for reproducing polyphonic vocal compositions of the 16th century to an idiomatic instrument¹¹ concern the extension of the ambitus into the lower register and experimentation with different tunings. In France in particular, from the beginning of the 17th century onwards, a style of composition developed that explored the tonal qualities of the lute within its extended tonal range as well as the possibilities of different tunings. This style of lute composition would eventually spread throughout Europe. The most important written sources documenting the proliferation of the French lute style, apart from the numerous lute prints and manuscripts, are Musick's Monument, published by Thomas Mace in 1676, 12 and Miss Mary Burwell's Lute Tutor, dated between 1660-1672.¹³ Both sources describe the spread of the French lute style from an English perspective and give some details of the instruments. However, the musical development of the lute, which had an impact on the material configuration of the instruments, began earlier and was not exclusively a French phenomenon.

2.1.1 Expansion of the ambitus

The earliest experiments in extending the ambitus of the lute date back to the early 16th century, as does the first recorded attempt to extend the six-course lute by a seventh course (though this was not accomplished until the second half of the 16th century). In the preface to his *Teutsch Lautenbuch*, published in Strasbourg in 1574, Melchior Neusidler mentions the disadvantages of the six-course lute: "that one cannot have on such lutes almost all the most artistic and lovely concordances or fingerings / for this reason I have thought of a way / by which such a deficiency might be remedied." The music would

^{11.} An instrument that plays music specifically composed for it as opposed to consort music, which was written as vocal music, but was often played by viols, recorders, cornettos, trombones, etc.

^{12.} Mace, Musick's Monument.

^{13.} Thurston Dart, 'Miss Mary Burwell's Instruction Book for Lute', *The Galpin Society Journal* 11 (1958): 3–62.

^{14. &}quot;Ettlich spylen uff dreytzehen saytten, oder firtzehen / und dye haben siben kore" Sebastian Virdung, Musica getutscht und außgezogen (Basel, 1511), J III r.

^{15. &}quot;das man auff solchen Lauten fast aller artigsten und liebliche Concordanzen oder griffe nit haben kan / derihalben hab ich auff ein weg gedacht / dadurch solcher mangel

require that the "lutes are supplemented and perfected with one string / together with their octave to the previous eleven / in such a way that a lute with 13 strings can achieve and fully provide clausule to every song." 16

Towards the end of the 16th century this development was pursued and more courses were added, which descended diatonically and extended the tonal range of the lute into the lower register. This phenomenon can be found in various European countries. Michael Praetorius, for example, describes the division of the six-course lute family into seven different sizes from the "great octave bass lute" to the small "octave lute", but also mentions "that at last eight/nine/yes sometimes ten/eleven/ and more courses are found on a lute"¹⁷ The fact that the size between tenor and descant, which Praetorius called the "Recht-Chorist oder Alt-Laute", is particularly affected by this development can be seen in the overview in which he gives the tunings for the six-, seven-, eight- or nine-course "Gemeine Alte Lautten" ("common alto lute").¹⁸

According to Marin Mersenne's explanations twenty years after Praetorius, these experiments were continued to the extreme and lutes were equipped with fifteen or twenty courses. However, the soundboards could not withstand the strain of such stringing, and eventually lute makers settled on using no more than ten, eleven or twelve courses.¹⁹

Numerous contemporary accounts of this development attest to the importance of the expansion of the ambitus for the tonal possibilities of the lute.²⁰ In Thomas Mace *Musick's Monument* a reflection on the addition of extra bass strings features prominently at the beginning of his chapter on the lute and forms the first argument of his reasoning as to why the lute is now easier to

möchte erstattet werden." Melchior Neusidler, $Teutsch\ Lautenbuch$ (Straßburg: Bernhart Jobin, 1574), Preface.

^{16. &}quot;Lauten noch mit einer Seite / sampt ihrer Octave zu den vorigen eilffen also ergänzt und perficiert werden / das ein Laute mit 13 Seitten recht bezogen / eines jeden gesangs Clausulen erreichen und vollkömlich geben mag." Neusidler, preface.

^{17. &}quot;daß endlichen acht / neun/ ja bißweilen zehen / eilff/ und mehr Chorsaitten uff einer Lauten numehr gefunden werden." Michael Praetorius, Syntagma Musicum: De Organographia, vol. 2 (Wolfenbüttel: Elias Holwein, 1619), 50.

^{18.} Praetorius, 27.

^{19. &}quot;Le Luth n'avoit autrefois que six rangs de chordes, mais on en adiôute 4, ou 5 autrs plus bas, c'est à dire le 7. 8. 10. & 11. rang, afin de faire les basses, [...]. Quelques-uns ont voulu mettre 15, ou 20 rangs de chores sur le Luth, mais la table est si chargee, qu'ell est souvent contrainte de creuer, & de se rompre, de sorte qu'il n'est pas à propos d'user de plus de 10, 11, ou 12 rangs." Marin Mersenne, Harmonie universelle: Contenant la théorie et la pratique de la musique. Seconde Partie. Livre Second (Paris: Sebastien Cramoisy, 1637), 45 20. See Dart, 'Miss Mary Burwell's Instruction Book for Lute', 13.

2 Experiments: The Lute in the 17th Century

learn than in earlier times. "The First and Chief Reason that it was Hard in former Times, was, Because they had to their Lutes but Few Strings; viz. to some 10, some 12 and some 14 Strings, which in the beginning of my Time were almost altogether in Use;"²¹ Mace reports that he began playing the lute 54 years before writing his work, which would mean in 1621. The evaluation of the manuscripts according to the number of courses confirms the simultaneous use of the lutes with different numbers of courses described by him in this period in other European countries as well. Mace explains that it would be "by reason of the Fewness of Strings, [...] (really) extreme Hard to perform".²² The twelve-course lute type, which in this work is accorded the highest place, would give him more "Liberty, Scope, Freedom" as well as "variety of Trebles, Basses, and Inner Parts".²³

In the 16th century, the extension of the tonal range of the lute into the lower register meant merely the addition of bass strings, usually tuned at diatonic intervals, while retaining the established tuning in fourths and one third. The advantages described by Mace in 1676, however, not only concern the extension of the tonal range, but also modifications to the tuning that had been developed by French lutenists from the beginning of the 17th century. The expansion of the tonal range was motivated largely by the desire to optimise the tonal possibilities of the instrument, as Besard's statement in his gründlichen Unterricht already suggests: "This lute should have at least ten or more courses / just as one sees / as is almost common today in Italy and France / it is also taught by experience itself that the more courses on a lute / the more beautiful and lovely sound and harmony it produces."²⁴

2.1.2 Experiments with different tuning variations

Before describing the different tuning systems, some remarks on the conventions for representation of the tunings are necessary. For lutes, tablature notation was common. Using this, tunings could be independent of regionally

^{21.} Mace, Musick's Monument, 39.

^{22.} Mace, 39.

^{23.} Mace, 39.

^{24. &}quot;Dise Laute solle zum wenigsten zehen oder mehr Choros haben / gstalt man sihet / das heutigs tags in Italia uñ Franckreich fast gebreuchlich / auch in Experienz selbst lehret, das je mehr Chori auff einer Lauten / je schöner und lieblicher Klang und Harmoney darauß entstehet." Johann Baptist Besard, Isagoge in artem testudinariam: das ist: gründtlicher Unterricht uber das künstliche Saitenspil der Lauten (Augsburg: Steffan Michelpacher, 1617), 9.

variable pitch standards and lute sizes. In the lute manuals of the 16th and 17th centuries the intervals were indicated by letters representing the frets that must be stopped in order to tune the next string, always reading from the highest course to the lowest. The bass strings were not usually mentioned and only the six stopped strings were indicated. The tuning in fourths, with one third, in G (g'-d'-a-f-c-G) or A (a'-e'-h -g-d-A) could thus be indicated as **ffeff**, regardless of the pitch.²⁵ This representational convention will be used in the following.

The first attempts to adapt the standard tuning of the lute to different key signatures are represented by the Abzuq already described in Virdung, a tuning variant in which the lowest string is "tuned a fifth below the middle prummer ["drone"] / But that is not the custom of all lutenists."²⁶ Other attempts to modify the tuning can be traced in various French lute books as early as Antoine Francisque's Le trésor d'Orphée, which was published in 1600. In Francisque's trésor, most of the pieces are set for an 8- or 9-course instrument in the standard tuning, while thirteen pieces require the re-tuning of one or two strings of the middle register to form the so-called cordes avalées tuning. In the following years, the variation in tunings can be traced mainly in compiled lute manuscripts and in printed lute books. The title page of Pierre Ballard's Tabulature de luth de différents autheurs sur l'accord ordinaire et extraordinaire, published in 1623 and now largely lost,²⁷ promised a variety of tunings, as can be found in Ballard's Tabulature de luth de différents autheurs, sur les accords noveaux, published in 1631.²⁸ The concept of accords nouveaux seems to have been established by the time Mersenne's Harmonie universelle appeared. He points out that one should direct the tuning according to the "tuning which is called the *old tone*, or the *new tone*, according to the different pieces of music which one wants to play".²⁹

^{25.} This representational convention was first formulated by Frank Traficante to simplify the representation of the different tunings of the Lyra Viol. "The letters used and the intervals they represent are as follows: c = major second; d = minor third; e = major third; f = perfect fourth; g = diminished fifth; h = perfect fifth; n = octave." Frank Traficante, 'Lyra Viol Tunings: "All Ways Have Been Tryed to Do It", Acta Musicologica 42, no. 3 (1970): 184

^{26. &}quot;ein quint und[er] den mittlern prummer [gestimmt wird] /Aber das ist nit der gebrauch aller lutiniste[n]." Virdung, Musica getutscht und außgezogen, K I r.

^{27.} Pierre Ballard, Tablature de Luth de differents auteurs sur l'accord ordinaire et extraordinaire recueillie par P. Ballard (Paris, 1623).

^{28.} Pierre Ballard, Tablature de Luth de differens autheurs sur les accords nouveaux (Paris, 1631).

^{29. &}quot;accord que l'on appelle le vieil ton, ou le nouveau, selon les differentes pieces de Musique que l'on veut joüer". Mersenne, Harmonie universelle: Contenant la théorie et la



Figure 2.1: Tuning instruction for a suite by Bouvier in Ballard (1638), p. 40

In the 1620s in France, the tunings edeff, fdeff and fedff in particular are encountered frequently.³⁰ Here it should be emphasised that, compared to ffeff, the pitch of the first string remains constant (except in edeff), and only the middle registers vary. Among the tunings consistently used from about 1630 onwards are dedff, and ddeff, the two most frequent variants in which the first string is tuned a whole tone lower. This reduces the ambitus of the playing strings by one tone and the intervals between the strings become smaller. This is also the case with the tuning dfedf (known today as D-minor tuning), which is found for the first time in 1638 in a collection of lute suites, likewise titled Tabulature de luth de différents autheurs, sur les accords noveaux,³¹ published by Pierre Ballard. The particular suite for 10-course lute featuring this tuning, later known as nouvel accord ordinaire, is by an unknown composer named 'Bouvier' (see fig. 2.1).

The different tunings affect both the playing technique and the tonal possibilities of the instrument. Smaller intervals between the strings mean that melodies can be played in such a way that successive notes are not on the same string and can therefore sound longer. For Mace, this presented a significant advantage over the old tuning, whose "hard, cross, and wringing stops" were difficult for the left hand to perform.³² Overall, more open strings sound in chords than in the tuning with smaller intervals, resulting in a richer sonority. The simultaneous sounding of stopped and open notes can furthermore lead to a *campanella* effect, which finds its way into the expressive possibilities of

pratique de la musique. Seconde Partie. Livre Second, 52.

^{30.} Francois-Pierre Goy, 'The accords nouveaux: a survey of their history, sources and music', $Lute\ News$, no. 105 (2013): 20–25.

^{31.} Pierre Ballard, Tablature de Luth de differents autheurs sur les accords nouveaux (Paris, 1638).

^{32. &}quot;Yea, such Stops have I seen, that I do still wonder how a Mans Hand could stretch to perform some of them, and with such swiftness of Time as has been set down." Mace, Musick's Monument, 41.

lute music as a mixture of resonance, reverberation, and even dissonance.

The tonal possibilities of the different tunings go hand in hand with innovations in the style of composition that developed in France at the beginning of the 17th century. The texture of the pieces became lighter, strummed chords were used less frequently, and bass lines ran relatively freely, both diatonically and in larger intervals. Imitation and motivic repetitions were largely eliminated from the phrase structure. "From this situation French lutenists became more concerned with sonority and expressiveness, and in how the lute's own capabilities could be best exploited to effect the maximum in expressive variation of rhythm, tone and colour." The pieces are formally arranged as dance suites, but understood as solo music. As in Ballard's collection of suites, the lute books were now laid out with suites in different moods, reflecting the progression of a performance situation. For example, the prelude served as an opportunity for the player to familiarise himself with the new tuning, which could govern the rest of the suite.

By the mid-17th century, with Jacques Gaultier's La rhétorique des dieux³⁴ of 1652, the essential elements of the compositional style now known as style brisé were largely established in France.³⁵ This style is characterised above all by the horizontal distribution of the notes of the chord, in which the notes are plucked in succession in different registers. The pieces remain ambiguous in melody and texture, characterised instead by simple harmonic movements and cadences to the closest related keys. The middle and lower registers are particularly favoured, and ornamentation is an integral part of the composition. The widespread use of this style of composition in France during this period and the stylistic uniformity make it difficult to attribute unsigned pieces.³⁶

"The 'French Lute' became synonymous with the altered tunings developed in France after 1600 and with techniques developed to exploit the resonances of these tunings. Certainly lute and later theorbo players accompanied singers and instruments, but this was almost always on lutes in Renaissance tuning and was viewed as an altogether different genre." For example, the old tuning

^{33.} Matthew Spring, 'The development of French Lute Style 1600-1650', in *From Renaissance to Baroque*, ed. Jonathan Wainwright and Peter Holman (London: Routledge, 2016), 176.

^{34.} Denis Gaultier, La rhétorique des Dieux, ca. 1652: Fac-similé du manuscrit du Kup-ferstichkabinett; Berlin, 78 C 12, ed. Francois Lesure (Genf: Minkoff, 1991).

^{35.} The term *style brisé* is rather recent and was used for the first time in Lionel de La Laurencie, *Les Luthistes* (Paris: Laurens, 1928), 82.

^{36.} See Spring, 'The development of French Lute Style 1600-1650', 189-190.

^{37.} Spring, 173–174.

continued to be used in the *Airs de cour*, which were extremely popular in France. For a long period of time, there was a coexistence of different tunings. In the second half of the century the D-minor tuning (**dfedf**) was the most frequently used tuning variant. As late as 1676, Thomas Mace tried to prove the advantages of the tuning **dedff**, which he called "French Flat Tuning", by meticulously demonstrating that there were 199 more chords theoretically possible in **dedff** than in the new tuning systems.³⁸ Because of the variety and simultaneity of the different tunings, the term "transitional tunings", which has been common in modern musicological discourse,³⁹ must be viewed critically.

Around 1630, France was the centre for solo lute music, attracting numerous students from other countries and also exporting her musicians and musical style abroad. The French lutenist, author, and poet Charles de L'Espine, for example, journeyed to England, Germany, and Italy between 1610 and 1627. The accounts of other French lutenists, such as Ennemond Gaultier and René Mesangeau in England around 1630 and the activities of the French musicians accompanying Anne of Denmark, Henrietta Maria of France (married to Charles I of England from 1625) and the noble Cavendish family show that French lutenists spread their style far and wide. 40 The French lutenist Jacques Gaultier exerted tremendous influence on the development of lute music in England during the first half of the 17th century. Initially patronised by the Duke of Birmingham, he became a court musician in 1625 and remained the dominant figure on the English lute scene until 1642. Both Thomas Mace and Mary Burwell's Lute Tutor describe him as the most influential lutenist of his time. His contact with the Dutch poet and lutenist Constantijn Huygens testifies to his international connections. Huygens also corresponded with other composers, such as Pierre de la Barre, to whom he mentions in a letter of 1st December 1653 that he had made the first experiments with the new tuning. This attests to the spread of the French style to the Netherlands.⁴¹

In the preface to his *Livre de Tabulature des Pièces de Luth*, dated 1680, Denis Gaultier, a French lutenist living in France, offers an interesting testimony to the alterations (some quite egregious) that French lute music sometimes underwent when it was disseminated abroad:

^{38.} Mace, Musick's Monument, 192–196.

^{39.} See Spring, 'The development of French Lute Style 1600-1650', 188.

^{40.} See Spring, 177.

^{41. &}quot;Ce sont mes premiers essays en cette espece n'y ayant que peu de semaines que j'ay commencé à tastonner les nouveaux tons, dont cestuy ci me semble des plus harmonieux." Constantijn Huygens, *Briefwisseling. Deel 5: 1649-1663*, ed. Jacob Adolf Worp (Den Haag: Martinus Nijhoff), 190.

"Comme jay apris qu'on se plaint que les copies des pieces de Luth que J ay composeés [...] se trouvent fort altereés [...] J ay crû estre obligé de les faire Graver pour les representer au Naturel [...]. Ainsi qu'elles ont este changeés et defigureés et ausy afin qu'elles ne fusent plus envoyees de cette maniere imparfaite dans les provinces, ny ches les estrangers, ou l'on ne les trouve a present qu'avec beaucoup de confusion, tant au regard de la Mesure, des Tenues, des Etoufements [...] ce qui empéche d'en pouvoir trouver le vray mouvem [mouvement] et de tirer du luth ce beau son dont l'un et l'autre forment le charme et l'harmonie."

As I have heard that people complain that the copies of the lute pieces that I have composed [...] are very much altered [...] I thought I was obliged to have them engraved in order to represent them in their natural form [...]. So that they have been changed and disfigured and also so that they are no longer sent in this imperfect manner to the provinces, nor to foreigners, where they are found at present only with much confusion, both with regard to the measure, the tenues, and the damping [...] which makes it impossible to find the true mouvem [movement] and to obtain from the lute that beautiful sound of which both form the charm and the harmony.

Gaultier thus felt obliged to restate some rules about the true playing of the lute in order to correct the errors which had caused confusion in the transcription and interpretation of his pieces in the provinces and other countries. Gaultier's hegemonic attitude regarding the "correct" interpretation of his compositions demonstrates the missionary zeal with which the French lute style was being disseminated in other countries.

2.1.3 Instrument types as a result of experimentation

The numerous attempts to develop playing and compositional techniques and to extend the tonal range of the instrument were motivated by the desire to exploit the tonal possibilities of the lute in the performance of as many instrumental genres as possible. These changes were reflected in various ways in the demands made on the instruments. The experimentation affected the shape

^{42.} Denis Gaultier and Gaultier. Ennemond, Livre de tablature des pièces de luth (Paris, 1680), 2.

and technology of the instruments used, with varying degrees of sustainability.

Although there is, as of yet, no evidence of the widespread use of some of the attempts to improve the acoustic properties of the lute described by Mersenne, they nevertheless bear witness to the inventive spirit of the period. For example, Mersenne suggested that a very large lute could be made and its back fitted with a door through which a child could enter to sing the treble voice from inside the lute while someone else played the accompaniment on the same lute. 43 Another suggestion by Mersenne, as a way of adapting the lute to different keys, was the integration of up to thirteen organ pipes into the lute's body and neck. The pipes, operated by a soundlessly driven bellows and activated through the fingerboard, would give the lute "more harmony [...] due to their different cavities" ("plus d'harmonie [...] par leurs differentes concavitez").44 The Dyphone or Double Lute or The Lute of Fifty Strings presented (and built) by Thomas Mace – a combination of theorbo and lute joined together at the lower sides – must also be understood in the spirit of tonal experimentation that characterised this period. The connection of these two types of instruments not only shows that the theorbo and the lute were understood as typologically different, but also supports the view that this experiment was yet another attempt to expand the timbral possibilities of the lute. Mace's statement that this combination brought the advantage of a "Fuller, Plumper, and Lustier Sound, than any Other" testifies to the tonal motivation of the invention.46

However, the lowering of the tuning pitch of the first string by a whole tone in the tunings that were consistently in use from about 1630 onwards had a concrete effect on the actual shape of the instruments. This modification allowed the neck of the lute to be made longer, which made it easier to play in the higher register. In the *Lute Lessons* published by Robert Dowland

^{43. &}quot;En huictiesme lieu, que l'on peut faire son corps si grand, qu'un enfant si ogera pour chanter le Dessus, tandis que le joueur de Luth touchera la Basse, [...] car l'on peut tellement faire les éclisses, que le dos du Luth s'ouvrira & fermera comme la porte d'une chambre, pour enfermer un enfant, dont le hant estant bien concerté avec les chordes, donnera du contentement aux Auditeurs." Mersenne, Harmonie universelle: Contenant la théorie et la pratique de la musique. Seconde Partie. Livre Second, 91.

^{44.} Mersenne, 91.

^{45.} Mace, Musick's Monument, 203.

^{46.} It should not go unmentioned that Pierre Trichet reports around 1640 that a man in Padua even made three lutes sound at the same time by joining them together. See Pierre Trichet, *Traité des instruments de musique -vers 1640-*, Réimpr. de l'éd. de Paris 1957, ed. François Lesure (Genève: Minkoff Reprint, 1978), 154.

in 1610, in which he translates, among other things, parts of the *Thesaurus Harmonicus* by Jean-Baptiste Besard published in Rome in 1603, it is noted that, since the publication of Hans Gerle's lute book, "all the lutes which I can remember used eight frets". ⁴⁷ Mersenne, on the other hand, mentioned in 1636 nine frets on the lute's neck. ⁴⁸ In Burwell's Lute Tutor the frets must be "nine in number". ⁴⁹ Finally, Mace explicitly warns against buying a lute with a neck that is too short: "If it carries less then *Nine*, it is *too short*; and if *more*, it is *too long*: Therefore *Nine* is esteemed the *Best Number* of a *True-siz'd Neck*." ⁵⁰ These technological specifications can also be traced in compositional practice; indeed, few French pieces go beyond the ninth fret. ⁵¹

Furthermore, Thomas Mace describes the layout of the fingerboard as another achievement resulting from the developments of the 17th century. "The Work-men of Those Times did not Lay their Lutes so well, fine, and easie for the Fingers, as now by experience our late Work-men have been inform'd to Rectifie; which is a very great, yea a main matter in the Use of the Lute."⁵² For Mace, the important improvements in playability would have included a change in the fingerboard and the bridge, which created a slightly convex surface. Moreover, the strings would have been placed closer to the fingerboard, almost touching the first fret, making it easier to stop the strings. Finally, the strings would be arranged so that the double strings are close together but the courses are far enough apart to allow for "a more ready and certain Command over them, for neat and clean Play."⁵³ According to Mace, the new layout of the instruments would give so many advantages that two equal players would not be recognised as such, if one was playing on a lute arranged in the modern manner and the other on one with an old layout.

Very few extant instruments can be dated with certainty to the time of the heyday of the French lute. Therefore, we must continue to resort to written and iconographic sources in order to describe the shape of the lutes more precisely. On the basis of the surviving compositions and the contemporary statements mentioned above, however, it must be assumed that lutes with

^{47.} Robert Dowland, Varietie of Lute - lessons (London: Thomas Adams, 1610), n.p.

^{48. &}quot;neuf touches sur le manche des luths". Mersenne, Harmonie universelle: Contenant la théorie et la pratique de la musique. Seconde Partie. Livre Second, 52.

^{49.} Dart, 'Miss Mary Burwell's Instruction Book for Lute', 16.

^{50.} Mace, Musick's Monument, 50.

^{51.} See Anthony Bailes, 'An Introduction To The French Lute Music Of The XVIIth Century', in *Le luth et sa musique*, ed. Jean-Michel Vaccaro, Corpus des luthistes français (Paris: Centre National de la Recherche Scientifique, 1984), 220.

^{52.} Mace, Musick's Monument, 40.

^{53.} Mace, 41.

different numbers of courses were in use at the same time and that people experimented with different variants. From French sources it is clear that the lute type with a bent-back pegbox was most common. In England and the Netherlands, the variant, which Mace called the *English Two Headed Lute*, with one bent-back pegbox and one extended pegbox for the bass strings was also common.

The most famous depiction of this type of lute is probably the copper engraving portrait of Jacques Gaultier by Jan Lievens, which was probably made during his stay in England in 1632 and 1634. Numerous other examples can be found in Dutch genre painting by the generation of painters, born between 1615 and 1635, around Bartholomew van der Helst, Frans van Mieris the Elder, Eglon van der Neer, Hendrik Martensz Sorgh, Gerard Ter Borch or Nicolaes Berchem. Few testimonies suggest the use of this type in France, although it is assumed, mainly because of the statement in Miss Mary Burwell's Lute Tutor, that Jacques Gaultier introduced this type from France to England: "English Gaultier hath been of another opinion and hath caused two heads to be made to the lute. All England hath accepted that augmentation, and France at first; but soon after the alteration hath been condemned by all the French masters, who are returned to their old fashion, keeping only the small eleventh."⁵⁴ However, Trichet⁵⁵ also points out that a maximum of twelve courses was used at the time, following a steady expansion. In addition to the type associated with Gaultier, another type with two bent-back pegboxes can be found, for example, in a painting by Jacques Linard (see fig. 2.2).

The preference for the 11-course lute without extended bass strings is the subject of a section in Mary Burwell's Lute Tutor. The reasons for rejecting the extended bass strings had to do with the basses sounding too long, causing dissonance, and also having the timbral character "of one that sings in the nose". Gaultier, on the other hand, defended lutes with extended bass strings for these very reasons. Burwell's and Gaultier's disagreement on this topic reflects their different musical and sonic ideals of the lute. According to Burwell, a nuanced treatment of loudness – especially in the bass register – was needed. In her estimation, Gaultier's 'stormy' style of playing would have fitted better in a cabaret than in an intimate chamber music setting. Nevertheless, according to Burwell's lute tutor, the lute was hard enough to learn and if one did not master the twelve courses with a light hand, one would only

^{54.} Dart, 'Miss Mary Burwell's Instruction Book for Lute', 58–59.

^{55.} Trichet, Traité des instruments de musique -vers 1640-, 151.

^{56.} Dart, 'Miss Mary Burwell's Instruction Book for Lute', 59.



Figure 2.2: One of the few representations of a lute with two pegboxes in French painting. Jacques Linard: The Five Senses and the Four Elements, 1627, Musée du Louvre, inv. no. DL 1970-12

produce an ugly noise. Instead, Burwell's tutor suggests another option, which is a modification of the 11-course lute:

"Concerning the eleventh string, which is the last bass, the good masters of the lute do use only the octave (that is the little one), because the eleventh bass is a superfluous string that has been added to the lute of late to give ease to the hands [...] Therefore it were necessary to discharge the lute of that burden. Making the bridge and the nut smaller and taking from the head the superfluous pegs, the lute would sound the better and the hands would find more ease. That eleventh string being alone ought to be something bigger than if it were an octave; [...]. The lute-masters have taken away that great string because the sound of it is too big and smothers the sound of the others."

The sources consulted so far show the distribution and simultaneity of different types of lutes in the 17th century, especially in France, England and the Netherlands. However, evidence of the French lute can also be found in other countries such as Italy, where a development of solo lute music for *arciliuto*, a small theorbo type, was established that was largely independent of France. The evidence of the French lute in Italy includes, on the one hand, the tuning

 $^{57.\ \}mathrm{Dart},$ 'Miss Mary Burwell's Instruction Book for Lute', 17.

fedef, which is related to the accord nouveaux and is found in an edition by the Venetian lutenist Pietro Paolo Melii,⁵⁸ and on the other hand the pieces printed in Rome by Gautier.⁵⁹ Furthermore, some of the lute patterns from the Stradivari workshop are labelled *liuto francese* and will be discussed later.

The pan-European efforts to expand the ambitus of the lute and the efforts of primarily French lutenists to explore the tonal possibilities of the lute through tuning variations led to a diversity of different lute types and tunings in the 17th century. This process must be seen as a simultaneity of different ideals and not as a teleological development. This is evident not only in the two most important written sources, Mace and Burwell, who take different positions, but also in the fact that in the manuscript of the English music collector James Talbot (dated 1692-1695), two French lutes, an English "Two Headed Lute", three "Angelique or Angel-Lute", two "Lesser French Theorboes", furthermore an "English Theorboe" and an "Arch Lute" are described. 60 The several variants of theorbos are beyond the scope of this study and cannot be discussed further at this point. It must be assumed, however, that especially in the metropoles such as Paris, London, and Rome, as well as in the lute-playing households such as Constantijn Huygens' manor house Hofwijk, different lute types were in use at the same time, and the latest compositional and technical innovations were followed and anticipated.

^{58.} See Andreas Schlegel and Joachim Lüdtke, *Die Laute in Europa: Lauten, Gitarren, Mandolinen und Cistern = The lute in Europe*, 2., stark erw. und überarb. Aufl. (Menziken: Lute Corner, 2011), 256.

^{59.} Pierre Gautier, Œuvres de Pierre Gautier, ed. Monique Rollin, Chœur des muses (Paris: Éditions du Centre national de la recherche scientifique, 1984).

^{60.} Michael W. Prynne, 'James Talbot's Manuscript (Christ Church Library Music MS 1187): IV. Plucked Strings - The Lute Family', *The Galpin Society Journal*, no. 14 (1961): 52–68.

2.2 The Lute in the 17th Century World of Objects

2.2.1 Cultural framework

The notion of a social life of musical instruments considers their cultural interactions and significance and thus views musical instruments as part of a larger cultural framework in which they are integrated. In this context, they are not to be considered merely as sounding tools; rather, their cultural function goes beyond the purely musical, involving them in other cultural expressions and forms of representation. Abstracted, musical instruments can take on a symbolic function in the visual arts and in poetry. Particular historiographies of music and social groups can be told from the perspectives of instruments, which through their participation in the world of material goods, often inhabit a slippery middle ground between sound-producing object and art object. In all fields, a differentiated knowledge of musical instruments can emerge that is transmitted in different ways. In this section, the different socio-cultural functions of the lute and its qualities as an aesthetic object will be analysed. The social position of the lute, its materiality, and its intersection with the cultural appreciation of old objects will be examined.

The lute was the most popular instrument among the aristocracy and the educated upper class in 17th century France. Trichet reports around 1640 that "There is no musical instrument today more widely used and more highly regarded than the lute". The culture surrounding lute playing was shaped by mechanisms of popular culture. These include elements that enable the expression of status and individual personality on the one hand, while meeting the musical expectations of the audience on the other, and creating a strong connection between music and courtly language, reinforcing courtly culture. Within this cultural framework, an awareness of the symbolism and a specialised knowledge of the various properties of the instruments developed. This body of knowledge became part of the materialistically oriented object world of the upper class and included not only knowledge about certain manufacturers of lutes and brand names but also the associated formal criteria, such as the shape of the instrument and material qualities. Within this musical and ma-

^{61. &}quot;Il n'y a point aujourd'hui aucun instrument de musique plus usité et plus recommandable que le luth" Trichet, *Traité des instruments de musique -vers 1640-*, 150.

^{62.} Robin Rolfhamre, The popular lute: an investigation of the function and performance of music in France between 1650 and 1700, vol. 88, Doctoral dissertations at the University of Agder (Kristiansand, 2014).

terial culture, the lutes from Bologna enjoyed an exceptional reputation early on and became some of the most sought-after instruments.

Numerous sources from this period describe performances of solo lute music in intimate settings. In Mary Burwell's lute tutor, the lute is described as "a closet instrument that will suffer the company of but a few hearers, and such as have a delicate ear; for the pearls are not to be cast before the swine. As I answered once to a gentlewoman that told me the lute was a heavy music: I answered that her ear was heavy, and that a violin was most fit for her." The intimate setting is the prerequisite for the performance of socially coded behaviour, which included lute playing: "the gentle and soft playing is to be preferred before others, so that you play neatly and in a little room or to please a small company (the lute not being fit to play in hall before a multitude of people; there the violin is most fit)."

The importance of the instrument in this framework is most evident in its relationship to the expressions of the body and the social codes associated with them. The lute, by virtue of its playing posture, enables a chaste posture in contrast to other instruments. "All the actions that one does in playing of the lute are handsome; the posture is modest, free and gallant, and do not hinder society. The shape of the lute is not so troublesome; and whereas other instruments constrain the body, the lute sets it in an advantageous posture."65 While one has to open one's arms and legs lewdly to play the viola da gamba, lute playing allows a posture that is perceived as beautiful. Numerous lute tutors emphasise the correct posture, the most elegant positioning of the hands, and the importance of controlling one's facial expressions, for example avoiding grimaces. The special relationship of the object to the body, the integration of the instrument into a "framework of body"66 leads to a differentiated perception about the suitability of certain objects in terms of their shape, size and materiality. For example, according to Burwell's lute tutor, the elongated shape of Bolognese lutes minimises the danger of "people to grow crooked".⁶⁷

The performance and teaching of lute music formed an important part of the courtly cultural programme and was strongly encouraged by the Bourbons in

^{63.} Dart, 'Miss Mary Burwell's Instruction Book for Lute', 60-61.

^{64.} Dart, 61.

^{65.} Dart, 48.

^{66.} Rolfhamre, The popular lute: an investigation of the function and performance of music in France between 1650 and 1700, 79–94.

^{67.} Dart, 'Miss Mary Burwell's Instruction Book for Lute', 10.

France, by the English kings, and by other noble houses, through the employment of various lutenists. In England, five lutenists were employed by the King from the beginning of the 17th century, with an additional seven for Princes Charles and Henry.⁶⁸ The situation was similar at the court of Louis XIV, where in 1656, for example, two well-paid lutenists can be found on the roster of musicians for the musique des reines as well for the musique des princes.⁶⁹ The chamber music setting allowed for an up-close appreciation of the lute's sonic and material qualities. Burwell reports that the instrument "requireth silence and a serious attention. It is used commonly at the going to bed of the Kings of France, and that time is the time of most rest and silence."⁷⁰ But even in bourgeois culture, lute playing belonged to the realm of private contemplation, and not only in France. Samuel Pepys' diary shows that he usually played the lute alone in the morning before work or in the evening before going to bed. In his notes on playing music in the evening hours, he deviates from the otherwise sober style of his accounts and describes emotions. On 28 February 1660, for example, he plays the lute in the evening "with great pleasure, and so to bed with great content." and on 28 July 1662 he goes to his room "a little troubled and melancholy, to my lute late, and so to bed".⁷²

Parisian salons, societies organised by aristocrats or personalities of the cultural scene in their *hôtels particuliers* or apartments, offered an important forum for social and cultural life as well as numerous opportunities for the practice of music within an exclusive circle. The aristocracy and the uppermiddle classes met there as a platform for social display and advancement, but also for musical-literary exchange.⁷³ Among the organisers of such events was the Italian opera singer Anna Bergerotti, who promoted the young Jean-Baptiste Lully and contributed to intercultural exchange through her mostly Italian audiences.⁷⁴ For the invited musicians (not infrequently maîtres de musique), the salons were an opportunity to acquaint themselves with possible

^{68.} Matthew Spring, *The Lute in Britain: A History of the Instrument and its Music*, Oxford early music series (Oxford: Oxford Univ. Press, 2001), 210–211.

^{69.} Catherine Massip, La vie des musiciens de Paris au temps de Mazarin (1643-1661): Essai d'étude sociale (Paris: Picard, 1976), 29–35.

^{70.} Dart, 'Miss Mary Burwell's Instruction Book for Lute', 62.

^{71.} Samuel Pepys, 'The Diary of Samuel Pepys', ed. Phil Gyford, accessed 26 April 2022, https://www.pepysdiary.com/.

^{72.} Pepys.

^{73.} Rolfhamre, The popular lute: an investigation of the function and performance of music in France between 1650 and 1700, 62.

^{74.} Anne-Madeleine Goulet, *Poésie, musique et sociabilité au XVIIe siècle: Les Livres d'airs de différents auteurs publiés chez Ballard de 1658 à 1694*, vol. 55, Lumière classique (Paris: Champion, 2004), 433.

patrons, to acquire potential pupils, and to maintain contact with court musicians. These small societies also provided an opportunity to come into contact with instruments and discuss their qualities.

Lute lessons, offered primarily by bourgeois musicians to members of the nobility and upper classes, were sought-after commodities in this environment.⁷⁵ Part of the instrumental instruction was also to impart the knowledge about the quality and care of the instruments that can be traced today in various lute manuals, treatises and encyclopaedias. This practical knowledge can be understood under the aspect of praxeology, a term which in sociology summarises both the implied, unintended bodily bodily experience of tangible qualities and the actions performed with objects.⁷⁶ In addition to instructions on posture, playing technique and expression, this includes a body of knowledge on using the right strings, how to tune them, and how to care for instruments. In his detailed instructions, Thomas Mace describes, among other things, that one should during the day keep the lute in a bed which is used regularly, "between the Rug and the Blanket; but never between the Sheets, because they may be moist with Sweat, &c."77 Many instruments, he says, are old – his own over a hundred years – and by these measures they can be preserved for another hundred or two hundred years.

As objects, the instruments were integrated into a cultural framework in which elements of musical consideration and social representation predominated. A particularly rich trope by which to examine this is the repeated connection between the lute and the bedroom, especially its presence in the courtly bedchamber. In the context of Louis XIV's policy of behaviour and representation at court, the most important audiences with him took place in his bedroom after waking up (lever) and before going to sleep (coucher). It is difficult to say

^{75.} Instruction was often arranged over several years and, in the case of children, was often linked to education, as can be seen in the 1614 agreement between Augustin de Berry and the lutenist Antoine Rossignol, who is described as the teacher of the king's brother. He promises to teach de Berry's son to write, read and play the lute for three years for a sum of 120 livres: "d'enseigner à son fils l'art de l'écriture, à lire et à jouer du luth, pendant trois ans, moyennant 120 livres". Madelaine Jurgens, Documents du minutier central concernant l'histoire de la musique (1600-1650), vol. 1 (Paris: Centre National de la Recherche Scientifique, 1967), 313. Similar agreements have survived from Jacques Raveneau or Jacques David, who even promised lessons for five years to the noble Claude Martin de Maunoy, drawing a salary of 300 livres for this purpose.

^{76.} Jens-Arne Dickmann, Friederike Elias and Friedrich-Emanuel Focken, 'Praxeologie', in *Materiale Textkulturen. Konzepte-Materialien-Praktiken*, ed. Thomas Meier, Michael R. Ott and Rebecca Sauer (Berlin, München and Boston: de Gruyter, 2015), 135–146.

^{77.} Mace, Musick's Monument, 62.

exactly what function the lute served during these audiences – perhaps the lute player simply provided pleasant background music for the proceedings – but it is significant that the lute was simultaneously associated with the intimacy of the bedroom and the most important actions of the state. The conservation measures described by Mace, while practical, also demonstrate the cultural placement of the lute within the intimate and private sphere. The bed can be understood here in the sense of a Foucauldian heterotopos, as having numerous connotations that underline the sentimental (and at times sexual) character of the lute. The corporeal knowledge associated with the instrument concerns the physicality of the player as well as the formal and material shape of the lute, which creates the basis for a fashion of valuing certain types of instruments, brands, and designs and the narratives associated with them.

2.2.2 The lute as a kingly thing

The position of the lute in the social hierarchy of the 17th century was determined by the owners of the instruments, the practising musicians, and the audience. Owning lutes and lute music was an important part of the cultural life of the upper classes. To ensure the exclusivity of the instrument, the lute itself was dubbed a *kingly thing*. The term, coined by Max Gluckman, describes the exclusivity of goods for a privileged social class. "In his analysis of 'kingly things' it becomes clear that the main function of these royal monopolies was to maintain sumptuary exclusivity [...] commercial advantage [...] and display of rank".⁷⁸

The lute's association with royalty was both literal and metaphorical. In many cases lutes and the performance of lute music were associated not only with royal chamber music but specifically with royal representation. Of the instruments at the reception ceremony for the Danish Queen Anne in Edinburgh in 1590, John Burell describes the lute as "Of instruments the onley king." Almost twenty years later we find an account that the French queen Maria de' Medici was accompanied by "twelve lutes in a dance". The lute itself was consistently apostrophised as the "king of instruments", a noble moniker that elevated the lute's status in relation to other instruments and served to reify

^{78.} Arjun Appadurai, ed., The social life of things: Commodities in cultural perspective (Cambridge: Cambridge Univ. Press, 1986), 22.

^{79.} John Graham Dalyell, *Musical Memoirs of Scotland* (London: William Pickering, 1849), 271.

^{80.} Dalyell, 226.

its position within courtly musical life. The bestowal of this royal dignity also suggests that the same elements of royal legitimation held true for lutes as with monarchs: generational, patrilineal succession. It should therefore come as no surprise that a lute's value increased if it could boast an old and noble lineage. The exclusive demarcation of the lute above all other instruments created a musical-cultural microcosm in which the use of old instruments became a topos.

The lute in this period was promoted as the most beautiful (both sonically and visually) and therefore most noble of instruments. Trichet notes that the lute had reached such perfection "that one can justifiably designate it the king of instruments [...] and Robert Flud vaunted it to the point that it there could not be any instrument that produced a more beautiful harmony". The lutenist Charles Mouton saw the performance of lute music as part of the canon of controlled courtly gestures and warned that hasty playing would not be appreciated by the "people who have delicate ears and who are aware of this charming King of instruments". Among the many characteristics of the lute's exclusivity was tablature notation, which was broadly considered highly inaccessible in the 17th century. Efforts such as those by the little known M. Perrine, who wanted to make the "most noble organ, the lute, this king of instruments" accessible to a broader public through a lute school in musical notation and save it from extinction, remained unsuccessful.

Finally, the exclusive and royal position of the lute can be observed in the iconography of decorated instruments, as seen on a theorbo decorated with ivory inlays in the Musée de la Musique in Paris (hereafter: MdlM) shows.⁸⁴

^{81. &}quot;qu'on le peut à bon droit qualifier le roi des instruments [...] et Robert Flud le vante à tel point qu'il dict n'y avoir pas aucun instrument qui rende une plus agréable harmonie". Trichet, *Traité des instruments de musique -vers 1640-*, 151.

^{82. &}quot;gens qui ont les oreilles delicates et qui se cognoissent à ce charmant Roy des instrumens [sic!]" Charles Mouton, *Pièces de luth sur différents modes* (Paris, 1698).

^{83. &}quot;plus noble organe le Lut, Ce Roy des Instruments" Perrine, Livre de musique pour le lut, contenant une metode nouvelle et facile pour aprendre à toucher le lut sur les notes de la musique (Paris, 1679), n.p.

^{84.} MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110439 (Version 29 July 2020). Concerning the conventions of referencing the instruments: The first time an instrument is mentioned, the link to the MusiXplora – the database of the Digital Organology research unit at the Musical Instrument Museum of the University Leipzig – will be given with the version date. If this is not possible (e.g. in captions), only the collection and inventory number will be given. After the first mention, a detailed description of the instrument will not always be provided, but the name or abbreviation of the collection and the inventory number will be given. In this case: MdlM E.25. In case of collections without inventory numbers, the MusiXplora ID (mXp) will be given.

The corpus of the instrument is made of ivory. The place where the maker's label is usually found is covered by a textile repair reinforcement. The disposition and art historical features such as the cartouche ornamentation suggest a date of origin around 1630. Various engraved ivory plates are set into the neck of the instrument, the representational concept of which is intended to lend nobility to the lute and its owner. On the back of the neck are so-called hangers with musical instruments. Above all of them is an image of the lute with the structural characteristics of the actual instrument, to which a putto adds a crown. On the fingerboard, in addition to a portrait and an allusion to the ruler of the empire represented by imperial eagles and cornucopias, is a third cartouche image containing an emblem. Above a mountain, a ribbon with text bears the words NON OMNES. This is not a commonly known emblem and emphasises the exclusivity of the lute over other instruments and the location of the instrument and its owner in the manorial environment to which not everyone – non omnes – has access.⁸⁵

Lutes can be considered *kingly things* in two ways. As part of the elite culture of music and representation, objects and music are assigned a distinct social location and aesthetic framework. Within this culture, the lute is given an additional nobility through the narrative that it is a king among instruments. Elitist taste and its demands set the parameters for fashions and production. The materialistically oriented object world of the upper class stimulates entire branches of business, of which the members of this social group are the sole clients. They create "entire zones of activity and production that are devoted to producing objects of value that cannot be commoditized by anybody".⁸⁶

In the context of courtly and bourgeois musical practice, lutes were produced and traded exclusively for and by the rich aristocracy, the bourgeois upper class, and the musicians financed by this group of people. According to Appadurai, luxury goods have the following characteristics:

- "(1) restriction, either by price or by law, to elites;
- (2) complexity of acquisition, which may not be a function of real 'scarcity'
- (3) semiotic virtuosity, that is, the capacity to signal fairly complex social messages (as do pepper in cuisine, silk in dress, jewels in adornment and relics in worship)

^{85.} See Arthur Henkel and Albrecht Schöne, eds., *Emblemata: Handbuch zur Sinnbildkunst des XVI. und XVII. Jahrhunderts*, Sonderausgabe, 2., unveränderte Auflage (Stuttgart: J.B. Metzler, 2013), col. 694.

^{86.} Appadurai, The social life of things: Commodities in cultural perspective, 22.



(a) Crowning of the lute



 (\mathbf{b}) Three cartouche images on the fretboard

Figure 2.3: Decorations on a lute, MdlM E.25

2 Experiments: The Lute in the 17th Century

- (4) specialised knowledge as a prerequisite for their 'appropriate' consumption, that is, regulation by fashion; and
- (5) a high degree of linkage of their consumption to body, person and personality."87

These criteria can apply to numerous objects, especially musical instruments. In the following analysis it will become clear why lutes – especially old instruments – fulfil these criteria to a particular degree. The relationship of the instruments to the body has already been described above, which includes appropriate posture. The knowledge of the correct posture goes hand in hand with a special knowledge that concerns, among other things, the quality and the correct use of the instruments. The restriction is created by the aesthetic framework and the social position of the lute players and owners. As will be shown later, especially in the case of old instruments sought after by lutenists in the 17th century, lutes were further marked as luxury goods due to their complexity of acquisition. Finally, semiotic virtuosity includes not only the position of the lute as a kingly thing, but the numerous symbolic and emblematic connotations of the lute.

2.2.3 Affects: The lute in different aesthetic concepts

Concerning the semiotic virtuosity of the lute as a symbol, the instrument fulfils different functions within various aesthetic concepts. It is a component of diverse conventions of public display, poetological traditions, and musical-aesthetic theories.

In poetry, from the mid-16th century onwards, the lute is associated with both the male and the female body because of its shape. Many of the lute poems popular in France refer to the shape of the instrument and to the way it is held and played. The round body allowed connotations with female fertility and a $vita\ voluptuosa$. A contribution to the sexual association of the instrument is made by its name. In Flemish, the word luit also refers to the female public area. The word luc, used in France in the 16th and early 17th centuries, forms the word cul (= posterior) in the popular pun form in French of reversing words and interchanging syllables.⁸⁸

^{87.} Appadurai, The social life of things: Commodities in cultural perspective, 38.

^{88.} See Carla Zecher, 'The Gendering of the Lute in Sixteenth-Century French Love Poetry', *Renaissance Quarterly* 53, no. 3 (2000): 772.

The sexual connotations of lutes also found their way into emblematic and icongraphical designs. In Dutch painting, the instrument is frequently found as an accesory of prostitutes, or as part of other representations with a sexual interpretative potential. The symbolic power in the representational tradition of the lute, however, goes far beyond sexual connotation. In the various editions of Cesare Ripa's influential *Iconologia*, which was first published in 1593 and became one of the most important sources for the depiction of abstract concepts, such as virtues, vices, affects, arts, and sciences in Baroque representational art, there are also illustrations in which the lute is incorporated. In the Venetian edition of 1645 (see fig. 2.4), 89 the lute is a central component of the figuration of the sanguine temperament (Sanguigno per l'aria) and the Scandolo. In the first case, a lute-playing young man is depicted next to an open music book and a goat. In the Scandolo an old lecher with an open mouth holds a pack of cards in one hand and a lute in the other, clearly representing the physical passions. In the depiction of Europa, the instrument, representing music, is in the company of other symbolic attributes such as an owl for science, and the Pope's crown for the Catholic religion. Somewhat hidden, the lute is part of a series of musical instruments on the back of the Consultudine. While the lute can be linked to the sensual passions in the representation of the sanguine temperament and the old lecher, in the other cases it stands for education and culture.

The symbolic potential of the lute is by no means fixed. In other representational concepts it could stand for geometry, morality, or prudence.⁹⁰ However, the connection with the sensual, with the passions, with hearing is the predominant context in which the lute is depicted over the centuries.⁹¹ In the field of musical aesthetics, the lute is integrated into the concept of the doctrine of affections, which is characterised by the release and imitation of passions. This period was characterised by its globalising, almost encyclopaedic, attempt to define the reality of human passions.⁹² Not only music, but also various other disciplines such as philosophy, medicine, and poetry were devoted to the definition and analysis of the various passions. In this context, the lute as an object

^{89.} Cesare Ripa, Iconologia (Venetia: Christoforo Tomasini, 1645).

^{90.} Simon Rees, 'The Lute as Emblem', Lute News, no. 110 (2014): 10-21.

^{91.} The theologian Nicolas d'Hauteville mentioned the care and the playing of the lute together with the development of human virtues. In another place he mentions the lute in the context of spirituality. See Nicolas d'Hauteville, La Théologie angélique ou l'idée du parfait Docteur; dans laquelle sont expliquées en ordre analytique, toutes les questions de la Somme de Saint Thomas., vol. 2 (Lyon: Claude Prost, 1659), 4, 346.

^{92.} See Goulet, Poésie, musique et sociabilité au XVIIe siècle: Les Livres d'airs de différents auteurs publiés chez Ballard de 1658 à 1694, 319.



Figure 2.4: Representations with lutes in Ripa's *Iconologia*: (a) *Sanguigno per l'aria*, (b) *Consuetudine*, (c) *Europa*, (d) *Scandolo*

and its power (agency) occupy a special position.

Within the framework of 17th-century musical aesthetics, the lute had the power not only to imitate but also to trigger the passions. In support of the doctrine of affections, theorists often drew on narratives such as the topos of Alexander the Great and Timothy of Miletus. Trichet, for example, illustrates the power of the lute with the example of the Danish king Eric, who was driven into various states of mind and finally into a rage by a lute player. The fact that the lute was smashed over the musician's head highlights the importance of the object in the process of evoking the passions. Despite the unfortunate outcome of the musical performance, the lutenist was highly revered, as was Timothy of Miletus, who is said to have accomplished something similar with Alexander the Great. Thomas Robinson also invokes the same narrative in his 1603 Schoole of Musicke, setting up the introduction as a conversation between a Knight and his teacher Timotheus and attributing healing effects to music. The same of the same accompanies of the same narrative in the same accompanies of the same narrative in his 1603 Schoole of Musicke, setting up the introduction as a conversation between a Knight and his teacher Timotheus and attributing healing effects to music.

The lute's connection with the topos of Timothy of Miletus is of such great importance because it shows clear parallels between developments in the lute's tuning and disposition in the 17th century and similar developments (attributed to Timothy of Miletus) of the kithara in antiquity. By expanding the range of the kithara, increasing the number of strings to eleven, Timothy is said to have made the instrument more expressive. The experiments with tunings and the expansion of the ambitus of the lute in the 17th century were done with the same motivation of expanding the tonal possibilities and thus the release of passions. Musical development and the material form of the lute are inextricably linked in this process.

An example of the stylisation of the lute as a central element in the aesthetic concept of the doctrine of affections can be seen in the illustrations in *La Rhét-orique des Dieux*, commissioned by the French nobleman Anne de Chambrée

^{93. &}quot;We may express upon it choler, pity, hatred, scorn, love, grief, joy; we may give hope and despair." Dart, 'Miss Mary Burwell's Instruction Book for Lute', 49.

^{94.} See Trichet, Traité des instruments de musique -vers 1640-, 155.

^{95. &}quot;But that Musicke is Phisical, it is plainlie seene by those maladies it cureth. As it cures melancholy; it much preuaileth against madness" Thomas Robinson, *The Schoole Of Musicke* (London, 1603), p. Br. Trichet also reports on the healing effect of the lute, with which one could best cure St Vitus' disease (maladie de sainct Victus).

^{96.} Martin van Schaik, 'Art. Timotheos von Milet', ed. Laurenz Lütteken, 2016, accessed 22 May 2022, https://www.mgg-online.com/mgg/stable/12875.

around 1652.⁹⁷ This magnificently designed volume comprises 56 compositions by Denis Gaultier, written and arranged in the twelve modes. The affects intended by the individual pieces are clarified in places by commentaries, although the preface points out that they are only for musical laymen and that one should not follow the descriptions too closely, as the music would speak for itself. In some cases, the remarks also serve to elevate Gaultier as an *orator* of divine speech and – for example, in the Tombeau for his wife – to attribute to him the gift of animating soulless bodies and making his lute sing about the lamentable separation from his 'other half'.

The volume is also adorned with numerous copperplate engravings by Abraham Bosse and Eustache Le Sueur, which on the one hand refer to the patron and the composer and on the other hand introduce the various modes illustratively. The preface is followed by an engraving that clearly expresses the standing of the instrument. A triple-crowned lute is presented on an altar-like construction quoting Ionic elements. The instrument stands upright on a short, broad column adorned with the blazoned coat of arms of the patron. The lute leans against a rectangular panel on which a cloth, decorated with stars, is draped. The upper band of the cloth bears the motto Arbitre de L'amour, de la paix, de la guerre – Judge of Love, Peace, War. The motto is illustrated by the three wreaths of laurel, myrtle and olive placed around the neck of the lute, the meaning of which is explained in the preface. The architectural setting and the symbolism of the wreaths refer to antiquity and, through the use of the olive branch, to the Old Testament. The central presentation of the instrument, whose elevation is reinforced by the perspective-applied lower view, underpins the motto that gives the lute the power to be the judge of the passions that can bring war, peace or love.

The personification of the instrument and the attribution of power over the listeners' states of mind is an expression of an extraordinary function attributed to the instrument in the music-aesthetic ideology. Above all, the development of different tunings and the expansion of the ambitus as well as the spectrum of ornamentation contribute significantly to the formation of this function. It goes beyond a purely symbolic or metaphorical quality and acquires what is described in actor-network theory as *agency*, the effective power of objects. This term does not seek to personify objects, but to describe the constitutive function of an object for a social action. "There is a difference between musical

^{97.} Gaultier, La rhétorique des Dieux, ca. 1652: Fac-similé du manuscrit du Kupferstich-kabinett; Berlin, 78 C 12.

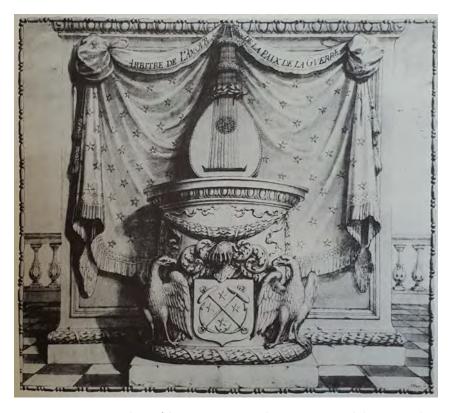


Figure 2.5: Lute as judge of love, peace, and war in La Rhétorique des Dieux

instruments being incidental to, or constitutive of, social interaction."98

The intimate performance situation of lute music is a prerequisite for devoting oneself entirely to its tonal qualities and their effect on the soul. In this setting, not only the musical composition but also the instrument becomes a central part of the performance concept. The lute thus acquires a *social life* and leaves the passive status of an artefact that is manufactured and traded, or from which only sound is generated. It becomes an active participant in the musical event, which is reflected in its various cultural expressions. The position of instruments in the complex relationship between objects and people is of central importance in the long object careers of lutes. The framing conditions can change while the instrument forms a constant. "Even the same instrument, in different socio-historical contexts, may be implicated in categorically different kinds of relations. I thus am arguing for the study of the social life of musical instruments." "99"

The lute is a component of various aesthetic concepts, not only in the abstractabsolute form of its music but also as an object with its material and formal properties. It does not have a clear symbolic character, but can be interpreted in various ways, although most of them refer to the realm of sentiment and sexuality. Beyond its symbolic function, an effective power is attributed to the sound, underlining the significance of the physical object within the aesthetic experience.

2.2.4 The lute as a collectible

Like other musical instruments, lutes found their way into collections early on and thus became part of the materialistically oriented world of objects. The equipping of art chambers and living rooms with curiosities, art objects, paintings, books, and natural objects was already in fashion in the 15th century in France as well as in Italy, as demonstrated by the example of Jacques Duchié. The halls of his town house were decorated with sculptures, paintings, weapons, and musical instruments. ¹⁰⁰ In the 17th century, collectors and amateur musicians were often connected to the court, as in the case of Hugues Yver, adviser and auditor to the king, in whose inventory of 1622 there are 23 musical

^{98.} Eliot Bates, 'The Social Life of Musical Instruments', Ethnomusicology 56, no. 3 (2012): 372.

^{99.} Bates, 364.

^{100.} See David Thomson, Renaissance Paris: Architecture and growth, 1475-1600 (Berkeley: University of California Press, 1984), 159.

instruments.¹⁰¹ The author of the *Traité des instruments de musique*, Pierre Trichet, was also a collector, as was the Toulousian canon François Filhol, in whose inventory, written in 1644, weapons, stones, coins from various countries, prints, enamels, turnery, and marine animals are listed alongside lutes, theorbos, and other musical instruments. The lutenist Charles Le Forestier ("joueur de luth, bourgeois de Paris"), bequeathed to his brother-in-law in 1611 a damask sword as well as a damask dagger from his collection, in which weapons and paintings can be found in addition to musical instruments.¹⁰²

These collections have to be considered as the primary sites in which the appreciation of old instruments became codified, and as the major progenitors of many of the mythologies connected to old instruments. Though Gétreau¹⁰³ has suggested that the line between practising musicians and collectors of curiosities cannot be sharply drawn, assuming a strong distinction between musical instruments that were actively used and others that merely served as exhibition pieces, I would argue that lutes in collections were simultaneously seen as objects of musical study and of antiquarian fascination. In the early modern period, exploring the world by means of various objects was part of the humanistic educational ideal, which found its clearest expression in Kunstkammern or cabinets of curiosities. In the process, things in these collections took on various functions. They served to revive ancient legends, in the study of nature, in the analysis of technical innovations and, last but not least, as a presentation of a hermetic world view, or overarching knowledge. Horst Bredekamp has described collecting as a kind of mastery of nature, in which objects stand in a chain within the following sequence: natural form - ancient sculpture work of art - machine. 104 Musical instruments and the practice of music are therefore rather to be understood as a component in this concept of education and research, in which objects are at the same time objects of study and representation.

In a cabinet of curiosities, a macrocosm is created in the microcosm, which replicates the world in miniature, making it controllable. Objects become a visual and haptic stimulus for studies in which no distinction is made, in prin-

^{101.} See Jurgens, Documents du minutier central concernant l'histoire de la musique (1600-1650), 878-879.

^{102.} See Jurgens, 22, 266-267.

^{103.} Florence Gétreau, 'Quelques cabinets d'instruments de musique au temps des rois Bourbons', Musique, images, instruments, no. 8 (2006): 25–44.

^{104.} See Horst Bredekamp, Antikensehnsucht und Maschinenglauben: Die Geschichte der Kunstkammer und die Zukunft der Kunstgeschichte, vol. 41, Kleine kulturwissenschaftliche Bibliothek (Berlin: Wagenbach, 1993), 33.

ciple, between natural and human work. "The collection becomes a gigantic vessel of a nature that understands man and his work not as a special case but as a component of a larger whole." In this context, objects are never passive, but part of an active laboratory in which free spaces for utopias prevail and collecting, researching and creating are understood as a unified, Promethean practice. An important element of the collection concept was the enthusiasm for machines, which for Bredekamp are at the end of the chain of nature's mastery. The experiments described by Mersenne and Trichet of building organ pipes and doors for singing children into the lute have to be understood in this context. Trichet also reports a bronze statue that could be placed on the table and which not only played the lute but also sang. He was supportive of those craftsmen who would make such lutes to place in the hands of small figures driven by a spring mechanism to imitate the movements of lute playing. Indeed, he believed it would be more graceful if craftsmen could make a lute that would sound without anyone having to touch it. 106

To the lute itself is also ascribed the quality of such a microcosm, and it is understood as an acoustic stimulant, as part of the active laboratory. "Its music and its manner of composing is special to itself, and as the human body is; like a little microcosm, that gathereth and comprehends in itself all that is, and all that is fine and rare in music." 107 Its position as the king of instruments further justifies this view of the lute. Burwell's lute tutor states that the lute is "without contradiction, the king of instruments. It maketh alone a consort of music; it speaks without any origin; and out of dead and dumb things it draws a soul that seems reasonable by the several thoughts and expression that the skilful master makes of his lute upon all kinds of matters and subjects." ¹⁰⁸ The unification of the noblest musical qualities in one instrument and the possibility of arousing passions in man, as in a laboratory, makes the lute a musical reflection of the intentions of humanistic collecting. The agency of the instruments, the evocation of the passions, and the power over the soul takes place in an aesthetic framework in which the stimulants, the kingly things, were reserved for an exclusive class.

^{105. &}quot;Die Sammlung wird zu einem gigantischen Gefäß einer Natur, die den Menschen und sein Werk nicht als Sonderfall, sondern als Bestandteil eines größeren Ganzen begreift." Bredekamp, Antikensehnsucht und Maschinenglauben: Die Geschichte der Kunstkammer und die Zukunft der Kunstgeschichte, 73.

^{106.} See Trichet, Traité des instruments de musique -vers 1640-, 154.

^{107.} Dart, 'Miss Mary Burwell's Instruction Book for Lute', 59–60.

^{108.} Dart, 47.

2.2.5 Materiality: Collectible versus musical instrument

As collectibles, lutes and other musical instruments were subject to the principles of collections. An important component of collections was their material hierarchy, in which objects were organised within a sequence extending from the raw, natural object to its incorporation (through human intervention) into a work of art or an art object. This can be seen in the structure of the *Kunstkammer* established by Archduke Ferdinand of Tyrol in 1573. The first cabinets contained gold, silver, precious stones, and natural casts of animals and plants. "These 'royal materials' were followed by the means of applying mathematics and mechanics in the form of musical instruments, instruments, clocks and automata. [...] All the other cabinets take up the sequence of materials and their refinement in the order: decorative feathers, ivory, alabaster, glass, coral, products of metal casting, porcelain and wood." 109

An early example of the importance of material for musical instruments in the context of the *Kunstkammer* is documented by the services of the instrument maker Lorenzo da Pavia rendered to the patroness Isabella d'Este (1474-1539). For years she wanted a viol made of ebony or sandalwood, but Lorenzo said it was difficult to find such a large block of wood of the right quality and that sandalwood would lose its colour. "She asked for the first lute he made for her to be entirely of ebony, but he told her bluntly this was not possible. Not only would it look bad, worse, it 'would have no voice', as though it were made of marble. He used cypress wood for the bowl of the lute instead, promising Isabella to add some ebony inlays to it". The use of the *royal materials* ivory or ebony for lutes, such as are also represented in large numbers in the stock of the Fugger merchant family documented in 1566, ¹¹² are not valued from a musical point of view in the 17th century: "But such instruments serve more for show than for any good effect, and should be

^{109. &}quot;Auf diese 'Königsmaterialien' folgen mit Musikinstrumenten, Instrumenten, Uhren und Automaten die Mittel der Anwendung von Mathematik und Mechanik. [...] Sämtliche weiteren Schränke nehmen die Abfolge der Materialien und ihrer Veredelung in der Reihenfolge: Schmuckfedern, Elfenbein, Alabaster, Glas, Korallen, Produkte des Metallgusses, Porzellan und Holz auf." Bredekamp, Antikensehnsucht und Maschinenglauben: Die Geschichte der Kunstkammer und die Zukunft der Kunstgeschichte, 35.

^{110.} William Prizer, 'Isabella d'Este and Lorenzo da Pavia, 'Master Instrument-Maker'', Early Music History, no. 2 (1982): 87–127.

^{111.} Christine Shaw, *Isabella d'Este: A Renaissance princess*, Routledge historical biographies (Abingdon, Oxon/New York, NY: Routledge, 2019), 136.

^{112.} In eighteen cases instruments or in lays of ivory are mentioned, in seven items ebony and only in two cases yew. See Erich Tremmel, 'Musikinstrumente im Hause Fugger', in *Die Fugger und die Musik*, ed. Renate Eikelmann (Augsburg: Stadt, 1993), 61–70.

reserved more for cabinet decoration than for concerts."¹¹³ In Burwell's Lute Tutor, the value of lutes whose materials came from the world of cabinets was denied altogether. "The lutes of gold, silver, ebony, ivory, or adorned with mother of pearl or suchlike, are worth nothing, because a lute must be made of a wood that is porous [poorest]."¹¹⁴ Mace also disparagingly calls ebony and ivory "most *Costly*, and *Taking* to a common Eye […] the worst."¹¹⁵

From a musical-practical point of view, a material anti-model to the *kingly materials* was clearly described, although a hierarchical order can also be detected here. Diverse authors, including Trichet, Mace, Burwell, and the diarist John Evelyn, ¹¹⁶ describe the materiality of good instruments, and the suitability and diversity of corpora materials become clear in their explanations. Mace and Trichet name maple as the best wood. ¹¹⁷ Mace describes English maple as the next best wood, and only after that other woods such as plum, pear, yew, *Rosemary-Air*, ash, and ebony. Burwell, on the other hand, maintained that "crab wood is the best wood; it must be sawn in thin ribs and kept dry [for] many years before it to be fit to make lutes.". ¹¹⁸ The term *crab wood* is now used to refer to a type of mahogany (*Carapa guianensis*), but could have also referred to madder wood (it is not clear which species of wood was meant by this term in the 17th century).

Suitable materials were also determined for the other parts of the instrument. Mace gives precise instructions on the quality of the top wood, which should have a fine structure, and names three possible types of wood in the order of their quality with *Cullin-cliff*, *Firr* and *Cypress*. *Cullin-cliff* is presumably wood that was traded via the Rhenish port of Cologne. ¹¹⁹ Furthermore, there are references to possible types of wood for the bridge, fingerboard, nut, and pegs along with their advantages and disadvantages. The descriptions are sometimes very detailed. For example, Burwell advises not to glue the nut to the neck so that a piece of paper can be placed underneath to adjust the string action. Thomas Mace mentions numerous advantages of the modern shape of

^{113. &}quot;Mais telle sorte d'instruments servent plus pour la parade que pour aucun bon effect, et devroint estre réservés plustot pour l'ornement des cabinets que pour les concerts." Trichet, Traité des instruments de musique -vers 1640-, 153.

^{114.} Dart, 'Miss Mary Burwell's Instruction Book for Lute', 11.

^{115.} Mace, Musick's Monument, 49.

^{116.} Michael Fleming, 'John Evelyn on Musical Instrument Wood', *The Galpin Society Journal* 66 (2013): 201–220.

^{117. &}quot;The Air-wood is absolutely the Best" Mace, Musick's Monument, 49, also harewood, derived from German aehre, ehre or Latin acer = maple.

^{118.} Dart, 'Miss Mary Burwell's Instruction Book for Lute', 11.

^{119.} Cullin is an Old English word for Cologne, cleft can be derived from to cleave.

the instrument, such as the rounded fingerboard (see chap. 2.1.3), and gives practical advice, instructions, and precise repair procedures.

Finally, musical instruments, as three-dimensional objects, have a sculptural character. The form of the lute was also categorised and hierarchised in the 17th century. Burwell observed a "great dispute amongst the moderns concerning the shape of the lute." Mace believed that the "Pearl-Mould is Best" with regard to sound, but also due to its pleasant shape and playability. Burwell's text offers more diverse points of view on the matter, noting that some prefer the rounder models, which are said to be more sonorous because of their greater volume, while others prefer the "handsome figure of a pear". The characteristics of the different shapes were strongly linked to the distinct aspects of the brand, which will be discussed in more detail in chapter 2.3. Discussions of lute shape also include the shape of the pegbox and the related question of whether the lute should have one or two pegboxes.

The materiality and shape of the lute plays a central role in the specialised knowledge and cultural techniques established for handling the instrument. As a collectible, the lute became part of art collections and, therefore, had to follow their principles. A hierarchy of materials and forms governed the value of lutes both as musical instruments and within the context of humanistic collections. The main difference is that, for their musical use, their material aspects were detached from the *kingly materials* in the collections, and other material specifications as markers for quality were defined. As shown before, the shape is of major importance concerning the posture while playing, and has been as much a part of the discourse as the material qualities of the instruments.

2.2.6 An old instrument is better than a new one: The birth of a myth

"I think it good to haue (if it were possible) euen the verie best instrument for a learner at first, is this: a good instrument will please a learner euery way, for it delighteth them to looke and behold it now, likewise they loue easie and smooth instruments, and although they can do but little, yet it will sound well, and so incourage them to learne with delight, whereas contrariwise, a

^{120.} Dart, 'Miss Mary Burwell's Instruction Book for Lute', 10.

^{121.} Mace, Musick's Monument, 49.

bad or dull instrument will quell their spirits quite, so that in long time, or neuer, they will profit in their forced labours." ¹²²

"I shall therefore advise All Learners, At First to provide them with Good Instruments; and then we will proceed Chearfully. [...] First know that an Old Lute is better than a New one." 123

There are 73 years between the publication of Thomas Robinson's School of Musick and Thomas Mace's Musick's Monument. In both cases, the authors advise the student of the lute to use a good instrument. The knowledge of what exactly determined the quality of a "good instrument" was part of a specific connoisseurship surrounding the lute. It belongs to the field of knowledge of consumption, which was refined over the course of the 17th century. Besides the material condition of the instrument, it was recommended that one pay attention to the correct size and neck length of the lute. The recognition of age as a particular characteristic of the quality of an instrument became established in the course of the 17th century. Indeed, among Thomas Mace's precise instructions as to which aspects of the instrument to look out for in order to recognize a good instrument, the most important was its age.

The esteeming of age as a positive quality, and the myth of the quality of old instruments, can be understood within the context of the humanist collections as a kind of historical archive that told a particular narrative of human history. On the basis of the objects in these collections, natural and cultural history could be represented as a union of nature and civilisation and a mastery of civilisation over nature, which fitted neatly into the universalist world view. "Antiquity roots credentials in the past; ancestral possession makes things our own, valorising claims to power, prestige, property, propriety. Antecedence lends authority to things that precede us. [...] Antiquity comprises at least four distinct notions: precedence (being first); remoteness (being far back in time); primordiality (being the source); and primitiveness (being unspoilt by

^{122.} Robinson, The Schoole Of Musicke, B v.

^{123.} Mace, Musick's Monument, 48.

^{124.} Dart, 'Miss Mary Burwell's Instruction Book for Lute', 61.

^{125.} Robinson does not give any clear criteria as to what characterises a good instrument. In the *Isagoge*, published a little later, Jean-Baptiste Besard cites disposition as a indicator of quality, advising that the lute should at least have ten or more courses, since the more the courses a lute would have the nicer the sound and harmony would be. Besard, *Isagoge in artem testudinariam: das ist: gründtlicher Unterricht uber das künstliche Saitenspil der Lauten*, 9.

modern 'progress')."¹²⁶ For Lowental, the handling of antiquity is linked to a narrative construction of history in which creatively arranged antiques yield a new context of meaning. In the context of representation, old objects also have the function of legitimation and represent the stability of power relations. The narrative of the lute as king of instruments helped to reify monarchical power by God's grace and chosenness, but also by tradition and age.

Age as a quality of collectibles and the principle of being first can also be traced in modern approaches to the theory and history of collections and the conservation of cultural heritage. In the vocabulary of Alois Riegl's Denkmalwerten, old objects can have historical value; in this he assumes a chain of development in which "everything that follows on from it is conditioned by the former and could not have taken place as it actually did if that earlier link had not preceded it." Objects can be considered testimonies to these stages of development, with the objects that stand at the beginning of a development being accorded the special rank as the origin. From a formalist perspective, George Kubler defined these objects as primary objects which, like prime numbers, have no regularity and are divisible only by themselves and one. These objects "likewise resist decomposition in being original entities." ¹²⁸ In Jean Baudrillard's sociological analysis of the old thing, old objects represent the mythology of origin as the nucleus of birth. "The older objects are, the closer they bring us to the past, to the divinity, to creation, to the knowledge of the primitive." 129 Through them, the limits of human existence are overcome and a previous life becomes tangible. Their beauty consists, among other things, in the fact that they have been preserved. That is, they are said to have a special quality that has guaranteed their survival.

As commodities, old objects share many of the same characteristics as luxury goods. They often possess *semiotic virtuosity* and are not only signs of a historical occurrence (and the possibility of suspending the conditions of human

^{126.} David Lowenthal, *The past is a foreign country - revisited* (New York: Cambridge University Press, 2011), 111, https://doi.org/10.1017/CBO9781139024884.

^{127. &}quot;alles darauf Gefolgte durch das erstere bedingt ist und nicht so hätte erfolgen können, wie es sich tatsächlich ereignet hat, wenn jenes frühere Glied nicht vorausgegangen wäre." Alois Riegl, Der moderne Denkmalkultus: Sein Wesen und seine Entstehung (Wien, Leipzig: Braumüller, 1903), 2.

^{128.} George Kubler, *The shape of time: Remarks on the history of things*, paperback ed. (New Haven, Conn.: Yale University Press, 2008), 35.

^{129. &}quot;Je älter die Gegenstände sind, umso näher bringen sie uns an das Vergangene heran, zur Gottheit, zur Schöpfung, zum Wissen der Primitiven." Jean Baudrillard, Das System der Dinge: Über unser Verhältnis zu den alltäglichen Gegenständen, vol. 1039, Reihe Campus (Frankfurt/Main: Campus-Verl., 1991), 99.

finitude), but they also offer narrative potential. Knowledge of the history of things, the production or the original and its development, all belong to the *knowledge of consumption*. In this context, the fact of *being first* and the authenticity of the object are important factors, since only truthful witnesses can tell a true story. For Walter Benjamin, the "unique value of the 'genuine' work of art has its foundation in the ritual in which it had its original and first value of use." Having been part of this first use qualifies objects as authentic testimonies of the past. In this context, authenticity must be guaranteed by reliable information, which in the case of lutes can be indicated by details of origin, formal criteria, maker's labels, and other trademarks.

However, the implications of the appreciation of age can also be understood from the successful branding policies of lute makers based mainly in Füssen and northern Italy, who exported lutes and lute-parts en masse to numerous European countries. The attribute of age became, quite early on, synonymous with identifying an instrument as being from this period, the heyday of lute making. Being first implies being produced during this important period of lute making, in which the techniques of production, marketing and sales were highly developed. Furthermore, the unusually high quality of the old instruments from this period was soon explained away by the fact that "Age adds Goodness to Instruments", 131 thus developing the rationalisation that the physical ageing processes somehow contributed positively to the quality of the sound.

Already by the end of the 16th century inventories were distinguishing between old and new lutes. In 1587, for example, Claude Denis in Paris mentions "4 vielz lutz garniz de leurs estuitz" ("4 old lutes in their cases") for a total of 3 Ecus, which are thus a little cheaper than the lutes from Lyon (1 Ecus per piece), the 9 lutes from Venice for a total of 13 Ecus or the 35 lutes from Padua, which are valued at 2 Ecus 30 Sols per piece. ¹³² It is not clear, however, whether 'old' here refers to an old type or to the actual age of the instruments. In the following years, the age designations are often associated with the origin or brand and higher-priced lutes. For example, in 1597 Robert Denis le Jeune lists "trois vielz luthz, dont deux d'Allemaigne et ung du vieil Gaspart garny

^{130. &}quot;Der einzigartige Wert des 'echten' Kunstwerks hat seine Fundierung im Ritual, in dem es seinen originären und ersten Gebrauchswert hatte." Walter Benjamin, Das Kunstwerk im Zeitalter seiner technischen Reproduzierbarkeit: Drei Studien zur Kunstsoziologie, 1. Aufl., [Nachdr.], vol. 28, Edition Suhrkamp (Frankfurt/Main: Suhrkamp, 2012), 16.

^{131.} Mace, Musick's Monument, 246.

^{132.} François Lesure, 'La Facture Instrumentale à Paris au Seizième Siècle', *The Galpin Society Journal*, no. 7 (1954): 37.

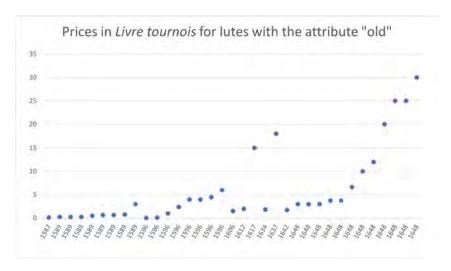


Figure 2.6: Values of lutes with the attribute 'old' in Paris inventories (1587-1648)

de leurs estuidz" ("three old lutes, two of which are from Germany and one from the old Gaspard with their cases"), ¹³³ this being Gaspard Duiffobruchar (Caspar Tieffenbrucker) in Lyon. The three lutes are listed for 40 Sols and are thus valued somewhat more highly than the six old lutes from Padua, Venice and Flanders in the same inventory, which are valued at a total of 30 Sols. In the known Paris inventories from 1556 to 1648, old lutes are mentioned in a total of 27 items, of which more than half are recorded as coming from northern Italy (see fig. 2.6). Two old lutes from Bologna in the inventory of Jean Desmoulins are in the high price segment with a valuation of 30 Livres. ¹³⁴

The earliest explicit mention of age as a determining feature of an instrument's quality dates from around 1640 by Pierre Trichet. He justified the high price of old instruments through a technological argument that dry materials would be better suited to creating harmony. "That is why one should not be surprised if the old lutes, for being extremely dry, are more prized than the others; which is also true of most of the other instruments." Early on, old lutes from Bologna were valued most highly. In Burwell's Lute Tutor this value is attributed to the age and quality of the wood and the workmanship: "but their goodness is not attributed to their figure but to their antiquity, to the skill of those lutemakers,

^{133.} Lesure, 'La Facture Instrumentale à Paris au Seizième Siècle', 41.

^{134.} See Florence Gétreau, ed., 'Inventaire après décès de Jean Desmoulins', in *Instrumentistes et luthiers parisiens* (Paris, 1988), 26.

^{135. &}quot;C'est pourquoi il ne faut pas s'esmerveiller si les vieux luths pour estre extremement secs sont plus prisés que les autres ; ce qui se doibt aussi entendre de la pluspart des autres instruments. Trichet, *Traité des instruments de musique -vers 1640-*, 153.

to the quality of the wood and [the] seasoning of it, and to the varnishing of it."¹³⁶ In Contantijn Huygens' correspondence, which attests to a decades-long search for a lute by Laux Maler, the fact that this is an old instrument and that Laux Maler had been dead for over 120 years at that point plays a central role. Connecting the age with the original place of production of a lute is evident not least in the first scene of the second act of Molière's *The Miser* (first performed in 1668). The servant La Flèche makes an allusion to the age difference between potential spouses: "Furthermore, a lute from Bologna, with all her strings, or almost all." ("Plus, un luth de Bologne, garni de toutes ses cordes, ou peu s'en faut."). According to a 19th century interpretation, this phrase goes back to the proverb "Qui veut un luth de Bologne, Ne prend-il pas des plus vieux?" ("Whoever wants a Bolognese lute, does he not choose from the oldest?"). ¹³⁸

Three main arguments are thus put forward for the quality of age. From a technological perspective, an old lute guaranteed exceptionally good workmanship from the heyday of lute making, and the dryness of the old wood is said to further contribute to the sound quality of the instrument. These two aspects relate to the materiality of the instruments and suggest a rational, comprehensible argumentation. The exceptional quality of old instruments remains a subject of much discussion and research today. In 2017, Fritz et al. ¹³⁹ showed, in blind tests with violins, that the instruments by Antonio Stradivarius were not judged to sound better than new instruments. If it is true that the age of the material does not play an important role, it can thus be assumed that there is a third reason why old instruments were, and are still, highly valued. Old instruments are collectibles, commodities, objects of representation that have the legitimising attribute of being first. This makes them authentic witnesses to the founding of a tradition. Furthermore, old instruments are considered to be antique objects, with which the limits of human transience can be overcome. Sebastien Chièze reports on 23 February 1679 to Constantijn Huygens:

^{136.} Dart, 'Miss Mary Burwell's Instruction Book for Lute', 10.

^{137.} See the letters of 10 April 1645 by Jean Gaultier, of 29 July and 16 August 1647 by Hinric Bielke and the letters of 11 January and 9 March 1679 by Sebastien Chièze. Constantijn Huygens, *Briefwisseling. Deel 4: 1644-1649*, ed. Jacob Adolf Worp (Den Haag: Martinus Nijhoff).

^{138.} François Henri Joseph Castil-Blaze, Molière Musicien: notes sur les œuvres de cet illustre maître, et sur les drames de Corneille ... ou se mêlent des considérations sur l'harmonie de la langue française, vol. 1 (Paris: Dondey-Dupré, 1852).

^{139.} Claudia Fritz et al., 'Listener evaluations of new and Old Italian violins', *Proceedings of the National Academy of Sciences of the United States of America* 114, no. 21 (2017): 5395–5400, https://doi.org/10.1073/pnas.1619443114.

"Laux Maler is not dead: he has just appeared in the flesh, and in eleven ribs to my friends at Bologna [...] in companionship with a nine-ribbed brother of his who is said to be the famous Cristofle, who is, as you know, an article of faith for all good Lutherans." ¹⁴⁰

2.2.7 Material metamorphosis, fragments, and the Look of Age

As shown in chapter 2.1, the lute underwent significant developments in terms of ambitus and tunings during the 17th century, and several lute types coexisted. Furthermore, the practice of adapting the layout to the respective needs of the players was common, which means there was a successive material transformation of the objects. Thomas Mace, for example, strongly advised an old instrument be equipped in a new way, that is with a new neck, twelve courses and a slightly rounded fingerboard. This leads to an understanding of the musical instrument not as an object with a fixed form, but as transient in its physical appearance. It can be fragmented, altered, and transformed. As a commodity, old lutes were often traded as fragments, as shown for example by the "deux vieilz corps de luthz" ("two old bodies of lutes")¹⁴¹ and numerous other corpora in Jean Desmoulins' inventory. Furthermore, Hinric Bielke described on 29 July 1647 in his letter to Constantijn Huygens his efforts to obtain a "vieux corp du luth" ("old lute body"), 142 which was promised to Huygens by a Danish envoy. According to Bielke, there were said to be many such corpora in Vienna.

The attribute of age and the value attached to that thus mainly concerns the lute body and not a material unity of the object as a self-contained entity. The individual parts of the instrument were mobile and had to be incorporated into a new context as spolia. This raises the question of the core elements of the instrument's identity. In the case of the lute, it is, above all, the back bears of the essential criteria. Its shape, its materiality, the number of ribs, and, inside, the maker's label can be categorised, hierarchised and associated with brand names (either maker's names or shapes). The form-related and material qualities, like the wood of the soundboard and its age, were important criteria

^{140. &}quot;Laux Maler n'est pas mort: il vient d'aparoistre en chair, et en onze costes à mes amis de Boloigne - ainsi que vous verrez par le memoire incluz - en compaignie d'un sien frere à neuf costes qu'on dit estre le fameux Cristofle, qui est, comme vous savez, un article de foy pour tous les bons Lutheriens." Constantijn Huygens, *Briefwisseling. Deel 6: 1663-1687*, ed. Jacob Adolf Worp (Den Haag: Martinus Nijhoff), 409.

^{141.} Gétreau, 'Inventaire après décès de Jean Desmoulins', 26.

^{142.} Huygens, Briefwisseling. Deel 4: 1644-1649, 414.

in the discourse on quality of the sound. Neck and pegbox, bridge or bars were considered interchangeable parts that did not affect the identity of the instrument as an old object.

For Lowenthal, a fragmentary character belongs to the *Look of Age* as a characteristic of an antique. The incompleteness is perceived as part of the beauty and can at the same time call for the creation of a completeness. "The timeworn fragments demanded to be made whole again, in celebratory verse or in actual restoration." Part of the concept of *Look of Age* is that old objects can be easily recognised as such. In Alois Riegl's approach, the fragmentary state is part of the *Alterswert* (age value), which is characterised by the immediately recognisable age in the sense of visible traces of age, which includes also patina. These signs of decay as aesthetic features, such as patina in visual arts and sculpture, dates back to the 16th century and can be recognised without further specific knowledge about the object. Age of the Look of Age is that old objects can be easily recognised without further specific knowledge about the object.

In the 17th century, however, the mixed state of a lute made of an old corpus with a new neck was not a disadvantage, nor did it represent a lack of originality, but was rather an assurance of its age. Signs of age or damage on old lutes were not seen as disadvantages, as Thomas Mace notes. He describes two lutes by Laux Maler as "(pittifull Old, Batter'd Crack'd Things) valued at 100 l. a piece." Later he points out that one should not be bothered by cracks in the soundboard unless they are transverse. Cracks in the longitudinal direction were seen as easy to repair and as being unimportant. Thus, material integrity or objective unity did not play a significant role in the evaluation of the value of an old lute. The fragmentary and patinated character rather supports the value of age as a sign of quality.

Lutes were thus subject to a certain material processuality, which can be traced in different art forms and for several types of objects in the early modern period. The metamorphosis of materials is already referred to in the motto on the engraving by Pierre Woeriot de Bouzey from 1562, which shows Caspar Tieffenbrucker surrounded by his range of products. There it says: Viva fui in sylvis sum dura occisa securi. Dum vixi, tacui: mortua dulce cano (I was alive in the forest, the hard axe cut me down. In life I was silent, in death I sing sweetly). This refers to the material transformation of the tree into a musical

^{143.} Lowenthal, The past is a foreign country - revisited, 241.

^{144.} See Riegl, Der moderne Denkmalkultus: Sein Wesen und seine Entstehung, 22-29.

^{145.} Thomas Brachert, *Patina: Von Nutzen und Nachteil der Restaurierung*, 2. Aufl. (München: Callwey, 1995), 9–13.

^{146.} Mace, Musick's Monument, 48.

instrument. Only the end of life as a tree makes an after-life existence as a musical instrument possible. In the broadest sense, the short motto belongs to the literary form of *it-narratives*. These stories tell the career of an object from its perspective, such as in story of a coin that often changes hands. In the 1668 picaresque novel *Der Abentheuerliche Simplicissimus Teutsch* by Hans Jakob Christoffel von Grimmelshausen, a conversation with the toilet paper is described. It recounts its history of its production and its life as a writing notebook until it is further used as a packaging material and eventually finds its final use as toilet paper.¹⁴⁷

The esteem for old instruments and rapid musical change led to the recycling of instruments on different levels. The material form of the surviving lutes in their various states bear a clear witness to this and will be discussed later. However, there are also written sources that illustrate the practice of adapting and transforming instruments. Hardly any invoices have survived from the 17th century; we have only occasional entries in diaries and references in correspondence. Once again, a few examples can be found in Constantijn Huygens' rich correspondence. On 13 May 1643, Joan Albert Ban sent him a lute with the request to have it converted into a theorbo, assuming he finds the instrument suitable for this purpose. Huygens seems to have been an authority in this field, since seven years later Johann van Reede approached him with a similar request. 148 The diarist Samuel Pepys noted on 17 February 1659 that he consulted Mr Hills, his instrument maker, about altering his lute and viola. On 28 October 1661 he described picking up his theorbo at Hunt's (sic) in Paul's Churchyard, "and there found my theorbo done, which pleases me very well, and costs me 26s. to the altering. But now he tells me it is as good a lute as any is in England, and is worth well 10l." ¹⁴⁹ In May 1645 Jacques Gaultier offered Huygens a lute by Laux Maler for sale, which was brought to him by a friend who had it adapted to his needs. It was "barré et enmanché par maister Nicolles" ("barred and necked by Master Nicolles")¹⁵⁰ Because of its bars and also due to its disposition, it would be suitable for both singing

^{147.} See Daniel Bellingradt, Vernetzte Papiermärkte: Einblicke in den Amsterdamer Handel mit Papier im 18. Jahrhundert (Köln: Herbert von Halem Verlag, 2019), 111–112.

^{148.} See Jan W. J. Burgers, *The lute in the Dutch Golden Age: Musical culture in the Netherlands 1580-1670*, Amsterdam studies in the Dutch Golden Age (Amsterdam: Amsterdam University Press, 2013), 165.

^{149.} Pepys, 'The Diary of Samuel Pepys'.

^{150.} Huygens, Briefwisseling. Deel 4: 1644-1649, 148. Maister Nicolles may be the English court lutenist Nicholas Lanier (1615-1666), whose passion for painting suggests that he was a skilled craftsman. See Spring, The Lute in Britain: A History of the Instrument and its Music, 210.

and playing solo pieces. This example shows how the characteristics of the instruments could be adapted not only in terms of the number of strings, but also in terms of its tonal properties. Thus, within a limited framework, lutes possessed a certain flexibility with regard to the musical field of application.

However, there is also evidence of recycling of individual parts for further use in another material or musical-typological context. In January 1707, the Parisian journal *Mercure galant* reported on an invention by a Mr Marius, which was a portable harpsichord that could be transported like a guitar. The description is reminiscent of the Orphica developed by Carl Leopold Röllig in Vienna at the end of the 18th century. The soundboards of these instruments were "made from the tops of old lutes that are over a hundred years old" which, together with a new type of stringing, was supposed to give them a special tonal harmony.

In the cases of the lutes cited above, on the other hand, it is not clear which conversion was made. It could equally well be a conversion of a bent-neck lute to an English theorbo type, such as Mace describes, or a change to a basso continuo instrument (or angélique). All examples show, however, that the objects and their components were not uniquely assigned to one type of instrument from today's systematic or the typological point of view. 152 The modular construction of lutes was based on the mass production established in the 16th century and offered the technological prerequisite to adapt the corpora of the instruments to different types. Essentially, a new neck had to be attached to the fragment of back and soundboard. This and further changes made will be discussed later in detail. The objects thus offer the potential of mobility between types as well as the possibility of continued use over a long period of time, as fashions changed rapidly. Burwell, for example, reports that the lute with two pegboxes favoured by Gaultier was soon despised "by all the French masters, who are returned to their old fashion, keeping only the small eleventh." This suggests an experimental practice in line with the experiments with different tunings and tonal ranges, in which one type was tried out for a certain period of time, only to eventually adapt the instrument back to the previous type. The reuse over a long time not only implies the flexibility of change, but look of age as a signifier of value.

^{151. &}quot;faits avec des tables de vieux luths qui ont plus de cent ans" 'Clavecin portatif', *Mercure galant*, 1 July 1707, 209–213.

^{152.} As early as the 17th century a clear distinction was made between theorbo and lute, which is a typological distinction.

^{153.} Dart, 'Miss Mary Burwell's Instruction Book for Lute', 58–59.

2.2.8 Narrative potential of object biographies of old lutes

The material metamorphosis, the gradual change of the function of objects away from their maker's intention, is summarised in the vocabulary of cultural studies in the term *object biography*. The merit of this designation is that it draws attention to the fact that objects were capable of serving different functions and meanings at different times and in different places. In doing so, the reconstruction of this history is always an attempt at a historiography of the contexts in which the object was involved. This approach can be viewed from two angles. On the one hand, the approach of object biography is a possible method of investigating historical objects. The deconstruction of the unity of the object in favour of an investigation of the different material layers of time allows the individual components of an object to be placed in different contexts. On the other hand, historical object-biographical narratives – as in the case of *it-narratives* – can be examined for their cultural-historical significance.

Myths about the making, ownership or career of an object are part of all areas in which objects play a central cultural role. "But such stories acquire especially intense, new, and striking qualities when the spatial, cognitive, or institutional distances are great." ¹⁵⁷ In George Kubler's conceptual model, every work of art sends out a signal that passes through various transformations, so-called relay stations, up to the present. The historiographical tracing of an object's biography thus faces the challenge of including both its original form and function as well as its later changes and recontextualisations. "Historical recall can never be complete nor can it be even entirely correct, because of the successive relays that deform the message." ¹⁵⁸ The long distance and ignorance

^{154.} The term is not entirely uncontroversial because of its anthropomorphisation of objects, which is why Hans Peter Hahn has proposed the term *itinerary*, which has not yet found widespread use. Hans Peter Hahn, 'Dinge sind Fragmente und Assemblagen: Kritische Anmerkungen zur Metapher der 'Objektbiografie', in *Biography of objects*, ed. Dietrich Boschung, Patric-Alexander Kreuz and Tobias L. Kienlin, Morphomata (Paderborn: Wilhelm Fink, 2015), 27.

^{155.} See Matthias Jung, 'Das Konzept der Objektbiographie im Lichte einer Hermeneutik materieller Kultur', in *Biography of objects*, ed. Dietrich Boschung, Patric-Alexander Kreuz and Tobias L. Kienlin, Morphomata (Paderborn: Wilhelm Fink, 2015), 39.

^{156.} See Nina Henning, 'Objektbiographien', in *Handbuch Materielle Kultur*, ed. Stefanie Samida, Manfred Eggert and Hans Peter Hahn (Darmstadt: WBG Wiss. Buchges., 2014), 235

^{157.} Appadurai, The social life of things: Commodities in cultural perspective, 48.

^{158.} Kubler, The shape of time: Remarks on the history of things, 19-20.

of the origin or of the motivations of change provide room for speculation and for the creation of myths.

According to Appadurai, these myths can be created out of different motivations by owners, traders, consumers or producers, with the commodity context in the foreground here. Old lutes, their origin, quality, producers and owners are also given constructed narratives by consumers and traders. These include narratives about the lute's power, its royal dignity, the justifications for the special quality of old wood, or the craft techniques of the time. An example of the object biography of a concrete instrument can be found in Constantijn Huygens' correspondence with the lutenist Jacques Gaultier, which was received early on and became part of the general knowledge about the lute maker Laux Maler.

On 1 April 1649, Gaultier offered his lute for sale to his correspondent, Huygens. He wrote that it was once selected from a series of Bolognese instruments and was the only one among them made by Laux Maler, who had been dead for 150 years. The instrument had been acquired as a fragment – only the soundboard and back – by the English court lutenist Jean Ballard for 60 pistoles. It was then brought to England, adapted, and soon aroused the desire of the king, who, however, was only able to acquire it from Ballard's heirs for a sum of £100 after Ballard's death. The king finally gave the instrument to Gaultier as a reward for his thirty years of service to the English royal court. From Huygens he now demanded the same price as the king paid. 160

Another letter, dated 24 August of the same year, reveals that Gaultier was sending the lute to Huygens so that he could compare the instrument with others. Gaultier reports that the lute had already been compared with all the lutes from Bologna, France, and England and that it was apparently so excellent that no other lute could stand compare to it in terms of size or shape ("taille"), harmony, strength of sound ("force") or sweetness ("doulceur"). He noted that a piece of wood was placed near the bridge, not because there was a hole there, but to protect the soundboard from damage by the supporting finger. The soundboard, he determined, was of outstanding quality, the likes of which had never been seen. He justified the high price with the exceptional quality of the instrument and by his own economic situation. He gave the

^{159.} In 1621 a John Ballard is listed as Prince Charles' lutenist with a comparatively low salary of £5.40 per year. Whether the lutenist is related to the French lutenist Robert Ballard and the publishing family in Paris is not known, but can be assumed. See Spring, The Lute in Britain: A History of the Instrument and its Music, 211.

^{160.} See Huygens, Briefwisseling. Deel 5: 1649-1663, 144.

impression that the instrument was the only thing he had left as financial security for himself and his wife after working at court. ¹⁶¹

The story transmitted by Gaultier contains several narrative elements characteristic of the appreciation of old instruments. First, the finding of an old fragment and its elevation to an object coveted by the king. Through the material metamorphosis in the form of furnishing the instrument to Ballard's needs, the instrument is transformed from a non-functional antique to a kingly thing. The instrument has an object biography marked by geographical mobility: the move from Bologna via an unknown stopover to England and now may well be sold in the Netherlands. As a result, it has a succession of contexts of use and a traceable series of owners (Ballard, King Charles I, Gaultier) who ensure its exceptional quality through their musical competence and social standing. This element of quality assurance has survived to this day. Above all, instruments (especially violins) attributed to or named after a famous musician or previous owner enjoy the highest esteem, especially as regards sales prices. The lute described by Gaultier also possesses exceptional material properties, such as the quality of the wood of the soundboard responsible for the sound, but these also justify unusual measures such as the piece of wood near the bridge, which, with hindsight, would appear to have been a repair rather than a protective measure. The instrument is said to have been unique in sound, with Gaultier resorting to the vocabulary often used to describe Bolognese lutes. The superlative, describing the instrument as the best in England, France, and Bologna, is astonishing in that four years earlier Gaultier had already offered a lute by Laux Maler for only £30, which he praised as "absolutely the best and most beautiful Bolognese lute in England" ("absolument le plus beau et meilleur luth de Bologne qui soit en Engletterre"), 162 but which Huygens found too expensive. 163 Finally, the instrument is associated with the brand name Laux Maler, which guarantees quality and rarity in equal measure.

Huygens, however, does not seem to have been the only one to whom Gaultier told the story of his lute. Thomas Mace also tells of how the lutenist showed him a lute by Laux Maler: "Mr. Gootiere, the Famous Lutenist in His Time, shew'd me One of Them, which the King paid 100 l. for." In a dramatised

^{161.} See Rudolph Rasch, 'Musical correspondence of Constantijn Huijgens: Duizend brieven over muziek van, aan en rond Constantijn Huygens', 2000, 29–30, accessed 18 June 2022, https://doi.org/10.17026/dans-zuj-d4st, https://easy.dans.knaw.nl/ui/datasets/id/easy-dataset:1427/tab/1.

^{162.} Huygens, Briefwisseling. Deel 4: 1644-1649, 148.

^{163.} See Huygens, 150.

^{164.} Mace, Musick's Monument, 48.

2 Experiments: The Lute in the 17th Century

form, the story is finally found in an 1882 article on Constantijn Huygens, in which the line in Gaultier's letter is stylised into a pained exclamation: "This is the only thing I have from His Majesty after thirty years of service." ("C'est la seule chose que j'aie de Sa Majesté après trente années de services.") 165 Mace mentions yet another story of a pupil of Gaultier to whom a merchant was to pay, for a lute of Laux Maler, either a £20 loan to take it with him on his travels or £100 for its purchase. In the annotations in the margin he significantly adds "A true Story of a Lute". 166

An object biography linked to a story contributes to the appreciation of an old instrument. In addition to the material characteristics and the brand name, the instrument acquires additional qualities through the people and content represented in the narrative, which attest to its age and "goodness" and justify its high price. The description of Gaultier's economic situation suggests that he was indeed very interested in selling the instrument at a high price, having previously failed to sell it to Huygens. These considerations lead to the next section, which examines old lutes from the point of view of the commodity value and the associated brand names.

^{165. &#}x27;Constantin Huygens', Le Ménestrel 49, no. 5 (1882): 33.

^{166.} Mace, Musick's Monument, 48.

2.3 Lutes as Commodities

The commodity character of an object is, according to Appadurai, "not one kind of thing rather than another, but one phase in the life of some things". ¹⁶⁷ Old instruments and other objects that are reused over a protracted period of time become commodities again and again, each time subject to different economic principles of trade. Part of the *social life* of an object is linked to its status as a commodity. The pricing, trading format, identities of the seller and buyer take different forms at different times and are linked to a diverse set of social interactions.

In general, the trade in commodities takes place in various forms of markets. Markets are understood in recent research as complex figurations of social interaction where actors compete for the opportunity of exchange and are thus interpreted as specific types of networks. The specific social interactions within markets can be analysed in terms of the constellations of persons, rights of disposal, competition and cooperation of market participants, and other aspects. The actors within markets are involved in social relations in a variety of ways, since markets are not assumed to be abstract sites of exchange, but rather specialised production and distribution networks, in which people are competing for the possibility of exchanging goods. 169

The trade in old lutes in the 17th century involved different groups of people who offered unique, individual solutions, which distinguishes this trade from the market of mass-produced goods. The mass production of lutes that was established in the 16th century aimed to produce generic, standardised products based on fixed patterns. In northern Italy and in the German Allgäu region, instruments, and semi-finished instrument parts were produced in large quantities according to controllable quality criteria and exported throughout Europe. As the large volume of instrument parts in various estate inventories suggests, many workshops facilitated transfers between producers and intermediaries (business-to-business transactions). The market form in which such standardised products with a certain standardised product quality are traded is referred to in economic sociology as a standard market, which differs from

^{167.} Appadurai, The social life of things: Commodities in cultural perspective, 17.

^{168.} See Bellingradt, Vernetzte Papiermärkte: Einblicke in den Amsterdamer Handel mit Papier im 18. Jahrhundert, 133.

^{169.} See Christof Jeggle, 'Ressourcen, Märkte und die Ökonomie sozialer Beziehungen', in *Die Ökonomie sozialer Beziehungen*, ed. Daniel Schläppi and Gabriele Jancke (Stuttgart: Franz Steiner Verlag, 2015), 71.

the status market primarily in the social position of the actors and the knowledge necessary for the exchange of goods.¹⁷⁰ Unlike standard markets, the status markets are not governed by a normalised form, and the determination of the exchange value depends on the social status of the market participants. Moreover, the kinds of transactions that take place here are mostly between businesses and consumers (in the early modern period, an agent often acted as an intermediary). A special market form that follows its own commodity logic determined by external, formal factors and that differs from normal trading situations is the auction, which in more recent times has also become one of the trading venues for instruments and where depending on the symbolic and status value of an artefact, the economic exchange value is determined in a ritualised form of competition.¹⁷¹

2.3.1 Lutes as products on a standard market

In the 16th century, a particular manufacturing technique for the production of lutes was established that was handed down over several centuries. Initially, this manufacturing technique was associated with a manner of distribution and specialisation of labour. The lutes from this period were able to gain a lasting reputation for their quality. The market form in which lutes, semi-finished lute parts, and materials were exported in large quantities from Füssen and northern Italy in the early modern period can be described as a standard market. The trade of semi-standardised products among a large number of buyers and sellers required quality conventions that were perceived by the market participants. As with the trade in paper, for example, where there was a fixed vocabulary for quality and format, the trade in lutes and their components also necessitated a common knowledge of measurements, sizes, material criteria, brand names, and other criteria that made it possible to determine the quality of the products. Throughout the 16th and beginning of the 17th century, the highest standard of quality was defined by the products exported from the Allgäu and northern Italy.

Lutes were products of a capital-intensive labour process based on a structure of pre-financing and coordination of labour efforts among the different actors involved. The production of a lute involved several processes shaped by

^{170.} Patrik Aspers, 'Wissen und Bewertung auf Märkten', Berliner Journal für Soziologie 17, no. 4 (2007): 431–449, https://doi.org/10.1007/s11609-007-0039-3.

^{171.} See Jean Baudrillard, For a Critique of the Political Economy of the Sign, ed. Charles Levin (St. Louis, Mo.: Telos Press, 1981), 112–122.

traditional craft knowledge, which were integrated into a network of economic activity. For a long time, this network was determined by lute makers from the Allgäu region. It was characterised by the working and trading relationships of lute makers and traders operating throughout Europe, who tried to secure their capital and knowledge over generations through family succession and marriage. Instruments, components, semi-finished products like ribs, necks, and soundboards with carved roses, and raw materials were produced and sold in large quantities, as shown by the numerous inventories of lute makers based in northern Italy, such as Laux Maler¹⁷² in Bologna and Magno Tieffenbrucker¹⁷³ in Venice. Dominance on the European market could be achieved through an optimised form of production based on the division of labour with partly standardised products and an extraordinarily high quality due to the specialisation of the craftsmen. For Heyde, the preserved Italian instruments of this period indicate that the division of labour had no detrimental effect on the quality of the instruments. 174 From today's point of view, however, it must be stated more clearly that mass production based on the division of labour was actually the key to the success of these instrument makers, who were able to achieve high, and, to a large extent, standardised quality.¹⁷⁵

The dominance of the market by northern Italian and Allgäu lute makers, whose products were mainly traded through Venice, demonstrates their enormous export power. Lutes, semi-finished products, and materials from northern Italy and Germany can be found in numerous French sources. In the 16th century Parisian inventories presented by Lesure, ¹⁷⁶ there is evidence of a total of 24 lutes marked "Allemagne", 32 stringed instruments from Brescia, five stringed instruments from Cremona, 29 lutes and one guitar from Lyon, 60 lutes from Padua, and 16 lutes from Venice. ¹⁷⁷ The Spanish court also owned

^{172.} Sandro Pasqual and Roberto Regazzi, Le radici del successo della liuteria a Bologna: Lutherie in Bologna: roots & success; storia della liuteria classica bolognese e dei liutai bolognesi in età moderna a cui si aggiunge un censimento generale dei liutai attivi in città dal 1496 al 1998 (Bologna: Florenus, 1998); Sandro Pasqual, 'Laux Maler (c. 1485 - 1552)', The Lute: Journal of the Lute Society, no. XLV (2005): 71–97.

^{173.} See Stefano Pio, Viol and lute makers of Venice 1490-1630: Liuteria veneziana 1490-1630, Prima edizione (Venice: Venice Research, 2011), 291-311.

^{174.} See Herbert Heyde, 'Produktionsformen und Gewerbeorganisation im Leipziger Musikinstrumentenbau des 16. bis 18. Jahrhunderts', in *Der "schöne" Klang*, ed. Dieter Krickeberg (Nürnberg: Germanisches Nationalmuseum, 1996), 223.

^{175.} While high production figures are also found north of the Alps, these were not the instruments that would be sought later.

^{176.} Lesure, 'La Facture Instrumentale à Paris au Seizième Siècle'.

^{177.} Whether these are genuine indications of origin or merely attributions to a particular form cannot be determined.

various instruments from Padua and Venice. Among the 13 lute-type instruments listed in the inventory of the Habsburg ruler Philip II of Spain is a theorbo from Padua.¹⁷⁸

Until the beginning of the 17th century, Venice maintained a prominent position in the European instrument trade. The transportation of instruments, materials, and semi-finished products aboard Venetian galleys with standardised transport boxes (casse veneziane), had flourished since the 16th century. In Laux Maler's inventory from 1552 references can be found to "two medium boxes of lute ribs [...] a medium sized box of lute ribs [...] a strong Venetian box full of lute ribs". 179 Casse veneziane were standardised packaging units designed for transport on Venetian merchant ships. The inventory of the Spanish instrument maker Mateo de Aleto of 1575 mentions 88 fronts with rosettes from Venice. 180 Trade with the Iberian Peninsula seems to have worked well in the long term; in 1636, a ship from Venice headed for the southern Spanish port of Cadiz was reported to have been carrying boxes of 400 pieces for violas "del Sig. Matteo Sellas Liutario". Three years later, a load of "piena di coperchi da chitara dell'ultima marca comperati dal Sig. Giorgio Sellas liutaro" 182 was shipped on a boat named St. Giacomo from Venice to Lisbon. The trade routes from Venice throughout the Mediterranean, through the Straits of Gibraltar, via Cadiz to the French Atlantic coast and on to the Netherlands and London were exceptionally busy during this period. As Levin and Zohn¹⁸³ have

^{178. &}quot;Otra teoruia de dos cabeças con dos puentes, la tapa de madera blanca y el embes de colorado de caña de Yndias, listada de marphil y ebano, hecha en Padua. Es de treze ordenes en su caxa de madera cuuierta de cuero colorado num° 61. Tasado en treynta y seis ducados." The origin of the other instruments is matter of conjecture. The description of the striped shape, however, can be regarded as a distinctive feature of an instrument from Padua. Further details, however, point to a production in northern Italy. There are mentions of soundboards of conifer wood ("tapa de pinauete"), sometimes also ivory stripes between the ribs ("listas de marfil"), ebony purfling ("perfiles de ebano"), and a neck veneered with ebony ("El braço y cabeça cuuierto de ebano"). The description of the "puntos de ebano" could refer to fingerboard tips. Fernando Checa Cremades, ed., Inventarios de Felipe II: Inventario post mortem, almoneda y libro de remates, inventario de tapices = Inventories of Philip II; post-mortem inventory, inventory of sale items and record of sales, tapestries inventory (Madrid: Fernando Villaverde Ediciones, 2018), 498.

^{179. &}quot;zwei mittlere Kästen Lautenspäne [...] eine mittelgroße Kiste mit Lautenspänen [...] eine starke Venezianer Kiste voller Lautenspäne" Josef Focht, Klaus Martius and Thomas Riedmiller, Füssener Lauten- und Geigenbau: Europaweit (Leipzig: Friedrich Hofmeister Musikverlag, 2017), 101.

^{180.} See Pio, Viol and lute makers of Venice 1490-1630: Liuteria veneziana 1490-1630, 217. 181. Pio, 214.

^{182.} Pio, 214.

^{183.} Michael J. Levin and Steven Zohn, 'Don Juan de Austria and the Venetian Music

been able to prove, even trumpets from Nuremberg and Augsburg, various shawms, and music books were traded to Spain via Venice at the order of Diego Guzman, the king's ambassador. Thanks to the massive export power of the Venetian market and efficient shipping, materials, instruments, music prints, and paintings, all kinds of cultural goods (and, by extension, cultural practices) could be distributed throughout Europe.

Trade to France was mainly via Lyon, which was an important economic hub accessible by ship by the sea and the Rhône. The lute makers Johann Helmer and Gaspar Tieffenbrucker, who had excellent connections to Füssen, Padua and Venice through their lineage, had settled here. From Lyon, they also served the Paris market, which - as the figures in the estate inventories show had a great demand for musical instruments. The fact that instrument makers in France in the 16th and 17th centuries were often referred to as merchants (marchant) in contracts and estates illustrates the extent to which trade was part of the business model. 184 The lively trade in materials and semi-finished products from Germany and Italy is attested to by various items in inventories, such as the 1606 inventory of Pierre LeBlanc's estate in Paris, where, among other things, "one hundred and two ribs of maple from Germany to make lutes" ("ung cent et deux esclisses d'Allemaigne de boys d'erable a faire lucz")¹⁸⁵ are listed alongside 640 unplaned ribs. The 2100 "ribs for lutes both maple and cherry" ("esclises de lut tant d'erables que merisier")¹⁸⁶ in the workshop of Jean Desmoulins in Paris in 1648, it can be safely assumed, were not of his own production.

2.3.2 Effects of market dominance

The organisation of the early lute trade as a standard market with a quality determined by the products coming from northern Italy and Allgäu had many and long lasting effects. The prolonged dominance of the market by lute makers from these regions meant that similar structures could not develop in the same way in other countries. Lute makers in England and France, for example, remained dependent on the supply of materials and resale of products

Trade', Early Music 33, no. 3 (2005): 439-446.

^{184.} Such as in 1556: "Gaspard Duyfautbocard, marchand allemand, faiseur de luz" Henri Coutagne, Gaspard Duiffoproucart et les luthiers lyonnais du XVIe siècle (Paris: Librairie Fischbacher, 1893), 24. Or Claude Denis 1580: "marchant d'instruments de musique" Lesure, 'La Facture Instrumentale à Paris au Seizième Siècle', 34.

^{185.} Lesure, 47.

^{186.} Gétreau, 'Inventaire après décès de Jean Desmoulins', 29.

made outside of their country's borders. England was a centre for lute music in the 16th and 17th centuries, but there is little concrete evidence of the domestic production of lutes. "No instruments survive, though we know of two foreign names involved in the craft. In 1635 Thomas Mallard, an 'Italian Lute Maker', was living in the parish of St Martin in the Fields. Also in that year, 'John Baptisra [Bassano?], lute string maker, Italian' was living in St Margret's Westminster." As shown by the example of a lute by Laux Maler, which was fitted with a new neck and new bars by the court lutenist Nicholas Lanier, it was not uncommon for musicians to make repairs. The teaching of detailed knowledge of repair techniques in Thomas Mace's *Musick's Monument* is also an indication of the absence of knowledgeable lute makers.

In Paris, on the other hand, the activities of various instrument makers can be traced over a long period of time, above all through numerous inventories. According to Lesure¹⁸⁸ the craft was initially unregulated; the first statutes organising the craft within a guild date from 1599, but were not confirmed until 1680 by the parliament under Louis XIV. Lutes that can be clearly attributed to Parisian lute makers have not survived, with one exception. ¹⁸⁹ In Burwell's Lute Tutor, apart from old lutes, only the contemporary lutes from France were accorded a certain quality: "For the modern lutes – that is, those made in our days – they are made only in France, and very few are good for anything." ¹⁹⁰ Only Desmoulins is explicitly mentioned. His lutes were said to be "very good and were sold at first for £20 and [are] sold still for ten or twelve." 191 In a letter to Huygens, the Parisian organist of Notre Dame, Pierre de La Barre, also mentions that a certain Monsieur de Verpré held Desmoulins' lutes in higher esteem than the Bolognese, which de La Barre, however, points out as an exception to the common opinion of excellent lute players such as the Gaultiers, excusing it by saying that everyone would have his own taste. 192

^{187.} Spring, The Lute in Britain: A History of the Instrument and its Music, 308.

^{188.} Lesure, 'La Facture Instrumentale à Paris au Seizième Siècle', 11.

^{189.} The lute with the label by Jean Desmoulins in 1644 (MdlM E.979.2.69) is considered the only surviving evidence of Parisian lute making, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/6017160 (Version 29 July 2020).

^{190.} Dart, 'Miss Mary Burwell's Instruction Book for Lute', 11.

^{191.} Dart, 10.

^{192.} Letter of 15 October 1648: "j'avois desja appris de Mr. de Verpré auquel j'avais escrit en vostre absence pour quelques affaires particuliercs, ne luy ayant rien communiqué de la recherche que vous faitte d'un excellent luth de Bologne, joint qu'il me semble qu'il estime plus les luths neufs de Desmoulius. Ce n'est pas l'opinion de Mrs. les Gautiers et autres excellenls joueurs de luth. Chacun a son gout."Huygens, *Briefwisseling. Deel 4: 1644-1649*, 501.

The period in which instruments came to be valued for their age coincides with the 30 Years' War, the plague epidemics, and the lute-making crisis in Füssen that resulted from these events. In Füssen, where 19 businesses were still registered in the lute-making trade in 1606, about half the population succumbed either to the plague or to the war. 193 After that, there is hardly any evidence that this previously important industry in Füssen was ever revived on the same scale. Although production in northern Italy continued at the same rate throughout the 17th century, the European market, the supply of materials from the Alpine region, and the Europe-wide network were shaken by the consequences of the war and the plague. The production of highquality new instruments had been linked to this economic network and shaped by the northern Italian and southern German market dominance. From this perspective, the Europe-wide crisis triggered by the Thirty Years' War helps to explain the emergence of a high estimation of old lutes and their fragments: people were increasingly dependent on old instruments, since local producers could not achieve the same quality due to the lack of trained craftsmen and the appropriate materials.

2.3.3 Lutes as commodities on the status market

The description of lutes as goods on a standard market mainly concerns the mass production and distribution of lutes in the 16th century. However, as goods that are designed to fulfil customer-specific criteria, they can also be traded at any time within the framework of a status market. "On a status market, the value used for assessment is no longer the most established social construct, but the social structure formed by the actors on both sides of the market. [...] Thus, if sellers and buyers of high status meet, the commodity they trade 'becomes' valuable as a result, regardless of whether it 'is' so." ¹⁹⁴ In addition to the social status of the actors, the structure and mechanisms of the status market differ from those of the standard market. Narratives and knowledge about the other market participants are of central importance in

^{193.} See Focht, Martius and Riedmiller, Füssener Lauten- und Geigenbau: Europaweit, 56–59.

^{194. &}quot;Auf einem Statusmarkt ist nicht länger der zur Einschätzung verwendete Wert das etablierteste soziale Konstrukt, sondern die von den Akteuren auf beiden Marktseiten gebildete soziale Struktur. [...] Treffen also Verkäufer und Käufer von hohem Status zusammen, so 'wird' die von ihnen gehandelte Ware dadurch wertvoll, unabhängig davon, ob sie es 'ist'" Aspers, 'Wissen und Bewertung auf Märkten', 435–436.

status markets. The actors take their orientation from each other, and the codified knowledge of the products is complex.

The market participants in the status market are persons who occupy a high social position, either through their noble status or through a socially coded merit, as was often the case with famous bourgeois lutenists. Among the players in the trade in expensive old lutes was, for example, Jacques Gaultier, whose activities as a trader are evident from the two lutes he offered to Constantijn Huygens and the payment he received of £10 from the English court in 1637 for a "treble lute for him to be used in masques". 195 In Gaultier's story of his lute by Laux Maler, the court lutenist Jean Ballard and the English king also appear as buyers and sellers. In Huygens' correspondence, the royal organist Pierre de La Barre appears as an agent for old lutes in Paris. Furthermore, Huygens employed the lutenist and composer Giovanni Paolo Foscarini as well as Frédéric Rivet, a member of the Council of Princes, as agents for the search for a lute. In October of 1648 Pierre de La Barre wrote to Huygens about a Parisian lute dealer, Claude de La Nouë (presumably the son of the French field marshal, diplomat, and poet Odet de La Nouë), saying that he would apparently be active in Paris as a dealer in the most excellent lutes in Paris. 196 High quality instruments were thus traded by dealers and not necessarily by instrument makers. Similarly, Mace mentions a pupil of Gaultier named Edw. ard Jones, who made an arrangement with a dealer ("Merchant") for the hire and optionally the sale of a lute by Laux Maler. The fashion for old lute corpora opened up a market conducted among persons of similar standing and not necessarily involving lute makers, who were merely called upon to set up the instruments. For example, de La Barre offered two lutes that were in the workshop of the lute maker Lesellier. In this situation, de La Barre acted as an intermediary and potential seller, and was free to set the price for his buyer (Huygens) depending on de La Barre's view of the value of the instrument on the status market, as will be discussed later.

One principle of this market model, which can also be used to describe the trade in other *kingly things* such as antiques or art, is (partly controlled) scarcity and singularisation, which also includes the creation of a unique selling point

^{195.} Spring, The Lute in Britain: A History of the Instrument and its Music, 312.

^{196.} Letter of 15. October 1648 to Huygens: "Je suis aussy appres a en voir quelques autres qui appartienent a un curieux home de qualité, nommé Mr. de la Nouë lequel, quand il sera revenu de la campagne, je sçauray combien il veut vendre un luth qu'il a comme vous les demandez, que l'on dit estre le plus excellent qui soit a Paris, [...]. C'est un home qui trocque, qui achepte, qui revend pour son plaisir, et qui n'espargne rien en ce passetemps la." Huygens, Briefwisseling. Deel 4: 1644-1649, 502.

through object biographies, for example, important previous owners, or other unique characteristics. These mechanisms lead to an increase in value of the object that goes beyond the actual value of the commodity. "Thus, even things that unambiguously carry an exchange value – formally speaking, therefore, commodities – do absorb the other kind of value, one that is nonmonetary and goes beyond exchange value. [...] This allows the commodity to be socially endowed with a fetish-like 'power' that is unrelated to its true worth." Singularisation and scarcity were essential principles in the trade of old lutes in the 17th century and part of the *complexity of acquisition* of luxury objects. The desire to possess a certain lute, for example, in the case of Constantijn Huygens, can certainly be equated with a fetish, which can be understood here in both a religious context and in the Marxist sense of the commodity fetishism. The actual scarcity of commodities is illustrated by the example of Laux Maler's instruments, of which, according to Gaultier, there were still about fifty in 1645. 198 In the inventory of Laux Maler's workshop written in 1552, however, 357 small lutes, 651 large lutes, and 124 other lutes as well as a total of 1354 soundboards were recorded. If Gaultier's statement were true, it would suggest that less than 5% of the instruments found in Laux Maler's estate upon his death were still extant one hundred years later. The significance of the rarity of the instruments for their value is also illustrated by a passage in another letter to Huygens from Pierre de La Barre in which he described the quality of a lute by saying that it was one of the excellent instruments in Paris, of which there were only "30 or forty others of high value." ¹⁹⁹ On a status market, old lutes were thus traded as products of high value among people of high social status. The scarcity of the product played a significant role in the lute's desirability.

2.3.4 Importance of the brand

In the case of lutes, the almost cultic veneration of certain objects is linked to another concept of the status market: the brand or trade name. Knowledge about traded goods is central to both the standard and status markets. Specific knowledge about material quality, dimensions, formats, and processing quality are important in the trade of standardised products, but also in the trade of

^{197.} Igor Kopytoff, 'The Cultural Biography of Things: Commodization as Process', in *The social life of things*, ed. Arjun Appadurai (Cambridge: Cambridge Univ. Press, 1986), 83. 198. "Et croy qu'il n'y en a en tout le monde cinquante;" Huygens, *Briefwisseling. Deel 4:* 1644-1649, 140.

^{199. &}quot;30 ou quarente autres de grande valeur" Huygens, 502.

kingly things. In the case of the latter, knowledge about the social position of the objects, the object's biography, the possible previous owners, and the rarity of the object are all of major importance. The principle of the brand is equally significant for both market forms, but takes on different functions within the standard and status markets. For lutes, the concept of a brand has to be understood as more than merely a brand name or particular symbols associated with a brand name, but rather was counted among other external identifying signs, such as the lute's shape and colour. These characteristics were connected with particular places of production, which served as signifiers for certain qualities.

A brand is a name, term, sign, symbol, design form, or a combination of these or other perceptible components that is known to the relevant consumers and, in comparison with competing products, has a differentiating image, which leads to consumer preferences.²⁰⁰ The labelling of products with the name of the manufacturer has been part of the market system since early modern times and can serve various purposes. In the trading of goods, it serves as a mark of identification and quality assurance, increasing the prestige of the producer and establishing trust with the consumer. From a legal point of view, the trade mark today represents protection. In relation to the characteristics of the branded product, however, certain criteria of quality are in the foreground. Historically, various sign systems can be considered to have assumed a trademark function. These include stamps, inscriptions, stonemasons' or masters' marks, and guarantee marks for the fineness of precious metals. Furthermore, towns or guilds could award quality marks that ensured the quality of a product.

From today's point of view, these markings are often referred to as a 'trade-mark' in the case of handcrafted or industrially produced products, while the term 'signature' is primarily used for objects that can be classified as a work of art from an art-historical point of view. For the production and trade of lutes, a catalogue of characteristics has existed since the 16th century to differentiate certain products from competing products, which, over time, became part of the common knowledge in the lute trade in both the standard and status markets. In this context, the features of a brand go beyond the marking of the goods with manufacturer's signatures, such as labels inside the corpus or with brand stamps, which are usually found on the outside of the instrument.

^{200.} See Carsten Baumgarth, Markenpolitik: Markentheorien, Markenwirkungen, Markenführung, Markencontrolling, Markenkontexte, 4., überarb. und erw. Aufl. (Wiesbaden: Springer Gabler, 2014), 6, https://doi.org/10.1007/978-3-8349-4408-5.

Mace, in his instructions on buying a good instrument, lists the features one should look for in the following order: age, brand name, shape of the corpus, number of ribs, material of the ribs, colour of the varnish, and the material properties of the top. Only after this does he list details about what to look for in the layout of the neck and pegbox.²⁰¹

For the trade in a standardised market, brand management (the creation and maintenance of a brand) is an essential means of guaranteeing quality and gaining the trust of the clientele. In the various estate inventories of the 16th and 17th centuries, branded products are specially marked and differ in price from the simple instruments described often as *méchant* (simple, bad). Brand marks, like the ones by Caspar Tieffenbrucker (see fig. 2.7), were obvious in comparison to maker's labels and can be recognised and noted easily.²⁰² Furthermore, makers like Tieffenbrucker achieved their fame through intensive campaigning.²⁰³ Tieffenbrucker's name appears several times in various inventories.²⁰⁴ A trademark was highly relevant for quality assurance on the lute market and also had legal implications. This is illustrated by the conviction of the lute maker and dealer Lejeune, a competitor of Tieffenbrucker, who had imitated Tieffenbrucker's brand to mark instruments.²⁰⁵

Compared to a quite obvious brand mark on the outside of an instrument, the label inside the instrument is only legible with the proper lighting. However, the label often reveals more information about the name of the maker and, in many cases, information about the year and place of manufacture. Apart from that, one could use the corpus shape and the number of ribs to determine the place of manufacture, as these characteristics were strongly associated with the region of origin. For example, lutes with an elongated corpus and seven ribs were easily distinguishable as lutes produced in Bologna. The comparison of the Bolognese lute's shape with that of a pear was common in various languages. It can be found for the first time in 1611 in the inventory of

^{201.} See Mace, Musick's Monument, 49-50.

^{202.} Friedemann Hellwig, 'Makers' Marks on Plucked Instruments of the 16th and 17th Centuries', *The Galpin Society Journal*, no. 24 (1971): 22–32.

^{203.} See Focht, Martius and Riedmiller, Füssener Lauten- und Geigenbau: Europaweit, 69–71.

^{204.} For example, lutes by Caspar Tieffenbrucker can be found in 1589 at Robert Denis, in 1596 at Pierre Aubry, and in private ownership in the 17th century. Lesure, 'La Facture Instrumentale à Paris au Seizième Siècle', 41, 43; Jurgens, *Documents du minutier central concernant l'histoire de la musique (1600-1650)*, 882, 889.

^{205.} Lejeune was sentenced to a fine and ordered to hand over the branding iron to the authorities for destruction. See Georges Tricou, 'Duiffoproucart et Lejeune luthiers', *Revue musicale de Lyon* 1, no. 8 (1903): 89–91.



Figure 2.7: Trademark (circled in red) on the copper engraving by Pierre Woeiriot de Bouzey (1562) depicting Caspar Tieffenbrucker

the lutenist Charles Forestier²⁰⁶ and is also used later by Mace and Burwell. Burwell also defined other forms: "The lutes of Padua are something roundish and like those of Monsieur De[s]moulins; therefore their sound is greater than those of Bologna, which are very sweet. Those of Florence and Venice are between both of these shapes, but some nothing near to those of Bologna."²⁰⁷

"Next, observe the Colour", ²⁰⁸ advises Mace, and, indeed, the colour of the varnish can also be considered a kind of trademark. This is evident in the fact that Moisé Tieffenbrucker had two of his varnish recipes protected by law. On 14 May 1580, the Venetian Council recognised two new varnishes in crimson and green as 'patent' and set a fine of 100 ducats should anyone else use them. ²⁰⁹ Although the varnish surface of lutes has never been mythicised in the same way as that of violins, ²¹⁰ the red varnish of Bolognese lutes was considered a distinguishing feature and a signifier of quality. Burwell writes that the lutes from Bologna were known for their "varnish, which is darkish red." ²¹¹ and Mace judges, "only the Best Authors did use to lay on That Colour, especially Laux Maller." ²¹² The varnished surface of Bolognese lutes must have achieved a certain fame as early as the 16th century. In 1527 Duke Alfonso I d'Este sent an agent to Sigismund Maler to find out the recipe for his lute varnish and persuade him to write it down. In exchange for the recipe, Maler accepted "some mortadella or few delicacies." ²¹³

In the 17th century, features such as the number of ribs and the shape of the corpus served to identify a lute's place of production, which, to a certain extent, took over the function of a brand or trade name. These characteristics were known to the relevant consumers and were recognizable enough to allow them to distinguish between lutes of different origins and qualities, which led

^{206. &}quot;trois luth garnis de leurs estuitz, l'un rond et les autres en poires, prisez ensemble [...] 28 l." Jurgens, Documents du minutier central concernant l'histoire de la musique (1600-1650), 267.

^{207.} Dart, 'Miss Mary Burwell's Instruction Book for Lute', 10–11; Focht and Martius distinguished four shapes, the one defined by Arnault of Zwolle being very similar to that of the *arciliuti*. Josef Focht and Klaus Martius, 'Wirtschaftliche Grundlagen und kulturelle Rahmenbedingungen süddeutscher Instrumentenbau-Zentren des 16. Jahrhunderts', in *Musikinstrumentenbau-Zentren im 16. Jahrhundert*, ed. Boje Schmuhl, Michaelsteiner Konferenzberichte (Augsburg and Blankenburg: Wißner / Michaelstein, 2007), 99.

^{208.} Mace, Musick's Monument, 49.

^{209.} Balthazar Soulier, 'Resonanzen vergessener Oberflächen Teil 2: Lautenfirnisse der Renaissance', Zeitschrift für Kunsttechnologie und Konservierung, no. 26 (2012): 327.

^{210.} See Focht, Martius and Riedmiller, Füssener Lauten- und Geigenbau: Europaweit, 82.

^{211.} Dart, 'Miss Mary Burwell's Instruction Book for Lute', 10.

^{212.} Mace, Musick's Monument, 49.

^{213.} Pasqual, 'Laux Maler (c. 1485 - 1552)', 75.

to the development of consumer preferences based on these features. These characteristics represented quality and authenticity and could help a consumer identify a valuable, rare instrument. The various properties, origins, and characteristics of lutes seemed to have become common knowledge by the late 17th century, as the entry in the *Dictionnaire de l'Académie française* of 1695 suggests. After the definition of the lute as a plucked instrument, a list of terms connected to this instrument follows:

"Grand luth, petit luth, bon luth, excellent luth, meschant luth, vieux luth, un luth harmonieux, un luth sourd, luth de Paris, luth de Boulogne, luth de Padoue, corps de luth, manche de luth, cordes de luth, le dos d'un luth, la table d'un luth, les costes d'un luth."²¹⁴

Large lute, small lute, good lute, excellent lute, bad lute, old lute, a harmonious lute, a dull lute, Parisian lute, Bolognese lute, Paduan lute, lute body, lute neck, lute strings, the back of a lute, the top of a lute, the ribs of a lute.

Size characteristics, age, technological details or components and, last but not least, the successful trade names of the Bolognese and Paduan lutes are specifically listed even before the musical details, which follow later as (mettre un air, une Allemande). The Bolognese design was so successful, given its strong association with quality and age, that it was soon being copied by producers from different regions. Several instruments like the lute labelled "CASPAR DUIFFOPRUCCA / A LION" in the Musikmuseet Copenhagen CL 91A meet all the form-related criteria of a Bolognese instrument. However, it is not possible to decide whether the corpus is a product of Tieffenbrucker and was made in Lyon in the style of a Bolognese lute, or whether he obtained the individual parts or even the whole instrument from one or more other makers who were not necessarily based in Bologna. The description of the shape of a lute by using a city name refers to characteristic geometrical criteria associated with a place of production. The shape is associated with further characteristics of the instrument (comfortable posture or sound, see chapter 2.1), which may

^{214.} Académie française, ed., Le Grand Dictionnaire de l'Académie françoise, dédié au Roy: Seconde édition, reveüe et corrigée de plusieurs fautes, et où l'on a mis dans l'ordre alphabétique les additions qui estoient à la fin de l'édition précédente. Tome 1 (Amsterdam, 1695), 405.

^{215.} See Focht, Martius and Riedmiller, Füssener Lauten- und Geigenbau: Europaweit, 69. There are other examples of lutes whose corpora date from the 16th century, such as the instrument signed "Laux Boß zu // Schongaw." (MdlM E.980.2.338) or the lute labelled "Wolfgang Wolf zue Fießen" (Museum der Stadt Füssen (hereafter: MdSF) 4669/a).

have only been made retrospectively. The actual place of production may not always match the name used to identify the form.

For the trade in old instruments and in the context of the constantly changing types of instruments, it is crucial that the criteria of the brand name, shape, number of ribs, and colour of the varnish only concern the corpus and never the design of the neck: the identification and valuation of an old lute always referred to its top and back. These components already fulfilled all the characteristics of a brand or characteristic designation and thus a corpus could be traded and valued as a fragment. The layout of the instrument, that is, the number of strings, the design of the fingerboard, the neck, and the pegbox was understood to vary over time and belonged to the secondary quality criteria of an instrument. Therefore, as a commodity, an old lute could be seen as a collage of parts from various times and places: either a corpus with additional, later components, or in a fragmentary state that could be adapted accordingly.

2.3.5 Laux Maler and Bolognese lutes

As already described in chapter 2.2.5, knowledge of the geometrical and material properties of lute corpora was subject to hierarchisation as an anti-model to the king materials of the art cabinets. From an economic point of view, the prioritisation of a brand represents the result of successful branding processes, which can take different forms at different times. However, distinct formal characteristics of the product as well as communication about the brand, and thus social factors, are also considered essential principles. Hellmann has noted that producers have often used communication strategies to convince consumers of the exquisite value of a certain product with the aim of binding consumers to their products. He compares it to self-contained solar systems, or tiny cosmologies, in which all life revolves around the brand, which acts as the centre of gravity.²¹⁶ To make a certain product popular, there needs to be a discourse about its quality. The discussion about the qualities of certain lutes took place in such a cultural microcosm, in which the fame of Bolognese lutes, especially of those by Laux Maler, was propagated over a long period of time. As shown before, the attribute of age was often connected to Bolognese instruments.

^{216.} See Kai-Uwe Hellmann, Fetische des Konsums: Studien zur Soziologie der Marke, 1. Aufl., Konsumsoziologie und Massenkultur (Wiesbaden: VS Verl. für Sozialwiss, 2011), 94.

The success of the Bolognese lutes, especially those from Laux Maler's workshop, can be traced back as far as the 16th century. The numerous written and iconographic testimonies give the impression of an extreme veneration of Bolognese lutes. In 1523, Marchese Federico II Gonzaga instructed his brother Don Ercole to fulfil his wish for a lute from Laux Maler. "Wishing to have a lute made by the hand of Master Laux Maler, who is in Bologna, we ask that you entrust one of your servants to find this Master Laux to see whether he has anything suitable for my requirements, and the price he is asking, advising him that we desire a medium lute, that is neither large nor small and of excellent quality ... and give notice that we shall send the money to pay for it ... Mantua, 19 March 1523."²¹⁷ Further written evidence from the 16th century has yet to be discovered. Bolognese lutes rose in popularity with the posthumous fame of Laux Maler in the 17th century, when the instruments connected to his name came to be associated with the quality of age.

In 1618, the lutenist Lorenzio Vander Linden, who had been trained in Italy, began his service in the Brussels court chapel of Archduke Albert. In his possession was a Bolognese lute. The instrument must have found great favour at court, because immediately after his arrival an order for another similar instrument was initiated. The popularity of the Bolognese lutes in France can be deduced also from the preface of Allesandro Piccinini's Intavolatura di liuto, et di chitarrone published in 1623. He describes the characteristic features of the instrument (its pear shape and broad ribs), as well as its high price, noting that they had become rare in his time, and were apparently be particularly appreciated by the French. Bologna was an attractive stop on a Grand Tour, including that of the famous diarist John Evelyn, who visited the city on 21 May 1645. He reports on the local pride in the three famous lute makers – Laux Maler, Hans Frei, and Nicolas Schönfeld – originally from the Füssen region, who had died many decades before and mentions some other typical products from the city:

^{217.} Pasqual, 'Laux Maler (c. 1485 - 1552)', 79.

^{218.} Edmond Vander Straeten, La Musique aux Pays-Bas avant le XIXe Siècle (Brüssel: Van Trigt, 1872), 390.

^{219. &}quot;Gia molti anni sono che in Bologna, si faceuano liuti di bontà molto eccellenti, ò fosse l'esser fatti di forma lunga, à similitudine di pera, ò fosse l'hauer le coste larghe, che l'vno fa dolce, e l'altro armonioso; basta che, per la lor bontà erani molto stimati, & in particolare da i francesi, i quali son venuti à posta à Bologna, per portarne in Francia pagandoli tutto quello che era loro domandato, talche pochissimi hora sene trouano; & oltre di cio si faceuano liuti grandissimi, che in Bologna erano molto apprezzati, per suonare in concerto con altri Liuti piccoli passiemezi, Arie, & altri simili." Alessandro Piccinini, Intavolatura di Liuto, et di Chitarrone: Libro Primo (Bologna, 1623), 5.

"The city is famous also for sausages; and here is sold great quantities of Parmegiano cheese, with Botargo, Caviare, etc., which makes some of their shops perfume the streets with no agreeable smell. We furnished ourselves with wash balls, the best being made here, and being a considerable commodity. This place has also been celebrated for lutes made by the old masters, Mollen, Hans Frey, and Nicholas Sconvelt, which were of extraordinary price; the workmen were chiefly Germans. The cattle used for draught in this country (which is very rich and fertile, especially in pasturage) are covered with housings of linen fringed at the bottom, that dangle about them, preserving them from flies, which in summer are very troublesome."

The correspondence of Constantijn Huygens (previously cited) attests to his efforts over a period of 34 years to acquire a Bolognese lute and gives the impression that Huygens was obsessed with the desire to own an instrument by Laux Maler. Among his correspondents was Marin Mersenne, with whom he exchanged views from 1639 to 1648 on various technical subjects such as magnetism or weapons, but also on music and instruments. In response to Huygens' question about the best shape for a lute, Mersenne replied on 17 April 1648 that the soundbox should be rather more "parabolic than hyperbolic" ("parabole que de l'hyperbole"). His comparison with a parabola likely referred to the narrow Bolognese shape, which Mersenne presumably wanted to describe in mathematical terms (being a mathematician) rather than the more common description of the instrument as "pear-shaped".

The two central English sources, Mace and Burwell, express their appreciation of Bolognese lutes in many ways. For Mace, "The Venice Lutes are commonly Good", but "Pear-Mould is Best" and "Laux Maller Lutes [are] the best" respectively. Burwell also classified the Bolognese lute form as the best: "Besides, all Bologna lutes are in the shape of a pear, and those are the best lutes;" The characteristic outline of the Bolognese lutes can also be traced in numerous 17th century paintings and illustrations throughout Europe (cf. fig. 2.8). In portraits, instruments can be the function of representing a luxury item and suggest connotations with professional or educational status.

^{220.} John Evelyn, The diary of John Evelyn, ed. William Bray (London, 1901), 192.

^{221.} Rudolph Rasch, 'Duizend brieven over muziek van, aan en rond Constantijn Huygens: 1678', 2018, 53, accessed 22 May 2022, https://huygens-muziekbrieven.sites.uu.nl/.

^{222.} Mace, Musick's Monument, 48-49.

^{223.} Dart, 'Miss Mary Burwell's Instruction Book for Lute', 10.

The painting of the lutenist Mouton by François de Troy is $1.38\,\mathrm{m}$ x $1.06\,\mathrm{m}$ and portrays the musician in life size. The lute dominates the upper part of the lower half of the picture and is only partially concealed by Mouton's hands. The upright sitting posture and the slight turning away of the player's left shoulder support a clear presentation of the instrument, which stands out from the dark character of the other colours due to the orange-brown colour of the front. The painting was exhibited in 1704 in the so-called Salon de Paris, a regular art exhibition founded by Louis XIV in 1667 to propagate the court programme of art and culture. 224 In this context, the clearly foregrounded instrument with its well-defined form is an expression of the cultural anchoring of the high esteem of the Bolognese type. Further depictions can be found, such as the illustration in Perrine's Lute School, for example, which depicts the Bolognese lute type in several places for different purposes, testifying to the fact that the form could obviously be considered representative of the lute itself. The other paintings, such as the portrait of Arabella Hunt and that of François de le Boë Sylvius and his wife, are further evidence of the popularity of this type of lute throughout Europe as well as the simultaneity of different lute types.

All cited sources are evidence of textual or visual communication about the brand. The explicitly expressed or implicitly assumed promises of quality disseminated by Bolognese lutes are multifaceted. In addition to the beauty of their form, they were said to have had an extraordinary sound and their shape enabled a straight posture. They reputed to be of the best wood, which had undergone the best workmanship and acquired the best characteristics through age as well as dryness, which was seeing as contributing to the sound. In all descriptions, and in comparison with other lute forms originating from other places, it is clear that the Bolognese form could be described most simply and clearly. This made it the standard, as it were, and thus the reference model for comparisons with other forms. For example, if we look again at Mace's guide to buying a good instrument, all the criteria he cites apply only to Bolognese lutes, even if he does not mention them explicitly.

These criteria include the brand name –Laux Maler– and the distinctive appearance of the brand logo: "There are diversities of *Mens Names* in *Lutes*; but the *Chief Name* we most esteem, is *Laux Maller*, ever written with *Text Letters*". ²²⁵ Compared to other printed or handwritten signatures, the few sur-

^{224.} See Liste des tableaux et des ouvrages de sculpture, exposez dans la grande Gallerie du Louvre, par Messieurs les Peintres, & Sculpteurs de l'Académie Royale, en la presente année 1704. (Paris, 1704), 15.

^{225.} Mace, Musick's Monument, 48.

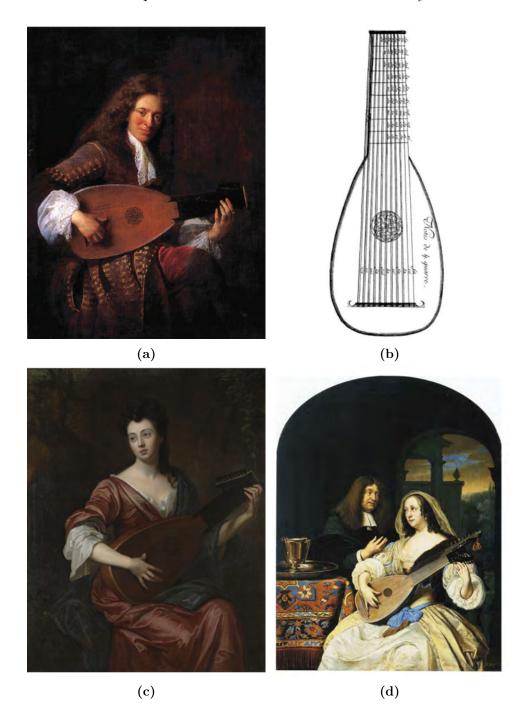


Figure 2.8: Lutes with Bolognese outline in 17th century illustrations: (a) François de Troy: Charles Mouton, 1690 (Paris, Louvre, inv. no. RF 2469); (b) Illustration in the Lute School of Perrine, Paris 1679; (c) Godfrey Kneller: Arabella Hunt, 1692, Cabinet Office London; (d) Frans van Mieris the Elder: Portrait of François de le Boë Sylvius and his wife, 1672 (Gemäldegalerie Alte Meister Dresden, inv. no. 1743)

2 Experiments: The Lute in the 17th Century

viving maker's labels by Laux Maler are characterised by a typical design in Fraktur script, which makes them easily distinguishable. For the number of ribs, Mace judges that "The Compleat Number (most esteemed) is Nine;"226 and Burwell also states that Bolognese lutes "and other good lutes are to have but seven ribs, and the most nine or eleven".227 The rosette "in the Lute Belly would be little, and smoothly cut."228 Added to this is the characteristic dark red varnish, which makes the instruments easily recognisable. In comparison to this wealth of detail, other lute forms are described only very vaguely as "somewhat roundish".229 More precise information about material, number of ribs, colour of the varnish, and the size of the rosette is missing. The success of the Bolognese lutes and their corpora is therefore also based on the fact that they had clear brand characteristics that were easy to identify and to communicate.

2.3.6 High prices and status: Owners of Laux Maler's instruments

The fame of the Bolognese lutes, especially the ones connected with the name Laux Maler, is reflected in the prices paid for these objects. Several sources provide information on the exchange values of instruments in the 17th century. Many values can be found in estate inventories from Paris, which list numerous lutes and other musical instruments. Other price information can be found in the description of actual offers and sales, as in Huygens' correspondence, and in other published contemporary sources, such as Thomas Mace and Burwell's lute tutor. In order to specify the actual exchange value, the different market situations and price formations have to be differentiated. The information about prices shows that the possession of a valuable instrument was connected with a high social status.

An estate inventory serves the purpose of establishing the economic assets of the deceased and the associated legal (and tax) implications. As can be seen

^{226.} Mace, Musick's Monument, 49.

^{227.} Dart, 'Miss Mary Burwell's Instruction Book for Lute', 11.

^{228.} Mace, Musick's Monument, 49.

^{229.} Dart, 'Miss Mary Burwell's Instruction Book for Lute', 10.

from the sources presented by Lesure, ²³⁰ Massip, ²³¹ Jurgens, ²³² and Gétreau ²³³ for the period between 1587 and 1648, instrument makers in Paris were usually called on to assess the values of musical instruments in an estate, which is especially true for the legacies of other instrument makers such as Desmoulins or Dumesnil. The prices quoted thus presumably reflect the possible that can be achieved in business-to-business transactions. Furthermore, the valuation may be influenced by other interests, such as those of the present instrument maker involved, who is considered a potential buyer.

The estate inventories reflect the diversity of products on the lute market. There are lutes with different designations of origin and size (small, medium, large, and without designation), large and small theorbos, individual corpora, and many individual parts, components, moulds, and tools. Often old and new products were specifically noted, as were the different brand features or types, such as "two lutes, one from Florence, the other one in Parisian style", or "four lutes in the English fashion and the others from Padua and Venice"²³⁴ The lute in Parisian fashion may have been a bent-neck lute with 11 courses, while the lute a la mode d'Angleterre probably referred to the type of lute favoured by Mace with two pegboxes. The prices could differ significantly. If lute corpora (that is, unfinished fragments) were specifically mentioned, they rarely exceeded the price of 2 to 3 livre tournois (hereafter: lt.). Intact instruments were valued very differently and according to their condition, material, and finish, with prices ranging from 3 to 40 lt. Branded products were clearly rated as more expensive. The average price for a lute was about 17-21 lt. depending on the size. The most expensive item in Desmoulins' 1648 inventory, at 60 lt., is "another large new theorbo with a leather covered case" ("un autre grand tuorbe neuf garny d'un estuy couvert de cuir"). A total of seven Bolognese lutes were valued in the same inventory at 30-40 lt. each and were thus clearly above the average. However, over the course of the 17th century the prices mentioned in the estate inventories show an increase in the valuation of Bolognese lutes.

^{230.} Lesure, 'La Facture Instrumentale à Paris au Seizième Siècle'.

^{231.} Massip, La vie des musiciens de Paris au temps de Mazarin (1643-1661): Essai d'étude sociale.

^{232.} Jurgens, Documents du minutier central concernant l'histoire de la musique (1600-1650).

^{233.} Gétreau, 'Inventaire après décès de Jean Desmoulins'; Florence Gétreau, ed., 'Inventaire aprés décès de Jacques Dumesnil', in *Instrumentistes et luthiers parisiens* (Paris, 1988), 32–33.

^{234. &}quot;deux luthz l'un de Florence et l'autre façon de Paris [...] quatre luth l'un a la mode d'Angleterre et les autres Padoue et Venise". Gétreau, 'Inventaire après décès de Jean Desmoulins'.

The first explicit mention of a Bolognese lute in the Paris inventories is only found in 1634 in the estate of Claude Lesclan (See fig. 2.9).²³⁵

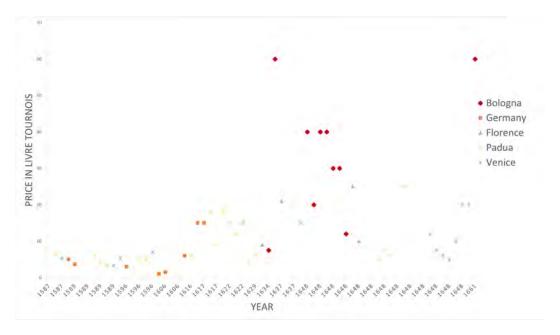


Figure 2.9: Prices for lutes with attribution of provenance in Paris inventories 1587-1661

Comparing the prices given in other sources with those listed in the estate inventories illustrates how different the valuation of instruments could be from the exchange values on the status market. The following anecdote offers a glimpse into how such differences in pricing often played out in sales scenarios.

On 3 September 1648, the instrument maker Jehan Sellier was called to estimate the inventory of the estate of his deceased colleague Jean Desmoulins in Paris, in which he recorded seven Bolognese lutes in a price range of 30 to 40 lt.²³⁶ Six weeks later, Pierre de La Barre reported to his correspondent, Huygens, that Sellier (de La Barre calls him Lesellier) had two Bolognese lutes on offer, one by Hans Frei and one by Laux Maler.²³⁷ It is likely that the two instruments were among the seven Bolognese lutes in Desmoulins' estate, and they passed into Sellier's possession for the price of 30 or 40 lt., which he had

^{235.} Jurgens, Documents du minutier central concernant l'histoire de la musique (1600-1650), 769.

^{236.} Gétreau, 'Inventaire après décès de Jean Desmoulins'.

^{237.} See Huygens, Briefwisseling. Deel 4: 1644-1649, 501-502.

set.²³⁸ It can be inferred from de La Barre's letter that he had contacted all possible sellers of Bolognese lutes and finally found what he was looking for at Lesellier's. According to his description, the lute by Laux Maler was very old and somewhat damaged. In fact, it could be identical to "un vieil luth de Boulongne" in Desmoulins' inventory. The price at which de La Barre offered the instrument to Huygens was 15 pistoles. The pistole was defined by its gold content and was therefore suitable as an international currency unit equivalent to 10 lt.²³⁹ This means the instrument apparently cost 150 lt., five times the price listed for a Bolognese lute in the aforementioned estate inventory. Who might have had a share in the profit, and in what form, is also a matter of conjecture. However, de La Barre used an anecdote to convince Huygens, which must be classified as a clear sales strategy. According to de La Barre, three months earlier, a friend of his had supposedly purchased a lute just like the one Huygens was looking for from the lute dealer Mr. de la Nouë. He had had to pay 40 pistoles (= 400 lt.), but this instrument, he said, was not as good as the one he could now offer to Huygens. This situation illustrates a typical sale on a status market and includes the elements of difficulty of acquisition, scarcity of the product, and the use of suggestion by an enterprising agent like de La Barre to make a deal.

The prices mentioned in the inventories thus differ significantly from the actual market price on the status market. Sources detailing the actual exchange value of Laux Maler's instruments on the status market are, unfortunately, few and fragmentary. However, from the extant evidence it becomes clear that the price depended on the status of the market participants (see tab. 2.1). The highest prices were obtained where the persons with the highest status – in this case the English King Charles I – were the buyers. The differences are relatively large. A comparison with other prices on the status market shows how extremely high the price of £100 was for a lute by Laux Maler. Burwell

^{238.} The only lutes associated with a maker's name among the 221 lutes in the entire inventory were on the one hand an old lute (vieil, 25 lt.) and on the other a large one (grand, 30 lt.) marked "d'Escouvel" (probably Nicolas Schönfeld). Whether only these instruments were marked with a brand stamp and could therefore easily be assigned to a maker or whether the naming of the maker was avoided for other instruments can no longer be determined.

^{239.} Shepard Pond, 'The Louis d'Or', Bulletin of the Business Historical Society 14, no. 5 (1940): 77–80, https://doi.org/10.2307/3111195.

^{240.} In order to make a comparison, the prices have been converted – where possible – into livre tournois, which was a stable currency in the 17th century. A reliable conversion using the Historical Currency Converter (see Rodney Edvinsson, 'Historical Currency Converter', 2016, accessed 14 May 2022, https://www.historicalstatistics.org/Currencyconverter.html) is only possible in 1663, which is why all prices refer to this year.

price in $l.t.$	year	price	currency	interested party
_	1523	2750	Bolognese lire	Federico II Gonzaga
600	about 1620	60	pistoles	Jean Ballard
1279	before 1648	100	pound sterling	Charles I of England
383	1645	30	pound sterling	Huygens
150	1648	15	pistoles	Huygens
73	1648	80	guilders	Joan Thijs
1279	1648	100	pound sterling	Huygens
1279	1672	100	pound sterling	"Merchant" (Mace)

Table 2.1: Prices for lutes labelled "Laux Maler" (1523-1672), converted to *lt.* at the exchange rate of 1663.

mentioned that lutes by Jean Desmoulins initially cost £20 (= 256 lt.) and can now be had for £10 to £12 (128 or 153 lt.). Samuel Pepys also reported that having his lute fitted with a new neck by the instrument maker Hunt cost him 26s, just over a pound. "But now he tells me it is as good a lute as any is in England, and is worth well 10l." The thirty pounds (= 383 lt.) demanded by Gaultier in 1645 for a lute by Laux Maler lute is thus well above the average, while de La Barre's offer is comparatively cheap and seems to correspond to the price of other high-quality instruments.

Other owners of lutes attributed to Laux Maler can also be traced. The son of a rich Amsterdam merchant, Joan Thijs, who also met Jacques Gaultier on his *Grand Tour* in England and France, acquired a Laux Maler lute in 1648, although he – as Burgers²⁴³ suspects – did not even play the lute himself. Expensive lutes took on a symbolic function, highlighting the social status of the owner. A closer look at the estate inventories of Parisian bourgeois and noblemen shows that the ownership of expensive musical instruments was in general linked to their rank at court. The closer their position to the king, the more expensive the instruments in their estate. In 1637, the estate of the financial secretary of one of Louis XIII's brothers, Israël Regnault, lists a collection of seven different lutes. Among them are an old lute from "Gaspart", one adorned with the coat of arms of the king's brother, and another in the Parisian style and two from Venice and Florence. The most expensive, however, are two

^{241.} Burwell does not indicate how much time has elapsed during the depreciation of Demoulin's instruments. Dart, 'Miss Mary Burwell's Instruction Book for Lute', 10.

^{242.} Entries of 25 and 28 October 1661. Pepys, 'The Diary of Samuel Pepys'.

^{243.} Burgers, The lute in the Dutch Golden Age: Musical culture in the Netherlands 1580-1670, 91-92, 145.

"lutz de Boullongne" which, at a total of 120 lt., are far above the other prices mentioned.²⁴⁴ Among other known owners of lutes by Laux Maler are Germain Pinel, lutenist and theorbo player at the court of Louis XVI, in whose estate in 1661 a Bolognese lute is listed for 60 lt., and a certain Mr. de Montarcis, a pupil or friend of Gautier's.²⁴⁵ Finally, another instrument is mentioned in James Talbot's manuscript as belonging to a certain Mr. Crevecoeurs.²⁴⁶

During the 16th century, high quality lutes were produced in large quantities and exported all over Europe. The domination of the market by the lute making families originating in the Allgäu region and operating all over Europe hindered the establishment of similar structures in other countries. During the 30 Years War, these structures were shattered. High quality instruments soon became associated with objects produced during the heyday of lute making and became sought after, highly priced products. Age became a signifier for quality, a condition which could not be fulfilled by contemporary makers. The Bolognese lute type and the name Laux Maler soon became representative of the highest quality of lute concerning their beauty of form, associated body posture, colour of varnish, age, and quality of the materials. The fact that Bolognese lutes were easy to identify by their specific external features made them a suitable status symbol whose value could easily be recognised by the society in general.

^{244.} Jurgens, Documents du minutier central concernant l'histoire de la musique (1600-1650), 889.

^{245.} Joël Dugot, 'Laux Maler (c. 1495-1552): The Lute of the Musée de la Musique and the Fame of the Maker in France', in *Hinter den Tönen*, ed. G. Ulrich Großmann et al., Veröffentlichung des Instituts für Kunsttechnik und Konservierung am Germanischen Nationalmuseum (Nürnberg: Verlag des Germanischen Nationalmuseums, 2018), 69–70.

^{246.} Prynne, 'James Talbot's Manuscript (Christ Church Library Music MS 1187): IV. Plucked Strings - The Lute Family', 53.

2.4 Transformation of Lutes during the 17th Century

When an object becomes a commodity, it becomes mobile in various ways: not only does it change hands, but often it travels far from its place or country of origin. Commodification also opens up the possibility of material change. As shown in chapter 2.1, the lute in the 17th century was subject to constant changes in tunings, number of strings and ambitus, with preferences differing significantly by region. The preference for old corpora, on the other hand, was a constant over a long period of time and across disparate regions. When a lute or fragment was sold, it could be adapted to the latest or regionally prevailing fashion or to the individual wishes of the customer with regard to the number of strings or pegbox shape. However, the adaptation of instruments to constantly changing compositional requirements was not necessarily carried out at the time of sale, but also took place during ownership.

The maintenance and alteration techniques carried out on these instruments resulted in material changes to the object, the traces of which are still partially visible today. Uncovering – and in some cases, reverse-engineering – these processes requires careful examination of the objects themselves, since few written sources have survived that make these methods traceable. The richest written source is again provided by Mace, who described various maintenance measures in great detail. A Lute Belly [is] often in need to be taken off" he explained, at least "once in a Year or two" to re-glue loose bars. Mace listed the most important procedures, step by step, giving advice on which tools to use and describing the quality of the materials to be used, such as the kind of glue. How representative his explanations are for the general practice in lute making is difficult to determine. Mace's descriptions were mainly aimed at lute players who lived on the countryside and had no access to trained lute makers. However, most of the procedures are comprehensible even from the perspective of today's craftsmen.

The assessment of repair and alteration techniques in France and England in the 17th century is also difficult to comprehend because the extant evidence is fragmentary and hard to date with certainty. Not only is there a lack of surviving manufactured instruments from this period, but also a lack of signatures or other evidence that would date an alteration or repair to an

^{247.} Over the course of the study I undertook the work of building a lute after Laux Maler and altering it from a 6-course lute to an 11-course lute. This gave me the opportunity to understand and remake the technical procedures required for such alterations.

^{248.} Mace, Musick's Monument, 54.



Figure 2.10: Earliest known dated labels from production and repairs by Barttner (or Garttner) and Helm, Salzburg Museum 1087

older instrument. The earliest signature that can be linked to a transformation of a lute is found in an instrument that is now kept in Salzburg Museum. According to the maker's label, this lute was made by Michael Barttner (or Garttner) in Salzburg in 1524, making it the oldest dated lute known today.²⁴⁹ Another signature reads "walthassar Helm // in Salzburg 15.94", who probably converted this lute to an eight-course instrument (see fig. 2.10). The only signature of a repair which was probably carried out in France can be found on the soundboard of the lute labelled "Laux Maler" kept in the Musée de la Musique in Paris.²⁵⁰ However, the inscription "Monsieur Dumesnil" on the inside of the soundboard is no longer legible because of a restoration carried out shortly before its acquisition by the museum and is only documented by a photograph (see 2.11). The signature could refer to the Parisian lute maker Jacques Dumesnil, who died in 1663.

As a result, there is not enough evidence to generalise about the tradition of marking the repairs or alterations of lutes in the 17th century in France and England. It was not until the end of the century, and predominantly in the German-speaking countries, that signatures documenting the alterations

^{249.} MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110385 (Version 29 July 2020).

^{250.} MdlM E.2005.3.1, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110786 (Version 29 July 2020).



Figure 2.11: Signature by "Monsieur Dumesnil", MdlM E.2005.3.1

of instruments began to accumulate. Previous research on old and altered instruments has often been motivated by the search for the original state of the instrument and has, therefore, failed to examine the different layers of change that the instrument underwent from its original state to its present one. Moreover, this kind of analysis, which focuses on determining an instrument's 'original' state, is susceptible to misinterpretation due to a methodology that is mainly characterised by connoisseurship. In order to understand the alteration practices of this period, which was characterised by the spirit of experimentation and in which there was an incomparable variety of tunings and lute types, it is therefore necessary to consult other sources, such as iconography, later examples of lutes, and the practices in other regions. In the following, written and iconographic sources will be compared with observations on the instruments themselves in order to find common factors and allow a holistic picture of the lute's transfiguration to emerge. Consulting a variety of representations is especially helpful in showing how the traces of the interventions themselves were becoming the signifier of an old instrument and thus represent a further aspect of its value. Thus musical development, the noble status of the lute and the flexibility associated with commodification equally influenced the material form of old objects, some of which have only survived in fragments.

2.4.1 Lute types created by transformation

8 to 11-course lutes

As was shown in chapter 2.1, the first experiments on expanding the lute's ambitus began at the end of the 16th century. It can be assumed that the instruments produced in the first half of the 16th century were designed with six courses, while lutes produced in the latter half of the century were built for a maximum of eight courses. The first written statements that explicitly mention the valuation of old lutes date from the 17th century. I would suggest, however, that the practice of adapting older instruments was common even before then, for example, to expand a 6-course instrument to seven or eight courses.

Although there are no extant examples of 8-course lutes that were previously 6-course instruments, it is very likely that the instruments that survived through the 17th century passed through this state before undergoing subsequent alterations. Though the surviving examples no longer show traces of these earlier alterations, it is only because they have been covered up by later interventions. In the case of the five instruments that are now considered authentic products of the maker Laux Maler, for example, there is no clear material evidence of any alteration before 1630. But, like other instruments dating from the 16th century, they have only survived due to their constant adaptation to the changing musical fashions.

The same is true for 10-course bent-neck lutes. To date, there are no extant examples of this style of lute (though a few examples have survived that may have previously been in a 10-course configuration) since the conversion of these instruments to an 11-course configuration has obliterated most traces of the earlier states.

The typical technical solution for extending an instrument by a single string (chanterelle) involved attaching a treble rider in combination with a corresponding bridge being mounted on the soundboard. In order to do this, a small wooden setup with a peghole for another string would be placed on the treble side of the pegbox.²⁵¹ The first and second courses would then be single-strung while the rest were double-strung. The implementation of this technique can

^{251.} Michael Lowe, 'The Historical Development of the Lute in the 17th Century', $\it The~Galpin~Society~Journal~29~(1976):~18.$

be observed in iconography of 10-course lutes from the period.²⁵² This technique can also be used to convert a 10-course lute without treble rider into a lute with eleven courses.²⁵³ However, over the course of this study only two instruments could be identified in which the addition of a treble rider was used as the only measure to extend the number of strings (Kunsthistorisches Museum Wien (hereafter: KHM) SAM 30;²⁵⁴ lute labelled Hans Fichtoldt, MdlM E.998.2.2).²⁵⁵

The liuto alla francese of Antonio Stradivari

The French lute at the end of the 17th century, as described, for example, by Mace and Talbot, was an instrument with a bent-back pegbox and eleven courses. There are no known examples of instruments of this type from France, the heartland of musical development. Due to the lack of extant instruments, the technological reception of the French lute type in Italy at the end of the 17th century can be best understood by examining the stencils from the inventory of Antonio Stradivari's workshop, and a lute – the only surviving example – altered by him in 1695.

A total of fourteen lute patterns for neck and fingerboard shapes, pegboxes, body outlines and a bridge from Stradivari's workshop exist today, and they offer invaluable insight into his activities making and altering lutes.²⁵⁶ Most

^{252.} Jean Daret: Woman Playing a Lute, 1638, Yale University, Art Gallery (inv. no. 1979.88.1); French School: La Joueuse de luth, 1620-1649, Musées d'Art et d'Histoire, Geneva (inv. no. 1825-0025).

^{253.} At this point it must also be mentioned that there may have been an even simpler practice of extension. The reference in Burwell, "the good masters of the lute do use only the octave (that is the little one), because the eleventh bass is a superfluous string that has been added to the lute of late to give ease to the hands" (p. 17) suggests that only the octave string of the lowest course was used to avoid loud, low basses. When the lowest string is not even mounted, it is possible to use a lute originally designed for ten courses in the disposition 1x1+8x2+2x1 (that is: one single bass course, eight double courses and two single courses as highest strings) as an 11-course instrument without making any structural changes.

^{254.} MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110427 (Version 29 July 2020).

^{255.} MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110657 (Version 29 July 2020).

^{256.} Fausto Cacciatori, ed., Antonio Stradivari: Disegni, modelli, forme: catalogo dei reperti delle collezioni civiche liutarie del comune di Cremona (Cremona: Museo del Violino, 2016); Stewart Pollens, 'Antonio Stradivari: Maker of Lutes in the French Style', Musique Images Instruments 6 (2006): 29–46.

of the patterns can be identified by their inscriptions as models for the design of a type of lute known as French ("francese"). Among the seven surviving templates for the outline of lute soundboards are three with the explicit addition "liuto alla francese" for eleven or twelve courses ("a 11 o 12 cori doppi"). The only model for the shape of a lute neck bears the inscription: "The length of the neck of a French style lute" ("La longezza del manico de Liutto [sic!] alla francesca"). Two of the five templates of pegboxes are unmarked and their actual purpose has not yet been conclusively determined. The other three, however, as well as the only model of a bridge, are also inscribed for the purpose of being used for a "liuto alla francese". The handwritings of the inscriptions has been successfully attributed graphologically to both Antonio and his son Francesco Stradivari. 258

Pollens has assumed that the patterns were used not only for making new instruments and for documenting old instruments, but also to create a template for renewing the soundboard of old instruments. "One can see how the outline wanders off course and is then retraced. Perhaps these patterns were used to make replacement tops for old or damaged lutes."²⁵⁹ It is more likely, however, that these templates were primarily a byproduct of the alteration of old instruments, as only one template contains information about the construction of the associated corpus. Moreover, the outlines of the templates are all relatively similar; if these patterns were being used to make new instruments, one would expect to find a variety of forms represented. The only known lute to have been worked on by Stradivari is held in the Musik-Instrumenten-Museum Berlin (hereafter: MIMB) 5303.²⁶⁰ This lute was first labelled by Magnus Tieffenbrucker in Venice in 1593.²⁶¹ In the winter of 1695, the instrument was in Stradivari's workshop, where it was thoroughly remodelled with a new soundboard, neck, and pegbox, as the repair inscription indicates: "A di 9 Decb 1695 // AN:TO STRADIVARI HA // FATTO iL CopeRco e MAN[ICO]." The instrument was later altered at least two more times and is seen today in the fragmented state of a lute-guitar after an aborted restoration. By comparing the preserved parts attributable to the intervention in Stradivari's workshop,

^{257.} Cacciatori, Antonio Stradivari: Disegni, modelli, forme : catalogo dei reperti delle collezioni civiche liutarie del comune di Cremona, 190.

^{258.} Marco D'Agostino, 'Le scritture dei reperti stradivariani - Handwriting on Stradivarian Artefacts', in *Antonio Stradivari*, ed. Fausto Cacciatori (Cremona: Museo del Violino, 2016), 65–84.

^{259.} Pollens, 'Antonio Stradivari: Maker of Lutes in the French Style', 33.

^{260.} MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110448 (Version 29 July 2020).

^{261.} See Focht, Martius and Riedmiller, Füssener Lauten- und Geigenbau: Europaweit, 193.

with the surviving templates from his workshop, the condition of the instrument in 1695 can be reconstructed.

Though none of the extant Stradivari stencils correspond to the outline of the soundboard, the repair reference on the label concerning the renewing the top is, however, supported by a dendrochronological report which dates the youngest annual ring to 1681.²⁶² The pegbox and fingerboard are veneered with snakewood, which can also be found under the black paint in the middle area of the neck. These parts probably originate from Stradivari's intervention. The neck length of 320 mm is 2 cm longer than the only model for a neck in the template collection (ms392). Even if it does not correspond in length, the original neck width matches the template. The neck width can be determined at the base of the neck by the distance between the fingerboard tips to be approximately 110 mm, thus roughly corresponding to the width of the template ms392.²⁶³

Further correspondences with the templates can be found when comparing the dimensions of the pegbox. The preserved piece of the pegbox is carved from a solid piece of wood, which is rather more typical of violin making than lute making, in which pegboxes were usually assembled from several different pieces of wood. The outer edges of the cheeks are decorated with an ivory strip on the upper side. Nine boreholes are still visible in this 120 mm long piece, three of which have been closed, while the last six have been used to reconfigure the instrument into a guitar. The shape and width of the pegbox, the edge decoration, and also the positions of the drilled holes, all correspond to the dimensions given by the templates ms394 and ms395 (cf. fig. 2.12). This would strongly suggest that these templates were used for the production of this pegbox and that the state of this instrument when it left Stradivari's workshop in 1695 was therefore a Liutto alla francesa with twelve double courses. With a length of 338 mm, the template for this pegbox is a total of 10 cm longer than the others in Stradivari's bundle of lute patterns or any comparable instruments. This raises the question of whether the pegbox was actually attached to the neck at an almost right angle or at a somewhat shallower angle. Any extant iconographic or written sources describing such a long pegbox have yet to be discovered.

^{262.} Report on the dendrochronological examination of a lute inv. no. 5303 by Dr. Peter Klein, Ordinariat für Holzbiologie, Universität Hamburg dated 11 October 2001.

^{263.} Depending on the interpretation of the lines, the width is 104 to 112mm.



Figure 2.12: Templates ms394 and ms395 compared with the preserved pegbox of the lute altered by Stradivari

The bridge of the instrument shows similarities of shape to Stradivari's surviving bridge model and echoes the decoration of the pegbox with the thin ivory inlays. However, the bridge is drilled for thirteen courses. Since music for 13-course lutes did not appear until later, it must be assumed that the bridge is the result of a later alteration in which, for example, a thirteenth course was added by the addition of a treble rider. The design of the bridge was probably based on the existing model.

From the comparison of the preserved parts with the templates it can be concluded that in 1695 an instrument with 12 double courses was made in Stradivari's workshop using a lute corpus signed by Magno Tieffenbrucker. The thickness of the soundboard and the system of bars for its reinforcement (including a J-shaped bass bar) correspond to the 17th-century practice of lute making. The shape of the rose on this lute is unique, its floral design differing significantly from the geometric patterns typically found on lutes in general. To form the pegbox, the back of the neck and the flat fingerboard, snakewood was used, which goes well visually with the yew wood of the corpus. According to the neck length, which is designed for ten frets, and the present bridge position, it is likely that the instrument had a vibrating string length of about 72 cm. The practice of using twelve double courses may go back to an Italian tradition of using a double course also for the chanterelle, instead of a single string. The production of the pegbox from solid wood can be traced back to the technique used in violin making, which differs from the modular construction method in lute making.

Curiously, many elements of this instrument do not correspond to the type of lute at the end of the 17th century that is characterised today by descriptions, iconographic evidence and preserved instruments as French. Certain criteria articulated by Mace, such as the number of frets and the roundness of the fingerboard supposedly typical of a French lute are missing from this instrument. This example shows the wide range of interpretations of what could be understood as a French lute type at the end of the 17th century in Italy. The other patterns from Stradivari's workshop, designed for both eleven and twelve-course lutes, provide further evidence of the variety of lute types that were recognised as French.

The English Two Headed Lute

Another testimony to the proliferation of the French lute is the 12-course lute, later called the "English Two Headed Lute" by Talbot.²⁶⁴ The characteristic shape of the pegbox must be understood as the result of a solution to convert old instruments into a different state. All surviving examples of this pegbox type are found on older corpora and are therefore the results of a conversion. Moreover, in numerous representations of this type of lute, especially in Dutch genre paintings, a textile band around the lute corpus is depicted, which can be seen as a signifier of an old lute, as will be shown later.

As mentioned in chapter 2.1, the introduction of this type of lute into England is widely credited to the French lutenist Jacques Gaultier. Mace referred to this type of lute, which he favoured, as the "French Lute", for which he recommends the tuning "(Erroniously) called the Flat-Tuning, &c. The Best of French-Tunings". Talbot, on the other hand, who associated the same lute type with England instead, maintained that the ideal tuning for the instrument was D-minor. The characteristic pegbox shape with a straight, theorboed part and a second, bent-back pegbox offers the advantage of extending the ambitus of the lute into the lower register in a tonally balanced way. In this configuration each of the four bass courses has its own string length. The thicker a string is with the same string length, the duller its sound. With the gradual lengthening, a similar string gauge can be used for all the low bass strings, "giving a better sound by avoiding the overpowering bass of the theorbo."

The way in which this lute was used has been the subject of considerable controversy among 17th-century authors as well as modern musicologists. While Spencer²⁶⁷ has claimed that this lute type was not used as a continuo instrument, and should therefore not be considered a theorbo, Sayce²⁶⁸ has attempted to prove the very opposite. Burwell already called the instrument a "bastard instrument between a lute and a theorbo",²⁶⁹ suggesting that it should be rejected altogether. In addition to its illegitimate status, the strong

^{264.} Prynne, 'James Talbot's Manuscript (Christ Church Library Music MS 1187): IV. Plucked Strings - The Lute Family', 55.

^{265.} Mace, Musick's Monument, 83.

^{266.} Lowe, 'The Historical Development of the Lute in the 17th Century', 16.

^{267.} Robert Spencer, 'Chitarrone, Theorbo and Archlute', Early Music 4, no. 4 (1976): 417.

^{268.} Lynda Sayce, 'Continuo Lutes in 17th and 18th-Century England', $Early\ Music\ 23,$ no. 4 (1995): 668–680.

^{269.} Dart, 'Miss Mary Burwell's Instruction Book for Lute', 59.

and nasal sound of its bass strings, which could not be stopped, were considered undesirable. Burwell maintained that all strings should have the same length in order to be able to vibrate with the same amplitude. Finally, with such a design there could be no pleasant proportion between the two pegboxes and many players, he states, accidentally make extraneous noises due to the many strings. These controversial statements, and especially Burwell's claim that "all the French masters, [...] returned to their old fashion, keeping only the small eleventh", ²⁷⁰ lead me to conclude that the two-headed type was part of an experimental phase. Indeed, after the appearance of Mace's *Musicks's Monument*, hardly any illustrations or compositions of this type can be found. The use of this type can be dated in the period between 1620 and 1680.

The technological construction of the characteristic pegbox seems to have arisen from the practice of modifying lutes with fewer courses. Lowe has shown that most illustrations depict the bent-back pegbox with seven or eight courses and the four bass courses outside the fingerboard. "It would have been relatively simple to alter an existing seven or eight-course lute to such a double headed instrument",²⁷¹ since the neck width would not have to be altered. In the course of this work, only six instruments could be identified whose double pegboxes actually date from the 17th century and which can confirm these considerations in at least one case.

One instrument in which this characteristic pegbox was placed on an existing neck is currently held in a private collection in Vienna (see fig. 2.13).²⁷² According to a questionable label, the round corpus in *Paduan* shape with 23 ivory ribs was produced by Magno Tieffenbrucker, and was altered in 1675. The neck, however, seems to date from before this alteration. While the strips for the decoration on the back of the neck are partly made of ivory, only bone was used for decorating the pegbox. The fingerboard has a width of only 62 mm at the upper end – a measurement that would be typical of a lute with eight courses. It is clearly visible that, in order to anchor the bass pegbox, a piece of the old neck was cut out to create an overlap. The decoration on the pegbox that was cut off in the process was added later. The bridge is not in the central axis of the instrument, which indicates that the neck was not changed during this alteration. If the neck had been renewed, one would expect to find the bridge repositioned centrally on the soundboard, the acoustically optimal position for it. The flat fingerboard, which was obviously not adapted to the

^{270.} Dart, 'Miss Mary Burwell's Instruction Book for Lute', 59.

^{271.} Lowe, 'The Historical Development of the Lute in the 17th Century', 18.

^{272.} MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110940 (Version 29 July 2020).

form more typical, rounded fingerboard of the late 17th century, is another indication that the neck was not renewed. In summary, all technical details suggest that a lute for eight courses was adapted to 12 courses by adding a new pegbox and a bridge.



Figure 2.13: Lute, presumably expanded from eight courses to 12 courses, label: Mangno Tieffenbrucker in Padua // Fatto nel anno 1504 lynope // M(...)o. Hagiopolita Renou: // Anno 1675, mXp 4110940



Figure 2.14: (a) Corpus by Wolfgang Wolf, top, neck and pegbox probably 1645; (b) Corpus by Jonas Stehelin with additions by Böningk, CT section and detail of upper block

In contrast to this example, other surviving instruments have undergone more significant modifications. In 1645, for example, an anonymous craftsman took a body labelled by Wolfgang Wolf and used it to make an "English Two Headed Lute" (MdSF 4669/a, see chap. 2.1.3).²⁷³ The neck along with the pegbox and the top were all renewed, but the old rose was kept. Accordingly, the bridge is positioned centrally the top and the neck is also wider at the upper saddle. The signs of wear on the neck and bridge indicate intensive use (see fig. 2.14).

A similar alteration was undertaken on a lute held in the Musical Instrument Museum of the University of Leipzig (hereafter: MIMUL).²⁷⁴ The back, made of 17 ivory ribs, is signed "1596 Iona[s] Stehelin in Argent[ina]"²⁷⁵ and is similar to the back attributed Tieffenbrucker described above. The repair label below the maker's label reads: "Johann Adolph Böningk: // in Böhringen, habe die lauthe // renoviret. den 17. december: / Anno 1662".²⁷⁶ Later, the instrument was heavily altered. However, most of the components of the neck and pegbox probably originate from Böningk's intervention. According to a dendrochronological report, the top was not made before 1836 and bears a stylistically unique bridge. The neck is now fixed with three modern screws and the flat fingerboard is probably a recent addition.

Another example of this type of pegbox can be found on a heavily damaged lute held at the Veste Coburg (see fig. 2.15).²⁷⁷ The back, comprised of 19 ivory ribs, is only preserved in pieces and is signed "1608 // Sebastian rauser in Verona". The repair label underneath reads "A° 1673// [...] Dierich Bocheim, in// Còlln. neu renovirt". It would seem to indicate an intervention in which the neck, the top, and the characteristic double pegbox with an unusual arched joint were made.²⁷⁸ Another instrument, which could not be examined for this study, is held by the Hessisches Landesmuseum Darmstadt (hereafter: HLMD) Kg. 67:106.²⁷⁹ The printed label inside identifies Wendelin Tieffenbrucker

^{273.} MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110246 (Version 29 July 2020).

^{274.} MIMUL 0494, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4010494 (Version 29 July 2020).

^{275.} Argentina is the Medieval Latin name for Strasbourg used until the 17th century and derives from the name of the Celtic settlement Argentorate.

^{276.} In most publications one finds the reading "Böblingen". An instrument maker with this name is not known.

^{277.} Veste Coburg XXV/2, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/41 10702 (Version 29 July 2020).

^{278.} It was not possible to clarify which changes were associated with the later intervention, connected to the label "Samuel Goldt in Lübeck 1720 neu zugericht".

^{279.} MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110473 (Version 29 July

as the maker: "IN PADOVA Vendeliò // Venere 1603". The details on the available pictures suggest that the pegbox was placed on top of an existing neck during the alteration of the instrument in the second half of the 17th century. 280

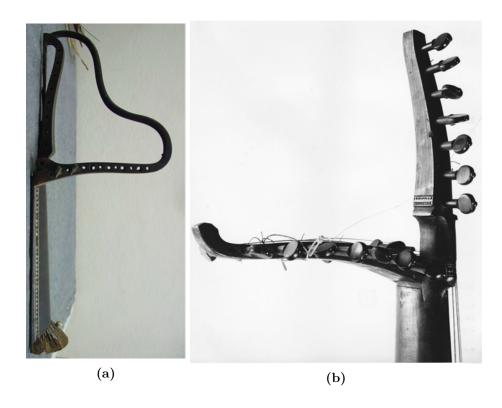


Figure 2.15: (a) Neck of the instrument altered by Bochem in 1673, Veste Coburg, XXV/2; (b) pegbox on corpus labelled "Vendliò Venere" HLMD Kg. 67:106

The construction of a pegbox with the bass strings situated next to the finger-

2020).

280. Two further known examples of this lute type could not be examined. One is mentioned by Curt Sachs in the catalogue of the collection of the Staatliche Hochschule in Berlin with a fake Laux Maler label. It has been considered lost since the end of the Second World War. See Curt Sachs, Sammlung alter Musikinstrumente bei der staatlichen Hochschule für Musik zu Berlin: Beschreibender Katalog (Berlin: Julius Bard, 1922), 180 The other is signed "Raphael Mest in Fiessen, Imperato // del Misier Michael Hartung in Pa- // dua me fecit, Anno 1633", and is preserved in the in the Chamber of Curiosities at the Diocesan and County Library of Linköping. See Kenneth Sparr, 'A Lute by Raphael Mest in Sweden', 2008, accessed 29 May 2021, http://www.tabulatura.com/Mestweb.htm.

2 Experiments: The Lute in the 17th Century

board was one way in which an 8- or 10-course lute might have been converted into an "English Two Headed Lute" with twelve courses lute without replacing the neck. Some extant examples, however, suggest that the neck was sometimes also replaced. None of the modifications can be attributed with certainty to England or France. Bocheim, (or Bochem), based in Cologne, was, on the other hand, geographically close to the Netherlands, where most iconographic representations of this type come from. The disappearance of this type of lute towards the end of the 17th century can be linked to the technological development of the wound string. In the fourth edition of John Playford's Skill of Music of 1664, the famous advertisement touting the "late Invention of strings" for the Basses of Viols and Violins, or Lutes, which sound much better and louder than the common Gut String under Bow or Finger" can be found, which is the first written testimony to this invention. "It is Small Wire twisted or gimp'd upon a gut string or upon Silk. [...] The best choice of these strings are to be sold at Mr. Richard Hunt's Instrument-seller at the Lute in St. Pauls Alley near Pater noster Row."281 It is not yet clear how widespread the wound string was among lutenists. Theoretically, however, this invention makes the advantages of the "English Two Headed Lute" obsolete, since the problem of uniform string thickness is solved by the wound string. At the end of the 17th century, the fashion for this type waned, and it is reasonable to assume that the old, valuable corpora found further use in other lute forms.

^{281.} John Playford, An Introduction to the Skill of Music, 4th ed. (London, 1664), n.p. Richard Hunts is the same instrument maker from whom Samuel Pepys had a new neck made in October 1662.



Figure 2.16: Hendrick Martensz. Sorgh: Lute player, 1661, Rijksmuseum Amsterdam, inv. no. SK-A-495 (detail)

The angélique

The angélique is a lute type of the 17th century that can be understood as the result of numerous experiments on the lute's sounding potential and developments in playing techniques. It is a theorboad lute type which can be traced back to the middle of the 17th century, and usually has 16 individual strings, tuned diatonically. The highest string is tuned in e'/E4, the lowest string can be tuned in $B_1/B1$ $C_2/C2$ or $D_2/D2$. Mattheson observed that the "angélique, which is somewhat similar to the lute, [...] is easier to play [...] without the left hand having to make any special effort." From today's point of view, one can distinguish an earlier, French type with the disposition 8x1/8x1 (eight stopped and eight unstopped strings) and a German type with the disposition 10x1/6x1, as represented, for example, by instruments by Joachim Tielke. Fuhrmann, however, referred to the angélique in his Musicalischer Trichter, published in 1706, as an "Engellisch Instrument", 284 which is perhaps based on

^{282. &}quot;Die der Lauten in etwas gleichende Angelique soll leichter zu spielen seyn […] ohne daß sich die lincke Hand sonderlich bemühen darff." Johann Mattheson, *Das neu-eröffnete Orchestre* (Hildesheim: Olms, 2002), 277.

^{283.} Friedemann Hellwig and Barbara Hellwig, Joachim Tielke: Kunstvolle Musikinstrumente des Barock (Berlin and München: Deutscher Kunstverlag, 2011), 123.

^{284.} Martin Heinrich Fuhrmann, Musicalischer-Trichter (Frankfurt/Oder, 1706), 91.

2 Experiments: The Lute in the 17th Century

a derivation of the name from the Germanic root *Angel* (as in "Anglo-Saxon"). Compositions for angélique, on the other hand, have survived mainly from France and Germany in various prints and manuscripts.

Several sources indicate the practice of adding to old lute bodies with th neck of an angélique. The earliest known mention of this type in 1648 in the inventory of Jean Desmoulins suggests that the instrument described is a modified lute: "Also a lute accommodated as angelique with three others equipped with their cases". 285 Talbot provides another clue to the practice of adapting lutes to this state. He described the angélique as "more proper for slow and grave lessons than for quick and brisk by reason of the continuance of sound when touched which may breed discord." 286 He explicitly named the "of pear-mould" form as a characteristic feature of the instrument. With this he refers to the popular Bolognese corpus form, which is the pre-eminent example for the continued use of old lute corpora. The perception of this lute type as the result of a combination of an old lute corpus with a new neck or pegbox also seems to be represented in contemporary illustrations. The illustration of the angélique on the engraving by Nicolas Bonnart made around 1690 (see fig. 2.17) shows that the bridge position is not central, but is clearly shifted towards the bass side, which is a distinct indication that more strings had been added.

^{285. &}quot;Item un luth accomodé en angelique avecq trois autres garnys de leurs estuys". Gétreau, 'Inventaire après décès de Jean Desmoulins', 28.

^{286.} Prynne, 'James Talbot's Manuscript (Christ Church Library Music MS 1187): IV. Plucked Strings - The Lute Family', 58.



Figure 2.17: Hand-coloured engraving by Nicolas Bonnart: 'Damon joüant de l'Angelique (1686-1690), Los Angeles County Museum of Art, M.2002.57.104

Only two instruments of the French type are known today and both were made using old lute corpora (see 2.18). One instrument is now held in the Yale Collection of Musical Instruments and could not be examined for this study.²⁸⁷

^{287.} Yale Collection of Musical Instruments (hereafter: YCMI) 4563.1960, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110532 (Version 29 July 2020).

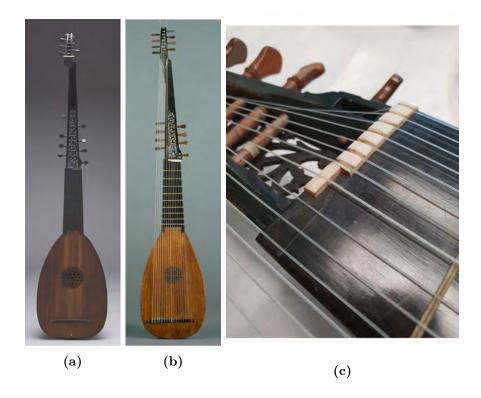


Figure 2.18: (a) Angélique, corpus labelled by Wendelin Tieffenbrucker, 17th century modification, YCMI 4563.1960; (b) Angélique MdlM E.980.2.317, (c) added piece of ebony in the groove of the upper nut

The symmetrical layout of the neck and the central positioning of the bridge, which can be seen in photographs of the instrument, suggest, however, that the neck, pegbox, and bridge were renewed when the instrument was built re-using a corpus signed "1592 // In Padova Vvendelio Venere". The other example, held in the Musée de la Musique in Paris (MdlM E.980.2.317),²⁸⁸ also shows clear indications of transformation from an earlier state.

The corpus corresponds to the characteristic Bolognese form described by Talbot and is signed "Joan D'arion // In Bollonia. 1574". No instrument maker of this name is known. The soundboard contains many inserted pieces, among

^{288.} MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110707 (Version 29 July 2020).

^{289.} A dendrochronological dating of the soundboard determined that the youngest annual ring was 1507. Report by Dr. Micha Beuting, 29.07.2021, Archive number Beuting: 5408701_210927.

them the rose. The pegbox, which is typical for the angélique, was probably placed on an existing neck. This is suggested by the position of the bridge, which is clearly shifted towards the bass side. The instrument, probably initially built as a 6- or 8-course lute, could have been converted to a 10- or 11-course lute beforehand. For this purpose, a reinforcing piece visible today in the X-ray image was added to the upper block (see fig. 2.24) and a new neck with a curved fingerboard was attached. In addition, a piece of ebony has been added to the groove of the upper nut, which would suggest that there was previously a continuous upper nut for ten or eleven courses, whereas the angélique only requires a smaller nut for eight individual strings. Later, the instrument underwent further alterations: reinforcement of the top and renewal of the bridge.

The few descriptions, illustrations, and material evidence of the 17th century angélique suggest that the practice of modifying old lutes was essential for producing this lute type. Some technological details, such as the neck width, the shape of the fingerboard, and the type of top bracing are very similar among the different types of instruments. This makes it possible to transform an existing instrument into a different state through minor modifications without replacing the neck. This is shown by the examples of the 12-course "Two Headed Lute" and that of the angélique in Paris. From the point of view of craftsmanship and economy, this practice saves time and material and is also an inexpensive method of reacting to the range of variations in the types of lutes that coexisted during this period and the constant changes to the instruments' ambitus. The other examples make it clear that the symmetry of the design and especially the position of the bridge need to be considered in order to determine whether or not the neck has been renewed.

The actual material evidence of the wide variety of lute types and forms that existed in the 17th century is, however, small. They are represented almost exclusively by additions to older lute corpora, which underlines the importance of the practice of modification. Today, the components of the two angéliques added to 16th-century lute corpora constitute some of the few material testimonies that can, in all likelihood, be linked to the French lute-making tradition of the 17th century.

2.4.2 Modifications of the corpus in detail

Modifications of the soundboard

Removing the top is a common repair technique on many stringed and plucked instruments. This procedure is most often undertaken for the purpose of maintenance or alteration. Lute tops usually have a thickness of only 1.0 to 1.9 mm and are reinforced by a system of bars on the back. Mace noted that the sound-board tends to warp inward above the first bar (as seen from the bridge), so it should be flattened with a hot iron after removal. According to Mace, a hot iron was also used when opening glued joints, cleaning away dried glue, and glueing cracks. It can often be observed in lute soundboards that the ends of the small rose bars have taken on a black colour due to the hot iron used in the glueing process. But such burn marks can also be observed in other places, which can come from the detachment of bars, glueing, or flattening of the soundboard (see. fig. 2.19). 290

When an instrument is altered and the number of courses are changed, the static load on the soundboard changes as well. Unless the tops of old lutes have been renewed, it must be assumed that the distribution of bars was designed for a smaller number of strings under less tension. A change in the number of strings would necessitate a change in the size of the bridge. Then, the bars would be partly replaced and redistributed. The earliest source in which the positioning of the bars is mentioned is the treatise by Henri Arnault de Zwolle;²⁹¹ however, it is impossible to compare this written account with actual practice due to the lack of extant instruments from this early period. In the 16th and early 17th century, a division of the soundboard length into eight or nine equal parts was common, for which there is much material evidence, which is also supported by Mersenne's account:

"Sixiesmement on barre la table en la diuisant en huict parties esgales, afin de coller ses six barres sur la 2,3,4,5,6 & 7, partie,

^{290.} Examples: (a) Lute with repair label by Andreas Berr, Boston Museum of Fine Arts (hereafter: MfA), inv. no. 1986.7, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110783 (Version 29 July 2020); (b) Lute, labelled "Laux Maler", MdlM E.2005.3.1; (c) Lute by Rudolph Höß, Germanisches Nationalmuseum, Nuremberg, (hereafter: GNM) MI1011, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110633 (Version 29 July 2020).

^{291.} Henri Arnault de Zwolle and François Lesure, Les Traités d'Henri-Arnault de Zwolle et de divers anonymes, Faksimile; Nach dem Expl. Paris: Bibliothèque nationale, ms. latin 7295, vol. 4, Documenta Musicologica (Kassel: Bärenreiter, 1972).

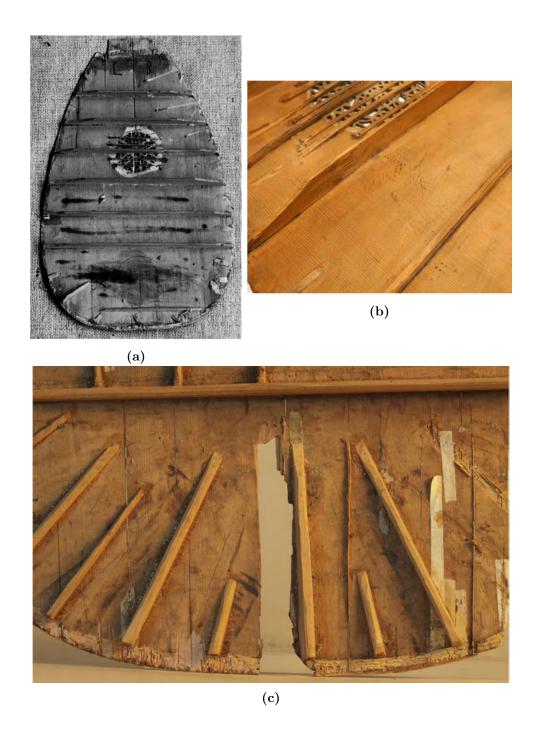


Figure 2.19: Burn marks on the inside of lute soundboards: (a) MfA 1986.7; (b) MdlM E.2005.3.1: also on the rose bars; (c) GNM MI 1011

car le manche commence sur la huictiesme partie au defaut de la table. Quant à la Rose, elle doit tellement estre située que son milieu se rencontre sur la 5. partie, sur laquelle la 4 barre est collée. Mais l'on use encore de deux ou trois autres petites barres que l'on metàcosté, lors que la table est foible: or toutes les barres trauversent la table, & aboutissent aux éclisses d'un costé & d'autre. [...] Mais il faut remarquer que les Facteurs adioustent encore d'autres petits barres plus bas que la premiere des grandes, ou en d'autres endroits selon la foiblesse de differentes tables ou suivant les experiences qu'ils ont faites, pour donner une meilleure harmonie aux Luths." ²⁹²

Sixth, one puts bars on the soundboard by dividing it into eight equal parts, to glue the six bars on the 2,3,4,5,6 & 7 part, because the neck begins at the eighth part on the end of the soundboard. Concerning the rose, it must be placed properly so that its centre meets with the 5. part, on which the 4th bar is glued. But two or three other small bars are used, which are placed at the back, when the soundboard is weak: now all the bars cross the top, & lead to the ribs from one side to the other [...] But it should be noted that the makers also add further small bars, lower than the first big ones, or in other places according to the weakness of the different soundboards or following the experiments they have made, to give a better harmony to the lutes.

In Hellwig's study of the construction of the lute soundboard, it becomes clear that Mersenne's description is an ideal which does not always match the surviving evidence.²⁹³ Mersenne makes no statement about reinforcing the area around the bridge. In the lutes of the 16th and 17th centuries, there were two main solutions to this problem. The first is that of a J-shaped crossbar on the bass side in combination with a variable number of smaller bars (fan bars) pointing from the edge towards the bridge and ending below the bridge. The second solution uses a variable number (usually six or seven) of these fan bars. While the first solution is usually associated with early instruments, the second seems to be a 17th-century development. The second solution gives the area under the bridge a greater degree of flexibility with enough rigidity

^{292.} Mersenne, Harmonie universelle: Contenant la théorie et la pratique de la musique. Seconde Partie. Livre Second, 49–50.

^{293.} See Friedemann Hellwig, 'On the Construction of the Lute Belly', *The Galpin Society Journal*, no. 21 (1968): 129.

2 Experiments: The Lute in the 17th Century

at the same time and may have arisen from the need to adapt a lute top initially designed for a lighter load to the stronger stress caused by a larger number of strings. This solution, which was eventually also implemented in the manufacturing process, can be understood as one of the consequences of reusing old instruments. Since Mersenne explicitly refers to the importance of the craftsman's experience in the choice of bracing, and since the soundboard is the central construction element for the sound, sound-aesthetic parameters must also be included in the considerations.

The soundboard of the lute held at the Musée de la Musique in Paris labelled "Laux Maler" is one of the few extant instruments that allow for a verification of the rules reported by Mersenne, since it represents the only known material evidence of French lute making from that period (see fig. 2.20). However, the inscription by Monsieur Dumesnil can only be dated very imprecisely to 1663 as terminus ante quem. Moreover, the instrument probably underwent a further change to a baroque guitar after Dumesnil's intervention and it is not clear from which period which part of the bracing originates. The scheme of the six crossbars is largely consistent with the instructions by Mersenne.²⁹⁴ The uppermost three bars (numbers 4-6, seen from the bridge) have a fine annual ring structure. It is evident from the surfaces of the sides that they were split off (rather than sawn) from a larger piece and the surface was not further planed afterwards. The bar below (number 3) also appears to be split, but has a broader annual ring structure. The second bar is also very widegrained and has a different profile from the others. The first bar again has a different profile. In the area of the bridge, there are five long and two short bars, irregularly arranged in a fan shape, whose shaping is not uniform. In this area and in other parts of the top, traces of earlier barring, such as a seemingly J-shaped crossbar on the bass side, can be seen.

^{294.} See Dugot, 'Laux Maler (c. 1495-1552): The Lute of the Musée de la Musique and the Fame of the Maker in France', 65.

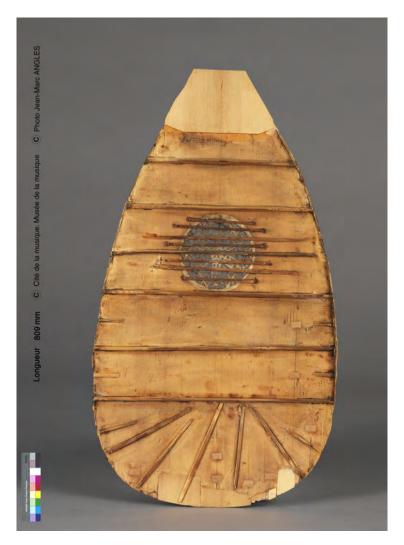


Figure 2.20: Soundboard of the lute labelled "Laux Maler", MdlM E.2005.3.1

While the uppermost bars, and those behind the rosette, show no signs of alteration, the bars below the rosette have probably been replaced and altered several times. The comparatively long fan bars project far into the bridge, which can be interpreted as a measure to strengthen this area, which has also been weakened by the repeated replacement and renewal of the bridge. The distribution and shape of the bars on old soundboards must be determined according to the existing stability of the top, which is why the solutions for old soundboards might differ from newer ones. The burn marks, which can also be found on the top of this lute, are evidence of a technique that can be traced back to the repair, reshaping, re-gluing and replacement of the bracing.

Attachment of a button

Next to the soundboard, the back, as a form-giving element as well as possible bearer of the signature, is the most important feature for determining the value and age of an instrument. This component, like the soundboard, is subject to various material changes related to the adaptation of lutes to changes in musical culture. A comparatively small modification in this context is the addition of two buttons – one in the cap at the lower end of the instrument and one at the joint of the body and the neck – that allowed the player to fasten a ribbon or string to the instrument, which could then be attached to the player's body or clothing. The oldest surviving instruments now considered to be unchanged, as well as illustrations of the 16th century, show such buttons only on theorbos. In many 17th century illustrations, however, these buttons can be found on smaller lute instruments, which bear other markers of later modifications (See fig. 2.21 and fig. 2.2).



Figure 2.21: Frans van Mieris (I): The Letter Writer (detail), 1680, Rijksmuseum Amsterdam, inv. No. SK-A-261

The attachment of the instrument to the body or clothing is related to the codified posture and practical considerations of playing. To what extent this development was related to changes in playing posture, performance practice, fashion, or dress code is beyond the scope of this study. In any case, this modification is part of the beginning of a long history of searching for solutions to facilitate the posture of instruments by means of auxiliary elements (guitar straps, chin rests for violins, etc.).

Attaching these small buttons required drilling small holes in the cap and usually the middle rib of the back where it was attached to the upper block.

The buttons could be made of materials such as ebony, ivory, or bone.



Figure 2.22: Various buttons presumably added later: (a) Corpus signed "Jacob & Ulrich Tieffenbrucker // In Venetia.", ca.1550, altered 1696 by Thomas Edlinger (private property, Vienna), mXp 4110943; (b) Corpus signed "Magno dieffopruchar a venetia // 1604", alteration by Matthias Fux, Vienna 1685, Kremsmünster Abbey, decorated button (detail) and profile of upper button visible in X-ray, mXp 4110503

Changes to the upper block

While the reduction of lute corpora seems to have been a comparatively rare occurrence, the majority of 17th-century conversions involved a widening of the neck to accommodate a greater number of strings. The neck width of the

common types of ten-, eleven- or twelve-course lutes or the angélique hardly differs and can also be determined by the individual requirements of the player. The central component affected by this modification is the upper block, which connects to the neck. When an instrument was converted to a type with more courses, in most cases the old neck was exchanged for a new, wider one.

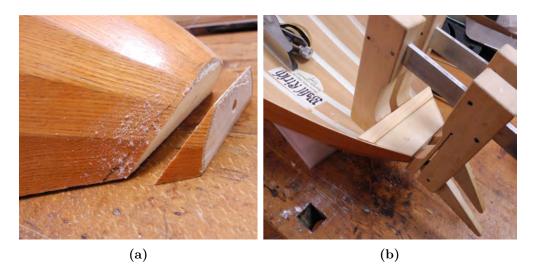


Figure 2.23: (a) Cut upper block (b) reinforcement, both on an instrument made during this dissertation

Connecting the new, wider neck to the corpus required cutting the upper block at an angle in order to create a larger contact area on which the new neck could be glued. This alteration not only changes the angle of the joint between the neck and the corpus, but also the dimensions of the top block. By doing so, the stability of this component is weakened and the connecting surface to the top is reduced. On many instruments it can be observed that an additional piece has been added to the inside of the upper block to compensate for the loss of material, and stabilise this structurally important component. While the upper blocks of early lutes were usually made of a wood such as poplar, a piece of coniferous wood with a thickness of about 1.5 to 2 cm was often added as a support. However, only a very small piece of the original block remained. The stabilising function is mainly taken over by the supplementary piece.

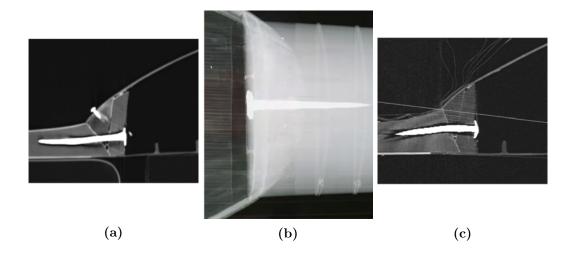


Figure 2.24: Upper block reinforcements visualised by radiographs: (a) CT section of the lute repaired by Jakob Weiß in Kremsmünster, mXp 4110982; (b) Angélique, MdlM E.980.2.317; (c) CT sectional image of lute signed by Michael Garttner, Salzburg Museum 1087

"Cut Lutes"

A technically complex method of reusing old lute corpora is referred to in Burwell's Lute Tutor:

"We have lutes that they call 'cut' lutes – that is, when of a great lute they will make a little one, which is done in cutting off something of the breadth and length of every rib, and then joining them together upon a little mould. A lute of twenty pound, lessend so, is not worth £5." 295

Large lute backs were produced for theorbos and bass instruments in the lute consort in several sizes. There are only four extant instruments that show this kind of alteration. In three cases the bodies were reduced in size for the production of a basso continuo theorbo and in one case to make an 11-course lute. From a technological perspective, two techniques for reducing the size of corpora can be distinguished.

A rather simple way to reduce the size of a lute back is to saw out a piece in the middle and glue the body back together. This technique can be observed

^{295.} Dart, 'Miss Mary Burwell's Instruction Book for Lute', 11.

on an instrument altered by Jakob Weiß in Salzburg in 1714, currently in Kremsmünster Abbey (hereafter: KrAb).²⁹⁶ The joint in the middle of the instrument is clearly visible between the numerous ribs and in the cap. As the cross section of a X-ray computed tomography shows, the upper block has also been cut. After the two halves were joined, the counter cap on the inside was renewed to provide stability. The same technique can also be observed in a chitarrone from the same collection in Kremsmünster, which is now kept in the Upper Austrian State Museum in Linz.²⁹⁷ A similar modification was undertaken with an instrument held in the Deutsches Museum in Munich.²⁹⁸ Here, it is also evident that the ribs of the back no longer run parallel to the plane of the soundboard as a result of the modification.

A second, technically more elaborate possibility, which corresponds exactly to Burwell's descriptions, can be found in an instrument, held in a private collection in Vienna, altered by Michael Alban in Graz at the beginning of the 18th century (see fig. 2.26).²⁹⁹ The back, originally made of 31 yew ribs, was cut into eleven segments and these were reassembled over a smaller form. The present shape is elongated, tapers to a point at the base of the neck and is roundish in cross-section. The rim is fitted with an outer ebony lining, which increases the glueing area for the overhanging rim. The use of an overhanging rim, which is otherwise unusual for lutes, could be due to the aesthetic consideration of making the soundboard appear somewhat larger overall and setting the relatively large rosette of 109 mm in a more well-proportioned space. The soundboard was also cut into three parts and reassembled. Michael Alban clearly indicated the reconstruction on the repair label, decorated with a panther, the coat of arms of Graz: "MICHAEL ALBANUS // me antiquis ex Monu- // mentis in hoc opus // redegit Anno 17 (date illegible)". The literal translation reads: "Michael Albanus restored me from ancient monuments to this work." The reference to the old state underlines the importance of the old work, whose historicity is emphasised by the use of the word monument.

^{296.} MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110982 (Version 29 July 2020).

^{297.} Oberösterreichisches Landesmuseum Mu 66, See Sebastian Kirsch and Klaus Martius, Die Lauten des Stiftes Kremsmünster, 1. Auflage, vol. 1, Laute, Mandora und Theorbe im Stift Kremsmünster (Peißenberg: Peißenberger Lautenverlag, 2020), 112–115, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110722 (Version 29 July 2020).

^{298.} Deutsches Museum Munich, (hereafter: DM) 35252. MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110450 (Version 29 July 2020).

^{299.} MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110945 (Version 29 July 2020).



Figure 2.25: (a) Back of a lute altered by Jakob Weiß (KrAb, mXp 4110982) with joint in the middle; left: Joint visible CT cross-section of the upper block. (b) Corpus, anonymous, joint in the middle of the back, Öberösterreichisches Landesmuseum Mu 66. (c) Cut-down corpus, unsigned, joint in the middle, DM 35252



Figure 2.26: Theorbo, altered by Michael Alban; top right: repair signatures of Alban and Josef Krenn, joints of segments visible; bottom right: View from above: eleven segments form the newly assembled back

All four of these lute backs were originally made from narrow yew ribs. The characteristic striped design of the numerous ribs, alternating light and dark, hides the glued joints well. On an instrument with only a few wide ribs, this intervention would be more obvious. As shown in the Burwell quote at the beginning of this section, reducing the size of the instrument reduces its value significantly, from £20 to less than £5. For Burwell, the loss of the material integrity of the back is a significant factor in the depreciation of the instrument's worth. This would indicate that this type of alteration was a practical solution to reuse large instruments in a different musical context or to adapt them to personal needs or body size. In this context, the monetary value of the old object as a commodity, or investment, recedes into the background. Rather, the modification seems to be seen as a favourable solution compared to the production of a new lute back. The situation is different with the modification carried out by Michael Alban. Through the clear written reference to the fact that he has converted an old instrument, putting it into a modern state, he emphasises the historicity of the object, venerating it for its age and its function as a monument to the past.

2.4.3 Specific features signifying age

Adapting old lutes to changing fashion often required creative solutions, given the inherent technological constraints of the old object. Over time, the visibility of some of these alterations – showing a long series of modifications – became independent, typological features signifying the object's age. A functional aspect that becomes a decoration or signifier is called a typological rudiment in the typological method developed by the archaeologist Oscar Montelius. These features can have a meaning within the cultural framework and can be understood within a social group. Two details identifiable within the practice of lute alteration can be traced in written sources, representations, and through material evidence: the reinforcement of the joint between the top and the back by means of a surrounding band of cloth or parchment, and the so-called fingerboard tips. These typological rudiments can serve as signs of an old instrument and of the maleability of its form.

^{300.} See Oscar Montelius, *Die typologische Methode* (Stockholm, 1903), 17 and Manfred K. H. Eggert and Nils Müller-Scheeßel, *Prähistorische Archäologie: Konzepte und Methoden*, Vierte, überarbeitete Auflage, vol. 2092, UTB Archäologie (Tübingen: Francke, 2012), 196–199.

Lace

According to Mace, the top of the lute had to be removed about once a year for repairs. Before the joint of the soundboard could be opened, however, the "lace" had to be removed. Talbot's dialogic description also mentions this reinforcement of the joint between the soundboard and the corpus: "What is the lace which is usually paper parchment sometimes silk or silver; tis glued on to join back and belly."³⁰¹ Mace recommends, "if it be *Silk* or *Silver*, and that it shall serve again, take This Course with it:"³⁰² one should soak the tape with water, heat it with a red-hot iron, whereupon it could be peeled off. Finally, he offered instructions on how to reattach the lace after completing the repair. The lace was applied as a reinforcement of the joint, which was damaged by the frequent removal of the soundboard during repairs and modifications.

Only a few of these textile reinforcements are extant on surviving instruments (see fig. 2.27).³⁰³ In most cases, the fabric is a rep weave. This type of fabric is particularly resistant to abrasion and was used, for example, for bag handles, straps, or to reinforce the spines of books. Ornaments in the fabric could be produced by variations in the weft thread. The textile band on the instrument in Kremsmünster is a board-woven border with silver wire. In this very elaborate production process, the threads are twisted into cords during weaving. This kind of braid was often attached to paraments and other luxury items.

^{301.} Prynne, 'James Talbot's Manuscript (Christ Church Library Music MS 1187): IV. Plucked Strings - The Lute Family', 55.

^{302.} Mace, Musick's Monument, 56.

^{303.} In the course of this study, only six examples could be found that were securely datable to the 17th century.

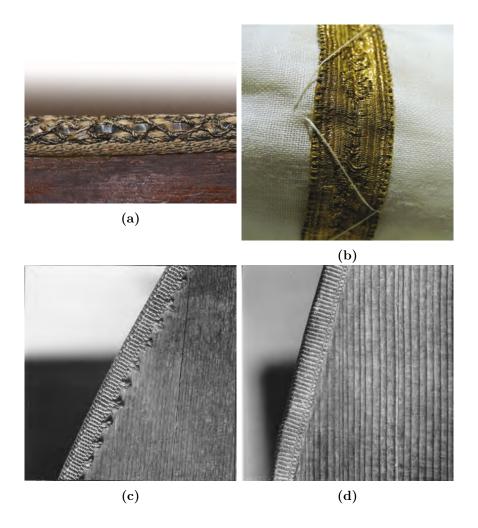


Figure 2.27: (a) Rep weave, (b-d) board weave. (a) Corpus labelled "Hans Frei in Bologna", KrAb mXp 4110287. (b) Textile ribbon to the lute with repair label by Andreas Berr, Boston MfA 1986.7. (c) Corpus by Georg Greiff, HLMD Kg 67:103. (d) Corpus labelled by Wendelin Tieffenbrucker, HLMD Kg 67:1066

In numerous paintings and illustrations from the 17th century, a border is depicted on the lute front. Often a careful depiction of the materiality of the textile band can be observed, for example, when the use of a precious metal in the fabric is indicated by prominent gold or white highlights. The characteristic tight threads of the rep fabric are also clearly represented in some paintings (see fig. 2.28). Decorative details like those in the textile braid around the corpus labelled by Greif (see fig. 2.27 (a)) find their expression

in the illustrations by Abraham von Bosse in Gaultier's *Rhétorique des Dieux* (see 2.2.3, fig. 2.5).



Figure 2.28: (a) Laurent de la Hyre: Allegory of Music (detail), 1649, Metropolitan Museum of Art, inv. no. 50.189; (b) Lute Player (detail), French School, Hamburger Kunsthalle, inv. no. 532

The cultural significance of this sometimes highly decorative reinforcement becomes clear by the analysis of the iconographical sources. In total, 70 paintings were analysed, dating from the time between the first depiction of a lace in 1626 and the last in 1710.³⁰⁴ It proved possible to identify this characteristic feature in 43 of these paintings.³⁰⁵ The most frequent representations are encountered in Dutch genre paintings, in which the lute was a popular motif, but numerous illustrations can also be found in France and England (examples from Germany and Italy have yet to be discovered). In this form of representation, everyday scenes, generally understood symbols and situations were depicted, behind which a moral or allegorical statement could be hidden. The coded interpretative framework of genre paintings and portraits suggests that the exact depiction of the lace is not merely a negligible, naturalistic representational element. Rather, this detail serves to identify the depicted instrument as the product of various repairs and modifications and thus to distinguish it from a new, flawless, contemporary product.

^{304.} First: Frans Hals: Boy with a Glass and a Lute, Guildhall Art Gallery, London, inv. no. 3725; last: Charles Coypel: La Marechalle de Villars, Chateau de Vaux le Vicomte, no inv. no.

^{305.} The paintings or illustrations cited in this work so far mainly contain a depiction of this technical detail.

Fingerboard tips

Fingerboard tips are pointed decorative ends on the sides of the fingerboard that protrude a few centimetres into the soundboard at the transition between the neck and the corpus. The emergence of this design element, which is characteristic of lutes, can be dated on the basis of iconographic evidence to the period between 1580 and 1600 and thus coincides with the period of the first expansion of the lute's ambitus from six to seven or eight courses. The origin of this decorative detail can be linked to the practice of modifying lutes. The fact that the spacing of the fingerboard tips marks the previous width of the neck would make them a sought-after detail on old corpora, and a mark of an old instrument. If traces of old fingerboard tips are found, it means that the instrument was previously in a different state. This detail is therefore a reference to the knowledge of the history of lute development and marks the instrument as old.

The painting *The Lute Player* by Caravaggio dates from the time of the first use of this decorative detail. The version commissioned by Vincenzo Giustiniani in 1595, now in the Hermitage in St. Petersburg, depicts a lute with six courses. The fingerboard is depicted in a brown tone, as in many 16th century paintings, and fingerboard tips are not visible. In the version made only one to two years later for Cardinal Francesco Maria Del Monte, which is now on loan to the Metropolitan Museum in New York (hereafter: MET), a lute with seven courses and a fingerboard with fingerboard tips is depicted. The typology and design features of this instrument differ from the version in St. Petersburg and point towards the 17th century. Thus the black colour of the fingerboard, the bridge, the pegs, and the spacers between the ribs of the corpus contrast with the brown colour of the top and the ribs. This contrasting pattern reflects the use of ebony and differs from the uniform colour design often seen on 16th century paintings.

^{306.} Keith Christiansen, A Caravaggio rediscovered: the lute player: Issued in conjunction with an exhibition held at the Metropolitan Museum of Art from February 9, 1990, to April 22, 1990 (New York, NY: Metropolitan Museum of Art, 1990), 44.



Figure 2.29: Caravaggio: Lute Player (a) Version in the Hermitage, St Petersburg, painted 1595-96 (inv. no. ge-45); (b) Version in the Metropolitan Museum of Art, New York, painted 1596-97 (inv. no. 52.81)

The painting shows the use of the fingerboard tips on an instrument with seven courses. This could indicate that there may have been a technical necessity for the introduction of this design detail. If an instrument is extended from six to seven or eight courses by replacing the neck, a reinforcement as described under section 2.4.2 is not necessary from the statics point of view. If the soundboard were to be cut off at the end of the fingerboard or slightly above it, as is often seen in representations of lutes with six courses, only a small bearing surface would be left on the upper block. If one keeps the original top length, there now free space at the edges. With the addition of the side extensions of the fingerboard and the characteristic gradation of the top block, this space is elegantly filled and sufficient bearing surface is ensured on the top block.

If one were to copy the design shown in the older version of Caravaggio's painting, and cut the top at the end of the fingerboard, the length of the soundboard would have to be reduced. Only a small area would be left for connecting it to the upper block. When the original length of the soundboard is kept, a free space appears at the edges, which has to be filled. By using the pointed fingerboard tips, this space is filled in an aesthetically pleasing way, while providing enough glueing surface on the upper block at the same time. This characteristic design feature, which can be described as a typological rudiment, can thus be explained by the necessity of a technological constraint.

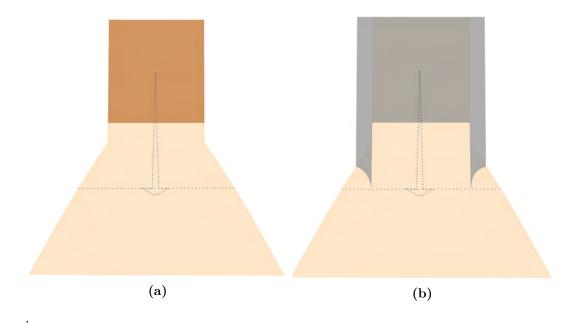


Figure 2.30: (a) Schematic representation of the neck transition for a lute with six courses; (b) Widening of the neck for a lute with eight courses while retaining the dimensions of the old top (previous dimensions highlighted by shading)

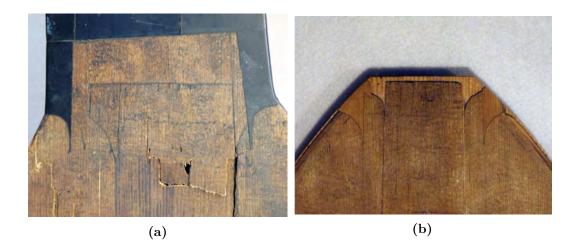


Figure 2.31: Three generations of fingerboard tips: (a) Corpus signed "Hans Frei" in Stift Herzogenburg; (b) Top with brand to the corpus signed by Giorgio Reicart, MIMB 4666

If the neck width of lutes is eventually widened to ten or more courses, the recesses provided for the fingerboard tips remain and mark the neck width of the previous state. In many cases, these recesses are found to have been filled in with wood, making them a subtle sign of a modified instrument. For example, on a lute corpus labelled "Hans Frei" in the Herzogenburg monastery, a total of three generations of fingerboard tips can be identified.³⁰⁷ Another example is a top belonging to a body signed by Giorgio Reicart (MIMB 4666),³⁰⁸ which also has three recesses next to the preserved brand mark in the upper area of the soundboard, which indicate different former neck widths.

The recesses were sometimes filled with a contrasting material, deliberately drawing attention to the modification and, therefore, to the instrument's age. In the painting made by Eustache Le Sueur in 1640 for Anne de Chambré, the lutenist Denis Gaultier is portrayed holding an instrument with clearly highlighted double fingerboard tips (see fig. 2.32). This detail can also be seen on the angélique held in the musical instrument collection at Yale University, made in the second half of the 17th century by using an older corpus. At the beginning of the 18th century, the feature of double fingerboard tips can be found again in instruments from the Tielke workshop (see fig. 2.33). In his product range, Tielke combined numerous successful concepts of the 17th century musical instrument market. These included, in addition to the artistic design and valuable materials, the exclusive use of the Bolognese form for lute corpora. In taking up the double fingerboard tips, Tielke exploited the prevailing knowledge about old instruments and the association of this detail with a valuable instrument and a luxury product.

The emergence of fingerboard tips as a characteristic lute design detail can be explained by the adaptation of the corpora in the course of the expansion of the ambitus. As a typological rudiment, it continued to be used - detached from its original function - and eventually becoming an established characteristic. Later, the presence of several generations of fingerboard tips became a characteristic of old instruments. Finally, in Tielke's instruments, this form was used, detached from the use of old corpora, as an aesthetic sign to indicate a luxury product.

^{307.} MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110300 (Version 29 July 2020).

^{308.} MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110453 (Version 29 July 2020).

^{309.} Extant instruments by Tielke with double fingerboard tips date from the years 1702 - 1707: TieWV 131, 139, 142, 149, 147, 156. Hellwig and Hellwig, *Joachim Tielke: Kunstvolle Musikinstrumente des Barock*, 121–136.



Figure 2.32: (a) Eustache Le Sueur: Réunion d'amis, 1640 (commissioned by Anne de Chambré), Louvre inv. no. INV 8063; (b) detail: the lutenist Denis Gaultier holding a lute with highlighted fingerboard tips



Figure 2.33: Double fingerboard tips on a theorbo from the workshop of Joachim Tielke, National Music Museum, Vermillion (SD) 4003

Conclusion

The musical development of the lute during the 17th century was characterised by the exploration of the tonal possibilities of the instruments through

an expansion of their ambitus and extensive experimentation with their tuning systems. These developments were motivated by a change in the lute's repertoire: while it had previously been used for playing intavolated and polyphonic vocal music, during the Baroque era it came to be seen as an idiomatic instrument, for which specific repertoire was written. This process of emancipation was instigated, in part, by the emergence of an exclusive performance situation. The lute became a kingly thing by virtue of its association with the upper classes, and shared similar features with other luxury goods. As an object, it took over several functions: musical tool, topos in diverse aesthetic concepts, social status symbol with close links to the body, commodity, and collectible.

During a period of crisis, marked by the Thirty Years War and the plague, old lutes came to be valued for their quality and scarcity. Moreover, they came to be seen as primary objects – the esteem of their noble lineage, I have argued, is comparable to the authority and reverence accorded to monarchs due to their patrilineal succession. The quality of age became increasingly associated with the lute body alone. In its materiality and form, and as the carrier of the signature, the lute body served as the signifier and could be traded as a fragment. Due to their modular construction, lute bodies could be modified and adapted to the numerous lute types that coexisted during this period. Instruments like the angélique and the double-headed lute were lute-types that were strongly connected to these modifications. In Italy, Antonio Stradivari modified lutes in a unique style that paid homage to the hegemony of French lute music at that period.

During the 17th century, the foundations for the concept of venerating old instruments were established. This included the preference for certain brand names, materials, the connection of the objects with a narrative about the makers or the previous owners, and the establishment of the status market as a trading platform for old lute bodies. The characteristic visible features – especially of Bolognese lutes – became common knowledge and were present in a variety of aesthetic concepts. The explorative change of musical fashions resulted in constant adaptations of old lutes. Some technological details, like the presence of multiple fingerboard tips and the lace around the soundboard, became signifiers for old instruments and were echoed in visual arts. One of the most important lute types to emerge from this period of experimentation was the 11-course lute in the French style. Due to the limited material evidence of French lute making, however, a nuanced and multivalent approach will be necessary in order to understand the origins and the technology of this lute

2 Experiments: The Lute in the 17th Century

type, as well as its musical and cultural contexts. This topic will be explored in the following chapter.

3.1 Musical Adaptations and Stylistic Developments

During the 17th century, France and the Habsburg-ruled Holy Roman Empire were adversaries fighting for political hegemony in Europe. Despite their political differences, however, French lute music was popular in the Habsburg lands, especially in Austria and Bohemia. The technical and aesthetic qualities of French lute music caused a particular musical style to develop there, which in turn influenced Austrian and Bohemian preferences for certain lute instruments.

After the Peace of Westphalia in 1648, the Habsburg family in Vienna controlled the major part of the Holy Roman Empire. In the decades after the Thirty Years' War, Vienna was hit hard by the plague in 1679 and by the second Ottoman siege in 1683. Conflicts between France and the Habsburgled Roman Empire would lead to the Nine Years' War (1688–1697) and, later, to the War of the Spanish Succession (1701–1714). Nevertheless, during this period of war and crisis a rich musical and artistic culture was maintained in cities such as Vienna and Prague by members of the upper classes. Due to its portability and musical autonomy, the lute played an important role in musical life during this period. As Burwell mentions, it "maketh alone a consort of music" and therefore could serve as a mobile tool for entertainment during times of war, travels and shortages of resources. For instance, the French lutenist Jacques-Alexandre de Saint Luc, in the service of Prince Eugene of Savoy, followed him as a musician and military officer in several campaigns against France. 311

Lute playing was intrinsically connected to the cultural life of the upper nobility and was, therefore, influenced by the taste of the court. Emperor Joseph I. (1678-1711) was an avid amateur composer and guitarist. Among his numerous compositions is also one piece for lute.³¹² His wife Wilhelmina Amalia of Braunschweig and Lüneburg was a skilled lute player as well. The most famous lutenist and composer, Jan Antonín Losy, Count of Losinthal, and also Wenzel Ludwig Baron of Radolt, served as imperial officials. There are even examples of lute players with great influence on the Austrian cultural elite being granted titles by the Emperor. Mathias Biechteler, who performed

^{310.} Dart, 'Miss Mary Burwell's Instruction Book for Lute', 47.

^{311.} Elisabeth Maier, 'Art. Saint Luc, Jacques-Alexandre (Laurent?) de ', 2001, accessed 5 July 2021, https://www.musiklexikon.ac.at/ml/musik S/Saint Luc Jacques de.xml.

^{312.} Aria composée del' Empereur Josephe, CZ–B
m ${\rm A}13.268,$ olim Raigern Mus. 2.

twice for the Emperor was ennobled by Charles VII. in 1723.³¹³

Noble families acted as patrons for art and music and imitated the courtly custom of musical education and performances for prestige purposes.³¹⁴ The most important collections of lute music established by the families Goëss, Lob-kowicz and Harrach bear witness to a rich musical life as one of the pastimes of the nobility. Monasteries like in Kremsmünster – often populated by the sons of the aristocracy – also served as cultural and musical hubs. Untitled lute players and composers such as Ignaz Hinterleithner (1659 – 1710), Gabriel Matthias Frischauff (before 1675 - 1726) and Johann Georg Weichenberger (1676 – 1740) were employed as accountants and directly influenced by the cultural life of the court. In fact, the number of people with civil occupation who were also part-time musicians and composers was quite high and is an expression of the vivid musical activity of the bourgeoisie that copies the courtly lifeforms.

The artistic taste of the Habsburg court was dominated by the Italian style and the aesthetic campaign of the Counter-Reformation conducted by the Roman church. The court's preference for Italian music is evident by the employment of numerous Italian musicians and composers, such as Antonio Draghi, Carlo Agostino Badia and the renowned theorbo player and opera composer Francesco Conti. Moreover, all 150 Arias composed by emperor Joseph I are in Italian. Despite the distinct artistic differences and strong political tensions that existed between the Holy Roman Empire and France, the French lute style soon took root in the Habsburg lands, where it was then adapted and incorporated into a unique musical style. This cultural exchange was due,

^{313.} Ennoblement of imperial officers, in general, was an important method of maintaining the hierarchical social structure. Other examples, such as the ennoblement of the architect Johann Bernhard Fischer (von) Erlach in 1696, underline the importance of arts in imperial society as well as the possibilities for social advancement. Karl Vocelka and Anita Traninger, eds., *Die frühneuzeitliche Residenz (16. bis 18. Jahrhundert)*, vol. 2, Wien - Geschichte einer Stadt (Wien, Köln, Weimar: Böhlau, 2003), 242.

^{314.} Cäcilia Smole, Viel fürsten halten ein musica: Die Musik- und Festkultur in Adelskreisen des 17. und 18. Jahrhunderts am Beispiel der Familien Goëss, Harrach, Orsini-Rosenberg und Porcia (Saarbrücken: Süddeutscher Verlag für Hochschulschriften, 2008).

^{315.} Kuchelbecker remarks in his description of Viennese court life in 1730 the presence of many well-paid Italian musicians, so that the "Kayserliche Capelle und Cammer-Music fast aus lauter Italiändern bestehet" (consists almost only of Italians) Johann Basilius Küchelbecker, Johann Basilii Kuchelbeckers allerneueste Nachricht vom Römisch-Käyserlichen Hofe: nebst einer ausführlichen historischen Beschreibung der kayserlichen Residentz-Stadt Wien, und der umliegenden Oerter, theils aus den Geschichten, theils aus eigener Erfahrung zusammen getragen und mit saubern Kupffern ans Licht gegeben (Hannover: Förster, 1730), 261. This trend lasted until the 18th century, see Vocelka and Traninger, Die frühneuzeitliche Residenz (16. bis 18.Jahrhundert), 527.

at least in part, to the general spread of French court manners and language among European nobility during this period. It can also be attributed to the power of the French music market and the mobility of professional lutenists such as François Dufault, a pupil of Denis Gaultier who visited Vienna, or the former chamber lutenist of Louis XIV, Saint Luc, who finally settled in Austria.

All extant manuscripts compiled in the Habsburg lands after 1640 contain mainly French compositions or features of French musical style. For example, all 44 manuscripts listed in Meyer, 316 which were produced in the Habsburg lands between 1640 and 1740, share features such as the notation in French tablature, the application of different tunings in the accords nouveaux, and an emphatic prominence of the 11-course lute. The earliest evidence of French instruments in the Habsburg lands can be found in a 1665 inventory of the Hofburg in Innsbruck where, among many other plucked instruments, six French lutes are listed.³¹⁷ Esaias Reusner the younger (1636-1679), trained by a French lutenist, published subsequently widely disseminated Delitiae testudines in 1667 for 11-course lute in the French lute style. The famous Cabinet der Lauten by Philipp Franz Le Sage de Richée, published in 1695, refers explicitly to the well known French lute masters. The author states that his book "is set out after the basic rules of the most famous masters Messieurs Du Faut, Gaultier and Mouton; the latter I heard myself and was so fortunate to have been his pupil."318

Cultural life in the Holy Roman Empire was relatively stagnant during this period – a consequence of decades of war and crisis – as a result the robust French music market made easy inroads into the Habsburg lands. In Austria, French compositions, the *style brisé*, and forms like the dance suite became widespread. Many details of the French playing style can be found in Austrian lute instructions. Radolt, for example, explains the *étouffement*, a staccato

^{316.} Christian Meyer, Sources manuscrites en tablature. Luth et théorbe (c. 1500 - c. 1800). Catalogue descriptif: III/1. Österreich, vol. 90, Collection d'études musicologiques (München, 1997); Christian Meyer, Sources manuscrites en tablature. Luth et théorbe (c. 1500 - c. 1800). Catalogue descriptif: III/2. République tchèque (CZ), Hongrie (H), Lituanie (LT), Pologne (PL) Fédération de Russie (RF), Slovaquie (SK), Ukraine (UKR), vol. 93, Collection d'études musicologiques (München, 1999).

^{317.} Stefan Hackl, Die Gitarre in Österreich: Von Abate Costa bis Zykan (Innsbruck: StudienVerlag, 2012), 15.

^{318. &}quot;Was Du in meinem Cabinet sehen wirst, ist nach den Grund-Regeln der berühmtesten Meister Messieurs Du Faut, Gautier, und Mouton eingerichtet, welchen letztern ich selber gehöret, auch das Glück gehabt sein Lehrling zu seyn" Le Sage de Richée, Franz Philipp, Cabinet der Lauten (Breslau, 1695), n.p.

ornament which can also be found in the music of Mouton. Furthermore, he uses the distinction between big and small letters in the tablature to indicate whether the lower or the higher octave of a bass course should be played. This nuanced handling of the bass strings echoes the dismissive attitude towards loud basses found in Burwell's lute tutor, which outlined the French style.

However, the blending of this new French style with features stemming from the Italian opera tradition resulted in the development of a distinctly Habsburgian musical style. For example, composers began intabulating Italian opera arias and applying the da capo aria form to lute compositions. Furthermore, Italian movement types such as capriccio, aria pastorale, and toccata became common in dance suites, appearing next to French sarabandes and gavottes. Austrian folk melodies were also incorporated into new compositions. These developments resulted in a style that was perceived as more 'cantabile' than the relatively fragmented melodic form of French compositions. The German lutenist and composer Ernst Gottlieb Baron (1696-1760) described it as a "unification of the harmonic nature of the cantabile with well selected melodies." Baron notes that Losy, an illustrious virtuoso, "has already so happily combined the Italian and French Method of treating this instrument that he composed not only very gracefully and cantabile for the ear, but also artistry and a firm ground." and in ground."

Not only was a unique style developed in the Habsburg lands, but also a distinctive musical genre. Around 1700, the lute concert was established in Vienna, which remains a unique phenomenon in the history of the repertoire for plucked musical instruments. It is less a solo concerto in the Italian style, in which a solo instrument is accompanied by an ensemble, 322 but rather this genre emerged in order to make solo lute accessible to other instruments and create more social opportunities for musical practice. In a lute concert, the

^{319.} See Tim Crawford, 'Teaching and learning lute in baroque Austria', $Lute\ News,$ no. 116 (2015): 18.

^{320.} Radolt uses in his "Aller Treüeste Freindin" (1701) a diversity of movements. His 8th "concert" is organised as: Ouverture, Aria pastorale, La Guerelle des Amants, Menuette en Canon, Capricio en Canon, Guigue, Menuette. Wenzel Ludwig von Radolt, Der Aller Treüesten Verschwignesten und nach so wohl Frölichen als Traurigen Humor sich richtente Freindin (Wien: Johann Michael Nestler, 1701).

^{321. &}quot;Dieser hochberühmte Meister, hat schon die neue Italiänische und Frantzösische Methode dieses Instruments zu tractiren, so glücklich combinirt, daß er nicht allein sehr anmuthig und Cantable ins Gehör, sondern auch Künstlich und Fundamentel componiret hat." Ernst Gottlieb Baron, Historisch-theoretische und practische Untersuchung des Instruments der Lauten (Nürnberg: Johann Friedrich Rüdiger, 1727), 74.

^{322.} See Hackl, Die Gitarre in Österreich: Von Abate Costa bis Zykan, 17.

parts that would usually have usually been played by one lute are separated into parts that could be played or doubled by other instruments such as violins, flutes or viola da gamba. Typically, the lute concert was orchestrated in such a way that the flutes and violins played in a higher register and the bass instrument might have extended into a lower register than the lute part. In addition to creating a more social musical scenario, this genre added volume and timbral complexity to the solo lute texture. Music for solo lute, which used to be considered a whole consort in and of itself, was therefore transformed into chamber music.

The first known concert for violin, bass, and lute was published by Ferdinand Ignaz Hinterleithner in 1699. This tradition was continued by composers like Wenzel Ludwig Baron of Radolt, Wolf Jakob Lauffensteiner (1676-1754), and Carolus Ignatius Kohaut (1726-1784), and became extremely popular as a genre. In contrast to the theorbo, the lute – especially in the French style – was considered a solo instrument, particularly associated with the nobility. As part of an ensemble, however, the lute leaves the confines of the solitary nobleman and his selective audiences of erudite listeners, becoming more social, and entering the wider world of musical consumption.

The social and aesthetic concept of the lute concert, as well as the mélange of the French and the Italian styles, can be understood as a continuation of the exploration of the wide range of aesthetic expressions of the lute as well as an attempt to implement the social factor of chamber music. The emergence of a local musical style also suggests the development of a distinct instrumental sound ideal that differs from the French. At first, the French 11-course lute type was adapted in the Habsburg lands and with it also the fashion of using old lute bodies by the early and famous makers from Bologna, Venice or Padua. In order to perform French music as well as the new musical style, the conflict-laden task of adapting an instrument to a musical sound for which it was not initially made continued as well.

3.2 Significance and Agency of Old Instruments in Musical Culture

In the 17th century, the age of cultural objects such as musical instruments was an important factor in determining their value, and the lute was no exception. Restricted availability due to shortage and pricing as well as to specialised knowledge made lutes kingly things. As objects, their age and materiality made them sought after collectibles, connected to the legendary quality of certain makers. As previously mentioned, the preservation of the lute's development and regular retelling of its history in treatises led to the prizing of even lute fragments. The necessary metamorphosis of lutes was widely accepted; they were seen as objects that needed to be adapted from a previous form to serve musical and aesthetic functions in the modern day, so their material integrity was not essential. Indeed, the complex material biography of a lute and the history of its previous owners was part of the business model for achieving higher prices.

In the Habsburg lands around 1700, these concepts remained unchanged. The lute was a $kingly\ thing$, and its use was largely restricted to the cultural elite. The strong presence of the lute at court is evidenced by the many dedications of composed lute works to the emperor Joseph I. The steep career trajectory of Andreas Bohr of Bohrenfels is an excellent example of how lute playing could lead to social and financial advancement. Born as the son of a court official who was given the title $von\ Bohrenfels$ in 1653, Bohr was employed as "Edelknabenlautenist" (= Page Lutenist)³²³ and taught the archduchesses Maria Josepha, Maria Theresia, and Maria Magdalena. He served as the last known lutenist at the court and as a teacher to Jan Antonín Losy, Count of Losinthal. Bohr eventually left in his will a total sum of more than 6500 Gulden to different churches and priests, donated to 900 holy services while his wife and five children received only 500 Gulden each.³²⁴ With the sum of 24000 Gulden he established an entail which was still active in 1899.³²⁵

The idea of the lute as the king of instruments was promoted by Radolt in the preface to his collection of twelve suites, illustrating this application of aristocratic nomenclature to the classification of musical instruments: "Most

^{323.} The term was coined at the beginning of the 17th century and bears witness to the long tradition of lute teaching for the imperial family.

^{324.} Andreas Bohr von Bohrenfels, Faszikel 2 - 3666/1837: Verlassenschaftsabhandlung Andreas Bohr, Wiener Stadt- und Landesarchiv, 14 January 1722.

^{325.} Lamezan, 'Erbenconvocationsedict', Agramer Zeitung, no. 135 (15 June 1899): 7.

are under the unchanging misapprehension that the lute must be judged not according to music but according to sweetness and hearing, since it is the most perfect instrument and simply the king of all others, both in sweetness, proportion and perfection, conducting all four voices at once."³²⁶ According to Radolt, the lute is superior to all other instruments not only in sound but also in music and composition. The lute as an object is representative of this superiority.

The collection and study of a myriad of objects, arts, and antiques in curiosity cabinets was still part of court life in this period. According to the report from 1730 by Johann Basilius Küchelbecker, the famous traveller who visited the Viennese court, the emperor spent his leisure time studying languages, architecture, music, and in arranging his curiosity cabinet and library.³²⁷ In his detailed description of the cabinet, Küchelbecker noted that the collection was divided into religious and secular sections. The order of the presentation of the materials and objects followed a hierarchy that was well established by the sixteenth century.

Reused old lute bodies, being simultaneously musical instruments and collectibles, were part of the rich and diverse collections that could be found in the cabinets of musicians, noblemen, and rich monasteries. The legacy of Bohr von Bohrenfels lists, among other objects like pistols, rifles, silverware, and books,

^{326. &}quot;Es Seind die Mehresten in diesen unveränderlichen Irrthumb begriffen, daß die Lautten nicht nach der Music Sovill, alß nach der Lieblichkheit, und gehör müesse gerichtet werden, da es doch daß allervollkommeneste Instrument, und büllich der König aller anderen, Sowohl in Lieblichkeit, Proportion, alß Perfection, kan genennet werden, in deme es Vier Stimmen gar Schön zertheilter führt." Radolt, Der Aller Treüesten Verschwignesten und nach so wohl Frölichen als Traurigen Humor sich richtente Freindin, n.p.

^{327. &}quot;Die Studia, welchen Kayserliche Majestät selbsten ergeben, werden von Ihnen sehr æstimiret. Es verstehen Dieselben nicht nur, sondern reden und schreiben auch Lateinisch, Italiänisch, Spanisch und Frantzösisch. Sie sind in der Mathematique, vornehmlich in Architectura civili & militari wohl erfahren. Sie lieben nicht nur die Music, sondern verstehen dieselbe auch ungemein wohl, und spielen auf verschiedenen Instrumenten; Sie verstehen die Composition, und hören so gleich, wenn bey einer Music oder Opera ein Fehler vorgeht. Ferner sind Dieselben ein grosser Liebhaber von Mahler- und Schilderreyen, wie auch andern curiosis, und bringen manche Stunde in der Kayserlichen Schatz- und Kunst-Cammer zu. In Dero Cabinet haben Sie eine Hand-Bibliothec, allwo Sie, wenn es die Regierungs-Geschäffte zulassen, zum öfftern sich mit lesen amusiren." Küchelbecker, Johann Basilii Kuchelbeckers allerneueste Nachricht vom Römisch-Käyserlichen Hofe: nebst einer ausführlichen historischen Beschreibung der kayserlichen Residentz-Stadt Wien, und der umliegenden Oerter, theils aus den Geschichten, theils aus eigener Erfahrung zusammen getragen und mit saubern Kupffern ans Licht gegeben, 146–147.

his ten musical instruments: five lutes, four "Chitara," and one "Mandelin".³²⁸ According to Koczirz, the valuation was made by the lute- and violin maker Stadlmann (probably Daniel Achatius Stadlmann, 1680-1744) and describes the lutes signed by the most famous Bolognese makers: one lute by Laux Maler (Lauchsmahler) for 30 gulden or thaler, a second, slightly bigger lute also by Laux Maler for 40 gulden or thaler, two similar lutes made of ivory by Laux Maler's cousin Marx Unverdorben (Unterdorn) for 40 gulden or thaler each and a small lute for only six gulden or thaler.³²⁹

The Lobkowicz family, over many generations one of the most influential musical patrons, still hosts one of the largest noble collections of art and music. Two lute bodies signed by the Laux Maler, one by Marx Unverdorben and one by Magnus Tieffenbrucker are part of a larger collection of musical instruments and other items. Among many other objects, we find trumpets by Michael Leichamschneider in silver and gold, a violin by Gasparo Bertolotti da Salò, engraved hunting rifles decorated with ivory, fencing weapons, a Romanesque silver-gilt and rock-crystal cross dating from 1125, a mounted carved ivory cup or a decorated game board. The library hosts 65000 volumes including 679 manuscripts and 730 incunabula.

The fundamental humanist desire to rebuild the universe on a small scale with its hierarchical order of materials and objects continued to be the motivation for monastic collections as well. In the baroque period, the monasteries in the Habsburg lands such as Melk, Heiligenkreuz or St. Florian developed an extraordinary cultural legacy connected to wealth, influence, and power. In Kremsmünster, for example, the collected items do not differ from those found in secular collections. In addition to a huge library, the collection boasts a diverse array of paintings with different subjects, as well as weapons, coins, and globes. A testament to the monastery's focus on understanding the nature of the universe, is provided by a large natural history collection. The canons of Kremsmünster even helped to finance the edition of *Epitome Astronomiae*

^{328.} All information is according to Adolph Koczirz. According to the Austrian State Archive, the "Sperrs-Relation" (probate proceedings) in this file is missing. Instead there is a borrowing slip which can be dated in the period in which Koczirz was working on this topic. Adolf Koczirz, 'Österreichische Lautenmusik zwischen 1650 und 1720', *Studien zur Musikwissenschaft*, no. 5 (1918): 49–96.

^{329.} Koczirz, 74.

^{330.} Jirí Cepelák, 'Lutes in the Lobkowicz collection', *Journal of the Lute Society of America* 32 (1999): 67–97.

^{331.} Sandra Pisano, ed., *The Lobkowicz collections* (London: Scala, 2007); Kathryn L. Libin and Petr Slouka, *The Lobkowicz collections music series: Highlights* (London: Scala, 2019).

(1618-1621) by the Protestant astronomer Johannes Kepler and built a momentous observatory in 1749 known as the mathematical tower. As part of a rich musical and cultural life, for the regular ecclesiastical service, for education as well as for private joy, lute-playing canons collected musical scores and instruments. Alongside products of contemporary makers we find adapted lute bodies by the most famous luthiers Hans Frei and Magno Tieffenbrucker. Expenses for lutes and lute music in the monastery are documented over a period between 1566 and 1743.³³²

The universe of cultural life in which objects are present for scientific studies, regular musical practice, and prestige purposes remained similar to the concepts developed under French cultural hegemony during the 17th century. It seems that the cultural importance of lutes – the social status of their players as well as the implemented cultural codes, significance of age and antiquity of objects – remained unchanged. In this hierarchically structured cultural society, lutes were seen as the king of instruments and, like monarchs, their 'noble' descent from famous makers was valued. The presence of adapted old lute bodies in the possession of Andreas Bohr von Bohrenfels, in the collections of the Lobkowicz family, in monasteries like Kremsmünster, Wiener Neustadt or Herzogenburg, however, suggests a notable preference for the Bolognese makers and shapes.³³³

Unlike in England, France or The Netherlands, written sources or treatises from the Habsburg lands discussing the quality of instruments, their age and the fame of certain makers, are rare. Among the few is a letter from Hinric Bielke to Constantijn Huygens, dating from July 1647, saying he had reminded the Danish diplomat to send him an old lute body as promised, while he himself would send one from Vienna, where they could be found in great quantity.³³⁴ The preference for Italian paintings and the prevalence of Counter-Reformation topics in the visual arts makes it difficult to find portraits of lute players or other depictions of lutes that would be representative for the development of a distinctive illustrative tradition and could represent features

^{332.} See Kirsch and Martius, Die Lauten des Stiftes Kremsmünster, 14–18.

^{333.} One lute with a probably imitated signature of Laux Maler is extant in the Capuchin monastery in Wiener Neustadt, Lower Austria (mXp 4110404), one instrument with a signature by Hans Frei (mXp 4110300) and another one signed by Marx Unverdorben (mXp 4110973) in the Cistercian monastery in Herzogenburg, Lower Austria and will be discussed later

^{334. &}quot;Je luy ay faict le soubvenir de ce vieux corp du luth qu'il vous a promis; j'espere que vous l'aurez bientost de Denemareq, et vous assure que je vous envoyere une de Viene, où ils sont a trouver en quantité." Munster, 29. July 1647. Huygens, *Briefwisseling. Deel 4:* 1644-1649, 414.

of age. In contrast to the situation in France and England, however, many lutes that were transformed by makers active in Vienna or Prague have survived. Therefore, while there is little visual and written testimony, a good deal of material evidence survived.

Due to the paucity of written or graphic sources, the cultural significance of old instruments can not be examined by philological or iconographical methods. In order to consider the agency of old instruments and the ways in which they were constitutive to musical production, it is necessary to examine the instruments and musical examples in which they could have featured. A particularly rich example of the agentive power of old lutes can be found by studying the instrumentation of Radolt's first of twelve lute concerts in his collection *Die Aller Treüesten Verschwignesten und nach so wohl Frölichen als Traurigen Humor sich richtente Freindin*.³³⁵

3.2.1 Evidence of old lutes in Radolt's lute concert *Der Aller Treüesten Freindin*

Printed in 1701 by Joann Michael Nestler and dedicated to the Emperor Joseph I, this collection of twelve suites is today the most famous work by Ludwig Wenzel, Baron of Radolt. Its detailed introduction makes it an exceptionally rich source of instructions for performance practice. Furthermore, Radolt gives the indication of the tuning pitch and provides information about the instrumentation. Not much is known about the dissemination and performance of these concertos. We find one mention of the work in the catalogue of the book and art dealer Michael Christophori, who ran his business at the Kohlmarkt in Vienna and dealt mainly in theological, scientific, and medical books, ³³⁶ and another in the Wiener Diarium of 1732. ³³⁷ Today the partbooks are scattered over several libraries, but since 2003 they have been available as an edition by Hubert Hoffmann. ³³⁸ As an important reason for the lack of other printed

^{335.} Radolt, Der Aller Treüesten Verschwignesten und nach so wohl Frölichen als Traurigen Humor sich richtente Freindin.

^{336.} Michael Christophori, Catalogus oder Verzeichnuß deren Geistlich-Theologischen und Predig-Büchern etc. So zu finden bey Johan Michael Christophori von Cölln (Wien, 1714). 337. Hannelore Gericke, Der Wiener Musikalienhandel von 1700 bis 1778, vol. 5, Wiener musikwissenschaftliche Beiträge (Graz and Köln: Böhlau, 1960), 21–22.

^{338.} Wenzel Ludwig von Radolt, Die Aller Treueste Freundin: Spielanweisungen, Streichersatz, ed. Hubert Hoffmann (Lübeck: Tree Edition, 2003).

editions of this period, Strümper³³⁹ suspects the claim of owner's rights by the patrons, but it's more probable that these compositions were widely available, even to musicians not directly connected to the court.

The first of the twelve suites stands out from the others. This piece in D-minor in nine movements is scored for two violins, one viola, and three lutes in different sizes.³⁴⁰ This is remarkable since the production of lutes in different sizes was primarily intended for lute consorts – an ensemble that, though popular in the Renaissance, had fallen out of fashion by the early eighteenth century. The production of lutes in different sizes was connected to the strong export market of lute making in northern Italy.³⁴¹ Indeed, the last known compositions for such an ensemble date from 1616 and 1617.³⁴² Extant instruments, which were actually built by craftsmen in the Habsburg Empire around 1700, suggest a standard size between 69 and 72 cm of string length. Furthermore, the combination of one lute with other stringed or wind instruments in lute concerts demands a certain standardisation of the tuning pitch. That Radolt specified three different lute sizes in this piece is rather exceptional, as there was no particular demand at that time for the production of lutes in a variety of sizes. The following analysis is based on the assumption that the diversity of lute sizes is due to the availability of old lute bodies.

Concerning the tuning of the lutes, Radolt provides the following information:

"This concert is played with three different lutes. The first, which has the soprano part, must be a very small lute and is tuned at least one tone higher, as *cornet*. The other must be somewhat larger, that means a medium lute, it is tuned a whole tone lower, the sixth course of this lute is tuned after the seventh of the small lute [...] The third must be a rather large *ordinari* lute and is tuned

^{339.} Marc Strümper, Die Viola da gamba am Wiener Kaiserhof: Untersuchungen zur Instrumenten- und Werkgeschichte der Wiener Hofmusikkapelle im 17. und 18. Jahrhundert, vol. 28, Publikationen des Instituts für Osterreichische Musikdokumentation (Tutzing: Schneider, 2004), 323.

^{340.} The movements are: Ouverture - Allemande - Courente - Saraband - Menuette - Guigue - Menuette - Bourée - Retirada.

^{341.} The inventories in France and Italy in the 16th and at the beginning of the 17th century show the categorisation in different sizes.

^{342.} Jean Baptise Besard's Novus Partus sive Concertationes Musicae, published in 1617 and Nicolas Vallet's Secretum Musarum (1615/1616).

two and a half tones lower, so the sixth course is tuned after the ninth course of the small lute."³⁴³

This leads to the tuning shown in fig. 3.1.

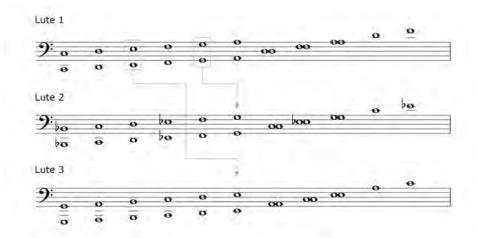


Figure 3.1: Tunings of the different lutes in Radolt's first lute concert

Radolt explains that the concert is written "â Quatro", which means every lute is doubled by a violin. Due to the high pitch, he recommends the use of violini piccoli ("Halb-Geigerln") and a small bass. The first lute should be at least doubled, or better tripled, and the second voice doubled. As justification for this instrumentation, he argued that it would produce an especially good effect if a section that was played by all was repeated by three lutes in ensemble.³⁴⁴ In total, this makes a concert for ten musicians, six lutes (three small, two middle, one *ordinari*), two violins, one viola, and one bass.

Detailed analysis of historical instrumentation and tuning, particularly with regard to determining string lengths and sizes of lutes, has been the topic of

^{343. &}quot;Dises Concert wird mit dreyen unterschiedlichen Lautten gespillet: die erste, so den Sopran führet, muß ein sehr Kleine Lautten sein, und wird wenigsten umb einen halben Thon höher, alß Cornet gestimmet; Die anderte muß schon waß grösseres und also ein mittere Lautten sein, wird umb einen ganzen Thon niederer gestimmet, wird also dieser Lautten Sexter Chor nach der Klein Sibenden Chor gleich gestimmet [...] die dritte, so ein recht große ordinari Lautten sein muß, wird umb zwey ganze, und einen halben Thon niederer gestimmet, wird also dieser Lautten Sexter Chor nach der klein Lautten neunten Chor gleich gestimmet." Radolt, Der Aller Treüesten Verschwignesten und nach so wohl Frölichen als Traurigen Humor sich richtente Freindin, n.p.

^{344. &}quot;es machet auch einen besonderen guetten *Effect*, wann man einen ieglichen Theil, nach deme Er in Völligem *Pleno* gegangen, mit dreyeinigen Lautten nachmachet."

a few notable studies. For example, Martyn Hodgson and William Samson³⁴⁵ have tried to calculate the maximum possible string length for the given tuning pitch. These considerations were also adopted by Bruce Haynes in his major study on the *History of Performing Pitch*.³⁴⁶ However, it is not clear from these publications precisely how the authors calculated the string lengths and which methods they used. My analysis turns to existing instrument to fill the gap in previous scholarship.

In order to be able to reconstruct the sizes of the lutes, the existing information on the tuning pitch and the pitch of the three lutes must be related to the parameters of string technology as well as to the other instruments. First, however, it must be clarified how high the *cornetto* pitch was in Vienna around 1700 in order to calculate possible string lengths. Finally, the results can be compared with the surviving instruments in order to verify the hypothesis of the reuse of older lutes for this concert and determine a possible instrumentation for the concert.

3.2.2 Tuning pitch Cornett-Ton

According to Thomas Balthasar Janovka's Clavis ad thesaurum magnae artis musicae, 347 published 1701 in Prague, the terminology of tuning pitches distinguishes between the lower Chor-Ton and the higher Zink-Ton. While the term Chor-Ton was associated with French and Italian wind instruments, organs were tuned in the Zink or Cornett-Ton. Janowka, as does Muffat's treatise on the basso continuo, defines the Cornett-Ton as being a whole tone higher than the Chor-Ton. The distinction between the two tuning pitches by means of a special terminology seems to be confirmed by the archival records in Kremsmünster Abbey, which name the French tuning pitch in several cases of wind instruments acquired in the period around 1700. 348 Several Austrian organs listed by Haynes suggest a tuning pitch between 460 Hz and 470 Hz. The

^{345.} Martyn Hodgson, 'On Cammer-Ton and on the sizes of lutes', *FoMRHI*, no. 41 (1985): 53–60; William B. Samson and Martyn Hodgson, 'Von Radolt's Instructions to Lute Players (Vienna 1701)', *FoMRHI*, no. 44 (1986): 48–59.

^{346.} See chapter 1-4a Strung Keyboard Instruments and Lutes in Bruce Haynes, A History of Performing Pitch: The Story of 'A' (Lanham: Scarecrow Press, 2002).

^{347.} Tomáš Baltazar Janovka, *Clavis Ad Thesaurum Magnae Artis Musicae* (Amsterdam: F. Knuf, 1973), 93–94.

^{348.} Altmann Kellner, Musikgeschichte des Stiftes Kremsmünster nach den Quellen dargestellt von Altmann Kellner (Kassel: Bärenreiter, 1956), 256.

^{349.} Haynes, A History of Performing Pitch: The Story of 'A', 149.

Whöckerl-Organ, the oldest preserved organ in Vienna, dating from 1642, has a tuning pitch of 457 Hz.³⁵⁰ A similar tuning pitch can be assumed for an Austrian harpsichord dating from 1696.³⁵¹

Radolt's instructions on the tuning pitch can be interpreted in two different ways. First, when he says that the first lute should be tuned "wenigsten umb einen halben *Thon* höher, alß *Cornet*" it could conceivably mean that the first lute should be tuned at least a half tone higher than normal, like the *Cornett-Ton*. In this case, the particle "alß" (= as, like) would be interpreted as a relative and the tuning pitch would be a'= ca. 460 Hz. The comparison would refer to the *Chor-Ton*, but it would contradict the definition by Janovka as being a whole tone below *Cornett-Ton*. Another interpretation, however, could read "alß" as comparative, which would mean the tuning would be a half tone higher than the *Cornett-Ton* and thus a minor third higher than *Chor-Ton*.

Determining the exact frequency of the tuning pitch, however, would be an ahistorical endeavor, as it would not take into account the range of possible tuning pitches. As an orientation for the further calculation, a range of possible tuning pitches for a' in a frequency of $a' = 460 \,\text{Hz}$ and a half tone higher $a' = 487.35 \,\text{Hz}$ will be considered and the consequences for the instrumentation will be analysed. ³⁵²

3.2.3 Calculation of maximum string lengths

The maximum string length for a certain frequency can be calculated according to the material properties of the string and the applied tensile force. According to many lute instruction books, the first string should be tuned just below the breaking point. Thus, for the tension just below the breaking point, an utilisation of 85-95% of the maximum tension is assumed. This limit can be

$$f = 460 \,\mathrm{Hz} \times 2^{\frac{100}{1200}} = 487.35 \,\mathrm{Hz} \tag{3.1}$$

^{350. &#}x27;The Wöckherl-Organ in the Franciscan Church in Vienna', accessed 8 July 2021, https://www.woeckherl-orgel.wien/die-woeckherl-orgel.html.

^{351.} Alfons Huber and Klaus Martius, 'Das Cembalo HN / 1696', in *Das österreichische Cembalo*, ed. Alfons Huber (Tutzing: Schneider, 2001), 269–286.

^{352.} The semitone step can be determined on the basis of the interval expressed in cents. According to DIN 13320, the tone difference of one cent and is defined as $1 \text{ cent} = 2^{\frac{1}{1200}}$. This leads, for the semitone difference, to the equation:

described as the maximum working index. Using the Taylor's theorem, this index can be calculated.

Taylor's theorem allows the calculation of the frequency of a string according to the parameters tension, length, and density:

$$f_0 = \frac{1}{2L} \sqrt{\frac{F}{\mu}} = \frac{1}{2L} \sqrt{\frac{\tau}{\rho}} \tag{3.2}$$

where f_0 is the frequency, L is the length of a string, F is the force and μ is the mass per unit length, which is given by $\mu = \rho A$. A denotes cross-sectional area at a diameter d, so $A = \pi \frac{d^2}{2}$, while ρ is the density. The mechanical stress τ represents the ratio of force F per cross-sectional area A and is given by $\tau = \frac{F}{A}$.

From this theorem, as Segerman³⁵³ has shown, the breaking index can be derived as a material constant. This means that strings of a certain material and length will always break at the same frequency, regardless of their diameter.³⁵⁴ The breaking index is defined as the product of the length L and the frequency f_{break} , at which a string will break.

Using this index, the maximum possible length for a string can be calculated using the experimentally determined tension and frequency at which a string of a material with a known density breaks. For gut, a density of $1350 {\rm kg/m^3}$ is assumed in most cases. Various – and not always consistent – statements can be found about the breaking strength to be determined experimentally. In most cases, gut strings of are assumed to have a maximum tensile strength of $340 {\rm N/mm^2}$. Thus, the breaking index (BI) can be defined as:

$$BI(\text{m.Hz}) = Lf_{break} = 500\sqrt{\frac{340\text{N/mm}^2}{1350\text{kg/m}^3}} = 251 \text{ m.Hz}$$
 (3.3)

^{353.} Ephraim Segerman, 'On Historical String Tensions on Lutes', FoMRHI, no. 75 (1994): 41–43.

^{354.} Segerman, 'On Historical String Tensions on Lutes'; Ephraim Segerman, 'On Historical Lute String Types and Tensions', *FoMRHI*, no. 77 (1994): 54–57; Djilda Abbott and Ephraim Segerman, 'A String Calculator', *FoMRHI*, no. 13 (1978): 47–50.

^{355.} Voichita Bucur, *Handbook of Materials for String Musical Instruments* (Cham: Springer International Publishing, 2016), 474.

^{356.} Karl-Ludwig Eggert, 'Darmbesaitung', *Lauten-Info*, no. 4 (2018): 12–19; Mimmo Peruffo, 'The Mystery of Gut Bass Strings in the 16th and 17th Centuries: the Role of Loaded Weighted Gut', *Recercare*, no. 5 (1993): 115–151.

Since the breaking index is the product of length and frequency, it can be deduced that a string one metre long – regardless of diameter – breaks at a frequency of about 261 Hz. The maximum working index (WI) is defined as between 85-95% of the breaking index. For the following calculations, an index of 240 m.Hz (92% of the breaking index) is assumed.

In order to calculate the maximum string length of a lute, the maximum working index is divided by the frequency of the highest string. The result will be the maximum length in meters.

$$L = \frac{WI(\text{m.Hz})}{f(\text{Hz})} \tag{3.4}$$

The first string of the smallest lute has a frequency of $f' = 365.1 \,\text{Hz}$ at a tuning pitch of $a' = 460 \,\text{Hz}$. Assuming the higher tuning pitch $a' = 487,35 \,\text{Hz}$ (half a tone above cornet), the frequency is $f' = 386.81 \,\text{Hz}$.

With the help of this formula, the maximum string lengths for the two cases can now be calculated. For the first case, a maximum length of 0.66 m is calculated:

$$L = \frac{240 \,\mathrm{mHz}}{365.1 \,\mathrm{Hz}} = 0.657 \,\mathrm{m}$$

In the second case, the length is 0.62 m.

$$L = \frac{240\,\mathrm{mHz}}{386..81\,\mathrm{Hz}} = 0.620\,\mathrm{m}$$

The other maximum sizes can be calculated as well:

Table 3.1: Maximum string length (SL) in Radolt's first lute concert

Instrument	SL at $a = 460 \mathrm{Hz}$	SL at $a = 487.35 \text{Hz}$
Lute 1	$0,66\mathrm{m}$	$0.62\mathrm{m}$
Lute 2	$0,74\mathrm{m}$	$0.70\mathrm{m}$
Lute 3	$0,88\mathrm{m}$	$0.83\mathrm{m}$

3.2.4 Lute sizes and the calculation of string diameters

The calculated results (see table 3.1) represent approximate values that can be used to narrow down the search for a possible set of instruments and give an indication of the maximum string lengths for an assumed frequency. It is important to note that these values represent the maximum length of the first string; however, smaller values are also possible. Most extant examples of lutes that were played in the period around 1700 in the Habsburg lands are made of reused older lute bodies and show a diversity of string lengths between 60 cm and 76 cm. The standard size for newly produced instruments was around 72 cm, which would be the size Radolt refers to as ordinari. No lute with a string length of more than 80 cm string length is extant and would be difficult to play. But it would provide a long string length for low frequencies in the bass register. So the question arises: how does one realise the third part on a recht grosse ordinari Lautten (=truly big ordinary lute) with a maximum string length of 76 cm, implying that a short string length has to produce a low frequency? In these considerations, the possible string diameters must also be taken into account.

By defining the frequencies for the lowest strings of the three lutes, it becomes obvious that the biggest lute is tuned only a little bit lower than it would be in a low "French" pitch of $a' = 392 \,\mathrm{Hz}$. The lowest string (C) on a lute around 1700 in D-minor tuning would have a frequency of 59.3 Hz at $a' = 392 \,\mathrm{Hz}$. Although the lowest string of the lute in the Radolt concert would be called G', it has a frequency of 51.2 Hz at a tuning pitch of $a' = 460 \,\mathrm{Hz}$, and a frequency of 52.3 Hz at $a' = 487.35 \,\mathrm{Hz}$. This means that, regardless of the pitch, the lowest lute should sound, in absolute terms, only a little lower than an 11-course lute set up for a low pitch.

The challenge in stringing basses is to achieve a low tone with a sustained sound despite a certain thickness of the string. As the diameter of the string increases, its ability to sound for a long time decreases because the material becomes stiffer and cannot vibrate as well. Furthermore, the detuning of the partial tones increases. This means that with a stiffer material there is a lower overtone content and their pitches are no longer harmonious. Various attempts have been made throughout history to increase the mass of the strings while maintaining the same flexibility, such as the saturation of the strings with heavy metal salts or winding them with metal wire. As mentioned previously, by 1700 the use of wound strings had probably become established, especially

for bowed stringed instruments. Mimmo Peruffo's research³⁵⁷ indicates that wound strings were not initially used on lutes. His assumptions are mainly based on iconographic sources. Peruffo suspects the use of 'loaded gut', i.e. strings weighted with heavy metal salts, which are depicted in a reddish colour in a number of paintings.

In order to determine how large the maximum diameter of the bass strings might have been, the bridgeholes of a total of 27 lutes were examined. Eleven of the selected instruments date from around 1700 and were either manufactured in Vienna or in the Habsburg Empire or are modifications of older lutes from that period. The diameters of the holes for the bass strings range from 1.5 mm to 1.7 mm with an average of 1.67 mm for the 11th course and 1.55 mm for the 10th course. Peruffo assumes that the holes were drilled about 10% larger than the actual string diameter: "When examining this data, it must be kept in mind that we are dealing with bridgehole diameters (not string diameters) which were bored by the lute makers with some amount of empirical oversize (assuming the string's diameter to be 90% of the hole's [...])." However, it must be assumed today that the boreholes have been enlarged by heavy use. As a consequence, the string diameter cannot exceed the determined values.

The diameter (d) of a string for a given frequency (f) can be calculated as a function of density (ρ) , length (L) and tensile force (F) using Taylor's string formula.

$$d(\text{mm}) = 1000 \cdot \sqrt{\frac{F}{\pi \cdot \rho \cdot L^2 \cdot f^2}}$$
(3.5)

Since the density (ρ) is determined by the material properties of the gut and its processing technique, and the string length (L) is determined by the size of the lute, what remains is the tension force F in Newtons. One of the few sources that indicate possible string tensions for lutes is provided by a handwritten table in an edition of Denis Gaultier's "Pièces de luth", which has been preserved at the Bodleian Library. Since the first publication of

^{357.} Mimmo Peruffo, 'German Baroque Lutes and Overspun Strings', *FoMRHI*, no. 79 (1995): 48–52; Peruffo, 'The Mystery of Gut Bass Strings in the 16th and 17th Centuries: the Role of Loaded Weighted Gut'.

^{358.} Peruffo, 'The Mystery of Gut Bass Strings in the 16th and 17th Centuries: the Role of Loaded Weighted Gut', 119.

^{359.} Bodleian Library, Oxford Mus.Sch.G.621.

the find by Andreas Schlegel,³⁶⁰ a debate has unfolded about the meaning of the information, which is limited to enigmatic numbers listed after the string names.³⁶¹

However the number system is to be interpreted, the ratios of the tensile forces can be calculated on the basis of this information. Schlegel assumes a very high tensile force of about 43 N for the chanterelle, while the second course is 36.6 N. According to his calculations, the other courses have a tensile force of 20.5 - 27.4 N. Compared to the data in Mersenne's Harmonie Universelle, the tensions estimated by Schlegel are somewhat high.³⁶². However, today's historically informed performance practice follows these sources and lutes are set up accordingly, whereby the tension of the lowest string is usually only 19 N. A tension of 40 N is assumed for the first string, 35 N for the second and 20 N for the others. The following two figures, fig. 3.2 and fig. 3.3, show the calculation of all diameters for the strings of the three lutes in a selection of different surviving lutes in different sizes. The small octave strings of the courses have been left out of account. In comparison – where possible – the bridge hole diameters are given. For the first lute in Radolt's D-minor concerto, only one of the surviving instruments comes into consideration, while various instruments are available for the middle register. The lowest lute is assumed to have a scale length of 76 cm.

^{360.} Andreas Schlegel, 'The first known stringing table for baroque lute? Oxford Bodleian MS Mus.Sch.G.621', FoMRHI, no. 131 (2015).

^{361.} Andreas Schlegel, 'The Lute in the Dutch Golden Age - What we know and what we play today', in *The Lute in the Netherlands in the Seventeenth Century*, ed. Jan W.J. Burgers, Tim Crawford and Matthew Spring (Newcastle-upon-Tyne: Cambridge Scholars Publishing, 2016), 73–101; Chris J. Coakley, 'Analysis of the Bodleian baroque lute stringing chart', *FoMRHI*, no. 131 (2015); Damian Dlugolecki, 'The Bodleian baroque lute stringing chart: a stringmaker's view', *FoMRHI*, no. 131 (2015); Richard Corran, 'Oxford Bodleian MS Mus.Sch.G.621, how long's a piece of string?', *FoMRHI*, no. 131 (2015).

^{362.} Segerman has calculated a tension of 20-23 N per string according to Mersenne. See Ephraim Segerman, 'String Tensions of Mersenne's Lute', FoMRHI, no. 11 (1978): 65.

COURSE	1350	1	2	en	4	5	9	7	80	6	10	11
Tension in Newton Tuning pitch in Hz	460	40	35	20	20	20	20	20	20	20	20	19
Lute 1 0,60	100	T OLD OF	Ø 11.718	250,000 0.50	1 182,54,0,63	e 0 1551 (75)	A #5	19245 1/12	2 21.25 1.35	90 15 138	11 W 2	
4110726 Langenwalder	09'0	1,10	1,20	1,10	1,20	1,20	1,20	1,20	08'1	1,40	0 1,60	1,60
Tute 2 0,67	100 Tel	(a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	Ø 72,52 0,50	f (d)	es Ø 161,63 0,63	C (Ø 136,70 0,75	G 0	91,241,11	L, (0)	D 0	C Ø	00,32 1,0
4110726 Langenwalder 4110783 "Berr" MfA	0,60	1,10	1,20	1,10	1,20	1,20	1,20	1,20	0 1,30	1,40	0 1,60	1,60
4110427 Hans Frei SAM30	79'0	1,20	1,20									
4110830 Hans Frey SAM29	89'0	06'0	1,10	1,50	1,50	1,50	1,60	1,60	09'1	1,60	0 1,60	1,70
4110331 Seelos MdIM E.540	69'0	1,20	1,30									
Lute 3	9	700	6	8	10	A SO	100	16.	<u> </u>	0	A. 00	18
0,76	0.7	11355 0,47	130,00-0,52	17,11 0,52	2-136,76-5,66	11510 0, 9	Wult 1,05	74,75 1.18	8 68,58 1,31	401 140	57,541 1.57	SALET LA
4110287 Hans Frei Kremsm.	0,71	1,15	06'0									
4110824 Anonym Kremsm.	0,71	1,20	1,20	1,15	5 1,20	1,20	1,50	1,30	1,50	1,40	0,70	1,70
4110467 Burgholzer SAM44	0,71	1,10	1,30									
4110503 Tieffenbrucker Kremsm.	0,72	1,10	06'0									
4111033 Laux Maler SAM28	0,72	1,30	1,30									
4110209 Laux Maler Lobk. 1931E	0,72											
4110253 Laux Maler Lobk. 1408E	0,73											
4110468 Pradter SAM45	92'0	1,00	1,00	1,00	00'1	1,10	1,10	1,20		1,50	0 1,60	1,60
4110865 Venere SAM616	92'0	1,40	1,20						09'1			
Calculation by Schlegel acc. to Bodielan MS Mus.Sch.G.621	0,695 395 Hz	43,1 N 0,47 36,6 N		0,51 27,4 N 0,59	0,59 23,7 N 0,73	0,73 24,4 N 0,84	0,84 20,5 N 1,03	1,03 21,7 N 1,1	1,19 23,3 N 1,38 24 N		1,48 25,2 N 1,71 24,8 N	24,8 N 1,90

Figure 3.2: Maximum lengths and diameters (blue) for lute strings in Radolt's lute concert at $a' = 460 \,\mathrm{Hz}$. Comparison with extant instruments and the bore diameter of their bridges.

Density	1350	1	2	en	4	5	9	7	80	6	10	11
Tension in Newton Tuning pitch in Hz	487,35	40	35	20	20	20	20	20	20	20	20	19
Lute 1 0,60	1000	V 02. d	8 57 Q47	24 10 047	193.11.059	11.21 U.N.	A 15 121.80 U.Sa	10854 1,05	9470 1,18	100	25.18	1,41 72 15 1.54
4110726 Langenwalder	09'0	1,10	1,20	1,10	1,20	1,20	1,20	1,20	0 1,30		1,40	1,60
Lute 2 0,67	D 000	(g) (d) (s) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	25.78 QA?	(g) OF (12)	es. Ø 173,35 0,59	THE GAT	G Ø 108.54-094	30,76 1,0	6 86,15 1,19	0 1	20 72,45	1,41
4110726 Langenwalder 4110783 "Berr" MfA	0,60	1,10	1,20	1,10	1,20	1,20	1,20	1,20	0 1,30		1,40	1,60 1,60
4110427 Hans Frei SAM30	29'0	1,20	1,20	1,20			1,35	1,3				
4110830 Hans Frey SAM29	89'0	06'0	1,10	1,50	1,50	1,50	1,60	1,60	1,60		1,60	1,60 1,70
OLC I WIND COUNTY OF THE PARTY	chia	-	25/4	i i			364	a fr				
Lute 3) (i) (ii) (ii) (ii) (ii) (ii) (ii) (ii	08	6	60	00	A O	100	0	100	0	A. O	10
0,76	5 **	9.11 D.M.	M3,68 0,49	110,50 0,43	144,89 0,62	17135 0.74	312/ D99	11.17 1.11	172,45 1,25	68.33	1,32 00,92	1.48 3-11
4110287 Hans Frei Kremsm.	0,71	1,15	06'0	1,20			1,20	1,2	1,15			
4110824 Anonym Kremsm.	0,71	1,20	1,20	1,15	1,20	1,20	1,50	1,30			1,40	1,70
4110467 Burgholzer SAM44	0,71	1,10	1,30	1,10			1,20	1,2				
4110503 Tieffenbrucker Kremsm.	0,72	1,10	06'0	1,00			1,30	1,2	Ĭ			
4111033 Laux Maler SAM28	0,72	1,30	1,30	1,30			1,30	1,1				
4110209 Laux Maler Lobk. 1931E	0,72											
4110253 Laux Maler Lobk. 1408E	0,73											
4110468 Pradter SAM45	92'0	1,00	1,00	1,00		1,10	1,10	1,2			1,50	1,60 1,60
4110865 Venere SAM616	92'0	1,40	1,20	1,30	1,20		1,40	1,40	09'1 0			
Calculation by Schlegel acc. to Bodleian MS Mus. Sch. G. 621	0,695 395 Hz	43,1 N 0,47 36,6 N		0,51 27,4 N 0,59	0,59 23,7 N 0,73	0,73 24,4 N 0,84	0,84 20,5 N 1,03	1,03 21,7 N 1,1	1,19 23,3 N 1,38 24 N		1,48 25,2 N 1,71 24,8 N	71 24,8 N 1,90

Figure 3.3: Maximum lengths and diameters (blue) for lute strings in Radolt's lute concert at $a' = 487.35 \,\mathrm{Hz}$. Comparison with extant instruments and the bore diameter of their bridges.

3.2.5 Conclusions concerning lute sizes

The calculation of the possible string lengths and the correlation with the material evidence indicating possible string diameters leads to the following conclusions.

The size of the bridgeholes, of both the smallest and largest extant instruments, suggests the use of a higher pitch that is close to the estimated $a'=487.35\,\mathrm{Hz}$. With a string length of 601 mm for the smallest lute, the calculated diameters of the chanterelle of 0,44 mm or 0,42 mm respectively are in a range that is also recommended by string manufacturers today. If we look at the bass strings, i.e. courses nine, ten, and eleven, it becomes clear that at an assumed tuning pitch of 460 Hz the (calculated) diameters of the strings exceed those of the holes drilled in the bridge. Following Peruffo's suggestion that the boreholes are about 10% larger than the string diameter, stringing that matches the bridge hole diameters can only be applied at a higher tuning pitch of about 487.35 Hz. For the third instrument, a higher pitch would reduce the diameter of the string as well, which corresponds better with the extant diameters of the boreholes.

Regardless of the correct interpretation of Radolt's instructions regarding the tuning pitch as "wenigsten umb einen halben *Thon* höher, alß *Cornet*", the material parameters of the extant instruments, their string lengths and bore hole diameters, suggest a high tuning pitch. Even with a high tuning, the large *ordinari* lute would have to have had a rather long string length in order to provide a resonant bass register. Extant lutes known to have been produced around 1700 in the Habsburg lands do not reflect the diversity of sizes that would have been necessary to perform this concert, especially when taking into consideration that Radolt asked for three small lutes.³⁶⁵ It can therefore

^{363.} Mimmo Peruffo, 'Strings for Renaissance and Baroque Lute', accessed 20 December 2020, https://aquilacorde.com/en/early-music-strings/renaissance-and-baroque-lute/; Damian Dlugolecki, 'Prices for Lute Strings', 2021, accessed 14 May 2022, https://www.damianstrings.com/lutelist.htm.

^{364.} These calculations were based on a pure gut string with a density of 1350 $\frac{\text{kg}}{\text{m}^3}$. If one assumes that the low strings are weighted down by metal salts, for example, even thinner strings could be used in the bass range.

^{365.} One of the few smaller lutes dating from 9 years after Radolt's publication is mentioned by Cepelák as part of the Lobkowicz collection 1173 E, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4111049 (Version 29. July 2020). It is signed "Johann Michael Güttler // Lauten und Geigenmacher // Breßlau Anno 1709". Exact measurements do not exist, but a vibrating string length of 592-601 mm is noted. Cepelák, 'Lutes in the Lobkowicz collection', 94.

be assumed that this composition was made possible by the existence of a multiplicity of lute sizes based on older lute bodies.

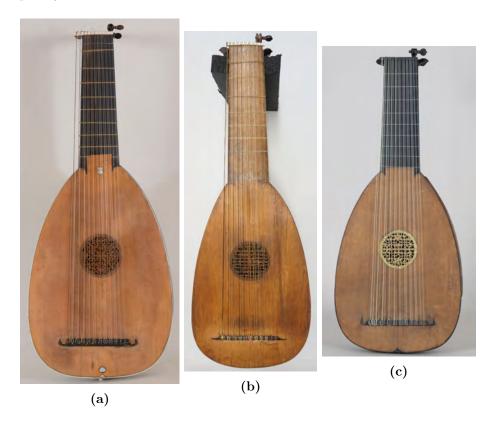


Figure 3.4: Possible instruments for Radolt's first lute concert: (a) Lute signed "In Venetia Vendelinus Venere. // Anno 1626", modified around 1700, KHM SAM 616; (b) Lute signed "Hans Frey", modified around 1700, KHM SAM 29; (c) Lute signed "Jacob Langenwalder // Fiessen 1627", modified by Matthias Greimbl, Kremsmünster 1678, KrAb mXp 4110726

3.2.6 The other instruments in Radolt's first lute concert

"Halb-Geigerln"

Assuming such a high tuning pitch would help to explain Radolt's instructions to use violini piccoli ("Halb-Geigerln") for the violin parts. His remark that it "would be good, due to the high tuning, if one took half violins [...] violins and

bass all are tuned after the small lute" 366 would suggest the use of a smaller instrument that is tuned in standard violin tuning at a higher pitch. 367

This small member of the violin family was usually tuned a third or fourth higher than the violin and was made popular by different composers in the 17th and 18th centuries.³⁶⁸ Among them were Johann Joseph Fux (1660-1741) and Karl Ditters von Dittersdorf (1739-1799), who were active in Vienna, as well as Johann Sebastian Bach.³⁶⁹ Today, only nine extant violini piccoli make up the corpus for studying the instruments, presenting different vibrating string lengths between 22,5 cm und 28,2 cm.³⁷⁰

The composer Johann Jakob Prinner (1624-1694), active in Vienna, and other composers such as Daniel Speer (1636-1707), suggest the tuning c'-g'-d''-g'' for violino piccolo. That means, the highest string g'' is tuned a minor third higher than the highest string e'' on the standard sized violin. Assuming the higher tuning pitch of ca. $a' = 487 \,\mathrm{Hz}$, which is a minor third higher than the Chor-Ton, the string g'' in Chor-Ton would sound at the same frequency as the highest string e'' at the higher tuning pitch $a' = 487 \,\mathrm{Hz}$. Consequently, the use of violini piccoli only makes sense if a correspondingly high tuning pitch is applied to the standard violin tuning.

Using small violins would have also had consequences for the sound of the ensemble. Leopold Mozart mentions that the small violin was "accompanied in musical night pieces with a small flute, harp or with another of such instruments." His comment suggests that these smaller instruments of the violin

^{366. &}quot;wäre wegen der hohen Stimmung guett, Wann man Halb Geigerl nehmete, [...] die Geigen und Bass werden alle nach der Klein Lautten gestimmet".

^{367.} Transposition would be possible, but adapting the tuning is much easier.

^{368.} Thomas Drescher, 'Art. Violine, Verwendung, bauliche Merkmale, Geschichte', ed. Laurenz Lütteken, 2016, accessed 14 May 2022, https://www.mgg-online.com/mgg/stable/51689.

^{369.} Margaret Downie Banks, 'The Violino Piccolo and Other Small Violins', $Early\ Music\ 18,\ no.\ 4\ (1990)$: 594.

^{370.} To the six instruments listed by Banks and Lee, three more can be added: Antonio Stradivari (1685), Royal Northern College of Music Manchester inv. no. i; violino piccolo (labelled Stradivari, 1700) MIMUL 0755; violino piccolo, John Barrett, ca. 1725, Royal Academy of Music Museum inv. no. 2012.599. Banks, 'The Violino Piccolo and Other Small Violins'; Daniel S. Lee, 'The Violino Piccolo in the Leipzig Orbit, 1650-1750' (PhD diss., University of Connecticut, 2017).

^{371. &}quot;so wurde es sonderbar bey musikalischen Nachtstücken mit einer Zwerchflaute, Harfe, oder mit einem andern solchen Instrumente vergesellschaftet" Leopold Mozart, Versuch einer gründlichen Violinschule (Augsburg: Johann Jakob Lotter, 1756), 2.

family were often used when the ensemble required a softer violin sound. Radolt may have specified violini piccoli for this lute concert in order to balance the ensemble in favor of the three lute parts.

Viola and "Kleines Bassel"

The other instruments in Radolt's first concert are a "Viola" and a small bass ("Kleines Bassel"). Under the term viola, Radolt probably understands a viola da braccio, since he mentions a viola da gamba in the other concerts explicitly. The term "Kleines Bassel", however, refers to a terminology that is in transition in the period around 1700. Janovka describes the "Violone ordinarium" in the tuning G, A, d, g and the "Violone Grosso seu Magnum" one octave lower.³⁷² But the term could also refer to the violoncello, which was just coming onto the scene.

Radolt's contemporary Georg Muffat explicitly recommends *Violoncini* for the performance of his suites, while the bigger *Violoni à Contrabassi* should only be used for larger ensembles.³⁷³ Actually, "the term 'violoncello' means [...] a small bass violin, literally a 'small violone,' which can be a variety of organological types with different sizes, shapes, number of strings, tunings, and playing techniques."³⁷⁴ In 1708, Johann Gottfried Walther describes it as an "Italian bass instrument, similar to a viola da gamba".³⁷⁵ In 1756, Leopold Mozart calls it "Bassel or Bassette, which is named after the Italian violoncello [...] the most common instrument to play the bass: and although there are some somewhat larger, others somewhat smaller; they are nevertheless only slightly different from one another in their stringing and consequently in the strength of their sound." ³⁷⁶

^{372.} Jiří Sehnal, 'Janovkas Clavis und die Musik in Prag um das Jahr 1700', Studia minora facultatis philosophicae Universitatis Brunensis, no. 6 (1971): 34.

^{373.} Alfred Planyavsky, 'Art. Kontrabaß', ed. Laurenz Lütteken, 2016, accessed 12 July 2021, https://www.mgg-online.com/mgg/stable/381048.

^{374.} Marc Vanscheeuwijck, 'Violoncello and other Bass Violins in Baroque Italy', in *Gli esordi del violoncello a Napoli e in Europa tra Sei e Settecento*, ed. Dinko Fabris and Marc Vanscheeuwijck, Le vie dei suoni (Barletta: Cafagna, 2020), 31.

^{375. &}quot;Italiänisches, einer Violadigamba nicht ungleiches Bass-Instrument" Johann Gottfried Walther, *Præcepta der Musicalischen Composition*, vol. 1 (Weimar, 1708), 161.

^{376. &}quot;das Bassel oder Bassete, welches man, nach dem italiänischen Violoncello, das Violoncell nennet [...] Es das gemeinste Instrument den Baß damit zu spielen: und obwohl es einige etwas grössere, andere etwas kleinere giebt; so sind sie doch nur der Beseytung nach, folglich nur in der Stärke des Klanges, ein wenig von einander unterschieden." Mozart, Versuch einer gründlichen Violinschule, 3.

In Vienna, the violoncello seems to have been one of the modern instruments around 1700 and the term "Kleines Bassel" would definitely be the appropriate way to translate the term "violoncello" into period Austrian German. In Viennese opera scores, the violoncello is found at the latest in Carlo Agostino Badia's La Gare dei Beni (1700) or Giovanni Bononcini's Artabano (1701). The tasks of the violoncello in the Viennese Court Opera were the performance of the basso continuo in the recitatives, arias and ritornellos, the performance of the bass part in three-part concertino (two violins, one violoncello) and in solos. ³⁷⁷ Finally, from 1717 the Venetian star cellist Antonio Caldara was employed in the Viennese Hofkapelle and became second Kapellmeister. ³⁷⁸ It is conceivable that Radolt saw the violoncello as a possible bass instrument in his first lute concert.

3.2.7 Diversity of instrument sizes as a precondition for the composition

The instrumentation of Radolt's first lute concert is characterised by a diversity of instrument sizes. The disposition of the instruments suggest an extraordinarily high tuning pitch. The interpretation of the instructions, whether it indicates $al\beta$ Cornet (the same as Cornett-Ton), a half tone above Cornett-Ton, or even another solution, belongs to the broader discussion about the history of performing pitch. The material parameters of the strings and instruments, however, show that the instrumentation – three lutes in different sizes and the use of violini piccoli – can only be explained by the use of a high tuning pitch.

Another curiosity of Radolt's instrumentation is the way in which he mixes both old and modern musical concepts. While violini piccoli were in use throughout the 17th century – in 1619 Praetorius calls them "Discant-Geig" – they start to become popular as solo instruments around 1700. As a smaller member of the violin family, they stand for the older playing technique of using a smaller instrument for a higher register – which, for Leopold Mozart, was already obsolete – instead of playing in a higher position. Here, they are used to compensate for the high pitch. Since the violoncello began to grow in popularity in Viennese court music at exactly the same time, it is probable

^{377.} Dagmar Glüxam, 'Art. Violoncello ', 2020, accessed 21 December 2020, https://www.musiklexikon.ac.at/ml/musik v/Violoncello.xml.

^{378.} Dagmar Glüxam, 'Das Instrumentarium und der Instrumentalstil in den Wiener Opern Antonio Caldaras (1716-1736)', *Studien zur Musikwissenschaft*, no. 49 (2002): 140.

that the term "Kleines Bassel" refers to this modern instrument, which also existed in different sizes, dispositions, and tunings.

The use of three different lutes, however, can be attributed to the existence of adapted older instruments. The size that used to be the 'standard-size' in the Habsburg lands could only have been used for the middle size. The comparison with extant instruments has shown that it is more probable that the such a diversity of lute sizes was provided by the existence of older lute bodies, which was already mentioned in 1642 by Hinric Bielke as a special feature of the Viennese lute market.

Thus, it can be concluded that the existence of old lute bodies with their diversity of sizes were constitutional to this musical opus. Furthermore, the concert shows the trend of making lute music accessible to a wider range of musicians. As an ideal instrumentation, Radolt suggests six lute players and four other musicians, which incorporates the social aspect of collective music making. Even though the collection is dedicated to the emperor, it seems to be possible that this kind of ensemble existed in private households of noble or bourgeois families. Finally, by using different lute sizes, violini piccoli and a bowed stringed bass instrument, the lute becomes part of a new sound landscape.

3.3 Economic Organisation of the Lute Makers in the Habsburg Lands

3.3.1 The trade in old instruments

The preference for old instruments was established in the 17th century and was further cultivated, in noble houses and monasteries, by famous lute players such as Andreas Bohr von Bohrenfels. It was supported by an established market structure and the economic strategies of lute makers. Due to the lack of sources, it cannot be determined whether old lute bodies were traded as luxury goods on a status market between persons of high social rank, as was demonstrated in the previous chapter, or if lute makers themselves acted as dealers and suppliers of old lute fragments.

One of the few extant sources specifically describing the trade in old lutes is a letter from the tutor of Johann Anton von Goëss in Salzburg, Jacques Fr. del Rée, to Johann's father, dated 19 February 1719. Del Rée reports that Johann is an eager learner on the lute, having just completed his fifth lesson, and suggests that he should invest in an instrument that he had found for him, "which is good but not very strong and delicate for its antiquity, which I can buy for sixteen fl or rent for fifteen groschen a month." In this case, the lute teacher acted as a dealer who tried to sell an old instrument for 16 Gulden. It is conceivable that the lute teacher would have made a profit in such a deal, as he may have been able to purchase the instrument for a smaller sum and sell it with a 'commission' built in. Del Rée also mentions the possibility of hiring the lute for 15 Groschen a month, a common business model that can be found in other sources and other countries as well. 380

^{379. &}quot;qui es asses bon mais pas fort propre et ases delicat pour son antiquité qu'on me laisse a raison de seize fl d'achat ou quinze grosches par mois." Kärntner Landesarchiv, Familienarchiv Goëss, D11, unfol.; quoted in Smole, Viel fürsten halten ein musica: Die Musik- und Festkultur in Adelskreisen des 17. und 18. Jahrhunderts am Beispiel der Familien Goëss, Harrach, Orsini-Rosenberg und Porcia, 76–77.

^{380.} In 1646 a James Master at the Trinity College, Cambridge paid 3 Pence "For borrowing a lute one month." Francis W. Galpin, Old English instruments of music, their history and character, The antiquary's books (London: Methuen, 1911), 46. In a bill from 9 October 1712 to Graf Johann Karl Joseph Orsini-Rosenberg (1695-1718), 30 Kreuzer were paid for hiring a lute plus 17 Kreuzer for adequate strings. Smole, Viel fürsten halten ein musica: Die Musik- und Festkultur in Adelskreisen des 17. und 18. Jahrhunderts am Beispiel der Familien Goëss, Harrach, Orsini-Rosenberg und Porcia, 194.

Before the introduction of the 13-course lute around 1720, the Bolognese model seemed to be the most popular lute form.³⁸¹ The common practice among lute makers in the Holy Roman Empire between ca. 1680 and 1720 of adapting older lute bodies to the popular 11-course type can be illustrated by numerous signatures in older lute bodies, particularly instruments having a Bolognese shape. In Nürnberg, six signed modifications before 1720 by Matthias Hummel and Leonhard Maussiel have been documented.³⁸² There are also eight examples of similar adaptations by Thomas Edlinger in Prague, which demonstrate possible modifications before 1720.³⁸³ The practice of adapting old lute bodies seems to have been especially popular in Vienna. Five signatures indicating an adaption by Heinrich Kramer are extant, eight labels show the activities of Matthias Fux, two are by Andreas Bär, one by Daniel Stadlmann and another, in an 11-course lute, by Martin Fichtl in 1731. In many cases, as with Matthias Fux, the modified instruments are the only material evidence of his work, since no other instrument from his workshop is known today.

Extant instruments by makers in the Habsburg empire and sources like Ernst Gottlieb Baron's treatise are proof that the Bolognese shape also served as a model for building new instruments. In his treatise, Baron explicitly states the practice of copying or imitating the original and also mentions Andreas Bär and Matthias Fux as famous lute makers in Vienna. According to Baron, Bär's instruments were made with broad ribs and very much appreciated by Count Losy, while Fux made good lutes as well and served as court lute maker.³⁸⁴ From Baron's text it is not clear if he was talking exclusively about newly produced lutes or about the layout these makers gave to older instruments. However, the extant instruments that were actually produced during this period by lute makers such as Leonhardt Pradter, who was active in Prague, or by Johann Blasius Weigert in Linz, but also by Joachim Tielke in Hamburg have the 'Bolognese' characteristics of wide ribs and a rather narrow outline.³⁸⁵

^{381.} See Robert Lundberg, 'The German Baroque Lute, 1650 to 1750', Journal of the Lute Society of America 32 (1999): 1.

^{382.} Martius, 'Reparaturen der Nürnberger Geigen- und Lautenmacher', 98.

^{383.} Robert Lundberg, 'Weiss's Lutes: The Origin of the 13-Course German Baroque Lutes', *Journal of the Lute Society of America* 32 (1999): 35–66.

^{384. &}quot;In Wien ist Herr Andreas Bähr und Herr Matheus Fux, beyderseits berühmte Lauten-Macher bekannt. Was den ersten anlanget, so arbeitete er breits-spänicht und sind seine Instrumente von dem hochberühmten Graffen Logi ungemein æstimirt worden. Was aber den andern anbetrifft, so hat er ebenfalls gute Lauten und Violinen verfertiget / und hat vom Kayserlichen Hoffe dependirt." Baron, Historisch-theoretische und practische Untersuchung des Instruments der Lauten, 96.

^{385.} Instruments by Leonhardt Pradter: Lute, (ca. 1670-1680) Bayerisches Nationalmuseum (hereafter: BNM) Mu 7 mXp 4110990; Lute, (1689), KHM SAM 45 mXp 4110468;

Furthermore, Baron mentions that Martin Schott in Prague was apparently famous because he had excellently reproduced ("vortrefflich nachgemacht") the Roman theorbos.³⁸⁶

Using older models or shapes to produce new instruments in the style of older instruments was a common practice born out of the demand for replicas of old lutes. In George Kubler's terminology, established in *The Shape of Time*, these objects would be described as "replications", and as such they would have to be distinguished from prime objects. While prime objects – like prime numbers – have no formal predecessor, replications multiply the characteristics and forms that were established earlier. From a formal-historical standpoint, these objects are not principal inventions but copies that pursue a formal sequence. From an economic standpoint, the Bolognese model is a successful and popular form strongly connected to the idea of a good sound and the value of age. Thus, the typical shape suggests age and quality and can be understood as a signifier for these values.

Other signifiers of age were also used in this period. Probably in the 1720s, the successor to Mathias Fux, both as a court lute maker as well as a husband of Fux's widow, Antonin Posch, executed a repair for Maria Josepha von Goëss. Among the services such as new frets, the repair of the fingerboard and new strings he applied a new lace.³⁸⁸ As shown in the previous chapter, the lace served as a signifier for age and has many iconographical representations.³⁸⁹

The few written sources and the numerous extant instruments show the popularity of old lutes by makers such as Laux Maler, Hans Frei, and Marx Unverdorben. In this period, lute makers systematically signed their repairs and modifications, which makes it possible today to track their activities. Especially in Vienna, the number of extant instruments that were modified by lute makers compared to the number of instruments that were produced during

Lute (1680-1690), Dean Castle 33 mXp 4110771; Lute by Johann Blasius Weigert (ca. 1720), GNM MIR 898 mXp 4110980. For Tielke see: Hellwig and Hellwig, *Joachim Tielke: Kunstvolle Musikinstrumente des Barock*.

^{386.} Baron, Historisch-theoretische und practische Untersuchung des Instruments der Lauten, 96–97.

 $^{387.\} Kubler,\ The\ shape\ of\ time:\ Remarks\ on\ the\ history\ of\ things,\ 45-48.$

^{388. &}quot;dann ein neye Pordten umb die Lauthen herumb gemacht davor 2f 30 xr". Cäcilia Smole, '"Für instrumente, saitten und hämmerl..." - Die Musiktätigkeit der Familien Goëss, Orsini-Rosenberg und Porcia im 17. und 18. Jahrhundert', *Carinthia I* 198 (2008): 202–203. 389. The instrument signed by Hans Frei and repaired by Fux in 1683 Kremsmünster has a lace as well, compare fig. 2.27.

that period is extremely high.³⁹⁰ This can be explained either by a higher value attached to older objects in later periods, which secured their conservation, or also by the large number of old lute bodies circulating in Vienna at that time. The latter is suggested in the already quoted letter from Hinric Bielke to Constantijn Huygens in 1647 (see footnote 334). Age as a concept of value is evident not only in the reuse of older parts, but also in the replication of the Bolognese model and the application of signifiers such as a lace around the lute body.

3.3.2 Organisation of the craft

Lute makers reacted to the high demand for old lute bodies and adapted their economic strategies to build and adapt older lutes in the French style. This shift in activities was closely connected to the foundation of the Viennese guild in 1696 by a generation of craftsmen from the Füssen region.³⁹¹ To better understand the significance of signing the modification of older lute bodies with a repair label in relation to the concept of age as value, it is necessary to describe the implication of the foundation of the guild in a bit more detail.

In the second third of the 17th century, Vienna started to experience an economic boom. Dominated especially by the growing demand for luxury goods at the court, crafts and proto-industrial production were increasing. The production of fabrics, tobacco, silk, Venetian mirrors, paper, sealing wax, glass and porcelain was supported and partly funded by the state.³⁹² In 1730, Küchelbecker reported that imitating foreign luxury – especially French fashion – had already taken over to the extent that even the common people wore all their possessions on their body.³⁹³ The rise in the numbers of craftsmen in

^{390.} For Vienna (period: 1631 - 1731): 9 extant instruments produced, 23 older lute bodies modified.

^{391.} Emil Karl Blümml, 'Beiträge zur Geschichte der Lautenmacher in Wien', Zeitschrift für Musikwissenschaft 3, no. 5 (1920): 287–299.

^{392.} Gustav Otruba, 'Wiens Gewerbe, Zünfte und Manufakturen an der Wende vom 17. zum 18. Jahrhundert', Wiener Geschichtsblätter 42, no. 4 (1987): 128.

^{393. &}quot;Der Luxus ist zu Wien sehr eingerissen, und nimmt fast von Jahr zu Jahren mehr zu. Man imitiret alle Frantzösische und ausländische moden; [...] Die Kleider müssen, so viel es möglich, a la françise gemacht werden; und sonderlich excediren die Vornehmen hierinnen am meisten, wiewohl das gemeine Volck ebenfalls auf diese Thorheit schon gerathen ist, so sein Vermögen meistentheils, wie jener Philosophe, mit sich an dem Leibe herum träget." Küchelbecker, Johann Basilii Kuchelbeckers allerneueste Nachricht vom Römisch-Käyserlichen Hofe: nebst einer ausführlichen historischen Beschreibung der kayserlichen Residentz-Stadt Wien, und der umliegenden Oerter, theils aus den Geschichten, theils aus

Name	Year of Birth	Place of Birth	Bürger
Andreas Bär	1656	Füssen	1681
Martin Fichtl	1649	Füssen	1684
Jacob Fux	c.1666	Füssen?	
Matthias Fux	1655	Füssen?	b.1672
Michael Heim	1663	Bachtal/Füssen	1682
Heinrich Kramer	c.1653		1682
Nikolaus Leidolff		Switzerland?	1673
Matthias Regenspurger	c.1659		1681

Table 3.2: The signatories to the regulations of the "Bürgerliche Lauten- und Geigenmacher" in Vienna, 1696 according to Blümml. Dates according to Richard Maunder, 'Viennese Stringed-Instrument Makers, 1700-1800', *The Galpin Society Journal* 52 (1999): 27–51.

the city during this period also indicates an economic boom. In 1674, a survey counted 1679 civic masters (*bürgerliche Meister*) and roughly 4000 journeymen (*Gesellen*). In 1702, already 3700 *Meister* were listed.³⁹⁴

During this period, the eight lute makers who would found the guild in 1696, arrived in Vienna and became citizens ($B\ddot{u}rger$) almost at the same time, (c. 1680, see table 3.2). Born just shortly after the end of the 30 Years War and coming almost exclusively from the Füssen region, this generation was probably attracted by the economic opportunities in the capital, while the business in Füssen had been devastated by war and disease, offering few lucrative perspectives. The lute makers of this generation, like Thomas Edlinger (born 1662 in Augsburg), who was active in Prague ($B\ddot{u}rger$ in 1692), preferred to settle in big cities. The trade between the Allgäu region, northern Italy and the rest of Europe was no longer the primary market. Due to the flowering of cultural life in Vienna and the demand for related products and the subsequent need for craftsmen, it was easier to enter the market as well as the community by becoming a $B\ddot{u}rger$.

The organisation of the craft comes from the long tradition of the medieval guild (Zunft) or the popular Christian brotherhoods (Bruderschaften). These municipal cooperative associations could determine the standard of the

eigener Erfahrung zusammen getragen und mit saubern Kupffern ans Licht gegeben, 396. 394. Vocelka and Traninger, Die frühneuzeitliche Residenz (16. bis I8. Jahrhundert), 148. 395. Richard Bletschacher, Die Lauten- und Geigenmacher des Füssener Landes (Hofheim am Taunus: Hofmeister, 1978), 189–212.

products, set rules about apprenticeship and regulate access to the profession. In many cases, these associations served as a social environments, hosting charities and such public rituals as commemorations of the dead, and naming a specific saint as their patron. Even though these organisations were often distinguished as either gesellige weltliche ('social secular') or gesellige geistliche ('social spiritual'), 396 the boundaries between Christian lay brotherhoods and organised craft guilds were not fixed, and terms like Zunft, Mittel, or Zeche were used interchangeably. 397 In the regulations, consisting of eleven paragraphs submitted by the eight bürgerliche Lauten- und Geigenmacher ('civic luteand violinmakers') and appropriated by the councillor Jakob Daniel Tepser on 30. April 1696, the term Bruderschaft is used (See fig. 3.5). 398

In Füssen, a guild system for lute makers – based on a first draft from 1562 – was established in 1606; it included rules for apprenticeships and determined the journey for *Gesellen*. These regulations outlined the penalties for bad behaviour, required attendance at annual meetings, and set the feast day of the patron saint.³⁹⁹ The regulations in Vienna differed from those in Füssen on several important points, reflecting the different economic situations and strategies. In Vienna, no patron saint was chosen and no Christian rituals or charity services were observed, which demonstrates the purely economic function of the guild in Vienna. The regulations only addressed, very generally, the establishment of peace between the members and the overarching aim of increasing the glory of God.⁴⁰⁰ Another notable difference in the regulations in Vienna had to do with the duties and social relations of the *Geselle* and *Meister*. Instead of going on a journey, the *Geselle* could stay and work with

^{396.} Martin Scheutz, 'Frühneuzeitliche Bruderschaften im Bereich des heutigen Österreich: Ein Forschungsüberblick', in *Bruderschaften als multifunktionale Dienstleister der Frühen Neuzeit in Zentraleuropa*, ed. Martin Scheutz, Elisabeth Lobenwein and Alfred Stefan Weiss (Göttingen: Böhlau Verlag Wien, 2018), 30.

^{397.} Josef Ehmer, 'Zünfte in Österreich in der frühen Neuzeit', in *Das Ende der Zünfte*, ed. Heinz-Gerhard Haupt, Kritische Studien zur Geschichtswissenschaft (Göttingen: Vandenhoeck & Ruprecht, 2011), 87–125.

^{398.} The only source for the whole content of this document is Blümml's article of 1920. Today, only the last page of the three folios is extant under the signature Akt 3.1.2.A1.3/1696 - 3/1696 | 1696 April 30 in the Stadt- und Landesarchiv, Vienna. The comparison between the extant page and the documentation made by Blümml shows that his transcription is exact. Judging by the lack of seals and signatures and the many crossed out words and corrections, this document is probably a copy or draft and not the official certificate.

^{399.} Focht, Martius and Riedmiller, Füssener Lauten- und Geigenbau: Europaweit, 49–57. 400. "zu Stüfft- und Erhaltung guether Ordnung, auch Pflanzung Fridt, und Ainigkheith: nit weniger zu Verhiettung aller Unordtnung, vorderist aber zu Vermehrung der Ehr Gottes und dessen Diensts" Blümml, 'Beiträge zur Geschichte der Lautenmacher in Wien', 289.

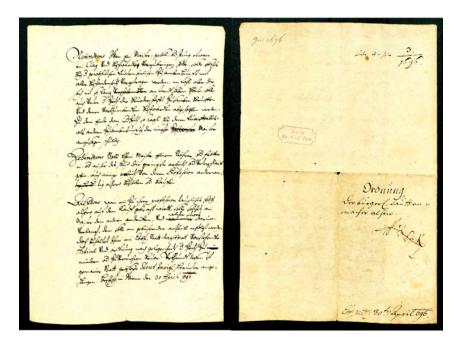


Figure 3.5: Recto and verso of the last page of the regulations of the Viennese Lauten- und Geigenmacher

the *Meister*. The *Meister* status was not defined by a sample work in the sense of a *Meisterstück* ('master-piece') but instead by being married and leading a workshop. If a *Meister* died, the widow could ask the community for a successor, who would also be accepted as a *Meister* even if he himself had not undertaken his journey.⁴⁰¹ Any business relationship with a *Stöhrer* or *Frötter*⁴⁰² was forbidden. Finally, every member was obliged to notify the others should he learn about the availability of suitable wood in town.

In general, craft regulations were the only tool available to control price, protect quality, and regulate the flow of production, while also opposing mercantilist politics. The growing influence on the craft exercised by the city's sovereign was especially invasive: in 1673, the first plans for a business tax in Vienna were discussed, in 1689 a bill was passed allowing the sovereign to determine

^{401. &}quot;Zum Sibendten wofehrn ein Wittib kheinen Gesöllen hette, und einen unentböhrlich bedürfftig wehre, solle Sie sich bey der Bruederschafft anmelden und einen Gesöllen begehren, worauf ihr auch einer nach Guethbefinden, er seye gewandert oder nit, zuegelassen und bey ainen Maister genomben werden" Blümml, 'Beiträge zur Geschichte der Lautenmacher in Wien', 290. The analysis of the position of the widows in craft regulations is a desideratum for gender studies based research.

^{402.} Interloper or slacker, pejorative terms for someone who has not a proper apprenticeship or is not part of the brotherhood and tries to enter the same business.

the number of *Meister* in the city, and finally in 1731 a general craft bill was enacted by emperor Charles VI allowing meetings of a guild to be attended by a representative of the authority.⁴⁰³ In the particular case of the lute and violin makers' guild, their regulations reflect a very hermetic circle in which the rules focused on securing a kind of economic status for their membership as well as promoting a business in which the production of new bowed and plucked instruments as well as the adaptation and repair of old instrument played important roles.

In times of economic and social upheaval, it became more and more important to be part of a recognised group or approved institution. Becoming organised in a guild using the branch label Lauten- und Geigenmacher' helped the makers coming from Füssen, who had already become $B\ddot{u}rger$ approximately ten years earlier, in securing a certain social status. The members of the group who were connected by familial bonds were protected against further competition by immigrants and craftsmen outside of the organisation. Meister positions could be assigned and controlled by the group using the surviving widows as gatekeepers of the workshops.

The fact that no Meisterstück was demanded shows that high-quality sample work, or the ability to produce a whole instrument, was not the main criteria for obtaining the Meister status. In the Füssen regulations, the Meisterstück was only requested in the draft of 1562 and not in the later regulations from 1606 and 1718, which reveals the sovereign's interest in an undefined, unspecialised wood business. 406 In fact, economically successful lute production was characterised for a long time by two major features: the skilful processing of prefabricated parts in widely standardised qualities and sizes and good marketing. Concerning the situation in Vienna, it is possible to conclude that the absence of the requirement of a Meisterstück suggests that the common practice of adapting old lute bodies was already a big part of the craft. Trade and marketing, establishing a recognisable brand or label which represented the social status and implied the quality of the product, may well have been an equally important task for a Meister.

^{403.} Otruba, 'Wiens Gewerbe, Zünfte und Manufakturen an der Wende vom 17. zum 18. Jahrhundert', 126–127.

^{404.} See Ehmer, 'Zünfte in Österreich in der frühen Neuzeit', 93.

^{405.} The term is a rendering of the expression "Branchenlabel", and refers to a sector of business, see Focht, Martius and Riedmiller, Füssener Lauten- und Geigenbau: Europaweit, 203.

^{406.} Focht, Martius and Riedmiller, 54.

3.3.3 The development of a label

The systematic approach of signing repairs and modifications by using printed labels, mostly with handwritten additions like *zugericht* or *reparirt*, dates back to the period just before the foundation of the Viennese guild. This practice has to be understood in relation to the makers' motivation to build up a branch label and a marketing strategy. Formal characteristics of the instruments, such as the 'Bolognese' shape, could not serve as a recognisable feature of a certain brand, so other solutions for marketing had to be used.

Using the name Lauten- und Geigenmacher as a branch label was a strategy that was applied by many lute makers of South German origin all over the Holy Roman Empire. 407 Matthias Fux in Vienna still used this term on his labels in 1685, even though he had already been appointed Hof-Lautenmacher in 1683. It seems that he changed his labels in 1685 in order to indicate his position at the court, thus pointing out his advancement in the social hierarchy. In the following years, his printed labels in characteristic Fraktur-letters read: "Matthias Fux / Röm. Käys. Maj. HoffLautenmacher in Wienn." Thomas Edlinger in Prague, who also used a characteristic font for his printed labels, added Lauten- und Geigenmacher to his labels by 1696 at the latest.

The implementation of a logo, created either by a distinctive style of writing or by a symbol, was an important part of establishing a recognisable brand, be it for an institution, a religious or social group, and it also served as a structural coupling of members and customers. The same function can be fulfilled by coats of arms that represent a certain person, family, sovereign or association. The *Lauten- und Geigenmacher* in Vienna were using a seal which served also as a representative symbol not only for the members of the *Bruderschaft*, but also for lute players and devotees.

A previously unnoticed seal of the *Lauten- und Geigenmacher* has survived in the Landes- und Stadtarchiv in Vienna. The coat of arms shows a griffin turned to the right holding a lute, surrounded by mantling and the inscription: "SIGILL DER BURGERL: LAVTDENMACHER I: WIENN." (see fig. 3.6). The same motive can be found on a tombstone dated around 1710 in the Church St. Peter and Paul in Hopfen am See near Füssen. Focht, Martius and

^{407.} Focht, Martius and Riedmiller, Füssener Lauten- und Geigenbau: Europaweit, 203. 408. Signature: Einzelstück 3.11.R2.49 - Geigenmacher. The actual date of the seal is difficult to determine since nothing is known about the provenance. In a catalogue of seals in the same archive compiled in 1873, the seal is not listed (Einzelstück 3.4.B.42 - Siegel Katalog | 1873).



Figure 3.6: Seal of the $b\ddot{u}rgerlichen\ Lauten-\ und\ Geigenmacher\ in\ Vienna$

Riedmiller⁴⁰⁹ suggest a connection to the family of Füssen lute makers Greiff (= griffin). In fact, it seems more probable that this heraldic motive was used more widely and served as a model for other coats of arms.

The last will of the lute maker Andreas Bär, born in Füssen and a founding member of the Viennese guild, is signed by Bär himself with his seal and by three witnesses, who also used their seals next to their signatures (see 3.7). Andreas Bär's coat of arms is quite similar to the one identified as the seal of the *Lautenmacher*. Instead of a griffin, however, a bear holds a lute in the centre of the coat of arms, thus paying tribute to the last name of the maker. The same depiction is repeated in the crest. On either side of the crest, the letters A and B indicate his first and last names. While the seal of one witness, Johann Joseph Roth, shows a monogram, the other coats of arms are again quite similar. In the case of a further witness, Ferdinand Knittlmayer, the coat of arms shows a lion or griffin. Whether or not it holds a lute cannot be precisely determined due to the poor quality of the imprint. But the coat of arms of a third witness, Johann Riedl, shows exactly the same symbol as the coat of arms of the *Lauten- und Geigenmacher* - a griffin holding a lute.

According to several entries in the Viennese newspaper Wienerisches Diarium, Ferdinand Knittlmayr's career had a steep upward trajectory, from a lowly pub owner to a city councillor, going to become a court employee who was even given a title (one of his children is called "noble born"). Johann Riedl could be identical with the Bürger and Hof Obstler (fruit supplier for the court) mentioned in the same newspaper. As friends and witnesses of the lute maker's last will, Knittlmayr and Roth could have also played the lute. The reason for using a coat of arms similar to the one established by the lute makers, depicting similar heraldic symbols including the lute, can be explained by a successful branding or marketing strategy on the part of the guild.

^{409.} Focht, Martius and Riedmiller, Füssener Lauten- und Geigenbau: Europaweit, 117.

^{410.} Landes- und Stadtarchiv Vienna, Einzelstück 1.2.3.1. A
1.3385/1722 - 3385/1722 Testament Andrä Beer | 1722.

^{411.} Such monograms were quite common and could be found in sampler books like Johann Christoph Weigel and Georg Heinricht Paritius, Zier- und künstlich ineinander geschwungene Initial-Buchstaben Aller Nahmen des Kayserlichen Hauses, aller jezo regirenden Könige, verschiedener so hohen Standes als Privat-Personen (Nürnberg, 1711).

^{412. &#}x27;Lista der Getaufften in und vor der Stadt', Wienerisches Diarium, no. 536 (21 September 1708): 6; 'Der Aussere Stadt-Raht', Wienerisches Diarium, no. 14 (16 February 1729): 7; 'Lista der Verstorbenen zu Wien in und vor der Stadt', Wienerisches Diarium, no. 62 (26 May 1759): 6.

^{413. &#}x27;Lista aller Verstorbenen in und vor der Stadt', Wienerisches Diarium, no. 157 (31 May 1705): 10.

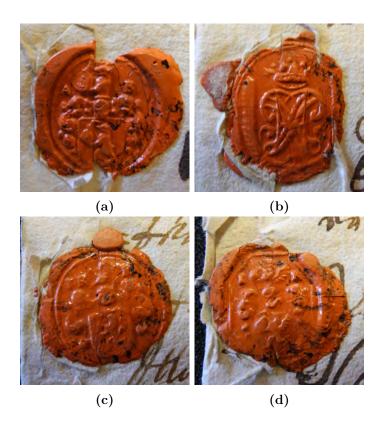


Figure 3.7: Seals in the last will of Andreas Bär: (a) Andreas Bär, (b) Johann Joseph Roth, (c) Ferdinand Knittlmayr, (c) Johann Riedl

The vendor-oriented approach of brand politics defines brands as a bundle of typical marketing instruments of a supplier in which symbols and logos have an important function for customer retention. The From a sociological perspective, members of a certain group or customers of a certain brand who identify by using these symbols are called "dilettantes", "dedicatees", "devotees" or – in case of a particularly strong affiliation with the brand – "dysfunctionals". In general, devotees build up a long-term and passionate relationship with a public object that is external to them, be it a prominent person, group or organisation, be it an artefact or symbol.

A similar kind of identification can be assumed in this case. The use of the coat of arms representing the lute makers by people who are outside this particular group can be understood as an adaptation due to a wider identification with the activity as devotees. The coat of arms could be used as a symbol for lute playing as such and served as an identifier for ambitious Bürger who were trying to express their identity as amateur musicians who played the lute. Thus, a label established by a guild could have been shared as a common symbol by people who were taking part in musical practice determined by court fashion. This assumption has to remain a hypothesis until more evidence for the use of guild signs among clients can be found. The particular design of the coat of arms of the Viennese guild, however, was still documented later. The labels of the violins MIMUL 3237 and MIMUL 5188 show a lion holding a lute in the centre framed by floral decoration (see fig. 3.8). Both labels are identical in design. One names Nicola Gusetto in Cremona as maker, the other one names Meinradus Frank in Linz. The reason for the similarity of these labels could be that they are fake, but this has to be discussed elsewhere. In our context, it is more important that the logo used by the Lauten- und Geigenmacher in Vienna during the 17th century was still used around 1800 or later as a representative symbol on signatures in musical instruments.

3.3.4 Signature of the repair as a marketing strategy

The concept of using a designed, printed label for individual recognition of one maker and establishing the term *Lauten- und Geigenmacher* as well as a

^{414.} Baumgarth, Markenpolitik: Markentheorien, Markenwirkungen, Markenführung, Markencontrolling, Markenkontexte. 5.

^{415.} Hellmann, Fetische des Konsums: Studien zur Soziologie der Marke, 153.

^{416.} Hellmann, 157.



Figure 3.8: Labels of (a) MIMUL 3237 and (b) MIMUL 5188

distinct logo, like the coat of arms, for a common representation of the brotherhood, was part of a marketing strategy. These efforts for social and economic recognition supported the establishment of the lute makers as a reliable entity to attest the age of old instruments by leaving signatures in older lute bodies indicating the modification that had been performed.

A signature added a second layer of meaning to an object. George Kubler gathers these potential significances under the term "signals", in which he distinguishes between self-signals and adherent signals. ⁴¹⁷ While self-signals are autogenous, mute existential declarations of things, adherent signals are added, and refer to a social concept, norm, theory or common knowledge. ⁴¹⁸ Signatures in general, especially those of repairmen, can be understood as adherent signals adding meaning to the object and referring to common knowledge and concepts.

^{417.} Kubler, The shape of time: Remarks on the history of things, 21-27.

^{418.} Kubler's example is a hammer on a workbench. The self-signal of the hammer is its purpose of being used in order to drive a nail into a piece of wood (= affordance of the object). The adherent signal could be the serial number stamped on the handle signifying that it is a patented trademark or manufactured by a certain maker.

In general, signing the modification of an old lute body with a recognisable label referred to the common contemporary knowledge of valuing instruments with older parts and the celebrity of certain makers like Laux Maler or Hans Frei. By adding another signature, the lute maker joined himself onto this lineage of famous predecessors. The fame of the name of the initial maker thus contributed to the fame of the contemporary maker. The added signature not only showed that he was familiar with these objects and that he possibly traded in them, but also he had the ability to adapt such valuable objects to the latest fashion. It served as advertising and a promise of quality.

Furthermore, the added signature served as proof of the age and authenticity of the instrument. By adding another label bearing an inscription like 'reparirt' or 'zugericht' as well as information about place and date of the modification, it could be concluded that the date of the fabrication of the initial object was further back in the past. Thus, the repairer confirmed the age and the authenticity of the object. In cases where the older label indicated the date of fabrication, a concrete time frame for the existence of the object and a possible history of trade could be constructed. This refers also to the common recognition of age as a value factor of instruments and works even if no label of the initial maker exists.

This is the case with a lute in the Musée de la Musique, Paris in which the only label seems to date from the modification saying "Ioan. Seelos 1699 // reparirt" (MdlM E.540). 419 We have to assume that Seelos, a maker settled in Linz, made the neck, the pegbox and the bridge to adapt an older lute body to eleven courses. A dendrochronological dating revealed that the soundboard was not made before 1668, which means that it was probably also made by Seelos. 420 Therefore, only the back, with eleven ribs made of fruit wood in the Bolognese style, can be considered old. The same is the case for another lute in Bolognese style kept in the Musik-Instrumentenmuseum Berlin (see fig. 3.9a). 421 The oldest label reads: "[Ma]tthias Fux / Lauten und //Geigenmacher in Wien 16(85) // (zugricht)". A dendrochronological analysis dates the youngest annual ring of the soundboard to 1670, 422 which proves that only the back can be considered older than the rest. In both cases, the repair la-

^{419.} MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110331 (Version 29 July 2020).

^{420.} Joël Dugot, Les luths (occident): Catalogue des collections du Musée de la Musique (vol. 1), vol. 7, Les cahiers du Musée de la Musique (Paris: Cité de la Musique, 2006), 82. 421. MIMB 5198, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110560 (Ver-

sion 29 July 2020).

^{422.} Report by Dr. Micha Beuting, 02 July 2015.



Figure 3.9: Repair labels by Fux: (a) MIMB 5198; (b) lute labelled "Tieffenbrucker" MdlM D.AD.48483

bel serves as an adherent signal referring to age as a concept for valuation that includes more qualities than the actual age of only a certain part of the object.

However, as shown in chapter 2.3, the concept of fragmentation is also part of the value placed on age. In these particular cases, the material entity of age is confined to one component of the instrument. In fact, this part is central since it determines the shape and can thus already signify age by itself, for example, when it is made in the Bolognese style. But the back is also the place where the signature is placed. The adherent signal of the repair label additionally attests an authenticity and age certified by a respected authority. The printed label, using a certain recognisable font or established terms like Lauten- und Geigenmacher or Röm. Kays. May. Hoff-Lautenmacher, refers to the specific respected speciality and the social status of the craftsmen. In the case of Vienna, these strategies were connected to the organised guild, which also used a recognisable logo in other contexts as part of their marketing strategies.

3.4 Technological Analysis

In contract to the previous periods, in the late 17th century lute makers in the major cities of the Holy Roman Empire, such as Vienna, Prague and Nuremberg were undertaking a great deal of work altering old lutes to meet new aesthetic demands. This is evident in the large number of signatures indicating alterations to older lute bodies. By analyzing these instruments it is possible to determine the various techniques that lute makers used as they reacted to the large demand for old lutes in a growing market. Especially in Austria, the lute was no longer used only as a solo instrument with an exclusive audience. By inventing a more social musical environment in the Viennese lute concert, the occasions of musical performances were expanded, as were the tonal demands of the instrument.

The musical development, from the first adaptation of the French style to the formation of a distinct Austrian character, is reflected in the technical modifications made to lutes in this period. "The lute's development during this important century was not a simple evolution. Rather, it was the process of at least three distinct responses to the changing needs of the lutenistcomposers, and the progression was not necessarily linear but overlapping."423 In his technological analysis, Lundberg focusses first on the conversion of older Bolognese style lutes into 11-course instruments, second, on the copying of these Bolognese models by contemporary makers, and third, on the preference for broader-bodied lutes in the style of the Tieffenbrucker family. The latter, he argues, was due to the demand for a more dynamic bass range, which these models would have provided. For his first hypothesis, he assumes that lute makers spent little time constructing instruments and more time altering old instruments. Indeed, the material evidence seems to suggest that more instruments were modified than produced. Looking at Prague and at cities in Austria, for example, we know of only 27 extant lutes that were produced during the period between 1670 and 1730, while 44 extant examples show the activities of makers carrying out alterations on old lute bodies. Whether or not this ratio reflects the actual activities of the makers during this period cannot be verified today. The number of extant instruments does not represent the total number of instruments in circulation during that period, but the fact that so few instruments have come down to us shows the continued attaching of value to older instruments in later periods.

The large number of examples of lute conversions in this period include not

^{423.} Lundberg, 'The German Baroque Lute, 1650 to $1750',\,1.$

only the first systematically dated repairs, but also provide reliable information about the techniques used to adapt old lute bodies to contemporary musical needs. Since the musical demands were changing, from the adoption of French lute music to the development of a distinct Austrian style, the technological solutions were also subject to development. For example, one way that older lutes were adapted to produce a stronger bass register was by using broad bodied models, as described by Lundberg. However, this musical demand was also realised through the creation of a unique 'Austrian' lute type, which retained the small Bolognese body while using a neck extension to accommodate longer bass strings.

The following technological analysis will focus on the two 11-course lute types that were most common in the Holy Roman Empire between 1670 and 1730 and will describe the technical details of adapting the soundboards. Further techniques that were mentioned in chapter 1.4, like the doubling of the upper block when preparing the instrument for a wider neck, the use of a lace around the soundboard or the highlighting of older fingerboard tips, were equally common interventions that can be dated and localised in the respective period and will not be discussed again.

3.4.1 The 11-course lute in French style

Since there are almost no extant instruments that represent the lute in France during the 17th century, the style and the characteristics of the instruments have had to be reconstructed from other sources, such as the numerous depictions in paintings and illustration as well as from textual descriptions. In the Habsburg lands, on the other hand, iconographic and written sources are rare, but a lot of extant instruments correspond to the same characteristics of lutes as described and depicted in France. The largest number of objects can be assigned to the 11-course lute type with a bent-back pegbox and a treble rider, which can be referred to as 'French' lute type, since it was probably first developed there. The narrow shape of the Bolognese body continued to be the most popular: the form implied quality and age and guaranteed a pleasing sound.

At the end of the 17th century, the aesthetic and functional features of the lute in Europe were dominated by the French practice, which seems to have led to a certain standard lute type with 11 courses, nine double strings, and two single strings. The string length was generally between 69 and 72 cm. In the lands of the Holy Roman Empire, and especially in Vienna, many instruments shared



Figure 3.10: Necks and pegboxes of the lutes in Kremsmünster Abbey, Upper Austria

the same stylistic and technical characteristics: a narrow body outline, a bowl with a low number of (and therefore wider) ribs, and a soundboard with a rose in a small diameter. The neck and fingerboard were veneered with ebony, and the fingerboard displayed a slight convex cross-section. On the back of the neck, close to the body joint, in some cases a wooden nail was inserted into each side in the veneer, the purpose of which is still unknown. In Austria, the pegbox and treble rider were mostly made from fruit wood with an ebony veneer on the top and bottom. The pegs were stained black. The reddish-brown sides of the pegbox thus contrast with the black surfaces on the top and bottom as well the black pegs (see fig. 3.10). Unlike his colleagues in Vienna, Thomas Edlinger in Prague, for example, used a characteristic fretwork on the bottom of the pegbox, which was not only an artistic feature, but in some cases the place for representational motives. 424 A more simple decoration that can be found on Austrian instruments are parallel, engraved lines on the bridge and along the sides of the pegbox.

^{424.} One of the two Edlinger instruments preserved in Leipzig bears a crowned 'P' in the fretwork. Fontana suggests the instrument was made for Prince Philip Hyacinth Lobkowicz. Eszter Fontana, 'Lutes for the Prince? The Edlinger Lutes in Leipzig and Frankfurt am Main', Journal of the Lute Society of America 35 (2002): 75–101.

Apart from this lute size, which was used as a solo instrument, lutes in other sizes are extant as well. Since most instruments that were actually produced during this period have a longer string length of 70 to 72 cm, the diversity of lute sizes can be explained to a large extent by the practice of reusing older instruments of different sizes. Nevertheless, we find some smaller lutes mentioned, such as those mentioned in Berr's inventory, or the produced by Michael Güttler in 1709 kept in the Lobkowicz collection (see footnote 365). The stylistic unity of the instruments of this period not only shows the dominance of a certain fashion, but also demonstrates the standard of working techniques and technical knowledge that were developed, mastered, and passed on by the members of the Viennese guild.

As far as the maker's portfolio was concerned, the stylistic and functional features were applied to four distinguishable sorts of products: first, new instruments signed by the maker, which were mostly replicas of older models. Second, old lute bodies signed by an ancient maker, in which we often find the signature reading 'zugericht' or 'reparirt'. Third, old instruments without a signature, and fourth, new instruments with a fraudulent label naming an old maker, like Laux Maler or Hans Frei, which we would define today as a fake (see fig. 3.11). The fact that new instruments were produced after old models as well as the fact that that the measures taken to adapt old instruments were quite thorough, helped to create a certain standard style. To old lute bodies, a new neck, pegbox and bridge were applied. In some cases the soundboard was renewed and, if not, the layout of the bars was changed.

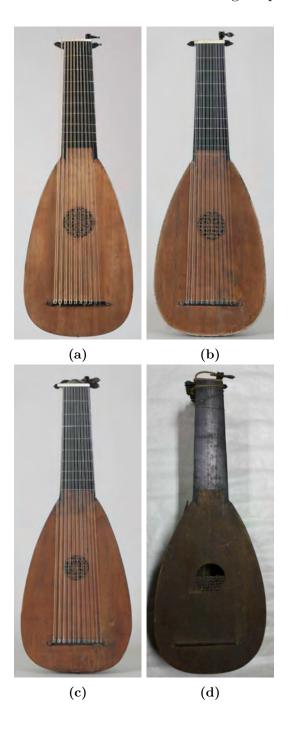


Figure 3.11: Lutes in Bolognese shape: (a) "Johannes Blasius Weigert", Linz 1721 (GNM MIR 898); (b) "Hans Frei" and "Matthias Fux (...) in Wienn 1683 zuegericht." KrAb mXp 4110287; (c) Unsigned instrument, KrAb 4110375; (d) "Laux Maler" (probably fake) and "Churfürstlich instrumentmacher // Martin Kaiser Verneiert", Neukloster, Wiener Neustadt, mXp 4110404

3.4.2 The Austrian 11-course theorboad lute

At the beginning of the 18th century, a further type of lute emerged in Austria. The material composition and technical construction of all four known examples reflect the musical development towards a more dynamic bass as well as the practice of reusing old lute bodies. This type, which has not yet been described in organological research, can be called the Austrian 11-course theorboed lute. Its main difference to the lute in the French style is the theorboed pegbox. All known examples are adaptations of older lute bodies by Austrian makers. The first known example has a lute body labelled "Hans Frei", transformed by Heinrich Kramer in Vienna in 1711. Thus, it is a theorboed lute type, which was produced ten years before the first known 13-course 'swan-neck'-lute with bass extensions.

All four known examples share some important features but also show some differences in their disposition, string length, and number of frets on the fingerboard:

- 1. Lute, signed "Hans Frei" and "Heinrich Kramer Lauten // und Geigenmacher zu gericht Wienn 1711", string length: 69,9 cm/99,3 cm, disposition: 5x2/4x2+1x1, frets: 9, Stift Herzogenburg, mXp 4110300
- 2. Lute, signed "Magno dieffobruchar a venetia 1501" and "Heinrich Kramer Lauten und // Geigenmacher in Wienn 171(3) // zu gericht", string length: 72.4 cm/105.7 cm, disposition: 4x2/5x2+2x1, frets: 9, KHM SAM 711
- 3. Lute, signed "Pietro Raillich al Santo in Padoua 1669" and "Johann Antoni Fichtl // zuegericht inn Wienn 1720", string length: 66 cm/95,4 cm, disposition: $4\times2/5\times2+2\times1$, frets: 9, MET 2008.3a, b⁴²⁶
- 4. Lute, signed "Michael Garttner // in Salzburg 1524", "walthassar Helm/ in Saltzburg . 1594" and "Andreas Ferdinandus Mayr //Hof=Laut= und Geigenmacher// in Saltzburg an. 1723 / reparavit 1723", string length: 72,3 cm/103,3 cm, disposition: 4x2/5x2+2x1, frets: 10, Salzburg Museum 1087 Salzburg

2020).

^{425.} A fifth example could be an instrument with a body from the 16th century, which was modified by Fux in Vienna in 1681. The theorboad pegbox might date from a later modification and was extended to 13 courses during the 18th century. MIMB 5199, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110559 (Version 29 July 2020).
426. MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110744 (Version 29 July

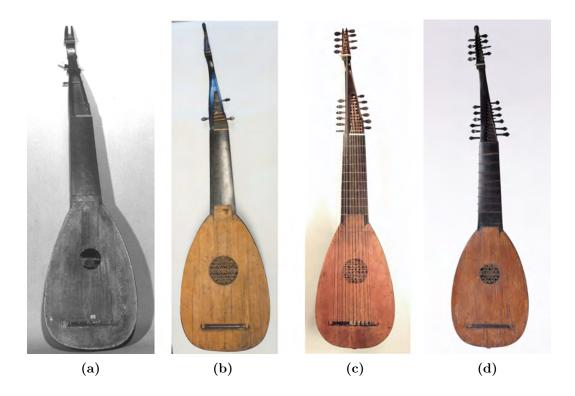


Figure 3.12: (a) Lute, signed "Hans Frei" and "Heinrich Kramer Lauten // und Geigenmacher zu gericht Wienn 1711" mXp 4110300; (b) Lute, signed "Magno dieffobruchar a venetia 1501" and "Heinrich Kramer Lauten und // Geigenmacher in Wienn 171(3) // zu gericht", KHM Vienna, SAM 711; (c) Lute, signed "Pietro Raillich al Santo in Padoua 1669" and "Johann Antoni Fichtl // zuegericht inn Wienn 1720", MET 2008.3a, b; (d) Lute, signed "Michael Garttner // in Salzburg 1524", "walthassar Helm/ in Saltzburg . 1594" and "Andreas Ferdinandus Mayr //Hof=Laut= und Geigenmacher// in Saltzburg an. 1723 / reparavit 1723", Salzburg Museum 1087

All of the aforementioned instruments are transformations of older lute bodies of relatively small sizes. The lute body and the neck do not differ from the characteristics of the 'French' lute type. However, in the first three instruments the neck offers space for nine frets while the fourth instrument, modified by Mayr in 1723, has a rather long neck for ten frets. On all instruments, the long pegboxes are made of one piece of wood and show some distinctive features. The lower pegbox has a characteristic protrusion on the treble side. The progression to the second pegbox follows an elegant sweep ending in two cases with a small head which resembles those on pochettes made by makers from

3 The French Lute in the Habsburg Empire

the Füssen region. The string length of the extension is in all cases about one Viennese foot longer than the stopped strings. The disposition of the instrument is in three cases the same: four bass courses and seven stopped courses, while the first two strings are single (4x2 / 5x2 + 2x1). The earliest example, modified by Kramer in 1711, has one stopped course less and therefore five bass courses (5x2 / 4x2 + 2x1). The instrument, which is today preserved in New York, has a significantly shorter stopped string length (660 mm) than the others, which are in the range of 699 to 724 mm.

Despite their differences, the stylistic features of these instruments are evidence of a cultural unity of craftsmanship that was developed by the Viennese makers. 428 The functional features reflect the general musical trend towards a stronger sounding bass, which dominated the era of the basso continuo. The technical solution seen here is, therefore, the result of the preference for old lutes which have a relatively small air cavity and do not support lower frequencies as easily as bigger models. Having long bass strings is the only option for a stronger sound in the lower register. In other cases, instruments with a bigger air cavity were constructed in order to provide a better bass response. In Vienna, for example, the five-string 'Viennese' double bass was becoming more and more popular during this period, and in the construction of other bowed stringed instruments a trend towards a bigger air cavity in the bodies can be observed. 429

However, the principle of the extension of the pegbox with long bass strings, best exemplified by the basso continuo instrument *chitarrone*, was also applied to smaller lutes in different periods. In the 17th century, the theorboad lute type can be found in the double-headed lute, the angélique, or in the 14-course *tiorbino*, today mainly known through the compositions by Giovanni Girolamo Kapsperger. In Viennese libraries, we find music for theorbo dating from the end of the 17th century or the beginning of the 18th century. Thus, the extension of the bass strings has to be understood from the background of the application of this principle to different lute types to produce a stronger sounding bass with a richer spectrum of partial tones compared to shorter,

^{427.} The ratio between stopped strings and bass strings is very close to 10:7, which is not a harmonic ratio. On the contrary, it defines the Euler's tritone.

^{428.} Andreas Ferdinand Mayr was born 1693 in Vienna and entered his apprenticeship there. Around 1717 he moved to Salzburg and married in 1719.

^{429.} See Lundberg, 'The German Baroque Lute, 1650 to 1750', 17.

^{430.} One example is the manuscript A-Wn-Mus.Hs.17706 MUS MAG. When opening the book from the back (p. 182), the "Accordo della Tiorba" is explained and eleven movements follow.

thicker strings. It may also suggest that the use of overspun strings had not yet become widely accepted. The use of the bass was a delicate topic in treatises on music in the French style. In Burwell's lute tutor the double-headed lute was rejected because of its loud basses. The instructions in the preface to Radolt's lute concert reveal a very nuanced use of the bass, and he even invented a sign to indicate when to only use the octave string of the bass course. Looking at the compositions that can be considered for these lute types, at least two main musical functions can be identified in which the long bass strings could have been an advantage and having a stronger sound might have been desirable: the use of the lute in the Viennese lute concert, and the more frequent use of bass figures in the solo lute music.

In the Viennese lute concert, the lute is placed in a chamber setting with other instruments. In many works by composers such as Hinterleithner, Radolt or Weichenberger, the bass line of the lute was simply doubled by the bass instrument. Other compositions featured more individual bass parts, as we find for example in the manuscript CZ-Lb 28 of the Lobkowicz collection. The 220 movements for violin, lute, and cello are organised into 33 suites. The classical French suite structure of Allemande - Courante - Sarabande - Gigue is only applied to the first suite and three others. The rest is full of galanteries – other types of movements – which are mostly French, although some bear Italian names like Ritornello, Lamenta, Aria or Retirata. Movement number 101 stands together with other movements (numbers 102 and 103) in C-major; these are not named but their forms can be identified as Sarabande and Menuett. The form of movement 101 is similar to other movements in this collection named "Aria". It is written in alla breve metre and has two sections, of which the second has a reprise; the melodic structure led by the violin.

The main difference between this piece and pieces from the earlier period of the lute concert is the presence of a more melodic bass voice played by the cello. This becomes particularly obvious in the second part of movement 101 (see fig. 3.13). The cello voice consists essentially of divisions over the bass voice instead of playing in unison with the lute. This gives the cello more freedom for legato playing or notes inégales. The lower register of the lute takes over the bass function alone by playing the roots of the chords or smaller figures. When playing only on the first and second beats, it is advantageous to mark the bass note strongly. The Austrian 11-course theorboad lute, and especially the model with five bass courses instead of four (modified by Kramer in 1711), would provide a strong bass when playing together in such chamber music settings, not only in this particular case, but in the Viennese lute concert in general.



Figure 3.13: First part of the movement 101 in the manuscript CZ-Lb 28

It was not only the Viennese lute concert that required the lute to display new tonal and musical qualities. Works for solo lute also shifted during the 18th century towards a compositional style that placed greater importance on the bass register. In the earlier French *style brisé*, the bass tone marked the root of the chord. The lute music in the French style developed towards more use of the bass strings for bass movements, providing supporting basses over which the melody or a polyphonic structure could be played. During the 18th century, distinct bass figures can be found more often and were used in an

3 The French Lute in the Habsburg Empire

increasingly exposed manner. This includes melodic lines as well as descending or ascending figures.

One example is the Aria in A-minor by Count Losy, which was obviously a famous piece since it is preserved in different arrangements for Baroque guitar and mandora, based on the original version for 11-course lute composed at the beginning of the 18th century. The piece begins with a chord in A-minor, with a descending bass line leading to the subdominant D-minor in the second bar. Again, the bass line leads via a figure in eighth notes to the relative major key, C, on the third measure. The first section ends with a half cadence in e-minor. The element of the bass line leading to the next key is repeated in the other two parts, sometimes alternating with the upper register. The distinctive feature of the descending bass line at the beginning of the piece was obviously a successful pattern since it was imitated in works attributed to the Viennese composer Adam Franz Ginter and in other anonymous compositions.

^{431.} Three known manuscripts contain the version for lute. One is preserved in Krakow (PL-Kj Mus. ms 40633, fol. 20r), one in Prague in the lute book of Pater Ivan Jelinek (1683-1759) (CZ-Pnm IV.E 36, p. 208-210) and one in Warsaw PL-Wu Ms. RM 4142 (olim MF.2010, no. 82), see Wolfgang Meyer, 'Eine Aria in a-Moll von Comte Logis', *Lauten-Info*, no. 3 (2007): 7–15.

^{432.} Michael Treder, ed., Das New Yorker Losy-Manuskript Ms US-NYpMYO, vol. 2 (Lübeck: Tree Edition, 2012), 22.

3 The French Lute in the Habsburg Empire



Figure 3.14: Aria in A-minor by Count Losy, PL-Wu Ms. RM 4142, p.82

The Aria in A-minor stands as an example for the general trend towards a more sophisticated use of the bass in solo lute repertoire. Such elements can be found in the manuscripts dating from the first third of the 18th century, such as the Wittgenstein manuscript⁴³³ and in compositions by Salzburg-based Matthias Sigismund Biechteler. Hendrik Schulze⁴³⁴ tried to identify the instrument in Salzburg as the one owned by Biechteler for which he composed the 12 Preludij in 1723 – the same year as the conversion of the lute into a 11-course Austrian theorbo. Even if it is not possible to prove this theory, Schulze shows the function of the bass in long bass tones over which an arpeggio is played, and the effect of a long descending figure in the piece 6ti toni Preludio (Adagio).

In summary, it can be stated that the technical solution of adapting older, relatively small lute bodies to the 11-course Austrian theorboad lute type provides

^{433.} Mathias Rösel, ed., *Das Wittgenstein Lauten-Buch*, vol. 1 (Lübeck: Tree Edition, 2010). 434. Hendrik Schulze, 'Matthias Siegmund Biechteler als Lautenist: Die Instrumentaltechnik als kompositorischer Faktor', in *Auf eigenem Terrain*, ed. Andrea Lindmayr-Brandl and Thomas Hochradner (Salzburg: Selke, 2004), 151–166.

a strong bass despite the small air cavity. Thus, the "colorful and responsive tone which has exceptional clarity" of the popular Bolognese model is combined with the growing demand for a stronger bass to produce a clear articulation of bass figures and other bass functions demanded by the compositions of this period. The drawback of the string disposition caused by the extended pegbox is that the eighth course – the seventh course, in case of the instrument in Herzogenburg – cannot be stopped. In a large number of compositions from this period, stopping as far as the seventh course is necessary, since the eighth course was mostly used as an open string. However, most of the solo compositions can be played on a lute in the 'French' style or on the theorboed type. In the chamber music setting of the Viennese lute concert, a lute with extended bass strings can take over the bass function alone or – more generally – contribute to the sound of the ensemble with its stronger bass character.

3.4.3 Technological features

Apart from the more general adaptation of old lute bodies to a chosen lute type by changing the neck, pegbox and bridge, further modifications of the soundboard and back can be observed. These details cannot be neglected since they are part of the material history of the object and are reactions to the type of use. Signifiers of age, such as multiple or visibly replaced fingerboard tips and lace, were also part of the repairing techniques used during this period, even though we find less representations in visual art or written sources.

Another addition to the original material of the lute was the attachment of an outside lining. Traditionally, lutes have no inside lining to enlarge the surface for glueing, unlike instruments of the violin family. From the late 17th century on, lute makers added a lining, mostly made of hardwood, on the outside of the rib at the joint between the body and soundboard. This thin and sometimes profiled piece of wood, reaching from the cap to the neck, served as a protection of the joint. It is often fixed only to the treble side, which lies the lute on the leg of the player, but often also on the bass side, which is in contact with the arm of the player. This reinforcement protects the joint that – in case of old, reused lutes – might be already worn from repeated removing and re-glueing the soundboard, even if the rib was planed off for a better fit before glueing. Before opening the lute again for further repairs or changes, the lining has to be removed, but it can be reused. While the outside lining is an addition to

^{435.} Lundberg, 'The German Baroque Lute, 1650 to 1750', 2.

older lutes, it can be assumed that this reinforcement was part of the initial state of many instruments produced in the 17th and 18th century.



Figure 3.15: (a) Black stained outside lining, probably added by Mathias Fux during his work in 1689 on an instrument signed "Wendelinus Tieffenbrucker", MdlM D.AD.48483, mXp 4110930; (b) Lining with profile, to be removed before removing the soundboard, theorbo by Rudolf Höß, Munich, 1698, GNM MI 1011

As described in chapter 2.4, removing the soundboard is a frequent measure for repairs and modifications. While the joint between the soundboard and the ribs is thin and relatively easy to open, the glueing surface on the upper block, between the fingerboard tips, is rather big. Thus, it can happen that the thin wood of the soundboard cracks during the attempt to open the joint in this area. Different forms of repairs or measures to hide the damage provide evidence of how this problem was solved. In some cases, the soundboard was glued back into position without any repairs and the crack is still visible. In other cases, the area between the fingerboard tips was replaced by a new piece of wood (see fig. 3.16). The most sophisticated method is to replace the whole part of the front between the fingerboard tips and the rose – a technical solution seen in some instruments modified by Viennese lute makers. While the repair shown in fig. 3.16.2 is rather rough, the corresponding parts inserted by Mathias Fux are almost invisible because the joints match so well. 436 A dendrochronological analysis of two instruments in Kremsmünster revealed that the pieces of wood used by Fux must have been taken from another old lute soundboard since they date to a similar time. The same is true of the

^{436.} Kirsch and Martius, Die Lauten des Stiftes Kremsmünster, 35, 43, 113.

3 The French Lute in the Habsburg Empire

inserted piece in the soundboard of the angélique preserved in the Musée de la Musique. While the soundboard dates between 1343 and 1507, the youngest annual ring of the part used for the repair dates from 1466 (see footnote 289). In addition to the insertion above the rose, the rose itself, as well as a narrow but long piece of wood underneath the rose, have also been inserted. The soundboard is therefore an assemblage of pieces dating from different periods. Furthermore, it shows that this repair technique was used by different lute makers in Europe and probably over a long period of time.

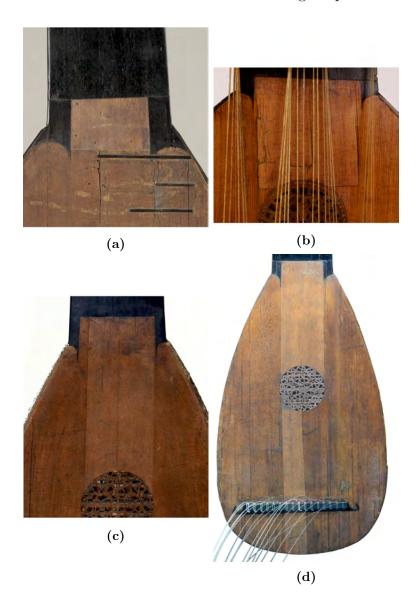


Figure 3.16: Replaced parts in soundboards (slightly highlighted): (a) Theorbo by Rudolph Höß, Munich 1698, GNM MI1011; (b) Tiorbino, signed "Tobbia Fiscier Siena 1710.", MIMUL 0502, mXp 4010502; (c) "Hans Frei", modified by Mathias Fux in 1683, KrAb mXp 4110287; (d) Angélique, MdlM E.980.2.317

3.4.4 Modification of the soundboards

Old soundboards might be modified either due to damage, as an adaptation to new sound requirements, or as a reaction to the increased physical stress because of a larger number of strings. Lundberg observed that the distribution of thicknesses in soundboards of lutes made in the early period differs from that in instruments made after 1670. "The Renaissance belly is thinner in the center and thickest around the perimeter, while the Baroque lute belly, like the violin's, has a backbone, as it were, being thicker up in the middle." The result is not only a different mass distribution, but also an increased longitudinal stiffness towards the centre line. This provides more resistance against the higher force of the strings. Since there is a limit to the possible changes of thickness in a lute belly, lute makers had to modify the bars to reinforce the belly in a way that created the required stability.

The instruments held in Kremsmünster are good representatives of the technical solutions for the adaptation of older lutes in Austria. The dates of the modifications are mostly quite clear, and two of them are signed by Matthias Fux as repairer; the objects have remained almost unchanged since these modifications. All instruments show a similar pattern of seven transverse reinforcements and six or seven radial bars under the bridge (see fig. 3.17). Thus, we find one more transverse bar than recommended in Mersennes's treatise. 438 The distances between the bars are not equal. The bars above the rose are closer together while the lower three bars have slightly further apart. In two cases some transverse bars are not placed orthogonally to the annual rings. On the soundboard belonging to the unsigned back in Bolognese shape, the upper four bars are placed at 90° to the annual rings of the soundboard, while the lower three bars show an angle of 93°. The difference becomes obvious in the X-ray image. In the lute modified by Jacob Weiß in 1714, the bars are placed in an angle of 96° to the growth rings of the soundboard and parallel to the orientation of the bridge. In the latter case, one has to consider that the instrument was later changed into a 13-course lute, and the bridge was renewed by that point at the latest. However, turning the bars slightly out of the orthogonal orientation contributes to an increase in the longitudinal stiffness of the soundboard.

^{437.} Lundberg, 'The German Baroque Lute, 1650 to 1750', 9.

^{438.} Mersenne, Harmonie universelle: Contenant la théorie et la pratique de la musique. Seconde Partie. Livre Second, 49–50.

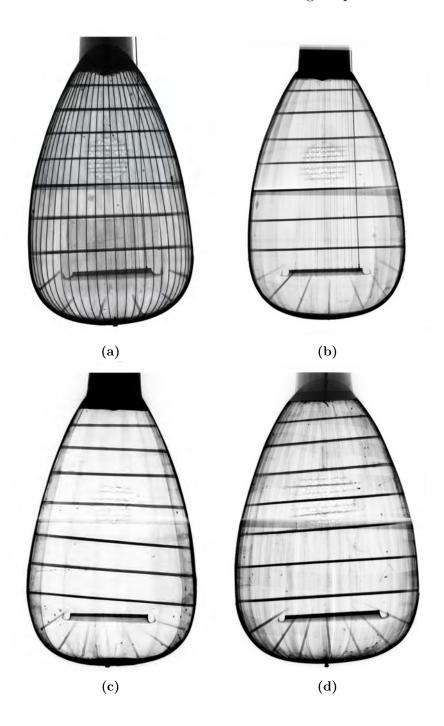


Figure 3.17: X-ray images (inverted colour) of the soundboards of four lutes in Kremsmünster Abbey: (a) Lute body signed "Magno dieffobruchar a venetia. 1604", modified by Matthias Fux in 1685, mXp 4110503; (b) Lute body signed "Hans Frei", modified by Mathias Fux in 1683, mXp 4110287; (c) Unsigned lute in Bolognese shape, modified around 1685, mXp 4110824; (d) Lute body (anonymous), modified by Jacob Weiß in Linz in 1720, mXp 4110982 192

3 The French Lute in the Habsburg Empire

The soundboard belonging to the back signed "Magno dieffobruchar" and Matthias Fux has two layers in the area around the bridge and above. Correspondingly, the radial bars under the bridge are relatively short. The area was probably too thin, damaged during removal of the bridge or cracked and requiring reinforcement. However, the added wood also contributes to an increased stiffness in this area.

Another method of supporting the backbone effect is by shaping the bars as seen on the soundboard belonging to the back signed "Mag dieffopruchar 1610", later repaired by Johann Udalricus Eberle in Prague, probably around 1720.⁴³⁹ Here, the "lower bars rise in height in their middles and are slightly thinner in the middle than on the ends."⁴⁴⁰ With this method of adapting the profile of the bars, it is possible to contribute to the stiffness at the centre line without adding mass.

While the lutes in Kremsmünster show a very similar pattern, which might be the result of the guild system in Vienna, lute soundboards of old lutes are often reinforced with a mixture of bars stemming from different periods. In the lute I made during this dissertation in order to reproduce and better understand some of the modifications, I did not have to change all the bars when adapting the instrument from the 6-course version to the 11-course version. Unlike the instruments in Kremsmünster, the soundboard was reinforced with nine transverse bars. For the modification into the 'French' lute type with 11 courses (disposition: 9x2 + 2x1), bent-back pegbox and treble rider, all bars below the bridge were changed. The position of the two transverse bars closest to the bridge and of the uppermost bar had to be changed due to the new position of the bridge and the increased size of the neck block. Some of the other bars were reduced in height during tap tuning of the soundboard. Thus, six of the bars were left in position (see fig. 3.18).

^{439.} Kunstmuseum Den Haag 1933-0555, MusiXplora, ed. Josef Focht,
https://musixplora.de/mxp/4110811 (Version 29 July 2020).

^{440.} Robert Lundberg and Jonathon Peterson, *Historical Lute Construction* (Washington: Guild of American Luthiers, 2002), 39.

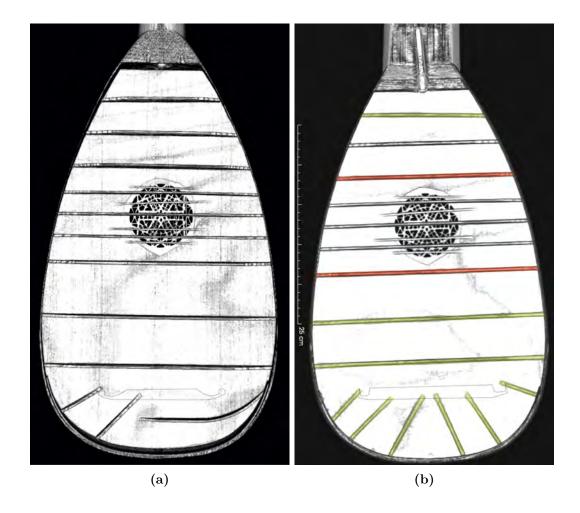


Figure 3.18: Soundboard of a lute made by the author after Laux Maler (CT-image): (a) initial state for six courses; (b) same soundboard after the modification to eleven courses. Green: added bars, red: bars modified in height

Conclusion

Most extant examples of the 11-course lute in the French style can be traced to the Habsburg territory, and specifically to Vienna, its cultural centre. Here, French lute music was adapted and mixed with elements of the Italian compositional style. One of the particular genres that emerged was the Viennese lute concert, in which the lute was integrated into a chamber music environment and combined with other instruments, such the violoncello. Throughout this

3 The French Lute in the Habsburg Empire

musical and social development of the lute, the preference for old instruments – especially in the Bolognese style –, was maintained, as were the concept of the lute as the 'king of instruments' and its function as a collectible.

In Vienna, instrument makers mainly stemming from the Füssen region established a *Bruderschaft*, in which the label of *Lauten- und Geigenmacher* as well as the use of a distinctive logo were introduced. Their numerous signed modifications of old instruments offer valuable evidence as to their activities. Indeed, the tremendous number of signatures from this period indicate that the transformation of old lute bodies was a significant part of their business model of lute makers. Besides the 11-course lute in the French style, a particular theorboad lute type was also being produced. Due to the extant signatures of alterations, it is possible to determine the characteristic technological features of this period in terms of materials and modifications of soundboards.

Even though the amount of written and iconographic evidence of old lutes during this period is sparse, a great deal of material evidence demonstrates their cultural and economic significance. The diversity of lute sizes as a precondition for the composition of Radolt's first lute concert highlights the importance of old instruments as part of the musical culture. The use of the lute in this kind of chamber music setting and the general development towards a demand for a stronger bass influenced the development of the 11-course theorboad lute. This new lute type has only survived in forms with adapted older lute bodies. The systematic use of a repair signature was established as an important signifier for an old instrument's authenticity and became an important marketing strategy.

4 Extension, Simplification, and Decline

4.1 Music for Amateurs

4.1.1 The 13-course lute

The most important development of the lute during the 18th century is the addition of two more courses in the bass, a development that can be connected largely to the most important lute player of that period, Silvius Leopold Weiss. After his death in 1750, the market for lute music became smaller and only few professional lutenists could be found. The group of players was mainly dominated by female amateurs.⁴⁴¹

The development of the 13-course lute can be regarded under two main factors: 1) a general growing demand for more bass to accommodate the stylistic development of contemporary music, 2) an already detectable reduction of positions for professional lute players. By adding two more courses to the bass, a full diatonic octave from A" to A' became available for a more flexible and powerful use of the bass register. The first known dated piece for 13-course lute was composed by Weiss in January 1719 during his stay in Vienna, only a few months after entering service as Electoral Saxon and Polish Chamber Musician to Elector August in Dresden. As Lundberg has proposed, Weiss could have already been acquainted with the lute maker Thomas Edlinger in Prague by 1717 or earlier, and the latter might have realised the first 13-course lute following the lutenist's ideas. 442 Since Weiss had learned already in mid-1716 that his former "lord Karl Philipp [von Pfalz-Neuburg] would soon become sovereign of the electoral principality where his father and brother were already employed, we may suspect that Silvius Weiss began to think in terms of a possible future elsewhere."443 However, the invention of the new lute type probably took place during the period when Weiss was searching for a new position. In this context, it can be regarded not only as an artistic development, but as a strategic advantage in the form of a unique selling point to increase his chances of getting the well-paid job at the Saxon court.

Weiss, who became the central figure in the world of lute music in the following decades, also adapted a bigger instrument for the purpose of playing

^{441.} Per Kjetil Farstadt, 'Lautenistinnen in Deutschland im 18. Jahrhundert', Early Modern Culture Online 2, no. 1 (2011): 55–80.

^{442.} See Lundberg, 'Weiss's Lutes: The Origin of the 13-Course German Baroque Lutes', 37.

^{443.} Douglas Alton Smith, 'A Biography of Silvius Leopold Weiss', *Journal of the American Musical Instrument Society* 1-48, no. 31 (1998): 10.

in orchestras and church performances. In a letter to Johann Mattheson in 1723, he admitted that the accompaniment of the lute in the orchestral concerts would be too weak and unattractive, which was why he has adapted one of his instruments for the purpose. "It has the size, length, power and resonance of the veritable theorbo, and produces the same effect, only that the tuning differs." According to Ernst Gottlieb Baron's description in 1759, Weiss transferred the tuning of the lute in D-minor to the 14-course theorbo, which was usually still tuned in the old tuning. Baron describes the theorbo, which had one or two more strings, as being tuned a third lower, while the first strings were omitted because they would not hold due to their lengths. It is possible that Weiss was already using this kind of theorbo during his stay in Vienna in 1719.

The lute, which Baron distinguishes from the theorbo by the presence of the chanterelle, continued to be used as solo instrument and in chamber music settings in combination with instruments like violin, viola, flute, or violoncello.⁴⁴⁷ Even though the 13-course lute soon became widespread, music for 11-course lute was still published as late as 1747.⁴⁴⁸ In the first half of the 18th century, compositions kept mainly to the contrapuntal style, combining French and Italian elements. After the death of Weiss in 1750, lute music was

^{444. &}quot;Im Orchestre aber zu accompagniren mit der Laute, das wäre freilich zu schwach und (e) unansehnlich; [...] Sonsten habe nun, im Orchestre und Kirche zu accompagniren, ein eigenes Instrument accommodirt. Es hat die Grösse, Länge, Stärcke und resonance von der veritablen Tiorba; thut eben den effect; ausser daß die Stimmung differiret." Silvius Leopold Weiss, 'Letter to Johann Mattheson of 21.3.1723', in Der neue Göttingische aber viel schlechter, als die alten Lacedämonischen, urtheilende Ephorus, ed. Johann Mattheson (Hamburg, 1727), 119.

^{445. &}quot;Was die Theorbe anlanget, der einige das System der 6 Linien beyzumessen pflegen, und villeicht dafür halten, daß Laute und Theorbe einerley sind; so ist zu merken, daß solche Instrumente sehr von einander unterschieden sind. Denn auf der Laute ist eine Gesangsaite nöthig; auf der Theorbe aber, die eine Terzie tiefer, von der ersten Saite angerechnet, anfängt, und wo der Baß eine oder auch zwey Saitten mehr hat, fällt die Gesangsaite gänzlich weg: weil sie wegen der Länge nicht halten will." Ernst Gottlieb Baron, 'Herrn Barons Abhandlung von dem Notensystem der Laute und der Theorbe', in Historisch-Kritische Beyträge zur Aufnahme der Musik, ed. Friedrich Wilhelm von Marpurg, vol. 2 (Berlin: Lange, 1756), 122–123

^{446.} The aria I Rapidi by Johann David Heinichen was performed by Weiss during his stay in Vienna and requests the ambitus of this kind of instrument, see Schlegel and Lüdtke, Die Laute in Europa: Lauten, Gitarren, Mandolinen und Cistern = The lute in Europe, 306.

^{447.} Several manuscripts containing compositions by Weiss include chamber works, for example D-Dl Ms. Mus. 2841/V/1 (1725-1750), D-As Ms. Tonkunst 2° fasc. III [1745-1780], A-Wsa Harrach, H. 120 (c.1710).

^{448.} David Kellner, XVI Auserlesene Lauten-Stücke (Hamburg: Christian Wilhelm Brandt, 1747).

4 Extension, Simplification, and Decline

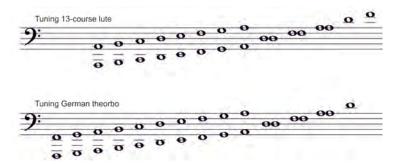


Figure 4.1: Tuning and ambitus of the 13-course lute and the German theorbo

increasingly composed in the galant and empfinds am style. "The broad, strict, ployphonic compositional style of the Baroque period gave way to a new style with thinner homophonic and purely harmonic texture (simple major/minor) and containing elegant, short motifs, slow harmonic rhythms and cantabile melodies, as well as scalework and passagework influenced by the Italian opera."449 Since the lower register was equipped with a whole diatonic octave, it was used more and more for playing bass figures, or to play the theme, accompanied for example by a long trill on the chanterelle. The polyphonic character of the compositions becomes in some cases reduced to effectively two parts – one in the bass, the other in the high register – while displaying distinct stylistic features. "The German galant lute style of Baron, Falckenhagen, and Hagen includes features such as slow harmonic rhythms, short melodic motifs, sudden changes in dynamics, sudden changes in tempo, extended use of triads, melodies built on triads, sixths or tenths, lombardic patterns, triplets, scalework and passagework. Ornaments that were used include double trills in thirds and extended use of appogiaturas and slides." ⁴⁵⁰

Lute music in the galant style was mainly performed in the residential cities like Munich, Vienna, Dresden, and Bayreuth, and in economic (mostly protestant) centres like Hamburg, Danzig, and Königsberg. In Leipzig, known for its university, trade fair and publishing houses, a lot of lute players, such as Johann Kropfgans (father: 1668 - ? and son: 1708 - ca.1770), Ernst Gottlieb Baron (1696-1760), Adam Falkenhagen (1697-1754), and Luise Adelgunde Gottsched (1713-1762), spent time there as students. In Königsberg, the vivid amateur scene of lute players around 1750 was depicted in an extensive poem by Johann

^{449.} Per Kjetil Farstad, German galant lute music in the 18th century: Zugl.: Göteborg, Univ., Diss., 2000, vol. 58, Skrifter från Institutionen för Musikvetenskap, Göteborgs Universitet (Göteborg: Department of Musicology, Göteborg University, 2000), 72. 450. Farstad, 72.

Friedrich Lauson (1727-1783), who mentions four professional lutenists and ten amateurs, among them eight women, all from the upper class or nobility.⁴⁵¹

In the second half of the 18th century, printed publications of lute music became rarer, and the attempt by the lute playing editor Johann Gottlob Immanuel Breitkopf in 1757 to introduce moveable type for tabulature was not pursued. The majority of lute players were amateurs, since many court orchestras had no use for professional lute players any more due to the changing musical style. While Weiss and his generation of pupils had raised a new generation of professionals, lute players in the second half of the 18th century were mainly occupied educating amateurs. In Forkel's Musical Almanac of 1782, only three professional lute players are mentioned: Karl Kohaut in Vienna as a virtuoso, Johann Adolph Faustinus Weiss in Dresden, and Christian Gottlieb Scheidler in Mainz. In a period of political turbulences and less demand for lutes in courtly musical performances, lutenists were forced to find new sources of income. This change will be shown from the biographies of the lutenists mentioned in Forkel's Almanac.

4.1.2 The last lutenists

In Dresden, unlike in many other cities, the noble class remained an important part of society and remained predominated over the wealthy merchant and bourgeois class, until the end of the 18th century. The residential character of the town influenced the cultural life. Musical performances were mostly connected to exclusive circles, either at court or in private homes of personalities like Baron Wolfgang von Riesch, Count Hans Moritz von Brühl and his wife Christine Countess von Brühl, or in the house of the well-connected author Christian Gottfried Körner. In these exclusive surroundings, professional musicians performed as guests, or amateurs played together, while music for the

^{451.} Raymond Dittrich, ed., Laute und Gitarre in der deutschsprachigen Lyrik: Gedichte aus sechs Jahrhunderten; eine Anthologie, 1. Aufl. (Leipzig: Engelsdorfer Verlag, 2015), 90–114. 452. Frank Legl, '"der alte Weiß spielte" - Laute und Theorbe in der zweiten Hälfte des 18. und zu Beginn des 19. Jahrhunderts', in Laute und Theorbe, ed. Christian Ahrens and Gregor Klinke (München: Katzbichler, 2009), 32.

^{453.} Johann Nikolaus Forkel, ed., Musikalischer Almanach auf das Jahr 1782 (Leipzig: Schwickert, 1781), 110–111, 128, 144.

^{454.} Romy Petrick, Dresdens bürgerliches Musik- und Theaterleben im 18. Jahrhundert: Zugl.: Dresden, Hochsch. für Musik, Diss., 2010 (Marburg: Tectum-Verl., 2011), 14.

broader bourgeois class was mainly restricted to military bands. ⁴⁵⁵ In other musical centres, in contrast, university or public concert institutions like those in Leipzig were missing. The activities and fame of the Dresden-based lutenist Silvius Leopold Weiss and the conservative social structure seems to have preserved the activity of lute playing in Dresden during the 18th century. Under Johann Adolph Hasse, Dresden became a centre of Italian opera. The number of arias arranged for lute show how successfully his operas were received by amateur musicians. ⁴⁵⁶

When Hasse left Dresden after the Seven Year's War, his successor Johann Gottlieb Naumann replaced him as the most important figure in the music scene and found ways to integrate the lute in the changing musical life of the city. He was affiliated with several private amateur musical circles in which the glass harmonica became popular in the 1770s and 1780s. After his initial scepticism, Naumann eventually became a big supporter of this instrument. He tried to combine it with other instruments, writing compositions dedicated to Elisabeth von der Recke and Dorothea von Kurland which are discussed in Elisabeth von der Recke's memoirs. 457 These are mainly quartets for harmonica, flute, violin, viola, and compositions for harmonica, lute and violoncello. Rather exceptional is Naumann's duo for glass harmonica and lute⁴⁵⁸ based on the text Wie ein Hirt sein Volk zu weiden. Here, the 13-course lute in D-minor tuning is used as an accompanying instrument and its part is by no means virtuosic, which identifies amateurs as the target group. Nevertheless, we know from a letter written by the companion to the Countess of Brühl that the professional lute player Johann Adolph Faustinus Weiss, the youngest son of the famous lutenist and his successor in the court orchestra, was closely connected to Naumann's musical activities outside the court. She wrote on 21 May 1785: "Around six o'clock we all went to Naumann's and heard him

^{455.} Richard Engländer, Die Dresdner Instrumentalmusik in der Zeit der Wiener Klassik, Uppsal Universitets Årsskrift (Uppsala and Wiesbaden, 1956), 21.

^{456.} For example, the 49 pieces in which the lute is used partly as an accompanying instrument and partly as a solo instrument: in D-LEm Becker III.11.46a. The second of the two booklets was the possession of Princess Maria Antonia Walpurgis Wittelsbach, who had been married to Elector Friedrich Christian in Dresden since 1747, see Tim Crawford, 'Contemporary Lute Arrangements of Hasse's Vocal and Instrumental Music', in Johann Adolf Hasse und Polen: Materialien der Konferenz Warszawa, 10-12 Dezember 1993, Instytut Muzykologii Uniwersytetu Warszawskiego, ed. Irena Poniatowska, Studia et dissertationes Instituti Musicologiae Universitatis Varsoviensis: Seria B (Warszawa, 1995), 73–96 and Farstadt, 'Lautenistinnen in Deutschland im 18. Jahrhundert', 69–70.

^{457.} Elisa von der Recke, Elisa von der Recke. 2, Tagebücher und Briefe aus ihren Wanderjahren, ed. Paul Rachel, vol. 2 (Leipzig: Dieterich, 1902), 329.

^{458.} Berlin, Staatsbibliothek, Preussischer Kulturbesitz, D-B Mus ms 15976/5.

play the harmonica accompanied by the lute, which Weise and after him Tina played."⁴⁵⁹

In the court orchestra, Johann Adolph Faustinus Weiss mainly played the theorbo, and became one of the worst paid musicians in the orchestra, a testament to the diminished musical value of the theorbo in that orchestra. While his father had been one of the top earners for many years, in 1764 even the court organ builder Johann Daniel Silbermann earned more for his services than the lute player. Various submissions by the lutenist to the court testify to his poverty, as does his children's attempt after his death in 1814 to claim the ownership rights of his theorbo. The children intended to sell the instrument in order to obtain money for their livelihood during a cold winter, to buy "at least half a Schragen of wood". Weiss, who also received financial support from Christiane von Brühl, obviously did not succeed in supplementing his income sufficiently by building up a large network of pupils and by adapting to the new musical style. The preserved duets for guitar could have been written for teaching purposes, but it remains the only known example of his attempt to adapt to the changing needs of amateur musicians.

In Vienna, successful contemporary compositions like Joseph Haydn's string quartets were arranged – probably by Karl Kohaut – to include the lute. 464 Unlike Weiss, Karl Kohaut (see fig. 4.2) received a comfortable regular income from his dual role as musician and secretary at the imperial court in Vienna. When he wrote his last will on 24 November 1780, he was obviously aware that his instrument had already become obsolete and expressed the wish of it being

^{459. &}quot;Gegen sechs Uhr gingen wir alle zu Naumann und hörten bei ihm die Harmonika in Begleitung der Laute, welche Weise und nach ihm Tina spielten." The name Tina refers to Christine, Countess von Brühl. Sophie Becker, Vor hundert Jahren. Elise von der Reckes Reisen durch Deutschland 1784-86 nach dem Tagebuche ihrer Begleiterin Sophie Becker, ed. Gottwald Karo and Moritz Geyer (Stuttgart, 1884), 144.

^{460.} See Legl, '"der alte Weiß spielte" - Laute und Theorbe in der zweiten Hälfte des 18. und zu Beginn des 19. Jahrhunderts', 40.

^{461.} Moritz Fürstenau, Beiträge zur Geschichte der Königlich Sächsischen musikalischen Kapelle: Größtentheils aus archivalischen Quellen (Dresden: C.F. Meser, 1849), 157.

^{462. &}quot;wenigstens Einen Halben Schragen Holz kaufen zu können". Schragen: old volume measure for wood. See Frank Legl, 'Eine alte Theorbe, ein alter Schragen Holz und die Winter 1815/16 und 1816/17', in *Theatrum instrumentorum Dresdense*, ed. Wolfram Steude and Bernhard Hentrich, Schriften zur mitteldeutschen Musikgeschichte (Schneverdingen: Verl. der Musikalienhandlung Wagner, 2003), 94.

^{463.} Johann Adolph Faustinus Weiß, Sechs leichte Duette (Mainz: Schott, 1959).

^{464.} Tim Crawford, 'Haydn's music for lute', in *Le luth et sa musique*, ed. Jean-Michel Vaccaro, Corpus des luthistes français (Paris: Centre National de la Recherche Scientifique, 1984), 69–85.



Figure 4.2: Carmontelle: *Mr de Kohault, musicien autrichien*, Musée de Condé, Chantilly, inv. no. Car 426

conserved. Kohaut wished that his "lutes and other instruments, especially [...] musical manuscripts should not be dumped but preserved until someone is found who can appreciate them. And my wife and universal heiress should seek advice from music experts in this concern." The advise by the experts seemed to not have been favourable to Kohaut's last will. After his death in 1784, his wife sold all his books, manuscripts and instruments in an auction for a total price of 495 *Gulden*.

The lutenist Johann Christian Gottlieb Scheidler (1747-1829), employed in the electoral court orchestra in Mainz, was only six years younger than his colleague in Dresden, but better able to adapt to changes in musical taste. 466 When French troops besieged the city of Mainz in 1794, he fled to Frankfurt am Main, where he sought and obtained permission to teach lute, mandora and guitar. The request is accompanied by a letter of support in which eight persons, mainly women and two of them from the nobility, affirm Scheidler's concern:

"We signatories certify and confess by virtue of our signature and seal that the electoral court and chamber musician in Mainz, Mr. Johann Christian Scheidler, during his [...] stay has given us instruction on the Spanish guitar, on which he has reached the highest level of perfection, as well as on the lute and mandor, so that it would not be easy to place anyone at his side [to compare] in this respect, and that none of the musical artists here play this instrument or the lute and mandor, and that instruction on the mentioned Spanish guitar is even less to be obtained here due to its rarity."

^{465. &}quot;Achtens: Wünschte ich sehr, daß meine Lauten und andere Instrumenten fürnemlich aber meine musickalische manuscripten nicht verschleudert, sond[ern] solange aufgehoben werden möchten, bis sich Jemand finde, der sie zu schätzen, und auch zu Nutzen wisse; Und wolle meine Frau universal=Erbin, zu diesem Ende, bey Musick=Verständigen sich Raths zu erholen belieben." Verlassenschaftsabhandlung (Vienna, Staatsarchiv, A-Wsa/1.2.3.2.A2 Faszikel 2 Verlassenschaftsabhandlungen (1783-1850) 2360/1784).

^{466.} Scheidler's biography is well documented by the recent works of Hindrichs and Lutz. Thorsten Hindrichs, Zwischen "leerer Klimperey" und "wirklicher Kunst": Gitarrenmusik in Deutschland um 1800: Zugl.: Mainz, Univ., Diss., 2007, vol. 576, Internationale Hochschulschriften (Münster: Waxmann, 2012); Markus Lutz, 'Johann Christian Gottlieb Scheidler (1747-1829) - Teil I', Lauten-Info, no. 4 (2018): 20–22 Markus Lutz, 'Johann Christian Gottlieb Scheidler (1747-1829) - Teil II', Lauten-Info, no. 1 (2019): 18–21, Markus Lutz, 'Johann Christian Gottlieb Scheidler (1747-1829) - Teil III', Lauten-Info, no. 2 (2019): 33–36.

^{467. &}quot;Wir Endes Unterzogene beurkunden und bekennen andurch Kraft unserer Unterschrift und Siegel, daß uns der Kurfürstl. Mainzische Hof= und Kammermusikus, Herr

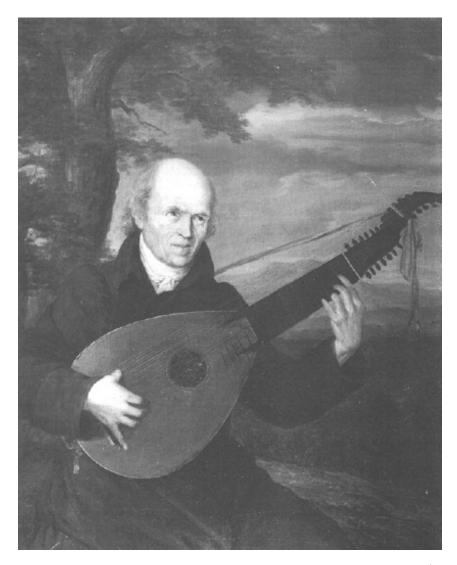


Figure 4.3: Portrait of Christian Gottlieb Scheidler by Christian Xeller (ca. 1812), Historisches Museum Frankfurt am Main, inv. no. B 363

Scheidler was successful as an organiser of public concerts featuring his mainly female pupils, which are well documented by reviews in the Allgemeine musikalische Zeitung⁴⁶⁸ and by the reports by Marianne von Willemer.⁴⁶⁹ Judging from the numerous documents, Scheidler must be regarded as a creative, partially self-employed entrepreneur who found additional income by teaching and organising concerts. His position as a lute player in court employment, and the associated income, had been eliminated by the events of the French Revolution and the later Napoleonic Wars. When he arrived in Frankfurt, Scheidler managed to create a wealthy circle of supporters in a very short time. With his pupil 'Demoiselle Jung', the later Marianne von Willemer (1784-1860), and a singer named Schmalz, he was introduced to "the Empress, who talked with them for a long time and very graciously, and expressed her praise with so much subtlety that they felt even more rewarded by it than by the truly imperial gifts."⁴⁷⁰

The biographies of Scheidler and Weiss show that the decrease in the demand for lute music in the court orchestras forced lutenists to find creative solutions to ensure their income. Naumann's compositions for glass harmonica and lute take into account the reality of lute-playing amateurs in the private musical circles of Dresden who needed to be included in contemporary musical developments. The adaptation of popular contemporary works like Hasse's operas or Gellert's *Oden* by Johann Christian Beyer in 1760,⁴⁷¹ which are among the last published compositions for lute, reflect on the musical tastes of the

Johann Christian Scheidler während seinem [...] bisherigen Aufenthalte, auf der spanischen Guitarre, auf welcher er so wie auch auf der Laute und Mandor es bis zur höchsten Vollkommenheit gebracht, so daß nicht leicht iemand ihm hierinnen an dies Seite zu stellen wäre, Unterweisung gegeben und noch gibt, wie auch daß keiner der hiesigen Tonkünstler sowohl dieses Instrument als die Laute und Mandor spielet, noch weniger aber auf gedachter spanischer Guitarre ihrer Seltenheit halber dahier Unterricht zu erhalten ist." Hindrichs, Zwischen "leerer Klimperey" und "wirklicher Kunst": Gitarrenmusik in Deutschland um 1800: Zugl.: Mainz, Univ., Diss., 2007, 241.

^{468. &#}x27;Nachrichten', Allgemeine musikalische Zeitung, 26 February 1806, 344–346; 'Nachrichten', Allgemeine musikalische Zeitung 15 (10 February 1813): 102.

^{469.} Carmen Kahn-Wallerstein, *Marianne von Willemer - Goethes Suleika*, 1. Aufl. (Frankfurt/Main: Insel-Verl., 1984), 26, 35.

^{470. &}quot;Des anderen Tages wurden Scheidler und die Dmois. Jung und Schmalz der Kaiserin vorgestellt, die sich lange und sehr gütig mit ihnen unterhielt, und mit so viel Feinheit ihr Lob aussprach, daß sie dadurch noch mehr sich belohnt fühlten, als durch die wahrhaft kaiserlichen Geschenke" 'Kaiserin Josephine in Mainz (aus Briefen)', *Journal des Luxus und der Moden* 22, no. 2 (1807): 141–142.

^{471.} Johann Christian Beyer, Herrn Prof. Gellerts Oden, Lieder und Fabeln nebst verschiedenen französischen und italienischen Liedern: für die Laute übersetzt (Leipzig: J.G.I. Breitkopf, 1760).

time. Scheidler offered lessons in lute, mandora and guitar in order to adapt to the needs of his patrons in the nobility and the wealthy upper class. This instrumental diversity was also part of the portfolio of an unknown musician in Munich in 1761, who offered to teach "eminent persons of rank as well as private individuals [...] the following instruments: [...] both pedal and ordinary David's harp,, lute, theorbo, mandora or gallichone, and mandolina".⁴⁷²

At the end of the 18th century, the lute and the transfer of the ability to play it was restricted to places less affected by the influence of political unrest and the consequences of the French Revolution. In Dresden and Vienna, for example, the hierarchical structure of the aristocracy was preserved longer, as was the traditional form of patronage. Patrons and pupils were mostly lute-playing amateurs, and thus lute playing on a professional level was neither pursued nor demanded by musical institutions. However, according to his last will, Kohaut seems to have been aware of the threat that his instruments and music could soon be obsolete. The fact that the heirs of Weiss in Dresden laid to claim to the ownership of the theorbo shows that there was no further use for this instrument in the court orchestra.

4.1.3 Mandora: An instrument for amateurs

The invention of the mandora, a smaller lute type mainly played by amateurs, can be seen as another approach to meeting the demands of the growing sector of amateur musicians. The first known instrument, made in 1700 by Wolfgang Sagmayr in Graz, has only six courses⁴⁷³ and the compositions for this kind of instrument have a low degree of difficulty. While the 11-course and later the 13-course lute were comparatively difficult to learn, the mandora presented an easier alternative while retaining the typical sound of the lute. Its invention can be seen as a recourse to the lute of the 16th century, from which it differs

^{472. &}quot;Denen respective hohen Herrschafften, sowohl als particulairen Personen offerieret sich durch dieses ein virtuoser Musicus folgende Instrumenta, nemlich sowohl Pedal: als ordinaire Davids-Harffen wie auch Lautten, Theorba, Mandora oder Gallichone, und Mandolina gegen civlier Bezahlung zu lehren, in welchen sowohl die Musicalische Kunst, als neuesten Gusto betreffend ein jede vollkommene Satisfaction finden wird, wer also hierzu Belieben traget, kan sich des mehreren erkundigen, in des Herrn Pilgram Handelsmanns Behausung in der Rosen-Gassen im Hof über 2.Stiegen." 'Avertissements.', Ordentlich-Wochentliche Münchner Frag- und Anzeigungs-Nachrichten, no. 43 (4 November 1761): 709.

^{473.} Landesmuseum Kärnten - Rudolfinum M41, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110584 (Version 29 July 2020).

only in a few characteristics concerning technology and tuning.⁴⁷⁴ Janovka⁴⁷⁵ indicates the tuning in 1701 as F, G, c, f, a, d'. The second between F and G and the tuning of the first three courses resemble to the tuning of the lute. However, in the course of the 18th century the main tunings were D, G, c, f, a, d' or E, A, d, g, h, e' anticipating the later tuning of the guitar. In general, a large number of scordaturas can be found, which spared the amateur player from much laborious work in the left hand.

While the lute was played in the cities, the mandora was most popular in the countryside. D. Kirsch⁴⁷⁶ has identified three main groups of players: monks, women, and freeholders, mainly settled in the southern German countries, Austria and Bohemia. The most important collection of music for mandora today is preserved in Eichstätt, but further compositions can be found, for example, in monasteries like Kremsmünster or Melk. A big part of the solo literature consists of intavolated popular songs, whose utilitarian character and somewhat crude lyrics indicate the relatively low social class of the players. The mandora was often combined in chamber music settings with flutes, clarinets, violins, cornettos, trumpets, or bassoons as well as in quartet and trio formations with flute, violin, bassoon, or violoncello. The latter arrangements are similar to the Viennese lute concert, in which the mandora part mostly renders the bass and violin parts with very reduced technical demands. However, the main repertoire of secular chamber music with mandora consists of arrangements of opera arias. Music for mandora was aimed at educated people with amateur musical ambitions, living far from cultural centres and adapting their musical activities to the life in the countryside, which resulted in a kind of salon music with mandora.⁴⁷⁷

In the middle of the 18th century, the mandora was flourishing and many instruments by south German or Austrian makers, as well as altered older lutes, are still extant from this period. Notably, the development of the mandora's ambitus repeated the history of the lute, but on a small scale. Initially, music was written for an instrument with six courses, later for eight courses, and finally even for nine courses, using a diatonic extension of the ambitus in the bass. Like the lute, the mandora was used decreasingly towards the turn

^{474.} Dieter Kirsch, 'Musik für Mandora in der Universitätsbibliothek Eichstätt', *Historischer Verein Eichstätt - Sammelblatt* 86 (1993): 87.

^{475.} Janovka, Clavis Ad Thesaurum Magnae Artis Musicae, 72.

^{476.} Dieter Kirsch, 'Mandora und Gallichon in Süddeutschland. Zur Geschichte eines Lautentyps des 18. Jahrhunderts', *Musik in Bayern* 81 (2017): 77–78, https://doi.org/10.15463/GFBM-MIB-2016-145.

^{477.} D. Kirsch, 78.

4 Extension, Simplification, and Decline

of the century. In 1794, Scheidler's supporters refer to him as a player of the mandora (see chapter 4.1.2). Vienna-based composer and guitar virtuoso Simon Molitor mentioned in his famous preface to his *Große Sonate für die Guitare allein* "Herrn Jos. von Fauner" as the only mandora player he knows and who apparently used an instrument with nine single courses. ⁴⁷⁸In 1829, Johann Daniel Andersch described in his dictionary *Musikalisches Wörterbuch* the mandora as a small lute-type instrument with eight courses. "It has not been in use for a long time; only now and then it is still played by some ladies in Poland."

^{478. &}quot;Uebrigens hat besagter Herr v. Fauner die doppelte Besaitung wegen ihrer Unbequemlichkeit schon vor längerer Zeit abgeschafft, kürzlich aber sein Instrument noch mit einer neunten Saite im Baß vermehrt." Simon Molitor, Große Sonate für die Guitare allein, als Probe einer besseren Behandlung des Instruments (Wien: Artaria und Comp., 1806), 8. 479. "Sie ist seit langer Zeit nicht mehr im Gebrauche; nur hin und wieder wird sie noch von einigen Damen in Polen gespielt." Johann Daniel Andersch, Musikalisches Wörterbuch für Freunde und Schüler der Tonkunde zusammengetragen (Berlin: W. Natorff und Comp., 1829), 292.

4.2 Historicist Concepts and the Function of Age in the Discourse on the Lute's Decline

The age of objects played a central function in the concept of material collections, such as cabinets of curiosities, during the 17th century. By the virtue of being first, being rare and expensive, the age of objects reflected the knowledge and wealth of the owner. Lute playing, as well as the possession of old instruments and other kingly things, was integral to this performativity of the powerful upper class. During the 18th century, however, this particular social function of the lute changed. The public appearance of the instrument was reduced since it was less common in contemporary compositions, and it was no longer considered a relevant instrument by the progressive movement in society and music. By the end of the 18th century, the lute became an object representative of the old system during a time of social and political transformations. For the young generation, the tradition of lute playing was connected with laughable stereotypes and belonged to an antiquated system that had to be shaken off.

The cultural discourse concerning the musical and social relevance of the lute found its strongest and most sustained expression in the confrontation between Johann Mattheson and Ernst Gottlieb Baron. In 1713, Mattheson published his book Das neu-eröffnete Orchester, in which he described the lute as an obsolete instrument, mainly played by unskilled and too imperfect and soft to be used in modern music. Probably from around 1720, lutenist Ernst Gottlieb Baron worked on his Untersuchung des Instruments der Lauten to answer Mattheson's polemical and sarcastic critique, which was finally published in 1727. After reading Baron's treatise, Mattheson answered in the same year with a Lauten-Memorial, which was added to Marpurg's compilation Historisch-Kritische Beyträge zur Aufnahme der Musik. The discussion of the relevance of the lute was continued by Baron in 1756, when he published another attempt to justify the importance of the lute for contemporary musical culture.

^{480.} Mattheson, Das neu-eröffnete Orchestre, 274–277.

^{481.} Douglas Alton Smith, 'Baron and Weiss contra Mattheson: In Defense of the Lute', *Journal of the Lute Society of America* 6 (1973): 48–62.

^{482.} Johann Mattheson, 'Lauten-Memorial', in *Der neue Göttingische aber viel schlechter, als die alten Lacedämonischen, urtheilende Ephorus*, ed. Johann Mattheson (Hamburg, 1727), 109–124.

^{483.} Ernst Gottlieb Baron, 'Herrn Ernst Gottlieb Barons Beytrag zur historisch-theoretisch- und practischen Untersuchung der Laute', in *Historisch-Kritische Beyträge zur Aufnahme*

4 Extension, Simplification, and Decline

Both Mattheson and Baron understood themselves as modern men who had adopted the galant lifestyle, but with approaches concerning the relevance of historical knowledge and actual physical objects to current musical aesthetics. Mattheson was a practical musician who received a private education and was not rooted in the academic world. Baron, on the other hand, studied jurisprudence and philosophy in Leipzig and, later on, in Jena before becoming Lutenist at the court in Gotha in 1728. Baron saw himself in the tradition of other great historiographers like Giorgio Vasari and Philppe Quinault. In his Untersuchung, he tried to justify the importance and continued existence of this instrument by creating a historiography of the lute, its composers and players in a systematic and scientific manner. Furthermore, by including objects in his argumentation and praising the old makers, Baron not only reinforced the legend of the high quality of old instruments but also applied modern academic historical methods to bolster these claims.

In order to better understand the conflict between Baron and Mattheson, it is necessary to take a step back and sketch the modernisation of the historical sciences. As will be shown later, Baron uses modern academic methods in his historical investigation, which includes objects and other non-written documents as evidence, and by this means the cult of ancient instruments was presented in terms of *galant* science.

4.2.1 Excursus: Object studies as part of academic scholarship

The study of antiques in the 17th century was largely a hobby of the ruling and educated classes and in monastic communities. Studies on objects rooting in the cabinets of curiosities and collections of relics were published mostly outside of the academic institutions. At the turn of the century, the examination of objects entered the academic spectrum of historical methods. The Word-based philology started to be enriched by a modern method based on original sources and was connected with the growing interest in archaeology. Documents and other material remains that were contemporary with the events to which they attested were gradually integrated into historical research and increasingly valued as reliable sources. Momigliano calls the 18th century the "Age of the

der Musik, ed. Friedrich Wilhelm von Marpurg (Berlin: Lange, 1756), 65–83; Baron, 'Herrn Barons Abhandlung von dem Notensystem der Laute und der Theorbe'.

^{484.} Baron, Historisch-theoretische und practische Untersuchung des Instruments der Lauten, 1.

Antiquaries"⁴⁸⁵ and sees antiquaries responsible for first stimulating the use of non-literate evidence in academic research. In fact, the important discoveries of Herculaneum in 1736 and Pompeii in 1748 can be seen as the result of a crucial change in historical methodology.

Already at the end of the 17th century, Gottfried Wilhelm Leibniz "had paved the way for an integration of antiques and other kinds of material sources into historical scholarship."⁴⁸⁶ Leibniz, who based his studies on the works of Jean Mabillon, categorised historical sources as written, oral, and material. Material evidence such as tools, tombs, buildings or coins he called *Urkunden*, and he emphasised that it was necessary to consider and analyse them carefully. As a supporter of the presentation and arrangement of these objects in special cabinets, he is seen as one of the pioneers of the idea of modern museums. In his *Untersuchung*, Baron explicitly refers to Leibniz and places himself the same academic tradition.⁴⁸⁷

Benjamin Hederich, who published his first edition of the 'Introduction of the most noble historic sciences' (Anleitung Zu den fürnehmsten Historischen Wissenschaften) in 1709, described in a later edition in 1742 the distinction between Philologie verbalis and Philologie realis. The latter deals with realia, thus mainly with antiques, and is therefore part of galant studies. The introduction of this term to refer to the investigation of the material world was necessary in order to underline this deliberate methodological distinction, which made it possible to introduce the auxiliary sciences of history into the spectrum of academic scholarship. This genre of scientific inquiry includes the systematic study of material evidence for history, like documents, genealogy, numismatics, heraldic, epigraphy, chronology, or geography. In 1734, the first curriculum for auxiliary sciences was founded at the University of Göttingen. Miller calls it "the first academic curriculum for material culture studies".

With the integration of non-text-based sources and the acceptance of objects as reliable proof of historical events, the scope of historical evidence was expanded. The material sources were used like eyewitness accounts in order to

^{485.} Arnaldo Momigliano, 'Ancient History and the Antiquarian', *Journal of the Warburg and Courtauld Institutes* 13, nos. 3/4 (1950): 285.

^{486.} Peter N. Miller, *History and Its Objects* (Ithaca, NY: Cornell University Press, 2017), 73.

^{487.} Baron, Historisch-theoretische und practische Untersuchung des Instruments der Lauten, Vorrede.

^{488.} Miller, History and Its Objects, 72.

^{489.} Miller, 76.

support the veracity of an argument. Collecting objects from the past, especially antiques, became less a way of rebuilding the wider world in small scale within a curiosity cabinet and more a method of studying history in a systematic way with immediate optic and haptic access.

4.2.2 The lute and its historical fetishism

Historical awareness and understanding of its functional developments had been part of the cultural discourse concerning the lute for many decades. Two of the main *topoi* in this historiography are the explanation of the lute as an instrument descending from antiquity and a narrative of progressive perfection by the addition of strings. Authors of the 17th century mainly used textual evidence, while Baron applied current historical methods by using material evidence. In his polemic critique, Mattheson tried to unmask Baron's efforts as ridiculous and based in historical fetishism, and therefore insufficient as an argument for the continued musical relevance of the instrument.

In the history of lute treatises, Baron's Untersuchung is not the first to use the textualisation of knowledge as a strategy to secure a lasting cultural stronghold for the lute. Mace's section The LUTE made Easie in his Musick's Monument was similarly motivated. It starts with a short, poetic episode, "A Dialogue between the AUTHOR and His LUTE: The Lute complaining sadly of Its Great Wrongs and Injuries". The lute expresses its sadness about the "New Fangles", that it would be out of fashion and fears "that I // Am not Long-liv'd, but shortly too shall Dye." Furthermore, the lute complains, that "There's not One Book yet writ of my Deserts, // Which gives both Full and Certain Rules whereby // To be Assisting to Posterity // In my Beloved Art." As a result, the author promises to write this book in order to vindicate the glory of this instrument and promises a new birth: "It shall be Put into Print". At a time when lute playing was becoming less common in musical culture in England, Mace dedicated his publication to renewing public awareness of his favourite instrument.

While Mace's book focusses on practical information about playing techniques, tunings, the acquisition and the repair of an instrument, many authors tried to reconstruct a history of the lute beginning in antiquity by using mainly

^{490.} Mace, Musick's Monument, 33.

^{491.} Mace, 34.

^{492.} Mace, 35.

^{493.} Mace, 35.

philological, text-based methods. In his Tabulaturbuch auff die Lautten, dating from 1558, Sebastian Ochsekun tried to explain the origin of the lute as lying in the antediluvian use of stringed instruments and refers to the fifth book of Genesis. He also describes the increase in the number of the strings in antique stringed instruments. Around 1640, Pierre Trichet places the roots of the lute in antiquity, even though the ancient names for these predecessors no longer applied to any instruments of his day. To his knowledge, the exact date of the invention of the lute remains unknown. However, he highlights the fact that sixty years before his time the lute had only six double courses. 494 The awareness of the antique roots and of the history of its development is also present in Burwell's lute tutor. The first chapter is dedicated to the origin of the lute, with an ancestral line from the antique plucked stringed instruments to the contemporary lute being suggested: "We believe that the word cythara, which was an instrument that David commanded us to make use of in praising God, was a kind of lute" 495 and "Orpheus delivered his wife Euridice from the captivity and the pains of Hell by the charms of his lute." 496

While these explanations are somewhat based on myths which serve to elevate the lute's importance in history, Baron tries to unify the cultural knowledge about the lute and uses a systematic historiographic approach, pointing to the constant historical awareness of its history among its players. In his book, he tried to reconstruct a coherent history from antiquity to the present. In his first chapter, entitled 'About the name of this instrument' (Von der Benennung dieses Instruments), his approach follows the classical philology, citing several diverse and very early sources, such as Ochsenkun, Julius Caesar Scaliger, the Arab dictionary of Samuel Bochart, and the Dictionnaire de Trévoux, in order to reconstruct the roots of the lute's name. In the second chapter, 'About the first origins' (Vom ersten Ursprunge dieses Instruments), he discusses several theories before stating that a tortoise shell used in antiquity must have been the first form of a lute. 497 Here, Baron presents a depiction of a lyre copied from a numismatic study by Otto Sperling. 498

In the subsequent chapters, he continues the object-based argumentation and

^{494.} Trichet, Traité des instruments de musique -vers 1640-, 151.

^{495.} Dart, 'Miss Mary Burwell's Instruction Book for Lute', 9.

^{496.} Dart, 9.

^{497.} Baron, Historisch-theoretische und practische Untersuchung des Instruments der Lauten, 15.

^{498.} Otto Sperling, Ad Nummum Furiæ Sabiniæ Tranquillinæ Aug. Imp. Gordiani Tertii Uxoris. Dissertatio (Amsterdam: Desbordes, 1688), 69.

4 Extension, Simplification, and Decline



Figure 4.4: Roman depiction of a lute-shaped instrument in Baron's *Untersuchung* p. 31

includes several Roman depictions taken from "coins, and old marbles". 499 Among them is another depiction taken from Sperling, but also examples whose attribution to an original is rather difficult. A relief showing a woman playing an instrument which looks quite similar to a lute (see fig. 4.4) is described by Baron as an excerpt from a bigger marble sculpture. 500 Due to the growing fashion at the time of collecting antiques and the systematic analysis that was developing in academia, many illustrated dictionaries, such as Bernard de Montfaucon's L' antiquité expliquée et représentée en figures, 501 provide examples of antique conventions of depiction.

Finally, Baron comes to the conclusion that the lute in its present form must have been in use since at least 1415, "because at that time the world-famous lute-maker Lucas Mahler was still alive". This conclusion is probably based on a fake Laux Maler label in a lute which had been in the possession of the

^{499. &}quot;Münzen, als alten Marmoribus" Baron, Historisch-theoretische und practische Untersuchung des Instruments der Lauten, 19. See also pages 19-23, 26 and 31 in the Untersuchung.

^{500. &}quot;But what it looked like at that time is shown in an old Roman marble piece, in which, according to ancient usage, a few people are seen taking food while reclining on a bed surrounded by a crowd of attendants. Outside the crowd there is a chair on which a woman sits and plays a lute with three strings" ("Wie es aber zu der Zeit ausgesehen, weiset uns ein altes Römisches Marmor-Stücke, worinnen man nach alten Gebrauch ein paar Menschen siehet Speise nehmen, auf einem Bett-Lager liegend, mit einer Menge Aufwärtern umgeben. Da ausser dem Gedränge ein Stuhl gestellet, worauf ein Frauenzimmer sitzt und auf einer Lauten mit drey Saiten bezogen spielet.") Baron, 31.

^{501.} Bernard de Montfaucon, L' antiquité expliquée et représentée en figures / Antiquitas explanatione et schematibus illustrata (Paris: Florentin Delaune, 1722-1724), https://doi.org/10.11588/diglit.1745.

^{502. &}quot;weil zu dieser Zeit noch der Weltberühmte Lauten-Macher Lucas Mahler gelebet". Baron, *Historisch-theoretische und practische Untersuchung des Instruments der Lauten*, 56.

court in Gotha since 1720, where Baron served since 1728. The instrument can be identified as the lute of Baron's predecessor, Georg Friedrich Meusel (also: Meisel, 1688-1728), to which the archival sources of the court orchestra in Gotha refer as the 'Meiselische Laute', currently kept in the Händel Haus in Halle. The Halle Haus in Halle. The Halle Haus in Halle Haus probably bought from Johann Georg Gleichmann in 1720, and it is very probable that Baron was already familiar with this instrument during the 1720s. He later confirmed a payment for a repair to the instrument in Nuremberg, from which it still bears Sebastian Schelle's repair label. Since the label of the instrument reads "Laux Maller 1415", Baron used this as material evidence in his argumentation, harnessing once more the modern method of Real-Philologie. Furthermore, he included an illustration reproduced from Hans Neusidlers Ein Newgeordnet Künstlich Lautenbuch from 1536, which can be seen as an example of what Leibniz called Urkunde.

Mattheson judged Baron's (in some places very tedious and artificial argumentation) as "fairy tales and farces" ("Mährlein und Fratzen").⁵⁰⁶ In Mattheson's present-oriented, social understanding of music, historical and material approaches were of no importance. He scoffs at Baron's academic efforts to use material evidence to reconstruct the history. The idea of the origin of the lute in the god Mercury's discovery with the empty tortoise shell, he comments that it would be better to make a Swiss hat out of the tortoise shell. He labels Baron's description of the lute as Mercury's child, naming it his daughter, as presumptuous, since it is nothing more than a lifeless wooden toy.⁵⁰⁷ Baron's references to the old lute treatises like Neusidler, in which the lute's lowest string is called *Brummer*, also receive critical commented. Mattheson refers to the lack of talent among the numerous contemporary amateur lute players, whom he calls "Allemand-crawlers", who would be "entirely similar to a pack of Visigoths, especially if the Neusiedler Brummers were to be dutifully strummed along with them." In his polemic critique, Mattheson sketched the

^{503.} Händel-Haus Halle MS-168, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110596 (Version 29 July 2020).

^{504.} Christian Ahrens, "Zu Gotha ist eine gute Kapelle ...": Aus dem Innenleben einer thüringischen Hofkapelle des 18. Jahrhunderts, vol. 4, Friedenstein-Forschungen (Stuttgart: Steiner, 2009), 227.

^{505.} Christian Ahrens and Gregor Klinke, eds., Laute und Theorbe: Symposium im Rahmen der 31. Tage Alter Musik in Herne 2006 (München: Katzbichler, 2009), 76.

^{506.} Mattheson, 'Lauten-Memorial', 109.

^{507.} Mattheson, 113.

^{508. &}quot;Und ich getrauete mir in Franckreich und Teutschland allein (wenns der Mühe werth wäre) schon so viel elende Allemanden-Krauler auf der Laute zusammen zubringen, daß sie einem West-Gothischem Schwarm vollenkommen ähnlich seyn sollten, absonderlich, wenn die Neusiedlerischen Brummer brav dabey angeschlagen würden." Mattheson, 120.

4 Extension, Simplification, and Decline

picture of a historic cult of mainly amateur lute players driven by their historical fetishism. Overestimating the historical significance of the instrument, in his opinion, is detrimental to the musical quality of the playing. "Diligent lutenists are honoured; but derided are such sinners as borrow all their fame from the instrument and its poltergeist." Baron's effort to present a historic treatise by using modern philological methods, was understood by Mattheson as a concept of historicism. He saw constant historical awareness of the lute's history among its players as part of a cult mentality, causing them to believe in this poltergeist of history, and correspondingly try to preserve an instrument which was almost out of use.

^{509. &}quot;Tüchtige Lautenisten ehret man; lachet aber über solche Sünder, die ihren gantzen Ruhm von dem Instrumente und seinem Polter-Geiste borgen." Mattheson, 'Lauten-Memorial', 122.

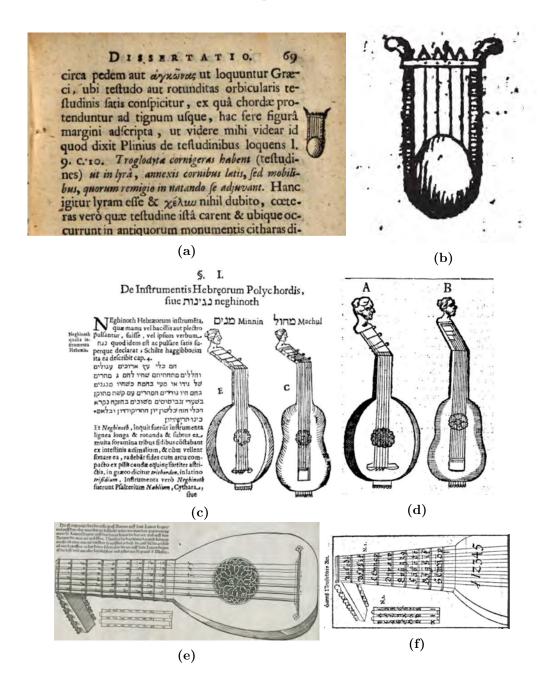


Figure 4.5: Interpictoriality in Baron's *Untersuchung*: (a) Depictions in Otto Sperlings *Ad Nunnum*, p. 69; (b) Baron's reproduction p.15; (c) Depiction of Jewish stringed instruments in Athanasius Kircher's *Musurgia Universalis* p. 48; (d) Baron's reproduction p. 43; (e) Depiction in Hans Neusidler's *Lautenbuch*; (f) Baron's reproduction p. 58

4.2.3 The lute and its material and immaterial fetishism

Not only did Mattheson deride the use of material evidence, but he also mocked the significance of the materiality of the lutes and the tradition of revering old instruments and their makers. Baron placed himself entirely in the tradition of earlier authors and echoed their legends about old lute makers, presenting the same criteria for valuable instruments. In his academic approach, he treated the objects like antiques, describing external-physical and biographic details. Baron dedicated the seventh chapter of his *Untersuchung* exclusively to discussing the "famous lute makers, their distinguished work, and in what the quality and virtue of a lute essentially consists." In the historical foundation of the work as well as against the background of the emergence of antique studies, his descriptions can be justly understood as an 'antiques guide' in which he explains form-related, material and immaterial values of the objects.

The form-related aspects mainly concern the design of the lute body. According to Baron, good lutes would have a rather flat body and big sound holes in order to project the tone better, while deep lute bodies and small sound holes he considered not to be very good. All parts should be in good geometrical proportion in order to produce a desirable sound. The analysis of the ratio of cavity, depth, length, and width can be seen as belonging to the early methods of *Real-Philologie*.

Concerning the material aspects, he described several factors. First, for a particularly good sound, a few narrow bars under the soundboard were apparently best. Second, the wood should be dry and of good quality, which is influenced by the growing conditions of the tree and the moment of logging. He referred to the *Dictionnaire de Trévoux*, a popular reference work at the beginning of the 18th century, in stating that the special kind of wood used by the Bolognese makers contributed to the quality of the sound.⁵¹² Here Baron follows

^{510. &}quot;Von den berühmten Lauten-Machern, deren unterschiedenen Arbeit, und worinnen eigentlich die Güte und Tugend einer Lauten bestehe." Baron, *Historisch-theoretische und practische Untersuchung des Instruments der Lauten*, 88.

^{511.} The term 'Antiquitätenführer' for Baron's work is used in: Martius, 'Lautenreparaturen und -umbauten von Johann Christian Hoffmann', 145.

^{512.} See the entries in the *Dictionnaire de Trévoux*: "SONORE. adj. m. & f. *Sonorus*. Qui a un beau son, qui rend un son agréable. Une voix *sonore*. Canora vox. Le bois dont on fait les luths de Bologne, les rend plus *sonores* que les autres. Cela rend les vers plus *sonores*." *Dictionnaire universel François et Latin vulgairement appelé Dictionnaire de Trévoux: S-Z*, 1st ed., vol. 3 (Paris: Estienne Ganeau, 1704), 89 and "LUTH": "Les *luths* de Boulogne sont les plus éstimez par la qualité du bois, qui est cause qu'on en tîre un plus beau son. On est plus longtemps à accorder un *luth*, qu'à en joüer. Les concèrts se sont avec des dessus & des

the argument, already found in the 17th century, that old lutes supposedly got their quality from the dryness of the materials. He states that this assumption would have to be examined further, thus showing his scientific interest in material study.

In his description, the favourisation of old lutes is characterised by the anticoncept of the preference for *noble materials*. The value of an instrument is not created by materials such as gold, silver, ebony or ivory, but by its association with age and a particular brand or manufacturer of the past or by the use of special, mostly aged wood. Just like Mace and Burwell, Baron criticised the sound of a highly decorated instrument he had seen in the Hoffmann workshop in Leipzig, the bowl of which was made of gilded copper showing numerous figures. The soundboard was made of ebony but it sounded more like an "old container or pot". Concerning the highly decorated instruments made by Joachim Tielke, Baron had to specifically emphasise that Tielke had a fortunate way with his woodwork, and his instruments, even if they do not sound at all strong, are indeed *delicate* and pleasant. To be sure of having a well sounding lute, his advice was to select an instrument made of good wood by one of the makers he names.

Concerning the immaterial values, he mentioned age, brand and authenticity as key elements. He provided detailed information about the products of several makers, of whom Laux Maler was the most esteemed. He mentioned 30 more lute makers, mainly from the past (see fig. 4.6), whose brand names were said to guarantee good quality. High valuations, especially of the lutes of Laux Maler, are justified, as long as "there is no fraud behind it, they are found original (or, to use the terminus technicus, oriental)". 515 According to

basses de *luths*. On dit qu'un *luth* est bien monté, quand on y a mis de bonnes cordes, qui sont bien d'accord & au ton convenable. Un Auteur digne de foi dit qu'on a vû à Paris un *luth* d'or qui revenoit à 32 000. ecus." *Dictionnaire universel François et Latin vulgairement appelé Dictionnaire de Trévoux: L*, 1st ed., vol. 2 (Paris: Estienne Ganeau, 1704), 66. Entries in later editions are identical.

^{513. &}quot;Klang eines alten Haffens oder Topffes". Baron, *Historisch-theoretische und practische Untersuchung des Instruments der Lauten*, 92. The instrument can be identified as a lute in the Landesmuseum Stuttgart G 14298, see Martius, 'Lautenreparaturen und-umbauten von Johann Christian Hoffmann', 146 and MusiXplora, Ed. Josef Focht, https://musixplora.de/mxp/4110835 (version of 29 July 2020).

^{514. &}quot;In der Holtz-Arbeit ist er auch glücklich gewesen, und klingen seine Instrumente nicht gar besonders starck, doch gantz delicat und angenehm." Baron, Historisch-theoretische und practische Untersuchung des Instruments der Lauten, 95.

^{515. &}quot;in so ferne kein Betrug dahinter steckt, und sie *originnal* (oder wie der *Terminus technicus* heist *oriental*) befunden". Baron, 92.

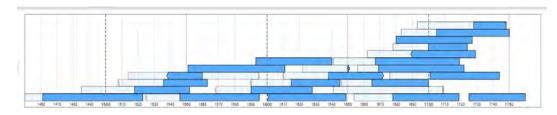


Figure 4.6: Life dates of lute makers mentioned in Baron's *Untersuchung*. Visualisation in *MusiXplora*

Adelung's Wörterbuch der hochdeutschen Mundart, the significance of the term original during the 18th century referred to "the first solemn primary work; in contrast to the copy. A picture, [...] invented by the artist himself is called original." Thus the term was used to distinguish an authentic object from its replica.

Furthermore, Baron illustrated the valuation of unexplainable, immaterial qualities of old instruments by a quote from Ochsenkun's *Tabulaturbuch*, which he addressed to Mattheson as "a truth that was already considered good 168 years ago, which [...] Sebastian Ochsenkuhn recognised, not without good grounds, [...] namely that ingenious reason, just like as the busy bees, was able to bring together such a treasure full of art and loveliness in such a small hollow yessel." ⁵¹⁷

Mattheson, in his *Lautten-Memorial*, responds to this quotation with the above mentioned term poltergeist, a myth of history, which lute players might search for in their wooden vessels.⁵¹⁸ In his description, the fascination for the material

^{516. &}quot;Ein Bild, welches [...] von dem Künstler selbst erfunden worden, heißt das Original" Johann Christoph Adelung, ed., Grammatisch-kritisches Wörterbuch der Hochdeutschen Mundart mit beständiger Vergleichung der übrigen Mundarten, besonders aber der oberdeutschen. Zweyte, vermehrte und verbesserte Ausgabe. M-Scr, vol. 3 (Leipzig: Johann Gottlob Immanuel Breitkopf, Sohn und Compagnie, 1775), col. 615.

^{517. &}quot;Doch muß ich ihm [...] eine Wahrheit die man schon vor 168. Jahren vor gut befunden communiciren, welche [...] Sebastian Ochsenkuhn nicht ohne Raison erkannt: [...] daß die sinnreiche Vernunfft nach Art der emisgen Bienen in ein so kleines höltzendes Gefäße so einen Schatz voll Kunst und Lieblichkeit hätte zusammen tragen können." Baron, Historischtheoretische und practische Untersuchung des Instruments der Lauten, 111–112. Baron quotes from this passage: "Also das wir uns nit onbillich verwundern, wie die sinnreiche vernunfft nach arth der embsigen Bienen, in diß unachtbar hültzin gefeßlin ein so grossen schatz kunstreicher und artlicher lieblichkeit der Concordantzen hat mögen zusamen tragen und verbergen können." Sebastian Ochsenkun, Tabulaturbuch auff die Lauten (Heidelberg: Johann Kohl, 1558), Aiii.

^{518.} Mattheson, 'Lauten-Memorial', 122.

and immaterial qualities of objects and the fame of the old makers is made ridiculous. He called lutes "a few wood shavings and cat-guts" ("ein Paar Hobel Späne und Katzen-Därme") or "a lifeless piece of wood" ("lebloses Stück Holtz").⁵¹⁹ The same satiric image of the lute as a product of wood and cat guts in which lute players search for the tone by looking into the sound hole can be found in the entry *Liuto* in Fuhrmann's *Musikalischer Trichter*.⁵²⁰ Mattheson's remarks assume that the praise of old lute makers was outdated and far from the reality of what was valued by contemporary society. He stated that the "lute players and makers will never, in all eternity, gain for their instrument such credit in the eyes of the world as tea and coffee, alas!, already enjoy."⁵²¹

Mattheson described musical instruments rather indifferently as objects, among others, that do not merit special attention, and certainly not after losing their musical and therefore cultural relevance. His contempt "would be the same as if I despised a smoke-blackened tobacco pipe, of which some think more than of Laux Maler's lutes, even if they were all oriental". The old, used and shabby tobacco pipe becomes an image for the look of age, a concept that used to promise value and historic importance and was part of the quality of an antique object. In using the term 'oriental', Mattheson refers to the terminus technicus used by Baron for original instruments, which is not further specified.

Baron's argumentation is rooted in his attempt to construct a historiography of the lute. He combines methods of classical studies with practical approaches to assesing a functional object. Mattheson's polemically formulated position, on the other hand, indicates a different cultural reality and a progressive ideology. According to his critique, form and material-oriented concepts, such as the *look of age* or immaterial aspects like brand names or authenticity were useless for the contemporary world of musical objects; drinking coffee and tea, smoking tobacco and the valuation of the associated utensils seem to be more present in the current discourse than any discussion of the quality of old lutes.

^{519.} Mattheson, 'Lauten-Memorial', 109, 110.

^{520.} Fuhrmann, Musicalischer-Trichter, 90-91.

^{521. &}quot;Die Lautenschläger und Macher, werden in Ewigkeit ihr Instrument in keinen solchen Credit bey der Welt setzen, als Thee und Caffee leider! sind." Mattheson, 'Lauten-Memorial', 110.

^{522. &}quot;wäre es nicht eben so viel, als ob ich eine schwartz-gerauchte Tobacks-Pfeiffe verachte, davon mancher mehr hält, als von Laux Malers Lauten, wenn sie auch alle Oriental wären". Mattheson, 109.

4.2.4 The lute as a stereotype

Another concept, the lute as a kingly thing, seems to have become obsolete during the 18th century, even for Baron. Unlike many other authors in the past, Baron did not try to construct a distinct noble use of the instrument. However, in his reconstruction of the antique and mythological roots of the instrument, he implicitly connected the lute with a high social status, but he did not explicitly mention the lute as the 'king of instruments'. In view of its reduced usage in court music, the rising musical importance of keyboard instruments, and the increased number of amateur players, a proposed correlation with nobility would have been an additional and obvious target for an attack by Mattheson. Furthermore, dedications of lute compositions to sovereigns were becoming increasingly rare. In fact, instead of being a kingly thing, the image of the lute changed and it became the subject of many mocking anecdotes full of stereotypes, which even Baron could not ignore.

Criticism of the lute had been part of the discourse since the end of the 17th century. The critiques included musical, material, and social aspects of the instrument, for example "That it makes Young People grow awry"⁵²³ or "crooked"⁵²⁴ or that it was be too expensive to maintain. Mattheson noted that "in Paris it costs as much to maintain a lute as a horse",⁵²⁵ a comparison that has already been used in Mace's Monument.⁵²⁶ Baron's reply was that the horses would be very skinny if one were to feed them for only two Thaler a year, which would be enough to maintain a lute.⁵²⁷

The criticism of the lute as an 'imperfect' instrument was expressed in different ways. Mattheson criticised the difficult and time-consuming tuning the instrument and remarked that "if a lutenist reaches the age of 80, he has certainly spent 60 tuning."" Furthermore, the sound of the lute was not strong enough to play in operas and church music, and thus the instrument did not provide any social or cultural benefit. However, since the instrument was in

^{523.} Mace, Musick's Monument, 43.

^{524.} Dart, 'Miss Mary Burwell's Instruction Book for Lute', 10.

^{525. &}quot;es koste zu Paris einerley Geld, ein Pferd und Laute zu unterhalten". Mattheson, Das neu-eröffnete Orchestre, 276.

^{526. &}quot;That it is a very *Chargeable Instrument* to keep; so that one had as good keep a *Horse* as a *Lute* for *Cost*." Mace, *Musick's Monument*, 43.

^{527.} Baron, Historisch-theoretische und practische Untersuchung des Instruments der Lauten, 114.

^{528. &}quot;Denn wenn ein Lautenist 80. Jahre alt wird, so hat er gewiß 60. Jahr gestimmet." Mattheson, Das neu-eröffnete Orchestre, 275.

his view deficient, one required special skills to perform with adequate musical accomplishment. The majority of the players, he said, were unskilled amateurs who would not reach this level as long as they lived in their "lute kingdom" ("Lauten-Reich") deluded by "blind lute love" ("blinde [...] Lauten-Liebe"). 529

Baron addressed this topic in the second chapter of part two in his *Unter*suchung, where he stated that it required spirit and intelligence as well as mechanical skills to become a good lute player. He illustrated this point by telling the anecdote of "a certain bad and not all too clever lutenist, named Marcolphus von Butter-Faß"530 (= of the butter-barrel). On his travels, he arrived at a court where the Capellmeister promised to find a pupil for him while he had to wait for his audience with the ruler. Instead of a pupil, he sent him the retired former lutenist, who pretended to be a learner. At first, held his fingers clumsily, and Marcolphus tried to teach him the right technique. After a while, he revealed himself as a lutenist and taught Marcolphus that the understanding of lute music is not about the fingers but about a smart and brisk mind. However, Baron claimed the lute was so easy that children of seven or eight years could learn it and defended amateur players said to have no advanced understanding of music and to play only for their pleasure. 531 Mattheson, on the other hand, picking up the same anecdote, stated that there are not many good players or teachers, and that "Marcolphus von Butterfaß has a lot of brothers". 532

Another rich topic for scornful critique is the alleged power of the lute to evoke 'affects'. Fuhrmann, in his *Musicalischer Trichter*, stated that anyone claiming the lute had a supernatural sound that can turn a melancholic person into a restless character would have to be judged insane.⁵³³ In this example, Fuhrmann is referring to the topos of Thimotheus of Miletus, often used to suggest the lute's power to evike affects (see chapter 2.2.3). In the literary discourse about the lute, its link with this emotional power meant that the lute was often categorised as an instrument for women⁵³⁴ or for cowardly,

^{529.} Mattheson, 'Lauten-Memorial', 115.

^{530. &}quot;ein "gewisser schlechter und nicht allzuvernünfftiger Lautenist, [...] Marcolphus von Butter-Faß genanndt". Baron, Historisch-theoretische und practische Untersuchung des Instruments der Lauten, 138.

^{531.} Baron, 141.

^{532. &}quot;Marcolphus von Butterfaß hat eine Menge Brüder". Mattheson, 'Lauten-Memorial', 113.

^{533.} Fuhrmann, Musicalischer-Trichter, 90–91.

^{534.} Mace, Musick's Monument, 43.

effeminate characters. Progressive authors of the *Sturm-und-Drang* movement took a stand against this attitude associated with *Empfindsamkeit*.

One such literary depiction is that of the lute teacher Reehar in Jakob Michael Reinhold Lenz's (1751-1792) tragicomedy *Der Hofmeister oder Vorteile der Privaterziehung* (The house tutor or the advantages of private education).⁵³⁵ The piece describes the conflict between generations and different concepts of education and follows societal changes from the domination of a conservative aristocracy to the emancipation of the bourgeoisie demonstrated in a love story between a bourgeois teacher (*Hofmeister* Läuffer) and a noble born daughter.⁵³⁶ The depiction of social disintegration on the basis of the discourse on education and sexuality makes *Hofmeister* an example of the upcoming epochal change and was regarded as an attempt by a passionate Enlightenment supporter and author of the Sturm-und-Drang period, Jakob Michael Lenz, to break with the totalitarianism of the older generation.⁵³⁷

The character of the lute teacher, Rehaar, who was probably inspired by Lenz's real-life lute teacher, Johann Reichardt, ⁵³⁸ represents the old hierarchical system with its rules and conventions. When one of the main characters of the younger generation, Pätus, begins a romantic relationship with Rehaar's daughter, the teacher plays an important role in the generational conflict. A minor character with only three appearances, Rehaar is depicted as a cowardly character, a poor and suppressed musician, plagued by the constraints of estate-based society. In his language, he uses colloquial, servile, and hilarious expressions as well as diminutives, which makes him a caricature. His cowardice is illustrated in several ways: he starts to cry after being insulted by Pätus and refuses to challenge him to a duel; he then attacks his unarmed opponent with a rapier and and, lastly, he states he would rather run away in battle than face a fight. The lute teacher does not receive his salary, has no courage and is beaten by his student, since musicians are considered "even

^{535.} The first manuscript dates from 1772, the printed version was published in 1774: Jakob Michael Reinhold Lenz, *Der Hofmeister oder die Vortheile der Privaterziehung. Eine Komödie.* (Leipzig: Weygandsche Buchhandlung, 1774).

^{536.} Matthias Luserke, Jakob Michael Reinhold Lenz: Der Hofmeister, Der neue Menoza, Die Soldaten, UTB (München: Fink, 1993), 33.

^{537.} Heinrich Bosse and Ursula Renner, 'Generationsdifferenz im Erziehungsdrama. J. M. R. Lenzens Hofmeister (1774) und Frank Wedekinds Frühlings Erwachen (1891)', Deutsche Vierteljahrsschrift für Literaturwissenschaft und Geistesgeschichte 85, no. 1 (2011): 47–84. 538. Günter Hartung and Johann Friedrich Reichardt, eds., Johann Friedrich Reichardt: Autobiographische Schriften, 1. Aufl. (Halle (Saale): mdv Mitteldt. Verl., 2002), 168.

lower than women"⁵³⁹ or (in the handwritten version) "no better than women in trousers".⁵⁴⁰

The stereotype of the musician as unmanly, sensitive and cowardly belongs to the system of the older generation, which the authors of the *Sturm-und-Drang* were trying to overcome. The musician's personality is explained as the natural result of the hierarchical and strictly class-dominated structure of society, which was outdated in the eyes of Rehaar's opponents of the younger generation. The lute and all its connotations as an instrument for the upper class and especially for women, linked with sentimentality and, finally, with amateurs, is used here as a literary *topos*.

4.2.5 The loss of the lute's musical habitat

For progressives like Fuhrmann, Mattheson, and Lenz, the lute belonged to the musical culture and the social order of the past. In their critiques, the historical approaches used in the treatises of 18th century authors and lute players like Baron were unmasked as historical fetishism. The new musical and social fashion of the *galant homme*, as it was proclaimed by Mattheson, created new social spaces in which neither the lute – as an object with musical, acoustical, and material qualities – nor the discussion of its myths and history had any place.

As a newly introduced word, the term galant referred to the modern, courtly French lifestyle and had a rather polyvalent meaning at the start of the 18th century. For followers and promoters of this modern ideology in the German speaking countries, for example the philosopher Christian Thomasius (1655-1728), it included the renunciation of pedantry and old-fashioned erudition in favour of a sober urbanity.⁵⁴¹ As a social concept transferred to musical style, this new fashion was initially connected with courtly life, where lute music had previously been promoted. The new ideal of social life no longer implied the intimate surroundings needed for playing the lute. It preferred a different kind of sociability marked by such activities as reading, visiting

^{539. &}quot;noch weniger als Weiber". Lenz, Der Hofmeister oder die Vortheile der Privaterziehung. Eine Komödie., p. 114 recte 116.

^{540. &}quot;nichts besser als Weiber in Hosen". Jakob Michael Reinhold Lenz, Der Hofmeister: synoptische Ausgabe von Handschrift und Erstdruck, ed. Michael Kohlenbach (Basel and Frankfurt/Main: Stroemfeld/Roter Stern, 1986), 128.

^{541.} Wilhelm Seidel, Galanter Stil, ed. Laurenz Lütteken, Kassel, Stuttgart, New York, 1995.

4 Extension, Simplification, and Decline

gaming clubs, drinking coffee and smoking tobacco. In this new society, the lute (as an object) lost its natural habitat – intimate and exclusive spaces with small audiences – and with it, its reputation as a *kingly thing*.

In this context, music had to be pleasant, free from the strict style of composition and adaptable to new social needs. The lute is just one example given by Mattheson to illustrate the contrasting ideas of the old-fashioned and modern forms of social and musical life. Beginning with the foreword to his *Orchestre*, he decried the exaggerated importance placed on ancient music theory and any form of antiquity; musical skills rooted in the knowledge of ancient music theory had no place in modern musical culture. In his satiric manner, he stated that someone with a monochord might imagine himself to be Apollo because he understood the mathematical reasoning of music, but would not be able to play even two bars of actual music.⁵⁴² The new *qalant* style was oriented towards delightful reception, performativity, and pleasantness. However, composers like Silvius Leopold and his brother Sigismund Weiss, Karl Kohaut, and Christian Gottlieb Scheidler and even Baron adapted to the galant style of composition. The historicist image of the lute remained. The integration of the lute into galant aesthetics was difficult due to the existing historical and material consciousness regarding this instrument, especially among amateur lute players.

Even though Real-Philologie and the study of antique objects was considered a galant occupation, the discourse on old instruments and their makers and the valuation of instruments due to their age and materiality represented to progressives an outdated mode of thinking. In literature and treatises, lute players were primarily depicted as unskilled and often rich amateurs who followed a certain cult like zealots. Since the discourse about the lute was no longer protected by its kingly character, hilarious anecdotes and stereotypes gained more space. By the end of the 18th century, the social and literary discourse portrayed the lute and its players as representatives of a cultural system and a social order that had to be overcome by the new generation.

^{542.} Mattheson, Das neu-eröffnete Orchestre, 5.

^{543.} Mattheson called a lute player "a small but rich lute partisan" ("kleiner, aber reicher Lauten-Partisan"). Mattheson, 'Lauten-Memorial', 111.

4.3 The Trade in Lutes as Antiques

The comparison of Mattheson's and Baron's publications concerning the lute served to illustrate two poles of the social significance of the lute during the 18th century. The importance of Baron's *Untersuchung* for the lute market can not be underestimated. Its exposition of the historical development and both material and immaterial aspects of the instruments corresponds to trading strategies of the day for antiques and old instruments.

For the 17th century, the trade in old lutes was explained by using the distinction between a standard- and status-market. Old lutes were traded mainly on a status-market, in which the knowledge of the social status of the market players influenced the formation of prices. Even though the customers were still coming from high society, the nature of the lute market in German-speaking lands during the 18th century cannot be grasped well on the basis of this distinction. Baron's *Untersuchung*, and other written sources, such as letters and the instruments themselves, indicate on a structural level similarities to a market for antiques, with structures comparable to those that can be observed today. The increased interest in antiques during the 17th century and trade of antique sculptures, paintings, furniture and other objects is subject to similar market mechanisms as today. Furthermore, the objects fulfil a similar prestige function for a group of buyers defined by a social status.

4.3.1 Structure and objects of the market

According to Honsel,⁵⁴⁴ antiques can be defined as genuinely old objects that are traded on a market and contain specific material and immaterial structural elements that express or refer to their age. The material structural elements include form, colour, material and – in the case of musical instruments – also functional elements such as disposition and size. As stated before, fragmentation, the *look of age* or other elements can function as signifiers of age. Immaterial qualities, such as originality or authenticity, rarity, origin (object biography) or historical significance are abstractions that require further specifications and rely on a specialised knowledge.

^{544.} Jan Honsel, Das Kaufverhalten im Antiquitätenmarkt: Eine empirische Analyse der Kaufmotive, ihrer Bestimmungsfaktoren und Verhaltenswirkungen, vol. 9, Schriften zu Marketing und Management (Frankfurt/Main: Peter Lang GmbH Internationaler Verlag der Wissenschaften, 2018), 19–39, https://doi.org/10.3726/b13582.

The social function of antiques was and still is mainly based on immaterial qualities, therefore social display is considered the most important feature, ranked above others such as decoration or functionality. For Baudrillard, the social prestige of the upper class is expressed through the appropriation of history. He distinguishes between the primitive fetish for technology and the fetish of civilisation for origin and authenticity. Thus, antiquity has no actual function, other than to signify virtue. It becomes a symbolic sign for the myth of power and myth of origin. 545 In Baudrillard's approach, the appropriation of the object means the appropriation of power. Old lutes, on the one hand, fulfil this assumption by having been owned by members of the powerful or rich upper class. In the face of criticism of the relevance of the lute in the musical discourse of the 18th century, these objects have a mythical character and can provide justification because they are rooted in history. According to Lowenthal, ⁵⁴⁶ antiques transmit the past and of an unmediated experience of history. Historical awareness was one of the key elements in the culture of amateur lute players in the 18th century. Thus, inside the small group of lute players, old instruments could take over the mythical function of being direct transmitters of the history of the lute.

In contrast to the market for new products, the structure of the antiques market is rather closed, or circular.⁵⁴⁷ The number of available products is relatively constant, or at least slowly growing, since age is a crucial quality. Once an object is sold, it is removed from the market for an indefinite period of time, and the overall supply is reduced while rarity increases. Collectors are usually motivated to keep these rare objects rather than selling them again. As Baron suggested, someone who was be lucky enough to own an instrument by Buchenberg, dating from around 1600, should keep it is as a true gem.⁵⁴⁸ However, objects can also enter the market once they fulfil the criteria for an antique. As commodities, old lutes were in competition with entirely new instruments in terms of their price and prestige. Brand and signs of usage seemed to have been the main criteria for lutes to be sold at the higher price of 'antique' instruments, even if they were not extremely old. Baron, referring to the instruments made by his contemporary Sebastian Schelle, only 20 years

^{545.} Baudrillard, Das System der Dinge: Über unser Verhältnis zu den alltäglichen Gegenständen, 106.

^{546.} Lowenthal, The past is a foreign country - revisited, 386–380.

^{547.} Honsel, Das Kaufverhalten im Antiquitätenmarkt: Eine empirische Analyse der Kaufmotive, ihrer Bestimmungsfaktoren und Verhaltenswirkungen, 56.

^{548. &}quot;Wer das Glück hat von diesem besondrem und vortrefflichen Meister etwas zu besitzen, der kann nur solches als ein wahres Kleinod von Instrumenten aufheben." Baron, *Historischtheoretische und practische Untersuchung des Instruments der Lauten*, 94.

his senior, stated that certain masters had the good fortune to obtain their instruments cheaply from Schelle and sold them later "once they have worn them out a little with playing, to connoisseurs and lovers, partly for a hundred and partly for sixty to seventy Reichsthaler." Thus, use and age improved the perceived quality and increased the customer's willingness to pay a higher price.

4.3.2 Market players

The target group for the "consumption of the past"⁵⁵⁰ is a group of a certain social class and cultural demographic in which the status-related instrumentality of antiques is accepted. For the modern market of antiques, Honsel identifies nostalgists and materialists⁵⁵¹ as the main costumer types. The acquisition of such objects is mostly motivated by the pride of ownership and the immediate, tangible connection to the past. As shown in previous chapters, the owners of old instruments were kings, noblemen and rich diplomats, as well as professional musicians, who were often employed by orchestras. The awareness of the history of the lute and the myth of the quality of old instruments was part of the musical culture. Owning an old instrument represented a direct, material connection to this history. The acquisition made it possible to possess a part of this history.

According to the existing sources, musical instrument makers acted as traders and experts. Johann Christian Hoffmann, in his letter to Johann Friedrich Armand von Uffenbach, called him an "devotee of old corpora" ("Liebhaber von alden *Corpra*")⁵⁵² and offered him two different lute models. A small one made by Rauchwolff, made after the fashion of the old lutes and adapted with

^{549. &}quot;Seine Lauten sind öffters so wohl geraten, daß diejenigen Meister, welche sie von ihm um einen billigen Preis bekommen, schon bißweilen das Glück gehabt haben, wenn sie dieselben vorhero ein wenig ausgespielt an Kenner und Liebhaber theils vor hundert theils vor sechstzig biß siebentzig Reichsthaler wieder anzubringen." Baron, Historisch-theoretische und practische Untersuchung des Instruments der Lauten, 97.

^{550.} Mark Westgarth, *The Emergence of the Antique and Curiosity Dealer in Britain 1815-1850*, vol. 5, The histories of material culture and collecting, 1700-1950 (London and New York: Routledge, Taylor & Francis Group, 2020), 50.

^{551.} Honsel, Das Kaufverhalten im Antiquitätenmarkt: Eine empirische Analyse der Kaufmotive, ihrer Bestimmungsfaktoren und Verhaltenswirkungen, 193, 199.

^{552.} Manuel Bärwald, Eszter Fontana and Klaus Martius, 'Ausgewählte Dokumente zu Leben und Werk von Martin und Johann Christoph Hoffmann', in *Martin und Johann Christian Hoffmann*, ed. Eszter Fontana, Veit Heller and Klaus Martius (Leipzig: Friedrich Hofmeister Musikverlag, 2015), 100.

a modern neck, was nevertheless very good and well conserved. The other instrument was a bigger example from Venice, made of snakewood but still to be transformed into a lute, since its current state was that of an *Artsolut* (= arciliuto).⁵⁵³ The letter illustrates a classic sales situation in which the customer addresses a dealer who obviously, from his varied stock, draws attention to the items most suited to his customer's preferences.

Uffenbach must indeed, like Huygens, have been searching for an old lute for a long time. His diary entries document not only his enthusiasm for old instruments, but also the trade structures and the practice of adapting instruments. The theme of old instruments and the pride he anticipated from owing one run through Uffenbach's life. As a student in Strasbourg in 1713, he owned a lute which was, according to the Count of Truchses, himself a specialist and lute trader, not as old as Uffenbach wished. Truchseß dealt with old lutes which he brought from Augsburg to Strasbourg and asked for high prices in teh range around 10 Louis d'or. 554 After adapting an instrument by the lute maker George Cousin, Uffenbach took his lute on a journey to Italy and France.⁵⁵⁵ In Bologna, he admired the very old lute belonging to Count Federico Caldarini, with whom he had become acquainted through the singer Santa Cavalli in March 1715. 556 In the autumn of the same year in Paris, he took his lute to a lute maker on the rue de bûcherie to have the neck adjusted again. There he saw many old lutes and reflected wistfully on those earlier times when the lute was the preferred instrument of music lovers. 557 He took lessons with Jacques Gallot who, Uffenbach reports, owned more than a dozen old instruments by masters from Padua and Hans Frey. Obviously, Gallot tried to persuade Uffenbach to buy one of his instruments for a price up to 40 Louis d'or. Despite Gallot's remark that one had to bite the bullet for art and spend a little more money to acquire a worthwhile instrument, Uffenbach remained intransigent.⁵⁵⁸ After returning from his journey in October 1723, Uffenbach was informed by Johann Daniel Geysel, a Nuremberg merchant and collector of art and natural objects, that Geysel had had "the good fortune to come across an admirable Laux Maler lute, so I have had it made up à

^{553.} Bärwald, Fontana and Martius, 'Ausgewählte Dokumente zu Leben und Werk von Martin und Johann Christoph Hoffmann', 100–101.

^{554.} Eberhard Preußner, Die musikalischen Reisen des Herrn von Uffenbach: Aus dem Reisetagebuch des Johann Friedrich A. von Uffenbach aus Frankfurt a.M. 1712-1716 (Kassel and Basel: Bärenreiter, 1949), 42.

^{555.} Preußner, 42.

^{556.} Preußner, 73.

^{557.} Preußner, 126.

^{558.} Preußner, 126.

la modern and adapted to 13 courses".⁵⁵⁹ Uffenbach's documentation of his lifelong quest for an old lute shows the admiration and pride he attached to the possession of such instruments. The need to pay a higher price for them was part of the discourse of the 18th century market of which merchants like Truchsess or Gallot were a part.

Furthermore, some example of direct selling of old instruments without the mediation of a luthier can be traced as well. In 1735, instrument maker Magnus Meyer announced two lutes for sale in the local newspaper, among them one by Michael Harton.⁵⁶⁰ In 1762, we find "a well conditioned lute" for sale in Weimar.⁵⁶¹ In 1766, a Nuremberg-based merchant, Christoph Jonathan Körner, announced the sale of several instruments which would apparently be available on his market stand at fairs in different German cities.⁵⁶²

However, besides specialised traders, lute makers (especially in big cities) were probably the main suppliers of old instruments. Lute makers were often based in cultural centres which were necessarily attracted to visitors for other purposes such as fairs. In Leipzig, for example, Johann Christian Hoffmann received clients from all over Europe during the Leipzig fairs. In his letter to Uffenbach, he mentioned the French merchants Mr. Sehehage et Clanti and Mr. Bousayet as merchants for "Galanderiewahren" (galant products), Mr. Krumbhaar and Mr. Kuntze, as well as "H. Lic: Göthe", probably Johann Caspar Goethe, lawyer and councillor in Frankfurt/Main and father of Johann Wolfgang von Goethe. ⁵⁶³

The activities of lute makers in other cities can also be traced by the repair labels in older lutes. Such labels can mostly be found in instruments associated with prominent makers whose names correspond to those given by Baron. Instruments from anonymous makers and bearing a repair label are relatively rare, which shows the importance of the brand name. From the workshop of

^{559. &}quot;das Glück gehabt, eine admirable Laux Maler Lauthe zu überkommen, so habe solche à la modern zurichten und auf 13. Chöre aptiren lassen". Johann Daniel Geysel (05/10/1723). Letter from Johann Daniel Geysel to Johann Friedrich von Uffenbach, Niedersächsische Staats- und Universitätsbibliothek Göttingen, 2 Cod. Ms. Uffenbach 20: Bd. II, ff. 632 - 633, f. 633v.

^{560.} Bärwald, Fontana and Martius, 'Ausgewählte Dokumente zu Leben und Werk von Martin und Johann Christoph Hoffmann', 95.

^{561. &#}x27;Sachen, so zu verkaufen sind', Weimarische wöchentliche Anzeigen, 18 September 1762, 150.

^{562.} Bärwald, Fontana and Martius, 'Ausgewählte Dokumente zu Leben und Werk von Martin und Johann Christoph Hoffmann', 98.

^{563.} Bärwald, Fontana and Martius, 100.

Thomas and Johann Joseph Edlinger in Prague, 14 repair labels can be found in instruments by Tesler, Tieffenbrucker, Laux Maler, Unverdorben, Burckholtzer, Hartung and Hans Frei that passed through the workshop between 1696 and 1739. From Sebastian Schelle's workshop in Nuremberg, the labels of 13 modifications between 1721 and 1745 are known and bear witness to his activities. The instruments were made by famous makers such as Sellas, Tieffenbrucker, Laux Maler, or Laux Boss. Among them is one instrument by Gregorius Kayser, first modified by Schelle's predecessor Matthias Hummel in 1715 and only eleven years later, in 1726, by Schelle. Schelle's successor Leopold Widhalm signed four modifications between 1757 and 1768, involving lutes by famous makers like Unverdorben or Laux Maler.

While these labels mainly indicate transformations into 11- course or 13-course lutes, the alterations into mandoras can also be found. Due to the geographic concentration of the use of this instrument, makers from Vienna, Innsbruck, Prague, Augsburg or Würzburg were the specialists in producing this lute type.

As Westgarth points out, the preference for old objects was based on personal and social influence: "For those who desired historical objects they would provide a catalyst for Romantic historical associations, or to suggest affinities with the social group of antiquaries and other collectors or used to demonstrate erudition and displayed as markers of wealth and status. For those who disparaged historical objects, for such material was also considered to have limited aesthetic appeal or be of dubious historical interest by many commentators in the period, ownership of historical objects represented arcane, obscure or dubious taste." ⁵⁶⁵

4.3.3 Prices

As commodities, old instruments were probably the more expensive alternative to new-built instruments. The information about prices for new and old instruments and their repairs vary and it is only occasionally possible to determine the actual value. In his letter to Uffenbach, Hoffmann mentioned that it is usually possible to adapt any old lute to the modern needs, as long as the soundboard was in a good condition. He also mentioned that the lute

^{564.} Martius, 'Reparaturen der Nürnberger Geigen- und Lautenmacher', 101.

^{565.} Westgarth, The Emergence of the Antique and Curiosity Dealer in Britain 1815-1850, 11.

maker often found more things to repair, so the final costs of refurbishing the instrument could end up being more expensive. He estimated that for a thorough repair, including the adaptation to 13 courses, one could expect to pay between 16 and 20 Reichsthaler. ⁵⁶⁶

Compared to the prices named in other sources from the same currency area, this price is rather high. In 1730, the *Meiselische* lute of the Gotha court orchestra was repaired, probably by Schelle in Nuremberg, for 4 *Reichsthaler* including 2 *Reichsthaler* for the postage. In 1748, the same instrument was altered by Franz Schonger who was paid 4 *Reichsthaler* for making a new neck, removing the top, and applying new bars and a new bridge. And finally, in 1754, probably the same instrument was turned into a theorbo for 1 *Reichsthaler* and 15 *Groschen* by Johann Martin Wieding.⁵⁶⁷

A similar pricing can be found in the bills of Johann Andreas Kämbl in Munich. In the bill for his yearly services for the imperial princess in the years 1753 and 1754, a thorough repair ("in allen Nothwendligkheiten Reperirth") was charged 6 Gulden and adding a bass or treble rider including repairs ("Mer auf eine lauthen ein aufsäzl gemacht In Und auswendtig die lauthen Reperirth") was charged 4 Gulden 30 Kreuzer. For several services in 1753, which included the changing of strings, he charged 26 Gulden 30 Kreuzer and one year later 29 Gulden 20 Kreuzer. For

The prices for complete new or old lutes vary, but show nevertheless that Hoffmann's pricing was rather high. In 1720, the Gotha orchestra paid 26 *Thaler* for the *Meisel'sche* lute.⁵⁷⁰ Veit Heller estimates the price for a new instrument made by Hoffmann around 1730 at between 20 and 40 *Reichsthaler*.⁵⁷¹ In his

^{566.} Bärwald, Fontana and Martius, 'Ausgewählte Dokumente zu Leben und Werk von Martin und Johann Christoph Hoffmann', 100.

^{567.} Christian Ahrens, "vor an der Theorbe und Laute verrichtete Reparatur" - Lauten und Theorben am Gothaer Hof im 18. Jahrhundert, in *Laute und Theorbe*, ed. Christian Ahrens and Gregor Klinke (München: Katzbichler, 2009), 76.

^{568.} One Gulden was worth the half of a Reichsthaler, see Siegfried Becher, Das österreichische Münzwesen vom Jahre 1524 bis 1838 in historischer, statistischer und legislativer Hinsicht: Erster Band, erste Abtheilung (Wien: Mösle und Braunmüller, 1838), 81.

^{569.} Bayerisches Hauptstaatsarchiv, BayHStA, KB HZA 1733II, Jg. 1755, Beleg Nr. 142 (2) and BayHStA, KB HZA 1733II, Jg. 1755, Belege Nr. 110-185; information generously pointed out by Dr. Frank Legl.

^{570.} Ahrens, "Zu Gotha ist eine gute Kapelle ...": Aus dem Innenleben einer thüringischen Hofkapelle des 18. Jahrhunderts, 227.

^{571.} Veit Heller, 'Umfeld und Mitarbeiter Joann Christian Hoffmanns', in *Martin und Johann Christian Hoffmann*, ed. Eszter Fontana, Veit Heller and Klaus Martius (Leipzig:

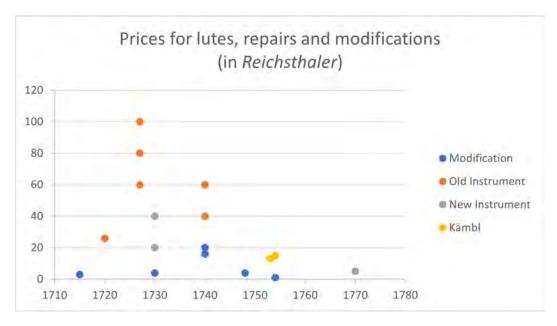


Figure 4.7: Prices for lutes, repairs, and modifications according to the cited sources. The yearly costs for maintenance given in Kämbl's bills have been converted from *Gulden* into *Reichsthaler*

letter, Hoffmann himself offered old instruments for 40 to 60 Reichsthaler. As stated before, Baron mentions it would be possible to resell an instrument made by Schelle for 60, 70 or 100 Reichsthaler. Uffenbach mentions lutes for 10 and 40 Louis d'or and neck adjustment for 7 livres. These prices contrast strongly the 5 Reichsthaler the Gotha orchestra paid in 1770 for a new lute. ⁵⁷² However, the sources indicate two tendencies. First, the charges for maintenance services for institutions like the court orchestras in Munich or Gotha were set rather low, while the offers for similar services for a rich private customer like Uffenbach were rather high. Secondly, they show that old instruments and those made by famous makers were more expensive then new-built lutes.

4.3.4 Customer engagement

Among the affluent and educated social class, the knowledge of antiques and other historical objects belonged to *galant* studies and were, therefore, part

Friedrich Hofmeister Musikverlag, 2015), 410.

^{572.} Ahrens, "vor an der Theorbe und Laute verrichtete Reparatur" - Lauten und Theorben am Gothaer Hof im 18. Jahrhundert', 76.

of the cultural discourse. From an economic perspective, the communication about the objects and the exchange of knowledge is part of what is described as customer engagement. This determines the social aspect of the attachment to the possession of a certain object.⁵⁷³ Specific knowledge of consumption – defined in chapter 2.2.2 as a characteristic of luxury goods – is the precondition for the interest in socially valued objects and the willingness to pay a higher price. Baron's book must be considered as the main source for this body of knowledge during the 18th century and as a guide for connoisseurship concerning form-related, material, and historic criteria of quality and age of lutes. Certain parallels between the market for antiques and old lutes are worth examining.

In general, specialised knowledge about certain lute makers, as well as material and immaterial aspects of old instruments was not part of common knowledge, but rather the purview of a particular social group. In most of the 18th century dictionaries, the information given about the lute is rather basic.⁵⁷⁴ The only compendium that repeats the myth about the fame of Bolognese lutes is the Trévoux's dictionary, which was cited by Baron. The impact of Baron's work becomes obvious when we consider that in Walther's *Musicalisches Lexicon* all of the lute-related biographic information is taken from Baron's *Untersuchung*. Gerber's dictionary contains an entry about Joachim Tielke which is obviously copied from Walther and again reflects the work of Baron.⁵⁷⁵ No detailed information about Hans Frei or Laux Maler, about the mythical quality of old lutes, can be found in the standard compendia.

However, some dictionaries give more detailed information, such as Gottsched's Handlexicon, in which we find one entry about the lute⁵⁷⁶ and one about Silvius

^{573.} Honsel, Das Kaufverhalten im Antiquitätenmarkt: Eine empirische Analyse der Kaufmotive, ihrer Bestimmungsfaktoren und Verhaltenswirkungen, 91.

^{574.} See Johann Heinrich Zedler, ed., Grosses vollständiges Universal-Lexikon, vol. 16 (Halle and Leipzig: Johann Heinrich Zedler, 1737), 610; Majer, Joseph Friedrich Bernhard Caspar, Joseph Friedrich Bernhard Caspar Majers Neu-eröffneter theoretisch- und praktischer Music-Saal (Nürnberg: Johann Jacob Cremer, 1741), 82–88; Johann Christoph Adelung, ed., Grammatisch-kritisches Wörterbuch der Hochdeutschen Mundart mit beständiger Vergleichung der übrigen Mundarten, besonders aber der oberdeutschen. Zweyte, vermehrte und verbesserte Ausgabe. F-L, vol. 2 (Leipzig: Johann Gottlob Immanuel Breitkopf, Sohn und Compagnie, 1796), col. 1947-1948.

^{575.} Ernst Ludwig Gerber, ed., Historisch-Biographisches Lexicon der Tonkünstler, welches Nachrichten von dem Leben und Werken musikalischer Schriftsteller, berühmter Componisten, Sänger, Meister auf Instrumenten, Dilettanten, Orgel- und Instrumentenmacher, enthält. N-Z (Leipzig: Gottlob Immanuel Breitkopf, 1792), col. 651.

^{576.} Johann Christoph Gottsched, Handlexicon oder Kurzgefaßtes Wörterbuch der schönen Wissenschaften (Leipzig, 1760), 1004–1005.

Leopold Weiss.⁵⁷⁷ This is due to the fact that Luise Adelgunde Gottsched, who was a skilled amateur lute player and became acquainted with Weiss in 1740, contributed to the work of her husband.⁵⁷⁸ Another exception is Johann Georg Krünitz's *Oekonomische Encyklopädie*, which provides at the end of the 18th century a synthesis of the publications of Baron and Mattheson and adds more information about technical aspects of instrument making, such as the drying of wood.⁵⁷⁹

This shows that by the 18th century the information about biographic and material aspects of the lute and its makers or brands given in Baron's Untersuchung was not common knowledge. In fact, Baron's work remained the main source of information on lutes during the 18th century and later. The character and content of Baron's information forms the basis of the shared knowledge of the instrument and its history in a certain social group. A main part of the information on lutes given by Baron concerns aspects of trade and ownership of old instruments. He classifies the importance of certain objects in terms of their rarity and value, which will contribute to the social reputation of the owner. As with the classification of antiques, information about material, form-related and historical aspects of the objects are given. Origin, names, and the genealogy of certain makers testify to continuity and formal classifications suggest secure knowledge. Furthermore, a certain assessment of ranking and even some information about prices are given.

Concerning form-related aspects, Baron states that the most esteemed lute bodies were rather flat and had large roses. The instruments by the Tieffenbrucker family, for example, were apparently in this style, but were hard to find. According to Lundberg, the "broader-bodied lute produces greater dynamic range and improved character of bass response" and would have been more suitable "to meet the developing character of German Baroque music, where greater dynamic range and improved characters of bass response were wanted." Among the 97 instruments selected for my analysis of the adaptation to 11- and 13-course lutes during the 18th century, half of them (48) were built in Venice or Padua, the base of the Tieffenbrucker family.

^{577.} Gottsched, Handlexicon oder $Kurzgefa\beta tes$ Wörterbuch der schönen Wissenschaften, 1644-1645.

^{578.} Frank Legl, 'Between Grotkau and Neuburg: New Information on the Biography of Silvius Leopold Weiss', *Journal of the Lute Society of America* 31 (1998): 51.

^{579.} Johann Georg Krünitz, ed., Oekonomische Encyklopädie oder allgemeines System der Staats- Stadt- Haus- und Landwirthschaft, vol. 66 (Berlin: Joachim Pauli, 1795), 381–388. 580. Lundberg, 'The German Baroque Lute, 1650 to 1750', 25.

^{581.} Lundberg, 'Weiss's Lutes: The Origin of the 13-Course German Baroque Lutes', 52.

This illustrates the popularity of this lute type, which was also produced by other makers like Michael Hartung, who – according to Baron – "has learned from the very young Leonhard Tieffenbrucker [...] whose work almost equals Vendelino Tieffenbrucker's."⁵⁸²

Since no other sources provide a detailed genealogy of this kind, Baron either took this knowledge from oral transmission or acquired it by studying form, style and material of the instruments and by comparing the labels. With his attempt to create a specific discipline founded on historical academic methods, he provided knowledge, a specific vocabulary, form-related and practical criteria to communicate the quality of objects. However, his descriptions may have formed the basis for the discourse and exchange of views among lute players regarding the different historical and material aspects of the instruments. From an economic point of view, this discourse can be seen as serving to engage the customer socially, intellectually, and economically. The customer does not only possess a valuable object but becomes a connoisseur himself. He can formally categorise the object and determine its quality according to its material and age. As shown in chapter 2.2.6, the possession of an old object can be connected to diverse concepts of veneration of the past. Apart from the history itself, defining details on the formal, materials, biographies of the lute makers and the technology of lutes were part of the body of knowledge shared by lute players. This knowledge adds an additional value to the possession of a certain lute and was the basis on which high prices were agreed for certain objects. Without this customer engagement, the value of the objects would be reduced to their basic qualities as musical instruments. The situation is similar with antiques, whose value and significance depends on the existing knowledge about the object and the area of history it signifies.

4.3.5 Consequences: Forgeries

With the introduction of form-based criteria for identifying old lutes and the growth of a clientele willing to pay higher prices for antique instruments, there inevitably developed a trade in replicas or forgeries. The question of authenticity became just as much part of the lute market as it has been for the art and antiques market. Baron had already cautioned lute enthusiasts that an

^{582. &}quot;hat noch bey dem gantz jüngeren Leonhard Tieffenbrucker welcher auch gar feine Arbeit gemacht, welche fast mit des Vendelino Tieffenbruckers übereinkommt zu Venedig gelernet." Baron, Historisch-theoretische und practische Untersuchung des Instruments der Lauten, 95.

instrument by the most famous maker, Laux Maler, was only valuable if it was in fact an original (or oriental, the technical term Baron uses) and free from fraud.⁵⁸³

In lute making, three types of copies – that is, non-original objects – have to be distinguished. The first are objects made according to older models; Kubler calls them replications. This practise was quite common. Lundberg has noted that lute makers in the late 17th century used to transform older models instead of inventing new outlines or designs. The replication of a model that is successful in aesthetics and sound and the reuse of templates is part of the workshop culture of the Early Modern era. It might not be the result of an autonomous invention, but cannot defined as fraud. The other two types of non-original objects can be defined as forgery. As Michael Prynne has pointed out, a "forgery is essentially a falsified object made with the intention to deceive. [...] A false attribution added in bad faith makes, in fact, a partial forgery – the attribution itself." This practice can be applied in two forms: either new-built instruments that are falsely labelled, or labels or other distinct signs that have been added to older lute bodies in order to change the attribution to a certain maker or place.

A forgery can only be successful if the distinctive properties that were made to change the attribution match the customer's knowledge in a convincing way. Baron's book may have played a key role in distributing this knowledge. In the case of Laux Maler, Baron's form-based criteria for identifying his instruments are contradictory. His description of the Bolognese lute, and especially Laux Maler's and Hans Frei's instruments, does not exactly match the description of Bolognese instruments we find in earlier treatises. In his view, it was "remarkable that they were already working according to the present façon, namely the Corpora elongated, flat and with braod ribs; inasmuch as there is no fraud behind it, they are declared to be original (or, to use the terminus technicus, oriental). They are very highly priced because they are rare and have a remarkable sound." 586 In the treatises and convention standard depictions in the

^{583.} Baron, Historisch-theoretische und practische Untersuchung des Instruments der Lauten, 92–93.

^{584.} Lundberg, 'The German Baroque Lute, 1650 to 1750', 1–3.

^{585.} Michael W. Prynne, 'Some Remarks on Lute Forgeries', *The Lute: Journal of the Lute Society* 3 (1961): 17.

^{586. &}quot;Nur ist dieses zu verwundern, daß sie schon nach jetziger façon, nemlich die Corpora länglicht, flach und breit-spänicht gearbeitet haben, und werden, in so fernde kein Betrug dahinter steckt, und sie originnal (oder wie der Terminus technicus heist oriental) befunden, man sie vor allen andern aestimirt. Man bezahlt sie sehr hoch, weil sie rar und von einem vortrefflichen Thon seyn". Baron, Historisch-theoretische und practische Untersuchung des

4 Extension, Simplification, and Decline

17th century, typical Bolognese lutes display the feature of broad ribs, but have a rather deep body and often a very small soundhole. This would seem to contradict Baron's criteria for a good lute. It might be that Baron was only familiar with instruments that were either fake or already modified and adapted to modern purposes.

Since the description of the form of the lute body is rather imprecise, the more important element he describes is the appearance of the signature. Its importance is underlined by the fact that Laux Maler's label is the only one of all mentioned lute makers that he gives as a facsimile. The signature is one of the most important factors in ascertaining the authenticity of an instrument. In Kubler's vocabulary, a signature is an adherent signal. In lutes, it is combined with the back, which is the only part certain to be retained throughout the life of the instrument. Pegbox, neck, bridge and in some cases even the soundboard can be changed without the attribution of the whole instrument being changed. Already in his day, Thomas Mace described the characteristics of Laux Maler's signature as "ever written with Text Letters" and Baron gives a facsimile of a label which can be used either to identify an original or to copy it in order to produce a forgery.

Today, eleven extant instruments are known which bear a label of Laux Maler. Another one "with the false written label Laux Miler" was documented by Curt Sachs in the collection of the Staatliche Hochschule in Berlin, while a further example in the Schlesisches Museum für Kunstegwerbe und Altertümer bore the label "Laux Maler // Bologna 1415". Both instruments have been lost since the second World War. Most of these instruments were adapted as 13 course lutes during the 18th century and are therefore directly linked to the information given in Baron's Untersuchung, the most important text on the lute of this period. Only the instruments in Nuremberg, Paris, London, and Prague are considered authentic, even though this conclusion is only based purely on elements of the form and connoisseurship. Until now, Laux Maler's instruments have never been the subject of a systematic study using methods

Instruments der Lauten, 92-93.

^{587.} Kubler, The shape of time: Remarks on the history of things, 22.

^{588.} Mace, Musick's Monument, 48.

^{589. &}quot;mit dem falschen Schreibzettel Laux Miler". Sachs, Sammlung alter Musikinstrumente bei der staatlichen Hochschule für Musik zu Berlin: Beschreibender Katalog, col. 180.

^{590.} Peter Epstein and Ernst Scheyer, Schlesisches Museum für Kunstgewerbe und Altertümer: Führer und Katalog zur Sammlung alter Musikinstrumente. (Breslau, 1932), 35.

^{591.} Exceptions are the instruments in Vienna, which is in 11-course state. The instruments in Paris and London were altered later, so earlier states can not be reconstructed.

of material analysis to compare and identify material similarities.

The comparison of the appearance of the different labels shows less a proof of authenticity of either of the instruments as the importance as a commodity (see fig. 4.8). Interestingly, two instruments bear the date 1415. Baron's work is the only known source for this date, so either he concluded it from the existing instruments, as suggested before, or someone created the label according to his information. Even though all labels use the characteristic Fraktur font, no label matches exactly the one given in Baron's book. Indeed, the fonts of the labels of the instruments in Paris, Nuremberg, and London are quite similar to each other and might have been produced with the same block printing technique, but certain letters like the M in Maler show differences. "The firm of Laux Maler operated from at least 1518 to 1613", 592 thus the style of the label might have changed.

In the case of the instrument in Halle, ⁵⁹³ the label is obviously glued over an older label. Here, the attribution of an old instrument in the style of the Tieffenbrucker family (which fulfils Baron's form-based criteria of a good lute) was changed by adding the label. In the instruments in Nuremberg (GNM MI 619)⁵⁹⁴ and Vienna (KHM SAM 28),⁵⁹⁵ the original labels were either removed or never existed. Without further analytical methods, it is not possible to determine the actual age of these lute bodies. The instrument in Wiener Neustadt (mXp 4110404) was probably built in the 17th century. It bears on the inside of the soundboard an inscription saying "Churfürstlich instrumentmacher // Martin Käiser Verneiert", which probably refers to the instrument maker active in Düsseldorf (1645-1710). All material signs indicate that the instrument was built as an 11-course lute, later transformed into a 13-course instrument with bass rider. Its Laux Maler label has nothing in common with the graphic block print style of the 16th century. However, all labels show on the one hand similar characteristics, on the other hand a certain variety in style. This variety can be an argument to prove or dispute the authenticity of the instrument.

Another example shows the connection between Baron's publication and forgeries. Baron refers to Hans Neusidler not only as lutenist, but also as lute

^{592.} Pasqual, 'Laux Maler (c. 1485 - 1552)', 74.

^{593.} Händel-Haus Halle MS 168, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110596 (Version 29 July 2020).

^{594.} MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110233 (Version 29 July 2020).

^{595.} MusiXplora, Hg. Josef Focht, https://musixplora.de/mxp/4111033 (Version 29 July 2020).



Figure 4.8: Laux Maler labels: (a) GNM MI 54; (b) Baron's *Untersuchung*; (c) MdlM E.2001.1.1; (d) London V&A 194:1, 2-1882; (e) Lobkowicz 1931E; (f) Lobkowicz 1408E; (g) Halle MS 168; (h) GNM MI 619; (i) KHM SAM 28; (j) Wiener Neustadt, mXp 4110404

4 Extension, Simplification, and Decline

maker. He said he had seen "corpora, in which the year 1553. was written, which looked somewhat large, of special foreign wood and quite proportional." 596 The only known lute with a Neusidler label is an instrument, attributed to Sixtus Rauwolf, which was repaired by Leonhard Maussiel in Nuremberg in 1715.⁵⁹⁷ It does not match the material and form described by Baron. As Jonathan Santa Maria Bouquet has shown, the Neusidler label was cut out from the title page of Neusidler's newes Lautenbüchlein published in 1547.⁵⁹⁸ It is not clear if Maussiel added the label, but anyone selling the instrument as conforming to the description Baron made twelve years after Maussiel's repair may have profited from this reference and managed to sell the instrument for a high price. For any market situation, Baron's Untersuchung could have served as the only written available source about the characteristics of old instruments. Closing his chapter on lute makers, he even suggested that everyone could choose the master he liked best and offered to supply missing names or give more information on another occasion. ⁵⁹⁹ This demonstrates his conviction of being the expert in this field.

^{596. &}quot;habe corpora worinnen die Jahr-Zahl 1553. gestanden, von ihm gesehen, welche etwas groß, von besondern fremden Holze und ziemlich proportionirlich ausgesehen haben." Baron, Historisch-theoretische und practische Untersuchung des Instruments der Lauten, 93.

^{597.} MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110511 (Version 29 July 2020).

^{598.} Jonathan Santa Maria Bouquet, 'Reconstructing a lute by Sixtus Rauwolf' (Diss, University of Edinburgh, 2017), 204.

^{599.} Baron, Historisch-theoretische und practische Untersuchung des Instruments der Lauten, 98.

4.4 Lute Transformations during the 18th Century

4.4.1 The 13-course lute with bass rider

The development of the 13-course lute is based on the technical predisposition of a modular construction of the lute and the tradition of adapting instruments. The first music for the 13-course lute was composed by Silvius Leopold Weiss around 1719 and it is probable that he himself initiated the production of a 13-course instrument. The easiest way to expand the bass range of the lute is by adding a new bridge and a so called 'bass rider' to the pegbox of an existing 11-course instrument, which provides space for four pegs for the two additional bass courses. Lundberg⁶⁰⁰ has suggested that the encounter between Weiss and lute maker Thomas Edlinger in Prague led to the development of this new lute type.

The new lute type provided a whole octave in the bass range, which is especially advantageous for accompaniment. In fact, "Weiss's [...] first experiments with a 13-course instrument were connected with ensemble performance". Also Baron's extant works include 10 pieces for ensemble and 12 for solo lute. Described by the Nuremberg merchant and collector Johann Daniel Geysel. In 1723, he wrote in a letter to Uffenbach to say he was lucky enough to get a Laux Maler lute, which he had adapted to the modern type with 13 courses: "which also works so well that I can boldly venture among a group of 4 to 5 people and need not fear being shouted down." It is likely that Geysel was referring to an instrument modified with a bass rider.

This new lute type spread quickly.⁶⁰⁴ The earliest known signed 13-course instrument is in fact an alteration signed by Thomas Edlinger in Prague in

^{600.} Lundberg, 'Weiss's Lutes: The Origin of the 13-Course German Baroque Lutes', 35. 601. Tim Crawford, 'S.L. Weiss's Use of the Lower Bass Courses', *Journal of the Lute Society of America* 35 (2002): 20.

^{602.} Ernst Gottlieb Baron, *Collected works*, ed. Jan W. J. Burgers (Lübeck: Tree Edition, 2005).

^{603. &}quot;welches auch so wohl reussirt, daß ich damit mich unter eine Copagn(ie) von 4 biß 5 Personen kecklich wagen, und nicht fürchten dorff, überschrien zu werden." Johann Daniel Geysel, Brief von Johann Daniel Geysel an Johann Friedrich von Uffenbach, Nürnberg, Niedersächsische Staats- und Universitätsbibliothek Göttingen, Nürnberg, 5 October 1723, 633v.

^{604.} Not only instruments were adapted to to the new lute type, but also manuscripts. This can be seen for example in the manuscript A-Wn 18829, in which the symbols for the 12th and 13th course were added later into compositions for 11-course lute.

1721, which supports Lundberg's hypothesis of Edlinger's involvement in the development of this type. Other extant instruments fitted with a bass rider during the 1720s were modified by several other makers, such as Jacob Heinrich Goldt in Hamburg, Sebastian Schelle in Nuremberg or Johann Michael Stürtzer in Wrocław. While these modifications of mostly 11-course instruments to 13 courses testify to the early form of this new lute type, the earliest extant dated instrument actually built with 13 courses dates from 1726. Other Thus, the material evidence strongly suggests that the first 13-course instruments with bass riders were rather modifications of older lutes than new-built instruments.

The process for adapting an instrument to a 13-course lute with a bass rider depends on the conditions of the existing instrument. In the case of an 11course lute, the modification is rather simple and can even be done without removing the soundboard. In general, the bass rider is a small peg box made of a piece of hard wood, like maple, glued and fitted onto the bass side of the back-bent pegbox of the lute. Seen from the front, it protrudes slightly towards the bass side in order to lead the additional, longer strings (by around 5 cm) alongside to the lowest two strings. Seen from the side, it often has a kind of C-shaped curve, and several solutions in design have been found to ensure stability with minimal added material. The attachment to the pegbox is done either via the top surface of the bass side or by including the lateral surface of the pegbox. On the soundboard, in most cases, a new bridge was applied. Even though the removal of a soundboard was a standard procedure when modifying or repairing lutes, the fact that many of the modifications were not documented and dated by a repair label suggests that these could have been done without removing the soundboard.

The simplest execution of such a modification can be found on an instrument made by Martin Hoffmann in 1697. Here, the old bridge was not even removed, but a small piece for the additional four strings was added by an anonymous maker. This shows that the modification might have been done even without

^{605.} Lute by Marx Unverdorben Lobkowicz collection 1178 E, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110363 (Version 29 July 2020), see also Cepelák, 'Lutes in the Lobkowicz collection', 89–93.

^{606.} Lute by Sebastian Schelle, Nuremberg 1726, YCMI 260; MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110532 (Version 29 July 2020). Two instruments by Thomas Edlinger in the Leipzig museum (MIMUL 3319 and MIMUL 0497) are not dated. Fontana assumes a date of production around 1721, which cannot be proven, see Fontana, 'Lutes for the Prince? The Edlinger Lutes in Leipzig and Frankfurt am Main'.



Figure 4.9: Additional piece on the bass side of the neck, bridge is offset to the bass side. Lute labelled "hans fichtoldt // in fiessen // 1627" with later modifications, MdlM E.998.2.2

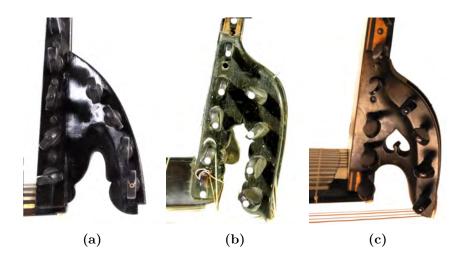


Figure 4.10: Different forms of bass riders on modified lutes: (a) Lute by Joachim Tielke, Hamburg 1676, modified between 1720-1750, MIMUL 0496; (b) Lute (1550-1650) with later modifications, MfA 1986.7; (c) Lute labelled "hans fichtoldt // in fiessen // 1627" with later modifications, MdlM E.998.2.2

removing the soundboard, since no repair label can be found.⁶⁰⁷ In this particular case, the veneer of the neck was removed and it was made a little thinner, probably to adapt it to the needs of the player. Baron had already observed that Martin Hoffmann often made his necks a bit too thick.⁶⁰⁸ This customisation can be seen as an individual service for the player.

In other cases, the neck had to be extended or modified for other reasons. An instrument by Hans Fichtoldt, built in 1627, probably as a 10-course lute, consists of a body made of ivory and a neck veneered with the same material (see fig. 4.9). Here, the unknown maker who modified it into a 13-course instrument by adding a bass rider added a piece of ebony on the bass side of the neck to provide enough space on the fingerboard. Thus the neck was enlarged 93 mm to 107 mm at the body and 74 mm to 85 mm at the nut. 609 The same

^{607.} MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110592 (Version 29 July 2020); see Klaus Martius, 'Die Lauten von Martin Hoffmann', in *Martin und Johann Christian Hoffmann*, ed. Eszter Fontana, Veit Heller and Klaus Martius (Leipzig: Friedrich Hofmeister Musikverlag, 2015), 280–281.

^{608. &}quot;da sie jenem meistentheils ein wenig gar zu dicke gerathen waren." Baron, Historischtheoretische und practische Untersuchung des Instruments der Lauten, 96.

^{609.} MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110657 (Version 29 July 2020), Dugot, Les luths (occident): Catalogue des collections du Musée de la Musique (vol.

technique for neck enlargement in which the precious material is preserved can be observed at a highly decorated mandolino held at the Metropolitan Museum of Art in New York. 610

In the above mentioned cases, the geometry associated with the neck and the bridge remained unchanged. The result is that the bridge is not centred on the soundboard, but offset to the bass side (see fig. 4.9). This happens if the bass rider is applied without also modifying the angle between the neck and body. This technical detail can be observed in extant instruments, as well as in contemporary depictions of lutes with bass riders and theorbos (see fig. 4.2, 4.3, 4.11). In order to implement the vibratory and aesthetic advantages of a bridge in the centre of the soundboard, as it can be seen in new-built 13-course lutes with bass rider, the positioning of the neck has to be slightly modified as well. This process can be assumed in the above mentioned bill by Johann Andreas Kämbl in which he describes "another lute the pegbox and the neck freshly set up"⁶¹¹. The neck of the lute modified by Edlinger in 1724 was probably also corrected so the bridge could be in the centre of the soundboard (see fig. 4.12).⁶¹²

The technique of adding a bass rider to the pegbox was the first method to adapt mostly 11-course lutes to a 13-course setup and thus is directly connected to the first musical experiments with two extra bass courses by Silvius Leopold Weiss. Likely developed in Prague by Thomas Edlinger, this technique spread quickly and was used during the entire 18th century as a relatively simple and probably cost-effective technique all over Europe. Due to the fact that the bass rider was often added to an existing pegbox, in many cases the pegbox and neck of the lute's earlier state was preserved.

^{1), 76-77.}

^{610.} MET 2008.2a, b; https://www.metmuseum.org/art/collection/search/505783.

^{611.} "Mer Eine lauthen dem khragn Und hals frisch aufgesetzt"; Bayerisches Hauptstaatsarchiv, Bay<code>HStA</code>, KB <code>HZA</code> 1733II, Jg. 1755, Belege Nr. 110-185.

^{612.} National Music Museum, Vermillion (SD) 10.214; MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110926 (Version 29. July 2020).

^{613.} A lute by Johann Hieber (1628) was probably modified to a 13-course lute with bass rider by Pierre Louvet in Paris as late as 1778, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4111008 (Version 29 July 2020).





Figure 4.11: The bridge is clearly offset to the bass side, indicating a conversion from 11 to 13 courses: (a) Johann Wilhelm Stör: Portrait Ulrich Haffner (1732, A-Wn); (b) Portrait Adam Falkenhagen (1737-1739, Herzog August Bibliothek Wolfenbüttel, inv. no. A 6327)



Figure 4.12: Lute with bass rider, labelled "In Padua. Vendelinus. Tieffenbruker.", modified by Thomas Edlinger in 1724, National Music Museum, Vermillion (SD) 10.214

250

4.4.2 The 13-course theorboad lute

The theorbood version of the 13-course lute was developed after the bass rider and became the iconic model for the 18th century lute. Due to the stylistic feature of the second pegbox being connected to the lower part by a characteristic curve, it is often called a 'swan-neck' lute in modern literature. No historical evidence for that name is known. With its long bass strings, it provided a stronger sound in the bass for ensemble and solo playing. This version lasted through the 18th century, existing alongside the version with a bass rider, and was produced either by building a new instrument or by modifying older lutes. One of the last testimonies of its long use is the portrait of Christian Gottlieb Scheidler by Christian Xeller (around 1812, see fig. 4.3).⁶¹⁴

In contrast to the version with the bass rider, it is not clear from a technological point of view whether the form originated from the adaptation of older instruments. The earliest date for a 13-course theorboad lute can be proven in two instruments dating from 1727. However, the theorbo principle was well known from earlier models in smaller sizes like the arciliuto, the angélique and the Austrian 11-course theorboad lute, which emerged around the same time as the 13-course lute. Due to long bass strings of up to 83 cm in smaller versions, but mostly 94 cm up to 100 cm, gut strings with a relatively small diameter could be used. In contrast to the version with bass rider, where either very thick or wound strings had to be used, a balanced sound and touch of play could be achieved. Due to the five bass courses, only eight courses can be stopped on the fingerboard. As a hybrid of continuo theorbo and lute, this instrument combined the sounding spectrum of both musical tasks, accompaniment and solo function.

Unlike the bass rider, the invention of the 13-course theorbo can not be attributed to a certain maker or place. It seems that the type was produced in many European cities, by Johann Christian Hoffmann in Leipzig, Sebastian Schelle

^{614.} Historisches Museum Frankfurt am Main, inv. no. B 363.

^{615.} Lute made by Martin Voigt, collection of Schloss Fasanerie, see MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110616 (Version 29 July 2020) and the lost instrument of the Staatliche Hochschule für Musik Berlin 271, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110820 (Version 29 July 2020); see Klaus Martius, 'Die Lauten von Martin und Johann Christian Hoffmann', in Martin und Johann Christian Hoffmann, ed. Eszter Fontana, Veit Heller and Klaus Martius (Leipzig: Friedrich Hofmeister Musikverlag, 2015), 142–143.

^{616.} In some compositions the stopping of the 9th course is demanded, which suggests the use of a bass rider type, but players could have adapted for example by transposing one octave higher. See: Crawford, 'S.L. Weiss's Use of the Lower Bass Courses', 11.



Figure 4.13: (a) Neck of MIMUL 8898; (b) image in the auction catalogue of the Amerling collection in 1912

and Leopold Widhalm in Nuremberg, and by David Buchstätter in Vienna with very similar stylistic features. However, Silvius Leopold Weiss, the most famous lutenist of the period and first composer of pieces for 13-course lute, was identified by his contemporaries as the inventor of this lute type. His name served as identifier for this type and for promotion of its qualities. In 1740, Hoffmann referred to Weiss in a letter to Uffenbach, mentioning that the lute he offered would be "thorboad according to the manner of Mr. Weis". 617 The entries on Weiss and the one on the lute in Gottsched's dictionary (written by Luise Adelgunde Gottsched, who knew Weiss), praise him as the one under whom the lute has taken on a different shape: "He has not only raised it from eleven courses to thirteen, but by straightening or theorboing its neck, he has set it in such a position that it can now play in the greatest concerts."618 The new flexibility of being capable of accompanying itself, making a pastime for persons who love solitude as well as playing in big concerts, was in the eyes of Gottsched and other contemporary lute players a positive modernisation. In his undated poem, Johann Friedrich Lauson expressed this development it in the verses:

"Nun prangt der längliche Hals der hochgebrüsteten Laute, Mit dreyzehn Chören zur stärkeren Lust. Sie ging vor Alter gebückt mit abgekrümten Nacken; Jetzt hat sie sich triumphierend verjüngt." ⁶¹⁹

Now the elongated neck of the high-breasted lute is resplendent, With thirteen courses to the greater delight. It went before, hunched over by age, with bent neck; Now she is triumphantly rejuvenated.

The transformation of a lute into a theorboad 13-course version is, however, more elaborate than simply attaching a bass rider. The long pegbox is, in most cases, carved out of one piece of hard wood, such as maple. In the lower part, an area is hollowed out that provides space for the pegs of the six double strings and two singles that run across the fingerboard. Sometimes there is a

^{617. &}quot;nach Mr. Weis seiner Ardt theorbirt". Bärwald, Fontana and Martius, 'Ausgewählte Dokumente zu Leben und Werk von Martin und Johann Christoph Hoffmann', 100.

^{618. &}quot;Er hat sie nicht nur von eilf Chören auf dreyzehn gesetzet; sondern da er auch ihren Hals gerade gemachet oder theorbieret, sie in den Stand gesetzet, daß sie nunmehr in den größten Concerten mit spielen kann." Gottsched, *Handlexicon oder Kurzgefaßtes Wörterbuch der schönen Wissenschaften*, col. 1644, see also: Gottsched, col. 1004-1005.

^{619.} Dittrich, Laute und Gitarre in der deutschsprachigen Lyrik: Gedichte aus sechs Jahrhunderten; eine Anthologie, 97.

small extra section for the chanterelle peg (see fig. 4.13). The upper pegbox, which extends slightly outwards, usually has room for ten more pegs for the five bass courses. Apart from the pegbox with all its pegs, the position of the bridge or the geometry of the neck had to be adapted. In case that the bridge is centred, the setting of the neck or the whole neck was changed. Further interventions like changing the bars can be assumed.

A good example of such modifications is the instrument altered by Mathias Fux in Vienna in 1686, and later by David Gabriel Buchstätter in Stadt am Hof (Regensburg) in 1750, of which only the neck is preserved (see fig. 4.13). During the research for this dissertation, I identified the neck as having belonged to an instrument that came to the museum in Leipzig via the Lingner Foundation and was originally in the collection of the Austrian painter Friedrich von Amerling. In the catalogue of the auction of Amerling's belongings in 1916, the instrument is mentioned under the number 772 as a theorbo. An anatomical examination of the wood of the ribs, still preserved on the upper block, confirmed that the back was made of yew wood. This suggests that it was made around 1600 in Füssen or in northern Italy. Buchstätter, however, probably adapted the instrument from an earlier 11-course or 13-course state with bass rider to the modern theorboed version by adding a new pegbox and bridge.

According to the material and textual sources, it is most likely that renewing the pegbox was the general practice. However, another instrument that also passed through the hands of Fux shows that certain preconditions provoked different technical solutions. This instrument is conserved in the Musik-Instrumenten-Museum in Berlin and bears no maker's label (see fig. 4.14). 622 The back is made in the Bolognese style with nine ribs and dark red varnish. The soundboard is marked by many repairs that indicate a long use and old age. According to a documentation published in 1973, the former owner, Dr. Erich Fiala, removed the label by Mathias Fux to avoid wrong conclusions since Fux cannot be considered as the maker. Fux's label probably indicated a modification of an older state into a 11-course lute executed in 1681

^{620.} MIMUL 8898; MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4018898 (Version 29 July 2020).

^{621.} Dorotheum Wien, ed., Nachlaß Friedrich von Amerling: Versteigerung von Mittwoch den 3. bis Samstag den 6. Mai 1916 (Katalog Nr. 263) (Wien, 1916), 64.

^{622.} MIMB 5199; MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110559 (Version 29 July 2020).

^{623.} Josef Hiestand-Schnellmann, 'Alte Musikinstrumente aus dem Besitz von Dr. Fiala, Wien', ${\it Glareana}~22,$ no. 4 (1973): 39.

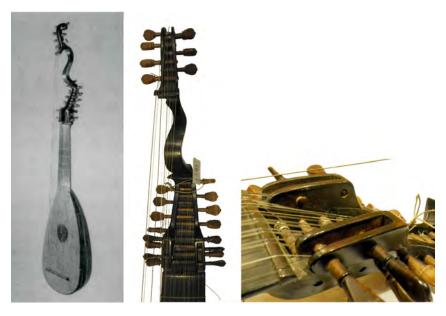


Figure 4.14: Old lute body, neck probably made by Fux in 1681, 11-course theorbo pegbox with additional riders for 13 courses in total, MIMB 5199

in Vienna, but Fiala wanted to be underline that the instrument is actually older. Later, a new pegbox in the style of the Austrian 11-course theorbo was added. This pegbox, initially made for 11-courses, was the base used to modify the instrument again into a 13-course version. Here, the principle of applying riders, known from modifying bent-back pegboxes, was transferred to the theorbo. On both sides of the pegbox, two small attachments for two pegs were mounted in order to provide two more courses. The result was a slightly different disposition from the other 13-course theorbos with only four bass courses. A new, wider bridge (similar to the one by Buchstätter) was applied, clearly stretched out towards the bass side. The bridge position and the non-parallel lie of the bass strings indicate that the neck remained unchanged.

Even though the 13-course theorbo with two connected pegboxes is widely considered the most common version, other forms existed in both new-built instruments and modified ones. In 1732, Johann Christian Hoffmann transformed a lute he built for Friedrich Adolph Warlitz in 1720 into a 14-course theorbo by using the characteristic shape of the pegbox to apply six bass

^{624.} Fiala bought the instrument from the former *regens chori* of the Chorherrenstiftes Seitenstetten, lower Austria, Blasius Schwammel. It is therefore likely that all modifications were made in Austria.

4 Extension, Simplification, and Decline

courses instead of only five.⁶²⁵ With a string length of more than 77 cm it is commonly referred to as the *German Theorbo*, which was used more as an accompanying instrument than for solo playing (see chapter 4.1.1). Other big basso continuo theorbos were equipped with the new style of pegbox as well. Sebastian Schelle added (probably in 1721) a modern pegbox to a theorbo made by Wendelin Tieffenbrucker in 1613.⁶²⁶ It might have been Schelle, who signed the instrument again in 1726, who transformed the same pegbox by splitting up the upper pegbox in two smaller ones, resulting in two different string lengths for the bass strings. This arrangement for 13- and 14-course theorbos can be found mainly in the southern part of Germany and in Austria and provides a full sound in the bass and allows the use of a very similar string diameter for the lower strings.

The theorbo pegbox with the stylistic feature of the 'swan neck' existed in different forms for several sizes of lutes. This technical realisation implied a complete exchange of the pegbox, pegs and bridge and was therefore more elaborate than the version with a bass rider. In some cases, theorboad pegboxes were modified either by adding a rider or by creating a more sophisticated stringing with two different string lengths for the lower courses. This layout was ideal for both solo literature and ensemble music due to the advantages of a sonorous sound in the bass. Connected to the name of Silvius Leopold Weiss, this version became the iconic image of the 18th century lute.

^{625.} MIMUL 0506; MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4010506 (Version 12. June 2020); Klaus Martius, 'Die Lauten von Johann Christian Hoffmann', in *Martin und Johann Christian Hoffmann*, ed. Eszter Fontana, Veit Heller and Klaus Martius (Leipzig: Friedrich Hofmeister Musikverlag, 2015), 298–299.

 $^{626.\ \}mathrm{MIMUL}\ 3357;\ \mathrm{MusiXplora},\ \mathrm{ed}.\ \mathrm{Josef}\ \mathrm{Focht},\ \mathrm{https://musixplora.de/mxp/4013357}\ \mathrm{(Version}\ 29\ \mathrm{July}\ 2020).$



Figure 4.15: Theorbo and its neck extension with three pegboxes, labelled "1613//IN PADVOA Vvendelio Venere" and repaired or modified by Sebastian Schelle in 1723 and 1726, MIMUL 3357

4.4.3 The mandora

The mandora, a small lute type of the 18th century, was primarily played by amateurs in the countryside of the southern German lands, Austria and Bohemia as well as in monasteries. For the production of mandoras, either new instruments were built, or older lutes were cut down. The history of the mandora's technological developments, with regard to its expanding ambitus, is remarkably similar to the lute's, only in a small scale. This extension of bass range led to further modifications of the instruments. Over the course of the 18th century, mandora instruments were modified by adding more strings to adapt them to the changing needs. It is likely that many of the instruments were changed during the 19th century into lute guitars due to their common feature of a narrow neck, which makes it difficult today to determine the previous state of these instruments. Compared to the works involved in the modification of lutes, the technical solutions for mandoras were rather simple.

The earliest version of the mandora was the type with 6 courses, which was introduced before 1700, when the 11-course lute was most popular. In order to modify bigger lutes into a mandora, the neck had to be narrowed down, and a new smaller pegbox and bridge had to be fitted. Such a transformation was undertaken with an instrument by an anonymous maker, which is preserved in the Musée de la musique, Paris (see fig. 4.16).⁶²⁷ A dendrochronological analysis of the soundboard determined 1617 as a terminus post quem for the production of this instrument, probably as 10-course lute. At the beginning of the 18th century, the lute was transformed into a mandora. On the top of the soundboard the former outlines of the fingerboard tips are still visible, even though they were filled with wood. The old neck was kept and narrowed down, while a new pegbox and bridge were added. It is remarkable that the pegbox consists of one piece to which a treble rider was added. This contradicts the lute-building tradition, in which bent-back pegboxes were usually composed of several pieces. However, this construction can also be found on other mandoras, but might in this case indicate a simple and fast technical solution. 628

^{627.} MdlM E.1184, see Dugot, Les luths (occident): Catalogue des collections du Musée de la Musique (vol. 1), 90–91 and MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110634 (Version 29 July 2020).

^{628.} For example on the mandora by Sebastian Schelle, Nürnberg between 1715 and 1720, Kunstsammlungen der Veste Coburg XXV/3, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110703 (Version 29 July 2020).



Figure 4.16: Lute, transformed into a mandora with 6 courses. Neck made smaller. Old width can be deduced from the visible traces of the former fingerboard tips. Paris, MdlM E.1184

The modular construction of the pegbox was the precondition for the reuse of the pegbox in the case of an instrument modified by Johann Joseph Muschl in Prague in 1781 (see fig. 4.17).⁶²⁹ The instrument was built by Leonhard Pradter around the end of the 17th century, probably as an 11-course lute in the popular Bolognese shape. Traces of a wider bridge on the soundboard and of a bass rider at the pegbox indicate that it was extended to a 13-course lute. Muschl transformed it into a mandora with 7 courses by reusing the old neck and the pegbox. The neck was narrowed on the sides while the original fingerboard and veneer were preserved in the middle of the backside of the neck. To make the pegbox smaller, Muschl took it apart, shortened the side elements, made the other parts also smaller and glued them together again. The veneer of the pegbox corresponds with the fingerboard, the remains at back of the neck and the ribs.

According to a label on the back of the neck, the neck was cut off by order of Dr. Jakobi, responsible for the musical instruments in the museum, on 11.04.1928 and replaced by a new neck and two pegboxes in the style of an English double-headed lute. Due to the impacts of the Second World War, this neck was broken off and the instrument is preserved today in a rather fragmented state with several loose pieces dating from and being modified in different periods, but belonging to the same object. These elements served as base to reconstruct the history of its alterations. Luckily, the mandora state, was described and depicted in the early documentations of the museum. The manuscript by Karl Emil von Schafhäutl in 1869 lists the instrument as "Lute with black body. 12 pegs together with one for the chanterelle from the 14th century by Leonhard Predl [corrected with pencil: a above e] / zugericht von Joh. [added: Jos.] Muschl 1781."630 In 1883, Karl Bierdimpfl took over this description in the museum's catalogue of the musical instruments including the corrections and further information on the lute in general.⁶³¹ In the book published on the occasion of the new building of the museum, the instrument is visible still in it's mandora state on a photograph of the showcase (see fig. 4.18).632

^{629.} BNM Mu 7; MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110990 (Version 29 July 2020).

^{630. &}quot;<u>Laute</u> mit schwarzem Körper. 12 Wirbel nebst einem für die Chanterelle aus dem 14. Jahrhundert von Leonhard Predl [corrected with pencil:a above e] / zugericht von Joh. [added: Jos.] Muschl 1781." Karl Emil von Schafhäutl, 'Beschreibung der musikalischen Instrumente im National-Museum aufgestellt' (München, 21 August 1869).

^{631.} Karl A. Bierdimpfl, Die Sammlung der Musikinstrumente des baierischen Nationalmuseums, Ofizielle Ausg. (München: Straub, 1883), 41.

^{632.} Gabriel von Seidl, ed., Der Neubau des Bayerischen Nationalmuseums in München:

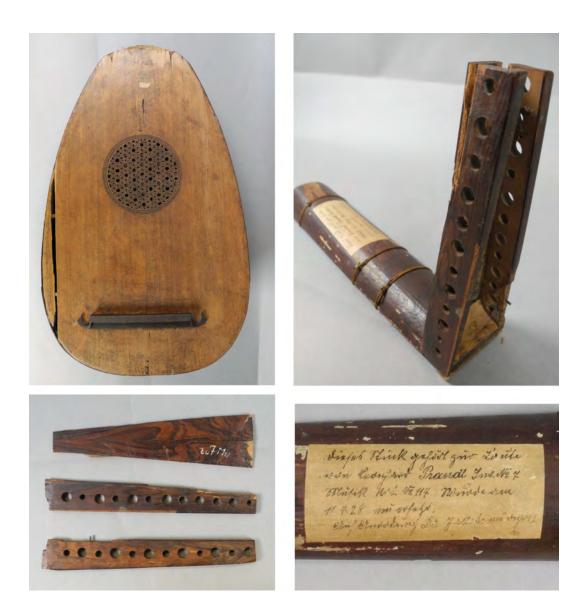


Figure 4.17: Lute body by Leonhard Pradter, transformed into a mandora with 7 courses by Johann Joseph Muschl in Prague, 1781 (BNM Mu7). Today fragmented. Label on old neck saying: "This piece belongs to the Lute // by Leonhard Prandl (sic) Inv. No 7 // Music Ins. No 114. Was on the // 11.4.28 replaced with a new one. // By order of Dr. Jakobi into Depot I."

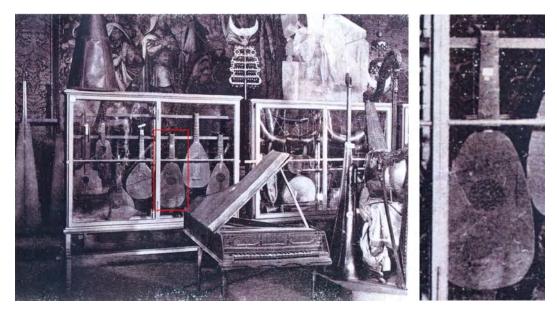


Figure 4.18: Plate LVI of Gabriel von Seidl's *Der Neubau des Bayerischen Nation-almuseum in München*, showing the instrument in its mandora state in the showcase (red mark). Detail enlarged on the right

Technically, the first examples of modifications show that aesthetic uniformity of design played a subordinate role to practical, simple solutions for transforming lutes into mandoras. The neck was left in its original position, its geometry unchanged, but was narrowed down. There are no signs of changes in the position of the bars. A noble design, for example with ebony veneer on the neck and pegbox or even using black dye, was avoided. In the first example, the wood of the neck was left blank. In the second example, the neck was painted by using a gesso base and brown colour in order to hide the blank wood and the traces of the narrowing. Due to the modular construction of the pegbox, the parts could be reused and did not have to be made new. The superfluous open holes for the former pegs were not even filled. These modification are rather simple compared to the elaborate work that was necessary to adapt an instrument to a 13-course lute with theorboad neck. The fact that these simple solutions were requested and accepted by the customer might testify to the rather practical function of the mandora instrument in its social and musical surroundings.

The adaptations of existing mandoras to a bigger ambitus also reflect this

herausgegeben mit Genehmigung des königlichen Staatsministeriums des Innern für Kirchen -und Schulangelegenheiten (München: F. Bruckmann, 1902).

4 Extension, Simplification, and Decline

musical-practical motivation. The technical solution of adding a rider or an additional peg are already well known from the history of lute modifications. A mandora stemming from Kremsmünster and preserved in the Oberösterreichisches Landesmuseum was made by Jacob Weiß in Salzburg in 1726 with 6 courses (see fig. 4.19). 633 Over the course of the 18th century, a treble rider and a bridge for 7 courses were added. The difference to the standard disposition is that in this case the last course has only one string. 634 For the sake of a simple technical solution, the sound advantages of the double stringing in the last course were renounced. This problem was solved in an instrument of the same origin in Kremsmünster. Here, a mandora made by Daniel Achatius Stadlmann in Vienna in 1720, initially with 8 courses, was extended to 9 courses (see fig. 4.20).⁶³⁵ For this, a treble rider and an additional peg at the very end of the pegbox were added. The part that connects the sides of the pegbox at the very end was therefore now very short. 636 The bridge is not centred today, but slightly slanted towards the bass side, which indicates that the geometry of the neck was not altered during the modification.

The less decorative status-related function of the instrument, which is perhaps also reflects a less affluent clientele, has led to relatively simple modifications. The material disposition of the neck and, in many cases, the pegboxes were accepted. A complete renewal of the neck, a change in geometry, or other elaborate work concerning the decoration were not carried out in the examples shown. Rather, parts were reused or simple solutions were found, which were sometimes associated with compromises on an aesthetic, tonal, practical, and statics level.

^{633.} Oberösterreichisches Landesmuseum Mu 63; MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110725 (Version 29 July 2020).

^{634.} Kirsch and Martius, Die Lauten des Stiftes Kremsmünster, 74–79.

^{635.} KrAb mXp 4110375; see Kirsch and Martius, 64–69, 114–115; MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110375 (Version 29 July 2020).

^{636.} This kind of solution would not have been possible in the first example due to the different construction of the pegbox. While the pegbox by Stadlmann is made of several connected pieces, the one made by Weiß is open-worked. This avoids the statical weakening of the small connection of the sides at the end of the pegbox.



Figure 4.19: Mandora made by Jacob Weiß in 1726, front and detail of the pegbox (Oberösterreichisches Landesmuseum Linz Mu 63). The treble rider was added later. First and lowest courses are single





Figure 4.20: Mandora made by Daniel Achatius Stadlmnann, Vienna 1720, front and detail of the pegbox (KrAb mXp 4110375). The treble rider and the last peg were added later

4.4.4 Technological features

Apart from the adaptions of the neck and the pegbox, which actually determined the lute type, modifications of the body and soundboards can be observed which were motivated by acoustical improvement, technical constraints or reasons of conservation. This led to very diverse degrees of material integrity in the objects.

Assembly and changing of soundboards

The soundboard and its supporting bars are an important factor for the vibrational behaviour of the instrument. During the 18th century, several parallel bars and so-called fan bars in the area below the bridge were used for bracing. Martin and Johann Christian Hoffmann are the only known makers who used the J-shaped bass bar instead during this period. In many cases, not all bars were changed during a modification, which can be deduced from the different wood qualities, traces of processing or glue, and other marks that indicate older bar positions.

In some cases, the entire soundboard was changed. The dendrochronological dating of the soundboard of a lute labelled "IN VENETIA (ms. 164?) // MARTINUS SELOS GERMANUS" leads to the conclusion that Gregori Ferdinand Wenger, who left his repair label in the instrument, changed the soundboard in 1709. 637 The fact that his repair label is printed, but with handwritten insertions of the last two digits in the date, reading "Gregori Ferdinand Wenger. // Lauten- und Geigen-Macher. Reparavit Augustæ. 17(ms. 09)", shows that repairs and modifications were a big part of his business. It can be assumed that the old soundboard did not fulfil the technical criteria for reuse for the new purpose.

In the case of the lute labelled "Laux Maler" in the Germanisches Nationalmuseum, the sound board was kept by means of a very obvious repair (see fig. 4.21).⁶³⁸ Only the lower part of the soundboard, including the rose, dates from the time of production, while the upper part was added later, probably because the top was damaged. The prominent joint in the upper quarter of the

^{637.} GNM MINe 262; MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110769 (Version 29 July 2020).

^{638.} GNM MI 54; MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110546 (Version 29 Juli 2020).

soundboard is clearly visible on the photo before the restoration. The motivation of preserving this part of the soundboard under the condition of acoustic and aesthetic losses was surely to save the material evidence connecting the instrument to the prominent name of the maker.

Furthermore, it can be shown that parts with different origins were assembled while creating or modifying the instruments. For making a basso continuo theorbo in 1698, Rudolph Höß in Munich used a soundboard from an older, slightly bigger lute. Marks of former bar positions are clearly visible on the inside. Dendrochronological dating determined the year 1593 as the most recent annual ring, which leads to the conclusion that Höß reused this older part. Later, a pegbox in the 'swan-neck' style was added.⁶³⁹ In other cases, only parts such as roses of older instrument were reused and inserted in the soundboards of lutes.⁶⁴⁰ This might have been done to replace a damaged rose, or for aesthetic or acoustical reasons, since the void area of the rose has an effect on the resonant frequency of the body.

Due to the development of the lute in the 18th century, lute makers added further layers to the bodies of older lutes, renewed and exchanged parts as necessary for repairs, or for aesthetic or acoustical reasons. It is remarkable that the ideal of the *look of age* is still pursued, as the example of the very evident repair of the lute labelled "Laux Maler" shows.

Tuning the body resonance

In many instruments that were modified over the course of the 18th century, a hollowing of the upper block, the connection between body and neck, can be detected (see fig. 4.22). The flat side facing the inside of the body was often carved out with a gouge, a technique that can be observed also in new-built instruments from that period. This may have been done in order to create more volume in the body. The volume of the body and the size of the void area of the soundhole are the two factors that determine the lowest mode, which is the body resonance or cavity mode, often also called Helmholtz-resonance.⁶⁴¹

^{639.} Sebastian Kirsch, 'Verformt, verfärbt, zerfressen – Maßnahmen zur Stabilisierung einer strukturell stark geschwächten Lautenmuschel', *VDR-Beiträge zur Erhaltung von Kunst-und Kulturgut*, no. 2 (2016): 39–40.

^{640.} Some examples in which the insertion of a rose into the soundboard were observed: https://musixplora.de/baccae/search/?simple=4110941%7C4110940%7C4010500%7C4010492.

^{641.} Neville H. Fletcher and Thomas D. Rossing, *The physics of musical instruments* (New York and Heidelberg: Springer, 1991), 214.

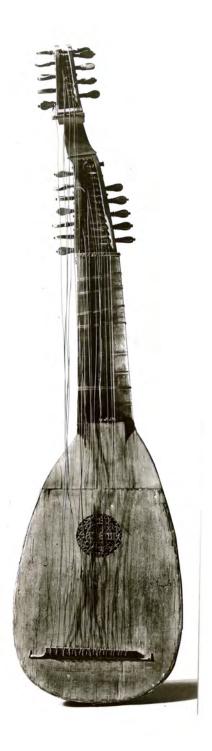


Figure 4.21: Lute, labelled "Laux Maler", Germanisches Nationalmuseum, GNM MI 54, before restoration

Air resonances in musical instruments amplify the sound radiation at low frequencies, where the corpus suffers from the absence of natural vibrational modes. 642

In some cases, changes of the size of the rose can also be assumed. In the case of an instrument labelled "Laux Maler" in the Lobkowicz collection, significant differences in the style of cutting the outer ring and inner part of the rose indicate that the void area was enlarged by a 6 mm wide ring around the initial rose (see fig. 4.23). Only the inner part corresponds to the pattern that can be found in the other known models labelled "Laux Maler". It can be assumed that the modification of the volume and the rose were aimed at tuning the first mode as an important sound characteristic of the instrument.

There are many indications that during the 18th century lute makers and players favoured instruments with a rather large body volume. Thomas Edlinger, for example, built instruments in the Tieffenbrucker family style, which are wide and flat. A comparison of a corpus labelled "In Padoua Vvendelio Venere de Leonardo Tiefenbrucker." and modified by Edlinger in 1732 with that of the "Laux Maler" lute in Nuremberg has shown that the first, with a volume of about 13 litres, encloses about 1.7 litres more air. According to Lundberg, the "broader-bodied lute produces greater dynamic range and improved character of bass response. Baron, likewise, gave his opinion that the tone of instruments with rather flat bodies and big roses, such as the Tieffenbrucker models were "bravely strong and carrying far into the distance. Abanan Christian Hoffmann also tried to achieve more volume in his lute models. He took up the form-defining characteristics of the popular Bolognese lute model, but widened the outline compared to earlier examples in order to increase the air capacity of the body. From this perspective, it is conceivable that

^{642.} Gunter Ziegenhals, 'Akustische Untersuchungen zu Klangeigenschaften von Barockgitarren und Gitarren von Richard Jacob Weißgerber', 2017, accessed 14 May 2022, http://www.studia-instrumentorum.de/MUSEUM/PDF/2016_ziegenhals.pdf.

^{643.} Lobkowicz 1408 E; MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110253 (Version 29 July 2020).

^{644.} MIMUL 0492, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4010492 (Version 29 Juli 2020). The lute based on a the Laux Maler-model is the copy I made during the work on the dissertation. From both instruments I made CT scans in the hospital of the University of Leipzig. The volumes inside could be compared by using the segmentation editor in the software 3D Slicer Version 4.10.2.

^{645.} Lundberg, 'The German Baroque Lute, 1650 to 1750', 25.

^{646. &}quot;daß der Thon wacker starck und in die Ferne oder Weite gehe". Baron, Historischtheoretische und practische Untersuchung des Instruments der Lauten, 90.

^{647.} Lundberg, 'The German Baroque Lute, 1650 to 1750', 21.

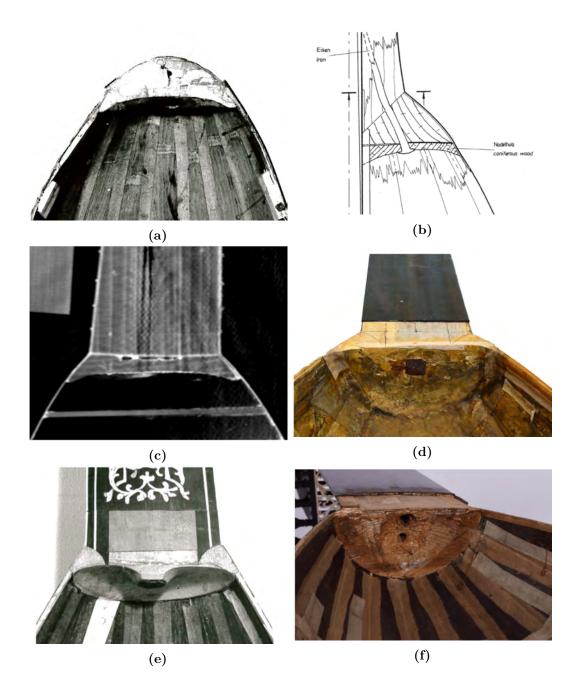


Figure 4.22: Diverse examples of hollowed out upper blocks: (a) "Laux Maler", GNM MI 54; (b) "Laux Maler", GNM MI 619;(c) Tiorbino, labelled "Matteo Sellas", MIMUL 0495; (d) "Laux Maler", MdlM E.2005.3.1; (e) Lute, labelled "Leopold Widhalm" 1755 and "Matth. Jg. Brandstätter reparavit Vienna A. 1826", GNM MIR 903; (f) "Joachim Tielke", 1676, bass rider later, MIMUL 0496

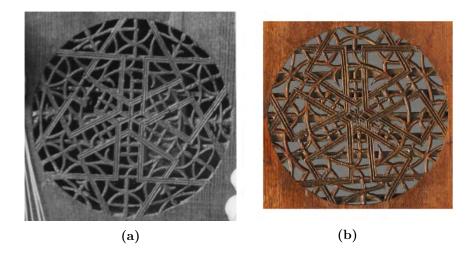


Figure 4.23: (a) Rose of lute labelled "Laux Maler", Lobkowicz E 1408; (b) Rose of lute labelled "Laux Maler" in MdlM E.2005.3.1. The outer part of the rose on the left was probably enlarged by a ring, which is missing in the other rosette. Images are in correct proportion

attempts were made to increase the volume of old lute corpora, whose outer shape was unchangeable.

The relation between volume of the body and the void area of the soundhole can be illustrated by the following formula, with which the resonance frequency f_0 can be calculated:⁶⁴⁸

$$f_0 = \frac{c_0}{2\pi} \sqrt{\frac{A}{Vh}} \tag{4.1}$$

A is the total void area of the soundhole, h the wood thickness, V the cavity volume and c_0 is the speed of sound. This formula was developed to calculate the frequency of a typical Helmholtz-resonator with a long neck, which is in case of lutes and guitars the rather small wood thickness h. For a small neck length, the formula gives a considerable error, which is corrected by replacing h with effective thickness h_e . For a circular opening with radius R, the effective thickness is equal to $h_e = h + \pi R/2$.

^{648.} Fletcher and Rossing, The physics of musical instruments, 13.

^{649.} Jürgen Meyer, Die Akustik der Gitarre in Einzeldarstellungen, vol. 42, Das Musikinstrument (Frankfurt/Main: Erwin Brochinsky, 1985), 31.

4 Extension, Simplification, and Decline

Even though this formula can only provide an approximation to the actual resonance frequency, the effects of the changes on body and soundhole can be demonstrated. Since the speed of sound c_0 and π are constants, only the fraction in the root need be considered to understand the influence of changes in volume or void area of the rose. In the equation, the volume is in the denominator, which means that when the body volume increases, the resonance frequency decreases. Increasing the void area of the rose, which is in the numerator, will have the effect of an increase of the resonance frequency.

Using this formula can explain the effects of changes of volume and rose diameter on the following examples. The differences in the volumes of the above mentioned lute, that was modified by Edlinger, and the reconstruction of the lute labelled "Laux Maler" in Nuremberg have significant consequences for the cavity vibrational mode. When assuming a similar rose design with a relatively small diameter of 8 cm, the calculated cavity resonance for the different body volumes differs significantly in 1.3 semi tones. The effect of hollowing out the top block would be rather small. On the generous assumption that this would increase the volume of the body by 100 ml, the change in the frequency of the cavity resonance for the Laux Maler model would be less than one Hertz. In the case of the enlarged rose of the lute labelled "Laux Maler" in Prague, the diameter was increased from 74 mm to 86 mm. This enlargement increased the void area by $7 \, cm^2$, which has a remarkable effect. The result is an increase of the resonant frequency of the cavity by a whole tone.

Even though this relative calculation of the results of changes in volume suggests that hollowing out of the upper block has no significant influence on cavity resonance, this modification could have been carried out with the motivation to create more volume. As shown above, other sources, such as Baron, and the popularity of wider lute models seem to indicate the preference for bigger lute bodies with more volume to support the bass frequencies. Of course, the sound of the lute is composed of many other factors that cannot be included in this model. The void area of the rose, however, plays a more important role in determining the cavity resonance, even though only a few examples of altered roses are known today.

^{650.} In fact, the calculated frequencies differ from the experimentally determined values. Therefore, only the relative intervals are given and not the absolute frequency values in Hertz.

Conclusion

The musical development of the lute was characterised during this period by the continued extension of the ambitus – increasing its difficulty and resulting in the 13-course lute – as well as, conversely, a reduction of strings to produce the mandora, making the lute more accessible to less skilled amateurs. The succeeding generation to the last professionals like Weiss was largely occupied with teaching amateur lute players. This was the main group of lute players, dominating the discourse about the instrument during most of the 18th century.

The publications of Mattheson and Baron, which were largely in dialogue with each other, created a long-lasting and antagonistic discourse around the significance of the lute and its place in musical culture. While Mattheson principally examined the musical use of the lute, Baron – coming from contemporary academic methods – argued for the historical and material importance of the instrument and its music. A vast body of knowledge concerning old lute makers, including their biographical information and the lineage of their craft traditions as well the geometrical and material criteria of certain instruments, was being refined during this period. Along these lines, a connoisseurship among amateur players – comparable to the study of antiques – was being cultivated and became part of the market model for engaging customers.

For the lute-making workshops that were located in the big cities, the transformation of old lute bodies labelled by famous old makers was a big part of their business model. The modular construction of the lute was the predisposition of the development of the 13-course lute type. From a technological point of view, the lute with a bass rider can be seen as a natural result of the technique of adapting lutes with less courses. Among contemporary lute players, the theorboad lute type was perceived as the product of progressive technical and musical perfection of the instrument. Since the lute's noble status as the 'king of instruments' was gradually replaced by the far less noble image of an instrument for amateurs, the historical awareness of the musical and material development of the lute became an essential part of the shared common knowledge to lute players and the central justification for the importance of the instrument.

5 The Lute-Shaped Guitar at the Beginning of the 19th Century

5.1 The Lute-Shaped Guitar and its Music

Even though the 13-course lute and the mandora were being played less and less by the end of the 18th century, the characteristic shape of the lute and the old lute bodies themselves, were repurposed to accommodate the growing demand for guitars in the 19th century. The following analysis will examine the first half of the 19th century, in which the guitar fashion had its first peak, and focus specifically on present-day Saxony and Thuringia – especially Leipzig and Dresden – as there is evidence of an accumulation of production and trade in lute-shaped guitars as well as a concentration of guitarist activities in these regions. Later 19th-century developments will be considered only if they are directly connected to people or events earlier in the century. Concentrating on this geographical region and time period will avoid confusion with the musical developments that occurred at the end of the century, including the guitar and Wandervogel movement, which ultimately led to the revival of early music. The importance of the lute in these later movements, which coincides with the beginning of 'The Museum Age' and the acquisition of lutes and other musical instruments by large private and public collections, has to be analysed separately and is beyond the scope of this work.

5.1.1 The lute-guitar as one form among others

The lute-shaped guitar, or guitar-lute, was one of many different kinds of guitar shape in the early 19th century. The form of the guitar body in this period was by no means fixed or standardised, but rather the subject of experimentation and discussion about the advantages and disadvantages of the various designs. In the late 18th century, the shape of the lute body was used to build baroque guitars in France. A lute body by Laux Maler, which is now in the Musée de la musique in Paris, for example, was reused to create such a type but new instruments were also built in this design (see fig. 5.1). From 1780 on, the lyra-shaped guitar (*lyre anacréontique*) was one of the very popular models, which came into fashion in Germany after Queen Luise of Prussia received an instrument made by its inventor Pierre Charles Marechal in 1801 as a gift. The French edition of Johann Traugott Lehmann's guitar manual distinguishes

^{651.} For example, the lute-shaped baroque guitar at the Musée de la musique, name on the label illegible, dated 1788, MdlM E.2098.

^{652.} Andreas Michel, Gitarren in Sachsen und Thüringen bis 1850 (Leipzig: Studiengang Musikinstrumentenbau Markneukirchen, 2018), 98–99.



Figure 5.1: Lute-shaped guitars with five double courses in the MdlM

three types of guitars: the guitars in the form of a lyre, those in the form of a lute, and those which are called Spanish, Italian, or French.⁶⁵³ There was also the heraldic guitar ('Wappengitarre'), whose shape harkened back to the cittern⁶⁵⁴ and the bowed guitar, which, like other designs with additional bass strings during the 19th century, continued to use the principle of the ambitus extension that had already been applied to the theorbo.

The sound and shape of the lute, however, was still used as a reference for the sonic possibilities of the guitar. In 1803, the instrument maker and dealer Jacob August Otto announced that his experiments in acoustics aimed at perfecting the guitar had resulted in a model that boasted a "strong, full, 30

^{653. &}quot;Il y a trois sortes de Guitares en Allemagne, savoir: les Guitares en forme de Lyre, celles en forme de Luth, et celles qu'on appelle Guitar d'Espagne, d'Italie ou de France." Johann Traugott Lehmann, Nouvelle méthode pour la guitarre ou règles les plus simples pour apprendre à pincer cet intstrument sans maitre (Leipzig: Hofmeister, 1840), 4.

^{654.} Josef Focht, 'Der süddeutsche Gitarrenbau im langen 19. Jahrhundert', in *Faszination Gitarre*, ed. Conny Restle and Christopher Li (Berlin: Nicolai, 2010), 14–33.

seconds lasting tone, which is similar to the softness of the sound of the theorbo or the big lute."⁶⁵⁵ In his introduction to the *Sonate für Guitare allein* of 1806, Simon Molitor gave several references to the lute. Quoting Albrechtsberger's *Anweisung zur Composition*, he described the lute as the most sonorous instrument, since every tone can be realised on at least three strings. ⁶⁵⁶ He claimed that guitar models with an arched back like a lute would sound better than models with a flat back, and if modern makers would not take the lute form as a model for the guitar, at least some features – such as the rose – should be adopted to improve the sound quality. He also suggested that the shape of the lyra guitar should be changed into a more oval, lute-like design. ⁶⁵⁷ In 1809, Otto mentioned in another advertisement that "For a long time, people valued the old lutes for the sake of their pleasing sound, to convert them into the so very popular guitars."⁶⁵⁸

The practice of turning old lutes into guitars and the sound ideal of lutes were important aspects of the discourse around the development of the guitar at the beginning of the 19th century. This discourse proliferated in print media of the time and can best be examined through the many publications of Jacob August Otto. He was a skilled businessman who immediately included the different varieties of guitar types in his portfolio and understood how to brand himself as a pioneer of the early six-string guitar in the German speaking countries. In his publications, especially in the section about the guitar in his *Ueber den Bau der Bogeninstrumente*, ⁶⁵⁹ he reinforced this image by propagating a particular legend about the introduction of the guitar in the German lands by the Duchess Anna Amalia, and touting his own role in the story as the first implementer of the sixth string, following the suggestion by Johann Gottlieb Naumann. ⁶⁶⁰ The fact that, among other content from his publications, this

^{655. &}quot;welche von mittlerer Größe sind, sechs Saiten haben, und einen starken, vollen, gegen 30 Secunden anhaltenden Ton geben, der dabey an Sanftheit dem Ton der Theorbe oder großen Laute gleichkömmt." Jacob August Otto, 'Guitarren', Kaiserlich privilegirter Reichs-Anzeiger, no. 250 (19 September 1803): 3269.

^{656.} Molitor, Große Sonate für die Guitare allein, als Probe einer besseren Behandlung des Instruments, 7.

^{657.} Molitor, 10-11.

^{658. &}quot;Schon lange schätzte man die alten Lauten, um des angenehmen Tones willen, sie zu den so sehr beliebten Guitarren umzuschaffen." Jacob August Otto, 'Musikalische Instrumente', *Allgemeiner Anzeiger der Deutschen*, 21 August 1809, 2533.

^{659.} Jacob August Otto, Ueber den Bau der Bogeninstrumente, und ihre Arbeiten der vorzüglichsten Instrumentenmacher, zur Belehrung für Musiker. Nebst Andeutungen der Violine in gutem Zustande (Jena: Bran, 1828).

^{660.} Molitor suggests that the sixth string was first used in Italy, see: Molitor, Große Sonate für die Guitare allein, als Probe einer besseren Behandlung des Instruments, 9–10.

legend was repeated in many later publications shows the profound impact of Otto's writings.⁶⁶¹ The lute-shaped guitar was part of his range of products, which he advertised in many places.

5.1.2 History, repertoire, and playing technique

The early history of the modern guitar in the German lands has not been well-documented in musicological scholarship, and therefore our modern understanding remains blurred by many stereotypes and assumptions. In his extensive study on guitar music around 1800 in the German lands, Hindrichs calls it a "Geschichtsverlust", a loss of history, for which he identifies three reasons. 662 The first reason is the doubtful historiography and the impact of such publications as Otto's and its wide reception. Furthermore, according to Hindrichs's research, less than 20% of the total compositions that he found in contemporary sources are extant. Finally, in 19th-century musical culture the guitar and its music were regarded as less important than, for example, genres like the symphony, and, as a result, has been left out of most historiographies of 19th-century music, resulting in a "historiographical black hole". 663 This is especially true of early forms of the Lied, often written by unknown composers. Hindrichs calls it a "contempt which grew in the course of history" ("historisch gewachsene Geringschätzung"), 664 a disdain for the guitar because of its association with amateurs (especially women), with popular music, and its apparent inability to participate in the performance of what was considered high-quality music.

Indeed, the trope of the talentless amateur guitar player began quite early in the 19th century. Molitor referred to this style of playing as "Klimperei" (tinkling) and mentions that "most guitar compositions are as little suited as the

^{661.} Anna Amalia is mentioned for example in Eduard Hanslick, Geschichte des Concertwesens in Wien, vol. 1 (Wien: Braumüller, 1869), 132, Georg Kinsky, Musikhistorisches Museum von Wilhelm Heyer in Cöln: Band 2: Zupf- und Streichinstrumente, vol. 2 (Leipzig: Breitkopf & Härtel, 1912), 131, or in Joseph Zuth, Handbuch der Laute und Gitarre (Wien: Verlag der Zeitschrift für die Gitarre, 1926), 17.

^{662.} Hindrichs, Zwischen "leerer Klimperey" und "wirklicher Kunst": Gitarrenmusik in Deutschland um 1800: Zugl.: Mainz, Univ., Diss., 2007, 16.

^{663.} Richard Tuskin introduced this term to describe the absence of certain composers from the narrative of music history, see Richard Taruskin, *Music in the Seventeenth and Eighteenth Centuries*, Rev. ed., vol. 2, The Oxford history of western music (Oxford: Oxford Univ. Press, 2010), Chap. 8.

^{664.} Hindrichs, Zwischen "leerer Klimperey" und "wirklicher Kunst": Gitarrenmusik in Deutschland um 1800: Zugl.: Mainz, Univ., Diss., 2007, 24.

playing of most guitarists to refute that opinion." ⁶⁶⁵ As Hindrichs has noted, guitar music at the beginning of the 19th century can be classified in 'higher' and 'lower' playing styles. The 'lower' style refers to a playing technique that is designed for accompaniment and primarily uses arpeggiated chords, avoiding rhythmic and technical difficulties such as ornamentations. The 'higher' playing style on the other hand is designed to showcase the guitar as an independent instrument in a solo performance, highlighting the guitar's ability to play melodic lines with polyphonic accompaniment, and is therefore more technically demanding. It includes technical details such as the use of ornamentation and the left thumb for stopping strings. This more virtuosic playing style was represented by composers and guitarists like Fernando Carulli, Dionisio Aguado, Mauro Giuliani, or Fernando Sor.

The 'lower' playing style was associated with the Lied and, thus, played a central role in bourgeois musical culture. These Lieder – musical settings of contemporary poems or such poems as were regarded as folk verses – and the technique for playing them was disseminated through numerous guitar manuals, for example by Bornhardt⁶⁶⁶ or Lehmann,⁶⁶⁷ as well as in contemporary journals like the Allgemeine musikalische Zeitung or in the Zeitung für die elegante Welt. Many publications offered separate versions for piano and guitar. In the early 19th century, the Lied has to be regarded as part of a private, and politically conservative musical practice, which was often connected with the early Romantic-nationalist propensity for collecting typical German folk poetry. The boundaries between the musicological distinction of Volkslied and Kunstlied are rather vague due to the numerous forms and variations in this genre. The guitar played the accompaniment in these compositions, which often demanded no advanced musical and technical skills, and, as I will argue, the lute-shaped guitar in particular was associated with this playing technique.

In 1801, the *Journal des Luxus und der Moden* describes the guitar as the new fashion item, which "only acquires its greatest charm in combination with

^{665. &}quot;Die meisten Guitare-Komposizionen sind so wenig als das Spiel der meisten Guitaristen dazu geeignet, jene Meinung zu widerlegen." Molitor, Große Sonate für die Guitare allein, als Probe einer besseren Behandlung des Instruments, 10.

^{666.} Johann Heinrich Carl Bornhardt, Anweisung, die Guitarre zu spielen. nebst einigen Übungen und Handstücken, auch einer Anleitung selbige bequem zu stimmen (Augsburg: Gombart, 1807).

^{667.} Johann Traugott Lehmann, Neue Guitarre-Schule oder die einfachsten Regeln die Guitarre auch ohne Lehrer spielen zu lernen: Zweite, verbesserte und vermehrte Auflage, 2nd ed. (Leipzig: Friedrich Hofmeister, 1809).

singing."668 In Koch's Musikalisches Lexikon of 1802, it is mentioned that "the guitar is particularly suitable for the harmonic accompaniment of monophonic singing"669 This image of the accompanying function of the guitar coincided with the contemporary impression of the musical use of the lute. Composer Carl Johann Mainberger mentioned in his article in the Allgemeine musikalische Zeitung in 1807 that the lute was a favourite instrument fifty years ago and that it was most often used for accompanying singing.⁶⁷⁰ As will be discussed in greater detail in this chapter, singing to the accompaniment of a lute was strongly associated with the Romantic image of the Middle Ages. The last printed publications for the lute like Gellert's Oden, Lieder und Fabeln, published by Breitkopf in 1760, which contains 34 Lieder with Volkslied-character suggests that the lute was mainly used for vocal accompaniment.⁶⁷¹ In the largest collection for mandora music in Eichstätt, the bulk of the works are arrangements of opera arias and Lieder with accompaniment for the mandora.⁶⁷² Accompaniment for vocal music was an important part of the lute and mandora's repertoire during the second half of the 18th century, after which the lute-shaped guitar seems to have taken over this role. In 1809, Otto advertised his lute-shaped guitars explicitly for "friends of music and singing" ("Freunden der Musik und des Gesanges"). 673 In 1842, Simon Gaßner mentioned, in his Leitfaden für angehende Tonsetzer, that "In more recent times one still finds lutes which have been adapted as guitars, which can be used for simple accompaniment and which, because of their construction, have a much stronger tone than the guitar. Their treatment in playing, tuning and writing is then completely like that of the guitar."674

^{668. &}quot;erst durch die Verbindung des Gesangs seinen größten Reiz erhält." 'Die Guitarre, ein neuer Modeartikel', Journal des Luxus und der Moden 16, no. 11 (1801): 705.

^{669. &}quot;Die Guitarre ist besonders zur harmonischen Begleitung des einstimmigen Gesangs geeignet". Heinrich Christoph Koch, *Musikalisches Lexikon*, ed. Nicole Schwindt (Frankfurt/Main: August Hermann d.J., 1802), col. 708.

^{670.} Carl Johann Mainberger, 'Einige Bemerkungen über den ästhetischen Charakter, Werth und Gebrauch verschiedener musikalischer Instrumente', *Allgemeine musikalische Zeitung* 9, no. 17 (21 January 1807).

^{671.} Beyer, Herrn Prof. Gellerts Oden, Lieder und Fabeln nebst verschiedenen französischen und italienischen Liedern: für die Laute übersetzt.

^{672.} D. Kirsch, 'Musik für Mandora in der Universitätsbibliothek Eichstätt', 89–90.

^{673.} Otto, 'Musikalische Instrumente'.

^{674. &}quot;In neuerer Zeit findet man noch Lauten, welche zu Guitarren eingerichtet worden sind, welche zur einfachen Begleitung wohl angewendet werden können und ihres Baues wegen einen bei weitem stärkeren Ton haben als die Guitarre. Ihre Behandlung in Spiel, Stimmung und Schreibart ist dann ganz wie jene der Guitarre." Ferdinand Simon Gaßner, Partiturkenntniβ, ein Leitfaden zum Selbstunterricht für angehende Tonsetzer, vol. 1 (Karlsruhe: Christian Theodor Groos, 1842), 60.

5 The Lute-Shaped Guitar at the Beginning of the 19th Century



Figure 5.2: August Harder's setting of Rochlitz's poem An die Laute

The lute-shaped guitar, with its stronger tonal qualities, its form, as well as its historical connotations, seems to have represented the archetype of an accompanying instrument in the 19th-century imagination. The performance of songs connected with the experience of nature was one of the early Romantic ideals, ⁶⁷⁵ in which the lute-shaped guitar took an iconic position. The lute itself was the subject of many poems in the *Volkslied* tradition, with titles such as *An die Laute* or *An meine Laute*, ⁶⁷⁶ which served as textual basis for Lieder. Like in the poem by Friedrich Rochlitz *An meine Laute* dating from 1805, which became famous in Schubert's setting of 1828 (D 905), the lute is given the role of a confidant, friend, and transmitter of secret love messages. Two earlier settings for guitar can illustrate the character of the Lied accompanied by guitar at the beginning of the 19th century.

The first setting is by August Harder (1775-1813), published in a *Journal pour la guitarre* by Schott in Mainz (see fig. 5.2).⁶⁷⁷ The works by Harder, who spent most of his life in Leipzig, are dominated by Lied compositions.⁶⁷⁸ His

^{675.} Hindrichs, Zwischen "leerer Klimperey" und "wirklicher Kunst": Gitarrenmusik in Deutschland um 1800: Zugl.: Mainz, Univ., Diss., 2007, 174.

^{676.} Dittrich, Laute und Gitarre in der deutschsprachigen Lyrik: Gedichte aus sechs Jahrhunderten; eine Anthologie; Raymond Dittrich, ed., Laute und Gitarre in der deutschsprachigen Lyrik: Anthologie Band 2 (Leipzig: Engelsdorfer Verlag, 2017).

^{677.} Journal pour la guitarre (Mainz: Schott, 1807).

^{678.} Lucy Gelber, 'Die Liedkomponisten August Harder, Friedrich Heinrich Himmel,



Figure 5.3: Johann Franz Xaver Sterkel's setting of Rochlitz's poem An die Laute

version of Rochlitz's An meine Laute is not through-composed, but repeats the same music for the second verse. The melodic line uses a galant rhythmic motif of 16th notes slurred two by two. The accompaniment's bass line is set in an Alberti-style rhythmic pattern, reminiscent of Mozart's compositions. The Lied has no written introduction or chorus, and the chord progression is limited to the tonic A and dominant E. The key of A-major was often used for songs with guitar accompaniment since many open strings could be used, especially at cadences. Here, the guitar part stays in the first position, and uses mostly open strings in combination with only one stopped string in alternating strokes. The use of bass strings, or the technique of plucking two or three notes at the same time is very rare in this piece. In this example, and in general, the accompaniment does not demand a high level of musical or technical skills on the guitar.

The second setting is an adaptation of a composition by Johann Franz Xaver Sterkel (1750-1817) for guitar, which was published in 1818 by Schott in Mainz (see fig. 5.3).⁶⁷⁹ In this composition, the guitar gives an introduction of eight measures of arpeggiated chords before the voice enters. The second verse,

Friedrich Franz Hurka, Carl Gottlieb Hering' (Diss., 1936).

^{679.} Johann Franz Xaver Sterkel, Auswahl von Arien mit Guitarre Begleitung No 118. Lied an die Laute von Sterkel (Mainz: Schott's Söhne, 1818).

which is musically an exact repetition of the first, is connected by an interlude of eight measures played by the guitar. The song ends with a similar outro of eight measures. The setting in $\frac{3}{8}$ evokes the pastoral style of a lullaby. The melody is organised in four-bar phrases with grace notes often accentuating the first beat of the measure. The chord progression is basic, moving from the tonic G-major to the dominant D-major and subdominant C-major, and can all be played in the first position. These three chords are arpeggiated in the guitar part, with a little variation for the final cadence, which essentially reuses the close of the previous verse of the poem. Only in this part is the simultaneous plucking of several notes demanded. All in all, the musical skills necessary for playing such an accompaniment would have been easily acquired from the most basic guitar manuals of this period.

Even if the style of the first composition is more rooted in the Classical era than the second, which implements more elements of the Romantic Lied, they were both aimed at the same target group of musical amateurs. In both cases, the music serves as a carrier for the same poem, in which the lute plays a central role. Among the numerous Lied compositions, more arrangements of similar poems about the lute can be found either for piano, or, like the setting of Thomas Moore's My heart and my lute by Carl Diehl, published in German and English, for guitar or piano. Apart from accompanying vocal music, the role of the lute or the lute-shaped guitar as an accompanying instrument became obvious in the chamber arrangements of the Neues Quartett für Alte Musik, which was active in Munich from 1843 to 1857 and played a pot-pourri of opera compositions on allegedly old instruments. In this ensemble, a lute-shaped guitar with three additional bass strings was used, which was advertised by the instrument maker Georg Tiefenbrunner as a "Mandora".

As Hindrichs has already shown, the guitar music of the early 19th century has been the victim of an "contempt which grew in the course of history" resulting in its absence from the narrative of Western musical history. The lute-shaped guitar and its important role as an accompanying instrument has received a dismissive reception within the field of musicology, and, since it is rooted in the musical culture of amateurs, it has been largely overlooked in favour of other musical developments from the same period. Moreover, because of its

^{680.} Johann Evangelist Fuß, 'An die Laute', Allgemeine musikalische Zeitung 20, no. 52 (26 December 1818): 1–3; Friedrich Ludwig Seidel, 'An die Laute', Zeitung für die elegante Welt, no. 77 (28 June 1806).

^{681.} Carl Diehl and John Philip Kemble, *Mein Herz und meine Laute* (Mainz: Schott, 1825). 682. Sebastian Kirsch, 'Die Mandora im neuen Quartett für alte Instrumente', *Phoibos - Zeitschrift für Zupfmusik* 19 (2021): 29–49.

hybridity, the lute-guitar as an instrument has received less attention than the more standard-shaped guitar. Contemporary sources, however, indicate that the lute-shaped guitar was actually one type among several possible guitar shapes, which was connoted with its tonal qualities for accompaniment of song as well as with the literary topos of the lute in the historicist concept of poetry during the early romantic period.

5.1.3 Theodor Körner - a Sänger

The life, work, and reception of the poet Theodor Körner (1791-1813) offers an excellent contrast between the concept of an artist and player of the lute-guitar in the early 19th century with the biographies of some of the last lutenists that were outlined in Chapter 3.1. Born one generation after the lutenist Scheidler, Körner died before the latter as a young volunteer soldier in the Lützow Free Corps during the German campaign of 1813. His biography, works, and reception will be considered for several reasons. Firstly, compared to the musicians of the 18th century, Theodor Körner can be considered a representative of a new type of artist. Due to his family origins, he was firmly rooted in the cultural life of the 18th century, but took the path of a 'Sänger' ('singer') in the sense of the national Romantic ideal. Secondly, his poems served as texts for songs with simple guitar or piano accompaniment and were already successful during his lifetime and shortly afterwards. Thirdly, Körner owned a guitarised old lute, which played an important role in Körner's reception as a national hero who died as a voluntary soldier.

Theodor Körner's father, Christian Gottfried Körner, was a central figure in Dresden's musical life in the late 18th and early 19th centuries. He was financially secure through his position as a civil servant, and well connected to artists, musicians, and literary figures through his membership in various organisations, such as the Freemasons. He was good friends with Schiller and became his editor. He organised music festivals, musical parties on the countryside, founded a singing circle, wrote song compositions and writings on music theory. 683684 Körner may not have been an entrepreneur or industrial-

^{683.} Franziska Nentwig, 'Christian Gottfried Körner - sein Wirken und seine Bedeutung für die Entfaltung der bürgerlichen Musikkultur in Dresden während der Jahre 1785-1815' (Diss., Technische Universität Berlin, 1992).

^{684.} Obviously interested in the latest developments in the field of musical instruments, Körner acquired a glass harmonica after his arrival in Dresden. As a favour, Schiller commissioned a guitar from Jacob August Otto for Körner's wife Minna. The correspondence around the purchase of this instrument is full of interesting details. See: Petrick,

ist, but he was endowed with enough capital to occupy a place as a patron of the arts that only a few decades earlier, and especially in Dresden, had been reserved mainly for the nobility. The fact that the court and aristocracy receded into the background was balanced out by the emergence of a separate bourgeois milieu consisting of the financial and commercial bourgeoisie, the educated bourgeoisie (civil servants), and entrepreneurs. This social group became the new milieu of arts and artists. ⁶⁸⁵ Children of bourgeois art patrons often became artists themselves.

Theodor Körner also enjoyed a musical education consistent with a upper middle-class upbringing, which enabled him not only to make practical music – instrumental music and singing in the Zelter'sche Sing-Akademie in Berlin, for example – but also to learn composition. "'On the violin,' his father later wrote, 'he looked set to achieve something, when the guitar attracted him more. He liked to think of his zither on his arm early on, back to the time of the troubadours. For this instrument and for the voice he succeeded in several small compositions, and his correct, fine playing was heard with pleasure." 686 It is clear from this passage in the letter that Theodor Körner obviously identified with the Romantic ideal of a singing troubadour even at an early age. Interestingly, the term 'guitar' seems to be quite blurry in this passage. The term 'zither' has a connotation that fits into the Romantic fascination with folk traditions, and the fact that Körner's father uses it interchangeably with 'guitar' illustrates not only the malleability of these terms, but the way in which the guitar could be linked poetically to an imaginary past.

After studying at the Bergakademie in Freiberg and further study visits to Leipzig and Berlin, Theodor Körner spent time in Vienna from 1811, where

Dresdens bürgerliches Musik- und Theaterleben im 18. Jahrhundert: Zugl.: Dresden, Hochsch. für Musik, Diss., 2010, 317 and Friedrich Schiller and Christian Gottfried Körner, eds., Schillers Briefwechsel mit Körner: Von 1784 bis zum Tode Schillers / 4: 1797-1805, Schillers Briefwechsel mit Körner: von 1784 bis zum Tode Schillers (Leipzig: Veit, 1859), the excerpts concerning the purchase of the guitar in Michel, Gitarren in Sachsen und Thüringen bis 1850, 54–57.

^{685.} Ernst Bruckmüller, 'Zur sozialen Situation des Künstlers, vornehmlich des Musikers, im Biedermeier', in Künstler und Gesellschaft im Biedermeier, ed. Andrea Harrandt and Erich Wolfgang Partsch, Studien zur Musikwissenschaft (Tutzing: Schneider, 2002), 21. 686. "'Auf der Violine,' so schreibt der Vater später, 'versprach er etwas zu leisten, als

ihn die Guitarre mehr anzog. Seine Zither am Arme dachte er sich schon frühzeitig gern zurück in die Zeit der Troubadours. Für dieses Instrument und für den Gesang glückten ihm mehrere kleine Kompositionen, und sein richtiges, feines Spiel wurde mit Vergnügen gehört." Emil Peschel and Eugen Wildenow, *Theodor Körner und die Seinen*, vol. 1 (Leipzig: E.A. Seemann, 1898), 104–105.

he eventually obtained a position at the Burgtheater. His poetic and musical abilities seemed to open some doors for him in the social environment in Vienna. On 14 December 1811, he wrote to his father: "Yesterday I spent a very pleasant evening with a family, where I taught one daughter to play the guitar. It was the name day of the second daughter, Ottilie; I had not badly saddled my Pegasus and had to play the guitar almost the whole evening. At one o'clock we went out, and the fiancé of one of our young ladies invited us young men to his cellar for a few bottles of Rhine wine, where we drank like real Germans, and at the same time laid down the law that anyone who used an un-German word would have to pay fifteen Kreuzer."687 His father replied on 20 December of the same year: "Your Pegasus and your guitar seem to acquire you many good friends."688 It is obvious that his poetic activity ('saddling the Pegasus') was firmly connected with singing as it is in the polyvalent meaning of the German word Lied. The Lied unites the values of poetry and song. At this particular evening, language, poetry, and song are embedded in a German patriotic, pre-nationalist setting.

Körner's self-image seems to have been fed by the Romantic ideas of being a 'Sänger', in which poetic skill and musicianship were unified. On 6 June 1812, he reported on his seemingly Arcadian work situation: "I do all my work in a garden, where I am also now writing this letter. A grove of chestnut trees spreads the necessary cooling around me, and the guitar hanging behind me on the next tree occupies me in the moments when I rest". The extent to which he saw himself as a 'Sänger', however, becomes clear in a letter he addressed to Henriette von Pereira on 29 June 1813. At that time he had already enlisted in the Lützow Free Corps and had been severely wounded in the head by a sabre cut ten days earlier. He signed the letter with the

^{687. &}quot;Gestern hab ich einen sehr angenehmen Abend in einer Familie zugebracht, wo ich der einen Tochter Guitarre spielen lehrte. Es war der Namenstag der zweiten Tochter, Ottilie; ich hatte meinen Pegasus nicht schlecht gesattelt und mußte fast den ganzen Abend Guitarre spielen. Um ein Uhr gingen wir aus einander, und der Bräutigam der Einen lud uns junge Männer noch in seinen Keller zu einigen Bouteillen Rheinwein ein, wo wir tüchtig Deutsch zechten, und zugleich das Gesetz bestimmten, daß jeder, der ein undeutsches Wort gebraucht, funfzehn Kreuzer zahlen müßte." Theodor Körner, Theodor Körners Briefwechsel mit den Seinen, ed. Augusta Weldler-Steinberg (Leipzig: Quelle & Meyer, 1910), 161.

^{688. &}quot;Dein Pegasus und Deine Guitarre scheinen Dir manche gute Freunde zu erwerben." Körner, 162.

^{689. &}quot;Ich arbeite alles in einem Garten, wo ich auch jetzt diesen Brief schreibe. Ein Kastanienwäldchen breitet die nötige Kühlung um mich her, und die Guitarre, die hinter mir am nächsten Baume hängt, beschäftigt mich in den Augenblicken, wo ich ausruhe". Körner, 193.

words "Ihr verwundeter Sänger" ("Your wounded singer"). ⁶⁹⁰ The 'Sänger' is a poetical entity in which poetry and song appear as inseparable, referring to an archaic ideal that recognises a primordial state of musicality in language. This primal ideal of musicality is inherent in many Romantic aesthetic concepts from Herder to Wackenroder. ⁶⁹¹

Körner's poems were soon adapted by his contemporaries and used as the basis for their compositions. 692 Carl Maria von Weber's setting of 'Lützows wilde, verwegene Jagd' is probably the most popular. It found its way into the canon of soldier songs and is still a popular piece with male choirs today. The most famous volume of poetry written by Theodor Körner is entitled Leyer und Schwerdt (Lyre and sword) and was set to music several times shortly after the poet's death. 693 A setting of the song cycle from 1820 by the author of a successful guitar manual, Johann Heinrich Carl Bornhardt, has been partially preserved. 694 Like many editions, the separate arrangements for guitar and piano took into account the two most successful instruments of bourgeois musical culture, and expanded the circle of possible clientele and performance practice. The accompaniment is kept simple for both instruments. The guitar part is characterised by simple arpeggiated chords – especially in the faster pieces. Difficulties for the left hand such as barrée fingerings are avoided, a capodaster is used for transposing and ornamentations are not required at any point. The accompaniment for guitar is kept within a simple rhythmic scheme, notated throughout in regular quarter or eighth note movements. In the eight pieces, only at one point is dotting notated in the guitar accompaniment (dotted eighths and sixteenths), which correlates with the vocal part. The piano

^{690.} Körner, Theodor Körners Briefwechsel mit den Seinen, 248.

^{691.} See Johann Gottfried Herder, 'Abhandlung über den Ursprung der Sprache', in *Schriften*, ed. Walter Flemmer (München: Wilhelm Goldmann, 1960), 228: "Da unsere Töne der Natur zum Ausdruck der Leidenschaft bestimmt sind: so ist's natürlich, daß sie auch die Elemente aller Rührung werden!" ("Since our tones of nature are destined for the expression of passion, it is therefore natural that they also become the elements of all emotion!").

^{692.} Setting existing poetry to music seems to have been a common compositional practice, even among amateurs. Körner's father set Schiller's *Ode to Joy*, for which Schiller used the term 'Gesellschaftslied' and 'Freimaurerlied', for guitar and voice. See Schiller and Körner, *Schillers Briefwechsel mit Körner: Von 1784 bis zum Tode Schillers / 4: 1797-1805*, 271. Furthermore, Körner sent his settings of Schiller's poems to his son. See: Körner, *Theodor Körners Briefwechsel mit den Seinen*, 81.

^{693.} One setting by Anton Franz Bečzwařzowský (kept in Kalmar, Läns Museum (S-Klm), no signature, RISM ID: 190004023) is discussed here: 'Kurze Anzeige', *Allgemeine musikalische Zeitung* 17, no. 29 (19 July 1815): 496.

^{694.} Johann Heinrich Carl Bornhardt, Leyer und Schwerdt. Von Theodor Körner ; mit Begleitung des Piano-Forte oder der Guitarre. 2. Heft. (Bern: Wanaz, 1820).

part makes use of the larger tonal space and has melodic passages in some places. Overall, the collection does not require advanced musical skills. The textbook, which has also survived, records more verses than the musical text in easier-to-read printed script and may be an indication that the accompanist and singer do not have to be identical or that the songs can also be sung in larger groups.

Theodor Körner's reception was always dominated by patriotic overtones. His death as a volunteer fighter in the wars of liberation and his patriotic, emotionally charged poetry made him an ideal figure upon whom people could project a national and Romantically idealised apotheosis. His self-image and his posthumous public perception as a heroic and artistic figure clearly distinguish him from the position of the eighteenth-century lutenists. In his *Hofmeister* for example, Lenz made the lutenist Rehaar feel the contempt of the next generation by having him slapped in the face. As mentioned in the previous chapter, the son of the famous lutenist Silvius Leopold Weiß died in poverty one year after Theodor Körner and his descendants wanted to exchange the instrument for firewood. The artist of the new generation, however, attained a new status in the 19th century. Körner died too young to be in a position to make a name for himself as a freelance entrepreneur in collaboration with a publisher and to realise his works. His reception, however, is marked by what the new type of artist received, as it were, in return for the loss of financial security: the new status of a mediator of art that was revered almost religiously. Bruckmüller has described the social function of poets, heroes, singers, and artists during this period as autonomous persons, who were given a quasi-priestly function to raise up the poor shattered people so that they remember their origin and their goals in life.⁶⁹⁵ The link between the lutenist of the 18th century and a 'Sänger' like Körner is the lute. The lute of the 18th century was a tool for music-making, but in the hands of artists coming of age in the 19th century it transcended its musical function and became an important symbol within the nationalistic ideology of German Romanticism.

On 28 March 1875, four years after the foundation of the German Empire, the Theodor Körner Museum was opened in Dresden. In addition to many personal objects of the poet and his family, his lute occupied as central a position in the museum as it does in his historiography. The *Illustrirte Zeitung* in Leipzig reported on the opening:

^{695.} Bruckmüller, 'Zur sozialen Situation des Künstlers, vornehmlich des Musikers, im Biedermeier', 28.

"There is still many a treasure that there is not enough space to mention; in conclusion, I will only remember two glass cases on the wall on both sides that contain precious relics, these are Körner's weapons and the lute that is famous as a lyre. Among the former is the sidearm that Körner carried on foot as a hunter, a Turkish Patagan, and also the sabre that he later wielded as an officer. An interesting piece is the lute, an old Italian instrument, which Schiller had procured on Körner's behalf. When it was cleaned, the following inscription was found inside it: In Padowa Vvendelio Venere de Leonardo Tieffenbrucko. - Mart. Hoffman Leipzig 1696 reparirt. - Johann Christian Hoffmann Koengl. Poln. u. Churf. Saechs. Hofinstrumenten u. Lautenmacher in Leipzig reparirt 1741."

The instrument is not extant, but is well documented with photographs and a detailed description by Ernst Roeder in the Zeitschrift für Instrumenten-bau, 697 in which he provided information about the labels inside the instrument, some measurements, and an account of the instrument coming to the museum through Körner's friend, F.W. Kunz. In his description he praised the lute for its age, which he estimated at more than 300 years, given the different repairs he could detect, noting that this was a testament to the instrument's significant value. Roeder assumed that the instrument was Koerner's favourite for serenading, or for travelling on foot: in other words, this lute helped Körner embody his image of a troubadour. He suggested that this instrument must have been the inspiration for his poems in general, and especially for the one called An meine Zither (To my Zither), which he reproduces:

"An meine Zither. Singe in heiliger Nacht, Du, meines Herzens Vertraute, Freundliche Zither, ein Lied, hier, wo die Liebliche wohnt!

696. "Noch manches Kleinod ist vorhanden, das zu erwähnen der Raum mangelt; zum Schluß gedenke ich nur noch zweier an der Wand beidseitiger Glaskästen, die theure Reliquien enthalten, es sind dies Körner's Waffen und die als Leier berühmte Laute. Unter ersteren befindet sich das Seitengewehr, welches Körner als Jäger zu Fuß getragen, ein türkischer Patagan, sowie auch der Säbel, den er später als Offizier geführt. Ein interessantes Stück ist die Laute, ein altes italienisches Instrument, welches Schiller im Auftrag Körner's besorgt hatte. Bei der Reinigung hat man in ihrem Innern folgende Inschrift gefunden: In Padowa Vvendelio Venere de Leonardo Tieffenbrucko. - Mart. Hoffman Leipzig 1696 reparirt. - Johann Christian Hoffmann Hofinstrumenten u. Lautenmacher in Leipzig reparirt 1741." D. Freiherr von Biedermann, 'Das Körner-Museum in Dresden', *Illustrirte Zeitung* 1875, no. 1659 (17 April 1875): 291.

^{697.} Ernst Roeder, 'Zwei historische Instrumente', Zeitschrift für Instrumentenbau 6 (1886): 342–434.

Sanft umflüstere dein Ton den süssen Traum der Geliebten, Und des Sängers Bild zaubre der Schlummer ihr vor! -Ach! wie gleicht dir mein Herz: Da sind die Saiten Gefühle; Und, ist's die Liebe nicht auch, die es zum Wohllaut gestimmt?"⁶⁹⁸

To my zither.

Sing in holy night, thou, my heart's companion,

Friendly zither, a song, here where the lovely one dwells!

May thy tone whisper softly around the sweet dream of the beloved,

And let slumber conjure up the singer's image! -

Alas! how like thee is my heart: there are the strings of feeling; And is it not love, too, that tunes it to a pleasing sound?

At this point it must be noted that Roeder speaks of the instrument as a lute, but associates it with a poem about a zither. In his first description he referred to it as a lyre. Furthermore, the editors of the magazine added a footnote to the article pointing out that was presumably not a lute but rather an old Italian mandolin. These terminological complexities will be discussed later. Despite this ambivalence regarding the instrument's identification, it was honoured as an object of inspiration for Körner's poetry, placed alongside his weapons in keeping with the title of his famous collection 'Leyer und Schwerdt', and received reverent attention on several occasions after the museum's opening. Roeder mentioned that the instrument received two wreaths on 28 March 1875, the day of the opening and inauguration of the museum – one natural laurel wreath donated by the director, and one made of gilded solid silver donated by the Dresden singing societies.

Together with Körner's weapons, the instrument was incorporated into a mythical historiography. His image as a singer, as a troubador who performed Romantic love songs and undertook musically accompanied wanderings, was an important narrative element. The stylisation of the concrete instrument as an object of poetry contributes to the expansion of the myth. The poem quoted, 'To my Zither', is in the tradition of dedicatory poems addressed to instruments in Romantic poetry. The term 'zither' reflects the discourse on the conceptual variety in designating the guitar. In fact, the term lute is specifically mentioned elsewhere in Körner's work:

"Abschied vom Leser Das Spiel ist aus, die Töne sind verklungen, Nicht weiter rühr' ich meine Saiten an;

 $698.\ {\rm Roeder},$ 'Zwei historische Instrumente', 342.

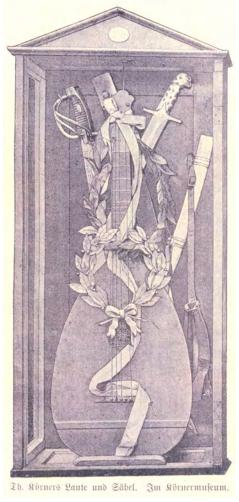
Ich hab' es recht aus voller Brust gesungen! Nein, meine Hoffnung ist kein leerer Wahn. Denn knüpft nur Einer voll Erinnerungen An diese Träume seine Freuden an: Leg' ich zufrieden meine Laute nieder, Und reich belohnt sind alle meine Lieder."⁶⁹⁹

Farewell to the reader
The game is over, the notes have faded away,
No more will I touch my strings;
I have sung it at the top of my lungs!
No, my hope is not an empty delusion.
For only one full of memories
Binds his joys to this dreams:
I lay down my lute in contentment,
And richly rewarded are all my songs.

The biography of Theodor Körner clearly shows how the image of the artist changed around 1800. Körner belongs to the generation whose lives were shaped by the consequences of the French Revolution and who saw themselves as practising art in a new way, detached from the traditions of the estate-based society and the cultural patronage associated with it. His biography makes it possible to approach this concept from two sides. On the one hand, Körner's self-image as a 'Sänger' is documented in many letters, as is his direct connection to contemporary Lied compositions. On the other hand, the understanding of the artist in the late 19th century can be seen in the retrospective veneration that Körner received at the time of the founding of the German Reich. The concept of the Körner-Museum, also consciously emphasised the family history, as shown not least by the advertising leaflet (see fig. 5.5). The lute, as the 'family lute' and as the tool of the 'Sänger', occupies a central position in the stylisation of the heroic figure, which testifies to the symbolic power of the object.

Jugend (Brandenburg: A. Müller, 1842).

^{699.} Theodor Körner, Theodor Körner's Sämmtliche Gedichte: Im Auftrage der Mutter des Dichters herausgegeben und mit einem Vorwort begleitet von Karl Streckfuß, ed. Karl Streckfuß (Berlin: Nicolai'sche Buchhandlung, 1838), 70. The collection of songs Lieder für Deutschlands turnende Jugend (Songs for Germany's Gymnastic Youth), published in 1842, concludes with this poem, see: Ludwig U. Beck, ed., Lieder für Deutschlands turnende





(a) Körner's Lute in Peschel, 1898

(b) Photo dated 1933.

Figure 5.4: Photographs of Theodor Körner's lute



Figure 5.5: Leaflet of the Körnermuseum, 1875

5.2 The Lute as a Topos in the Romantic and Historicist Concept

5.2.1 Conceptual history: Redefining the term *lute* in the poetical discourse

The period in which the practice of lute playing disappears and the use of the guitar arises coincides with the major ideological and social events of the late Enlightenment and the French Revolution. The historian Reinhart Koselleck called this period Sattelzeit (saddling time), a transition period, which marked the beginning of the modern age.⁷⁰⁰ It is characterised by two central changes that affected the social and literary significance of the term Laute and related terms such as theorbo, mandora, zither, etc. Due to the political and social transformation that occurred during this period, key terms for the political and cultural thinking of modernity underwent a profound change in meaning.⁷⁰¹ In his analysis of the history of concepts, Koselleck has shown that during the Sattelzeit, terms relating to social, cultural, and political reality were redefined, replaced, or had to be invented in order to describe the new, emerging reality. Thus, terms and the change in their meaning can be seen as indicators of broader cultural changes, and analysing their application can offer insight into important paradigm shifts.

As a result of the series of crises that shattered contemporary structures in the late 18th century, historicism emerged as a powerful intellectual attitude, as a principle of science, but also as an aesthetic concept. According to Koselleck, since the 18th century there has been an effort to historicise everything cultural, social, and, to some extent, in nature, codifying and understanding it within the temporal and spatial context of its origin. All aspects of human existence could now be explained by their development within a certain constellation of historical processes. History is no longer understood merely as a compilation of numerous individual stories, but as a continuum with forward momentum and, thus, as an independent force that conditions and shapes

^{700.} Reinhart Koselleck, 'Das achtzehnte Jahrhundert als Beginn der Neuzeit', in *Epochenschwelle und Epochenbewusstsein*, ed. Reinhart Herzog and Reinhart Koselleck, Poetik und Hermeneutik (München: Fink, 1987), 269–282.

^{701.} Reinhart Koselleck, 'Einleitung', in Geschichtliche Grundbegriffe. Historisches Lexikon zur politisch-sozialen Sprache in Deutschland, ed. Otto Brunner, Werner Conze and Reinhart Koselleck, Geschichtliche Grundbegriffe (Stuttgart: Klett-Cotta, 1972), XIII–XXVII.

every aspect of human existence.⁷⁰² The experience of a failed revolution, the attempt to realise political freedom through terror and dictatorship, and the suffering from the social consequences of establishing bourgeois society – these all result in the Romantic-restorative attempt to escape from the contemporary present.⁷⁰³ Both phenomena, the rise of historicism and the transformation of the significance of certain terms, have interesting consequences for the social significance of the lute around 1800 and its association with age.

First, a dissolution of the term 'lute' can be observed at the turn of the 19th century. During this transition, the term *Laute* and its connotations became historicised. The use of a wide variety of terms in the works of Theodor Körner, and in their reception, clearly demonstrate the absence of any fixed connection between the signifier and the signified. In his poems and correspondence, as well as in later descriptions of the Körner museum, the terms Laute, Zither, Leyer, and Guitare are used interchangeably. Körner's father used the term Guitare and Zither⁷⁰⁴ for the instrument that his son Theodor used to like. This ambiguity of terminology can already be found in Carl Friedrich Schubart's Ideen zu einer Ästhetik der Tonkunst, in which "Mandoline und Zither, oder Guitarre" are used equivalently. The Later, in the Körner museum, it was a lute-shaped guitar that represented Körner's musical life and was arranged with his weapons to illustrate his work Leyer und Schwerdt. Körner's poem An meine Zither and the mention of Laute in Abschied vom Leser refer rather to a poetic idea than to a specific instrument with a defined shape or tuning. A similar ambivalence of terminology can be observed in the work of other authors during this period. In Joseph von Eichendorff's work, for example, a clear distinction between the meaning of the terms Laute, Gitarre and Zither is not always possible. Finally, the term Mandora was used by Georg Tieffenbrunner in the middle of the century for a lute-shaped guitar with three additional bass strings.

On the one hand, this lack of precision in the terminology is due to the fact that

^{702.} Daniel Fulda, 'Sattelzeit. Karriere und Problematik eines kulturwissenschaftlichen Zentralbegriffs', in *Sattelzeit*, ed. Élisabeth Décultot and Daniel Fulda, Hallesche Beiträge zur Europäischen Aufklärung (Berlin and Boston: de Gruyter, 2016), 4.

^{703.} Friedrich Jaeger and Jörn Rüsen, Geschichte des Historismus: Eine Einführung (München: Beck, 1992), 24.

^{704.} Peschel and Wildenow, Theodor Körner und die Seinen, 104–105.

^{705.} Christian Friedrich Daniel Schubart, Christian Friedrich Daniel Schubart's Ideen zu einer Ästhetik der Tonkunst (Wien: Degen, 1806), 306.

^{706.} In Eichendorff's Ahnung und Gegenwart, the characters Leontin and Erwin both play the Gitarre, which is sometimes called Laute. Joseph von Eichendorff, Werke, ed. Wolfdietrich Rasch (München: Carl Hanser Verlag, 1966), 565–567, 631.

the use of terms in a poetic context is not comparable to the musico-historical terminology of today. Furthermore, the possible musical instrument to which all these terms might refer was subject to change in its physical appearance: guitars and lutes both existed in a variety of forms. Additionally, another layer of abstraction began to affect these terms as the objects themselves disappeared from actual social circumstances. The loss of real social interaction with these objects, with the experience of them musically, led to generalisation, abstraction, ambiguity, and transfiguration, opening up a space in which these objects took on new and different associations. By 1800, the lute as a musical instrument in its shape, tonal character, musical significance, playing technique, construction method, and various designs and dispositions already belonged to the previous generation. A clear distinction between terms like lute, theorbo, or mandora, which were bonded to the cultural surrounding of their use, had become difficult. Even though Molitor assumed that "the shape of the lute, which is distinguished from our guitar by its arched body, the wider neck and the higher number of strings [...] [would be] hardly strange to any of my readers"⁷⁰⁷, he remarked that they are only known by their shape and name. ⁷⁰⁸ The knowledge of the characteristics of the lute in its diversity of types is thus confined to the shape of its body. The composer Carl Johann Mainberger admitted in his article on the aesthetic character of musical instruments, published in the Allgemeine musikalische Zeitung in 1807, that he had never heard someone playing a lute.⁷⁰⁹ In 1809, the entry for *Laute* in the dictionary Brockhaus states that the lute has lost much of its great prestige and that it is scarcely known.⁷¹⁰

The absence of the lute from cultural activities caused the term *Laute* to become a conceptual sleeve which could be filled with other meanings and recontextualised. The term also became detached from its function within a specific social class and musical reality. In the course of the dissolution of estate-based society and its related structures, the scope of many terms began to expand,

^{707. &}quot;Die Gestalt der *Laute*, welche sich von unsrer Guitare durch ihren gewölbten Körper, durch uhren breiteren Hals und durch die größere Zahl von Saiten unterscheidet, [...] kaum einem meiner Leser fremd" Molitor, *Große Sonate für die Guitare allein, als Probe einer besseren Behandlung des Instruments*, 7.

^{708.} Molitor, 8.

^{709.} Mainberger, 'Einige Bemerkungen über den ästhetischen Charakter, Werth und Gebrauch verschiedener musikalischer Instrumente', 260–261.

^{710.} Brockhaus, ed., Conversations-Lexikon oder kurzgefaßtes Handwörterbuch für die in der gesellschaftlichen Unterhaltung aus den Wissenschaften und Künsten vorkommenden Gegenstände mit beständiger Rücksicht auf die Ereignisse der älteren und neueren Zeit. 6 Bände sowie 2 Bände mit Nachträgen (1809–1811), vol. 2 (Amsterdam, 1809), 368.

which Koselleck has characterised as a kind of democratisation. Formerly class-specific fields of expression were being expanded and made available to the greater public.⁷¹¹ The lute, mainly understood as an instrument used to accompany singing, became detached from the estate-based social reality of the time before the French Revolution and was subsequently historicised. The connection of the lute with aristocratic structures of the 18th century was reimagined and projected onto feudal structures of the distant past. It was given a place in a historicist hologram which consists of a collage of mediaeval scenes. It became an object associated with longing for the distant, in both time and place. The entry in the Damen-Conversationslexikon of 1836 seems to follow this contemporary, romantic conception of the lute. Here the lute is "the once so popular stringed instrument, the companion of the troubadours, of chivalrous courtly lovers, of the improvisers. It sounded on warm summer nights for the serenade of the lover, resounded from the balcony as a sign of hearing and the confession of love, lured the paladin into the shady groves of the park and was as much a sibling of southern romanticism as the harp is of northern. – Now it is rare in Germany; only in Italy's and Andalusia's meadows do the vibrations of its soft strings still resound."712

In this redefined meaning, the lute as a concept took over a function in the historicist exit strategy from reality. As an object located in the imaginary Middle Ages, it became a signifier for the artificial, historicised world which provided an escape from the unpleasant realities of the early 19th century. In his 'two-worlds' model, the musicologist Hans Heinrich Eggebrecht described the function of music as a retreat into a different world, which is similar to the aforementioned concept of historicism. For Eggebrecht, the reality of the world has a negative connotation and the Romantic being searches for refuge in a different world of fantasy, art, music, or dream. With the help of music, the subject changes his existence and enters into a spiritual world far from reality,

^{711.} Koselleck, 'Einleitung', XVI.

^{712. &}quot;das ehemals so beliebte Saiteninstrument, der Gefährte der Troubadours, der Liebesritter, der Improvisatoren. Sie tönte in warmen Sommernächten zur Serenade des Liebenden, erklang vom Balkone als Zeichen der Erhörung und des Liebesgeständnisses, lockte den Paladin in die schattigen Haine des Parkes und war mit südlicher Romantik eben so verschwistert, wie die Harfe mit der nordischen. – Jetzt ist sie in Deutschland selten; nur in Italiens und Andalusiens Auen ertönen noch ihre weichen Saitenschwingungen." Herlossohn Carl, ed., Damen Conversations Lexikon, vol. 6 (Adorf, 1836), 296.

^{713.} Hans Heinrich Eggebrecht, Musik im Abendland: Prozesse und Stationen vom Mittelalter bis zur Gegenwart (München: Piper, 1991), 590–592.

^{714.} Hans Heinrich Eggebrecht, 'Musik und Romantik', in *Gegenwelten*, ed. Roswitha Sperber (Hofheim: Wolke, 1997), 25.



Figure 5.6: Caspar David Friedrich: Der Traum des Musikers, chalk drawing, around 1826/27, Hamburger Kunsthalle, inv. no. 41113

where there is pure, untouched longing, and the dissolution of boundaries into the infinite. This world, in which the lute figures prominently alongside the singing troubadour, is depicted in numerous dedicatory poems with titles such as An die Laute, An die Guitarre, or similar. This small genre of short-form poems refers back to a poetic tradition of the 16th century, in which the lute is addressed and asked to speak to the adored on behalf of the lover. Through the musical adaptation of these poems into Lieder, the poetic concept becomes part of the reality of the musical culture. As objects, lute-shaped guitars were uniquely suited to be accompanying instruments for this genre: their ease and playability made them eminently accessible to amateurs, while their shape and connotation supported the escapist Romantic fantasy.

The integration of the lute-shaped guitar into this historicist concept of escape can also be observed through numerous representations in the visual arts. Depicted in genre paintings and their reproductions, engravings, and drawings, the lute-shaped guitar, as well as other forms of guitars, begin to appear at the beginning of the 19th century in Arcadian scenes (see fig. 5.8), often in the hands of women as a symbol of femininity or as an attribute of love and erotic relationships (see fig. 5.7). In the hands of young men, the lute often represents the instrument of the troubadour (see fig. 5.6) and refers to the topos of the lute as a keeper and transmitter of secret love because of its soft sound. In many cases, nature, ruins, historicist architecture, and other elements of the Romantic repertoire situate these scenes in the imaginary Middle Ages. In most cases, the depicted instrument can be clearly identified as a lute-shaped guitar by its characteristic features, such as the headstock, or the number of six strings. Thus, while these depictions refer to a type of object that actually existed, they are connecting the real objects with an imaginary world constructed by literal and artistic concepts. The cultural significance of the lute-shaped guitar is, therefore, firmly anchored in the concept of history as a place for Romantic escapism and articulated through several different art forms. The erosion of the term Laute – its detachment from a specific, physically present object – went hand in hand with its transition to this new function. In doing so, the term became a general one – at least in poetic language – as it could be fulfilled in many cases by other signifiers such as

^{715.} The two volumes edited by Dittrich contain 44 poems dating mainly from the beginning of the 19th century with a similar title. Dittrich, Laute und Gitarre in der deutschsprachigen Lyrik: Gedichte aus sechs Jahrhunderten; eine Anthologie, Dittrich, Laute und Gitarre in der deutschsprachigen Lyrik: Anthologie Band 2.

^{716.} Carla Zecher, Sounding objects: Musical instruments, poetry, and art in Renaissance France (Toronto: University of Toronto Press, 2007), 135.



Figure 5.7: Johann Georg Schreiner: Die Lautenspielerin, Lithography after Adolf Schmidt, private property



Figure 5.8: Julius Schnorr von Carolsfeld: Nemisee mit Lautenspieler, 1821, pen and brown ink over pencil, Staatliche Kunstsammlungen Dresden, Kupferstichkabinett, inv. no. C 1908-866

Guitarre, Mandora, Zither or Leyer. Whereas old lutes as concrete objects, associated with a certain maker or school, were previously valued as antiques because of their age and quality, they became instead general symbols of an imaginary past.

5.2.2 Romantic and historicist traces in the musico-historical discourse

In the first half of the 19th century, the lute was the subject of musico-historical studies. Many of these publications contain clear traces of the Romantic and historicist idea of the lute as a hallmark of the troubadours, and tend to reduce the role of the lute to that of an accompanying instrument.

In Carl Friedrich Schubart's *Ideen zu einer Ästhetik der Tonkunst*, written during his imprisonment 1777-1787 and published posthumously in 1806, he

described an idea of the lute that certainly points to the romantic world of chivalry:

"Durch Jahrhunderte war sie ein Lieblingsinstrument der Großen, der Kaiser und Könige, Fürsten und Herren. Auch die ersten Damen suchten eine Ehre darin. In den altdeutschen Ritteromanen, wo das Costum so herzlich und treu beobachtet ist, findet man häufige Spuren von diesem Enthusiasmus für die Laute. Alle Gesänge der Freude und der Liebe wurden damit begleitet. Wie aber auch dieses Instrument, nach dem gewöhnlichen Lauf der Dinge, zu den Pfarrerstöchtern, Nähermädchen und Schulmeistern herab sank; so legte sich diese Exstase für die Laute auch bey den Großen. Die Natur dieses Instruments ist: schwermüthige Liebe; stille Seufzer in schweigender Nacht ausgehaucht; Ausbruch des klagenden Herzgefühls bis zu Thränen. Es is mithin ganz für gefühlvolle Seelen gemacht."

Through centuries it has been a favourite instrument of the great, of emperors and kings, princes and lords. Even the first ladies sought honour in it. In the old German chivalric romances, where the customs are so warmly and faithfully observed, one finds frequent traces of this enthusiasm for the lute. All songs of joy and love were accompanied with it. But just as this instrument, according to the usual course of events, descended to the level of daughters of priests, seamstresses and schoolmasters, so this excitement for the lute also subsided among the great. The nature of this instrument is: melancholy love; silent sighs breathed out in the hushed night; outburst of the feeling of the lamenting heart to the point of tears. It is therefore made entirely for emotional souls.

Schubart connects the lute with the noble class of the past and explains its decline as part of a social degradation in the process of bourgeoisification. The reference to kings, old German chivalric romances, and the power of the lute to express melancholic emotions employs catch-phrases that point to the early Romantic connotations of the lute. However, Schubart seems to have been familiar with amateur musical practices at the end of the 18th century. According to Schubart, the lute was "very difficult to play, both because of the special tuning and because of the critical fingerings. [...] Today, good

^{717.} Schubart, Christian Friedrich Daniel Schubart's Ideen zu einer Ästhetik der Tonkunst, 305.

lute players are extremely rare. They are only found in imperial cities, in monasteries, especially among nuns, and at small courts."⁷¹⁸

Similar ideas can be found in the works of Carl Ferdinand Becker, who owned one of the largest collections of lute music in the first half of the 19th century. In his music library, which he donated to Leipzig City Library in 1856, 102 works for lute are preserved today. Mainly based on the works in his possession, he sketched a history of lute music in his Geschichte der Hausmusik in früheren Jahrhunderten. Here, he makes a direct and partly literal reference to Schubart: "For centuries it was a favourite instrument of the great, of emperors, kings, princes and lords; the first ladies sought an honour in it; all songs of love and joy were accompanied by it." Becker, like Schubart, noted that the sound of the lute is one of "melancholy love, an outburst of feeling in the lamenting heart, even to the point of tears, and breathes out silent sighs in the hushed night."

Adding to Schubart's account of the lute, Becker noted that it was used to accompany all songs of love and joy, a stereotype that can likewise be attributed to the artistic ideals of the early Romantics. This assumption can also be found in other contemporary writings on musical instruments. Wilhelm Schneider, for example, mentioned in his *Historisch-technische Beschreibung der musicalischen Instrumente* that the guitar had its origin in the lute, which

^{718. &}quot;Die Laute ist sehr schwer zu spielen, so wohl wegen der besonderen Stimmung, als wegen den kritischen Applicaturen. [...] Heutiges Tages sind die guten Lautenspieler äußerst selten. Man findet sie nur noch in Reichsstädten, in Klöstern, sonderlich bey den Nonnen, und an kleinen Höfen." Schubart, Christian Friedrich Daniel Schubart's Ideen zu einer Ästhetik der Tonkunst, 305–306.

^{719.} There is no indication that Becker actually owned a lute instrument. He reports that it would be difficult to find someone who knew how to play the lute, see: Carl Ferdinand Becker, 'Zur Geschichte der Hausmusik in früheren Jahrhunderten (Schluß)', *Neue Zeitschrift für Musik* 5, no. 50 (1838): 199.

^{720.} The music library was made accessible online in a research project in 2010-2013, Universitätsbibliothek Leipzig, ed., 'Online-Erschließung der Musikbibliothek von Carl Ferdinand Becker 2010–2013', accessed 20 March 2022, https://www.ub.uni-leipzig.de/forschungsbibliothek/projekte/projekte-chronologisch-alle/musikbibliothek-von-carl-ferdinand-becker/.

^{721.} Carl Ferdinand Becker, 'Zur Geschichte der Hausmusik in früheren Jahrhunderten: IV. c. Tonstücke für die Laute', Neue Zeitschrift für Musik 5, no. 49 (1838): 195–197.

^{722. &}quot;Jahrhunderte hindurch war sie ein Lieblingsinstrument der Großen, der Kaiser, Könige, Fürsten und Herren; die ersten Damen suchten eine Ehre darin; alle Gesänge der Liebe und Freude wurden damit begleitet." C. F. Becker, 195.

^{723. &}quot;schwermüthige Liebe, Ausbruch des klagenden Herzgefühls bis zu Thränen [...] und stille Seufzer in schweigender Nacht aushaucht" C. F. Becker, 195.

had been used for two hundred years in Spain and Italy for the accompaniment of simple songs.⁷²⁴ As early as 1806, Carl Johann Mainberger assumed that the lute would have been used mainly for singing and that the last composition was a song by Kapellmeister Joseph Schuster in Dresden.⁷²⁵

For Becker, too, the connection between the lute and vocal music seemed to have lasted until the very end of its use. He believed that the last work written for lute was an intavolation of Johann Adam Hiller's operas. In 1838, he wrote that a coincidence brought him an edition of all the operas by Hiller arranged for the lute. He assumed that this arrangement was among the last compositions for lute before the instrument disappeared. This work is not found in the surviving holdings of Becker's music library, but the incident Becker described could have been at an auction held by Breitkopf und Härtel in 1836 in Leipzig, where Becker was based. The aforementioned pieces appear alongside other significant lute pieces and were announced in the catalogue as follows:

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"1448 Hiller, d. Jagd. geb. 26 -
- Lottchen am Hofe. 7 -
- d. Liebe auf dem Lande. 6 -
1449 - Arien a. d. Opern die Jagd, die Liebe auf dem Lande u. Lottchen am Hofe. 25 -"<sup>727</sup>
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Becker was involved in the auction as the commission agent and it is quite possible that Becker used the opportunity to expand his own music library. The assumption that Hiller's intavolations are the last compositions for lute was shared by Becker's contemporaries and can also be found in later publications.⁷²⁸ The fact that Becker and his contemporaries identified the last

^{724.} Wilhelm Schneider, ed., Historisch-technische Beschreibung der musicalischen Instrumente, ihres Alters, Tonumfangs und Baues, ihrer Erfinder (Neiße and Leipzig, 1834), 85. 725. Mainberger, 'Einige Bemerkungen über den ästhetischen Charakter, Werth und Gebrauch verschiedener musikalischer Instrumente'.

^{726.} C. F. Becker, 'Zur Geschichte der Hausmusik in früheren Jahrhunderten (Schluß)', 199. 727. Breitkopf & Härtel, ed., Verzeichniß geschriebener und gedruckter Musikalien aller Gattungen, Leipzig, 1836, 59.

^{728.} In 1830, Carl Julius Hoffmann mentioned Kropfgans as arranger of Hiller's operas. Carl Julius Adolf Hoffmann, Die Tonkünstler Schlesiens (Breslau: Aderholz, 1830), 260. A similar entry can be found in Gustav Schilling, ed., Encyclopädie der gesammten musikalischen Wissenschaften oder Universal-Lexicon der Tonkunst, vol. 4 (Stuttgart: Löflundt, 1837), 243. In 1852, Franz Brendel mentioned the arrangement of Hiller's operas as probably the last works for lute. Franz Brendel, Geschichte der Musik in Italien, Deutschland und Frankreich: von den ersten christlichen Zeiten bis auf die Gegenwart: zweiundzwanzig Vorlesungen gehalten zu Leipzig im Jahre 1850 (Leipzig: Bruno Hinze, 1852), 206.

compositions or arrangements for the lute as pieces in which the lute accompanied vocal music is a significant hint as to its contemporary image. The Romantic idea, in which the lute and the voice are connected is, however, contradicted by the extant lute music from that time, of which Becker was well aware. The catalogue of the auction by Breitkopf und Härtel, a veritable kaleidoscope of lute music from the end of the 18th century, mentions only 14 titles in three editions under the category "Gesänge m. Lautenbegleitung", while solos, duos, trios, quartets and concertos account for over 66 titles in 21 editions.⁷²⁹

The incorporation of the lute into the poetically motivated Romantic ideal of an imaginary past, which defines it as the instrument of the troubadour, reduced it to its function as an accompanying instrument. In this context, it was associated with the expression of emotions, melancholy and love, which corresponded to its depiction in contemporary poetry and visual art. The fact that the widely-read publications of Schubart and Becker also represented the lute in this manner helps to explain the ubiquity of this attitude in various musico-historical studies.

5.2.3 Lexical knowledge

In addition to the Romantically coloured approach in historical writings on the lute and its music, there are also objective descriptions that reflect the contemporary encyclopedist's knowledge about the instrument.

Concerning the shape, tuning and musical use, entries in dictionaries like Adelung's Grammatisch-kritisches Wörterbuch der Hochdeutschen Mundart give extensive information, mainly based on Baron's Untersuchung.⁷³⁰ The same is true for Koch's Musikalisches Lexikon⁷³¹ in 1802 and Ferdinand Simon Gaßners Universal-Lexicon der Tonkunst in 1849.⁷³² All entries describe the lute as an instrument with thirteen courses, give information on tuning or the tablature system, and renounce any connection with the Romantic world of ideas.

^{729.} Breitkopf & Härtel, $Verzeichni\beta$ geschriebener und gedruckter Musikalien aller Gattungen, 58–59.

^{730.} Adelung, Grammatisch-kritisches Wörterbuch der Hochdeutschen Mundart mit beständiger Vergleichung der übrigen Mundarten, besonders aber der oberdeutschen. Zweyte, vermehrte und verbesserte Ausgabe. F-L, col. 1948.

^{731.} Koch, Musikalisches Lexikon, col. 891.

^{732.} Ferdinand Simon Gaßner, ed., Universal-Lexikon der Tonkunst: neue Hand-Ausgabe in einem Bande; mit Zugrundlegung des größeren Werkes (Stuttgart: Köhler, 1849), 531.

The lute-shaped guitar is not mentioned. All authors either refer explicitly to Baron, or without citation, for examples about biographic data of lutenists.

Raphael Georg Kiesewetter's historical study on tablature, published in 1831 in the Allgemeine musikalische Zeitung in several parts, was one of the few extensive studies on lute music and intavolation of that period. Unlike Becker, who devoted a large portion of his writing to descriptions of his antiquarian possessions, Kiesewetter tried to give a more detailed and objective overview of the lute. He named the most important composers of the early period, such as Konrad Meister, Hans Gerle, Sebastian Ochsenkun, Wolf Heckel, Melchior Newsidler, Sixtus Kargel, and Petrucci. He described the German tablature and distinguished it from the Italian and French systems. He also described the compositional character of lute music at different times, and was extremely critical of the quality. For example, he characterised the compositional style of the mid-18th century in the following manner: "The basses, which constitute the main force of the instrument are excellently used in these [compositions]; the harmony is pure and of naturally flowing succession; otherwise, the playing consists mostly only of broken chords (arpeggios) or very simple melodic melodic figures in the upper voice, which is then usually accompanied only by the bass."⁷³³ After a comparison of the famous composers of this period, such as Jakob Bittner, Sylvius Leopold Weiss, and Count Logi, he concluded that the latter did not utilise the whole harmonic capability of the instrument and, therefore, he found these compositions "in no way better than the older stuff." 734

Like many reference works, Kiesewetter mentioned Baron's *Untersuchung* as the most important source of information on the lute for the last hundred years, even though he criticised it for its shortcomings as a historical, theoretical, and practical study. He concluded that Baron's work would be the last of its kind, since no one would feel called upon to follow in Baron's footsteps as an evangelist for the lute.⁷³⁵ With this criticism he refers not only to the low estimation of the lute and its music, but also to Baron's text as an

^{733. &}quot;Die Bässe, welche die Haupt Force des Instrumentes ausmachen, sind in diesen [Kompositionen] trefflich benützt; die Harmonie rein, und von natürlich fliessender Folge; übrigens besteht das Spiel meistens nur in gebrochenen Accorden (Arpeggio) oder in sehr einfach melodischen Figuren in der Oberstimme, welche dann gewöhnlich nur vom Basse begleitet ist" Raphael Georg Kiesewetter, 'Die Tabulaturen der älteren Practiker seit der Einführung des Figural- und Mensuralgesanges und des Contrapunctes, aus dem Gesichtspuncte der Kunstgeschichte betrachtet: Zweyter Artikel. Die Lauten-Tabulatur', Allgemeine musikalische Zeitung 33, no. 9 (1831): col. 142.

^{734. &}quot;um nichts besser [...], als den ältern Kram." Kiesewetter, col. 142

^{735.} Kiesewetter, col. 143-144.

unfortunately limited source, given that it was the only one available on the transmission of scholarly knowledge about the lute.

5.2.4 Critique and appeal for revival in the musical discourse

The discourse on the practical use of the lute was characterised by two schools of thought: those who sought to explain why the instrument had disappeared and no longer met contemporary musical demands, and those who were advocating for its revival. Those who sought the lute's revival expressed a nostalgic fascination with the instrument, praising its timbre and historical connotations. There were, however, serious practical reasons for the decline of the lute, which were articulated at the beginning of the 19th century: the double strings, its use of tablature notation, and the lute's harmonic disadvantages when compared to the piano.

Concerning the double stringing, Molitor remarked that this made tuning extremely tedious, and it would have been impossible to maintain the tuning for an entire piece. The same considerations were voiced in the *Brockhaus Conversations-Lexicon*, adding that the difficulty of tuning and playing, along with the expensive maintenance, were the reasons why the instrument had disappeared. The second reason, mentioned by Molitor and other authors like Schubart and Kiesewetter, was the prominence of the piano, which had become the accompanying instrument of choice. Both Molitor and Kiesewetter maintained that the harmony could be perfectly articulated on the piano while the lute, in comparison, would generally show harmonic limitations.

The most discussed reason for the decline of the lute was its use of tablature notation, which had become so obsolete by this time that few people knew how to read it. As Molitor observed, "this barbaric description may have scared off not only many amateurs from learning this instrument, but also and especially

^{736.} Molitor, Große Sonate für die Guitare allein, als Probe einer besseren Behandlung des Instruments, 8.

^{737.} Brockhaus, Conversations-Lexikon oder kurzgefaßtes Handwörterbuch für die in der gesellschaftlichen Unterhaltung aus den Wissenschaften und Künsten vorkommenden Gegenstände mit beständiger Rücksicht auf die Ereignisse der älteren und neueren Zeit. 6 Bände sowie 2 Bände mit Nachträgen (1809–1811), 386.

^{738.} Kiesewetter, 'Die Tabulaturen der älteren Practiker seit der Einführung des Figuralund Mensuralgesanges und des Contrapunctes, aus dem Gesichtspuncte der Kunstgeschichte betrachtet: Zweyter Artikel. Die Lauten-Tabulatur', col. 133.

the composers.⁷³⁹ Becker referred to lute tablature as 'hieroglyphics' that were supposedly difficult to decipher.⁷⁴⁰ The rejection of tablature was most clearly articulated in Kiesewetter's study. He presented several arguments against the use of tablature notation, which, in his opinion, is not able to represent musical events at first glance and requires practical implementation. He thus takes the typical standpoint of a 19th century music theorist who sees in modern notation the possibility of direct musical analysis and who values the musical work over the performance. He wonders, "how, even at a time when the art of music, especially instrumental music, was still in its infancy, one could fall for such a kind of notation, which could not at all awaken any musical idea in the observer, nor could it be read with the mind, but only with the fingers; it is almost unbelievable that such a writing for instruments [...] remained in use, after the more reasonable musicians of other disciplines [...] had long ago made use of the splendid notation which completely satisfied every demand of an enhanced art."⁷⁴¹

For Kiesewetter, another reason for the instrument's imperfection was the practice of intavolation, which, in his estimation, dealt too freely with the musical works, transcribing them in such a way that too much of the original composition was left out, rendering it unrecognisable, a bastardization of the original work. He was especially critical of the transcription of polyphonic vocal works for the lute into tablature because it was impossible to reconstruct the original work once it has been intavolated, since it had to be adapted to the playing technique and notation method of the lute. The original advantages offered by tablature notation, namely that it made music accessible to instruments of any size, regardless of their pitch or the player's ability to read music, was never considered. Tablature notation was for Kiesewetter merely a tool

^{739. &}quot;Es ist leicht begreiflich, daß diese barbarische Bezeichnung nicht nur manchen Liebhaber von Erlernung dieses Instruments, sondern auch und vorzüglich die Tonsetzer abgeschreckt haben mag" Molitor, Große Sonate für die Guitare allein, als Probe einer besseren Behandlung des Instruments, 9.

^{740.} C. F. Becker, 'Zur Geschichte der Hausmusik in früheren Jahrhunderten (Schluß)', 199. 741. "wie man, selbst zu einer Zeit, als die Tonkunst, besonders die Instrumental-Musik, noch in der Kindheit war, auf eine solche Art der Notirung verfallen konnte, welche bey dem Beschauenden ganz und gar keine musikalische Idee erwecken, auch nicht mit dem Verstande, sondern nur mit den Fingern gelesen werden konnte; fast unglaublich aber ist es, dass eine solche Schrift, für Instrumente, [...] sich in der Zunft im Gebrauche erhielt, nachdem die verständigeren Musiker anderer Fächer [...] sich vorlängst der herrlichen, jeder Forderung einer gesteigerten Kunst vollkommen genügenden Notenschrift bedienten." Kiesewetter, 'Die Tabulaturen der älteren Practiker seit der Einführung des Figural- und Mensuralgesanges und des Contrapunctes, aus dem Gesichtspuncte der Kunstgeschichte betrachtet: Zweyter Artikel. Die Lauten-Tabulatur', col. 139.

for music praxis which did not meet the contemporary demand of theoretical accessibility through a standardised notation system.

In fact, the system of tablature had already been a recurring critique levelled at the lute and the exclusivity of its musical practice. In 1679, a lutenist by the name of Monsieur Perrine published a lute manual in which he tried to apply the standard notation system to the lute in order to make it more accessible (see 83). In his guitar manual published in 1809, Johann Traugott Lehmann declared his desire to publish "a new lute manual, edited according to our present notation system, to save this excellent instrument from oblivion." ⁷⁴²

The application of the modern notation system is just one suggestion among many by contemporary authors to correct what were seen to be the lute's disadvantages and revive the instrument. Their main focus, however, was on the unique tonal quality of the lute, which, they believed, would be missed if the lute were to disappear. Schubart, who saw the violin and piano or harpsichord as the instruments displacing the lute in chamber music settings rather than the guitar, made clear that the lute stop on a keyboard instrument would not be a real alternative to the sound of the lute itself. It "does by far not yet have the delicacy of the lute itself. The musical art would therefore lose a very touching peculiarity if the lute were to be completely displaced."⁷⁴³ It is remarkable that Schubart singled out the violin and the piano, two instruments that are not similar to the lute in terms of playing technique, but related in their connection with the social network and the explicitly domestic practice of music. Molitor, on the other hand, observed the need for a multi-stringed instrument that could be conveniently carried everywhere and played while walking or standing, a role which the guitar easily filled as the successor of the lute. 744

Molitor also reported on early attempts to solve the problem of double strings, such as the adaptation of lute corpora as six-stringed lute-shaped guitars. According to Molitor, the apparently last remaining mandora player, $Herr\ v$.

^{742. &}quot;Vielleicht glückt es mir durch Herausgabe einer, nach unserm jetzigen Notensystem bearbeiteten neuen Lautenschule, auch dieses vortreffliche Instrument der Vergessenheit zu entreissen." Lehmann, Neue Guitarre-Schule oder die einfachsten Regeln die Guitarre auch ohne Lehrer spielen zu lernen: Zweite, verbesserte und vermehrte Auflage, 8.

^{743. &}quot;Allein der Lautenzug auf dem Flügel hat bey weitem noch nicht die Delicatesse der Laute selbst. Die Tonkunst würde also eine sehr rührende Eigenheit verlieren, wenn die Laute ganz und gar verdrängt werden sollte." Schubart, Christian Friedrich Daniel Schubart's Ideen zu einer Ästhetik der Tonkunst, 306.

^{744.} Molitor, Große Sonate für die Guitare allein, als Probe einer besseren Behandlung des Instruments, 9.

Fauner, had "abolished the double stringing already a long time ago because of its inconvenience". The generally very critical Kiesewetter, on the other hand, suggested that the guitar tuning should be transferred to the lute. He was "no less convinced that this instrument, in the hands of a talented and tasteful artist (and at the same time composer), would be entirely suitable to delight lovers and connoisseurs, even today [...]; and perhaps that one of the good guitarists (who, with their instruments, have already survived the fashion) could most easily change over to the lute, which would not stop being a lute simply because he took his tuning of the guitar (or mandora) with him."

Becker maintained that the lute had enough charms to be pulled out of its undeserved oblivion. He reported about a certain Mr. Gusikow, who introduced an instrument into the salons "whose simple structure, whose half-confused scala, whose laborious handling we still regard with surprise today, and of which the cleanest illustrations are found as early as 1545". Becker referred to the depiction of a dulcimer in Agricola's Musica instrumentalis. Joseph Gusikow was known as a Russian virtuoso on some sort of dulcimer or xylophone and his concerts were reported in several journals as attractions. Becker's conclusion was that if it were possible to reintroduce such an instrument, then there could also be also a revival of lute playing: "The charms of the lute, too, must sooner or later be recognised anew; our matured experiences, and such significant progress in the field of tonal theory and the musical art in general, will be able to call it back into life in a more perfect form than it

^{745. &}quot;die doppelte Besaitung wegen ihrer Unbequemlichkeit schon vor längerer Zeit abgeschafft" Molitor, Große Sonate für die Guitare allein, als Probe einer besseren Behandlung des Instruments, 8.

^{746. &}quot;Dennoch bin ich darum nicht minder überzeugt, dass diess Instrument in der Hand eines talent- und geschmackvollen Künstlers (und zugleich Componisten) auch heut zu Tage [...], Liebhaber und Kenner zu ergötzen völlig geeignet wäre; und vielleicht, dass einer der braven Guitarristen (welche mit ihrem Instrumente schon die Mode überlebt haben) am leichtesten zu jenem übergehen könnte, welches darum, dass er seine gewohnte Guitarre-(oder Mandora-) Stimmung mit hinüber nähme, nicht aufhören würde, Laute zu sein." Kiesewetter, 'Die Tabulaturen der älteren Practiker seit der Einführung des Figural- und Mensuralgesanges und des Contrapunctes, aus dem Gesichtspuncte der Kunstgeschichte betrachtet: Zweyter Artikel. Die Lauten-Tabulatur', col. 143.

^{747. &}quot;dessen einfache Structur, dessen halbverworrene Scala, dessen mühevolle Behandlung wir heute noch überrascht betrachten und von dem sich schon 1545 die saubersten Abbildungen vorfinden". C. F. Becker, 'Zur Geschichte der Hausmusik in früheren Jahrhunderten (Schluß)', 199.

^{748.} Martin Agricola, Musica instrumentalis deudsch (Magdeburg, 1529).

^{749. &#}x27;Nachrichten', Allgemeine musikalische Zeitung 37, no. 36 (1835): 601–602.

was before; in a master's hands it can sound sweetly again, for 'What changing times have stolen, time will give us back'"⁷⁵⁰

At the beginning of the 19th century, the actual encounter with lute music and lutes in the form in which they were played during the 18th century, was rare. Actual historical knowledge about the lute's various forms, tunings, musical diversity, and compositions was limited to a few experts. Reference works mainly referred to Baron's Untersuchung as the only source of information on lutes, which was viewed critically by contemporary experts like Kiesewetter. The lack of musical presence and cultural interaction made it possible for the term lute to be reappropriated within the Romantic imagination into a mythological mediaeval past. The Romantic notion of the lute as the instrument of the troubadours and its delicate sound as the transmitter of love messages, was also distributed by music historians, such as Schubart and Becker. During this process of detaching the lute from its significance in the 18th century, the lute as a concrete object became abstracted. In the poetic context, the lute came to be characterised by its shape and was reduced to the role of accompanying instrument for vocal music. The authors who expressed a desire for the revival of the lute saw its transformation into a guitar-hybrid as the only means to this end. Therefore, all knowledge concerning the quality of the objects as antiques, the cult-like fascination with the different makers, brands, and forms, as well as the discussion of the quality of old instruments and aged materials that had been so important among lute players, completely vanished from the discourse. Nonetheless, the aspect of age remained inseparable from the lute, becoming less about the tangible age of the instrument (indicated by external markers of age or knowledge about the maker) and more about the imaginary, Romantic notion of the middle ages that the lute came to evoke.

^{750. &}quot;Auch die Reize der Laute müssen auf's neue früher oder später erkannt werden; unsere gereiften Erfahrungen und so bedeutenden Fortschritte im Gebiete der Klanglehre und der Tonkunst überhaupt, werden es vermögen, sie in vollkommenerer Gestalt, als sie früher war, in's Leben zurückzurufen; unter Meisterhänden sie lieblich wieder ertönen kann, denn 'Was Zeitenwechsel raubte, Gibt uns die Zeit zurück'" C. F. Becker, 'Zur Geschichte der Hausmusik in früheren Jahrhunderten (Schluß)', 199.

5.3 New Market Strategies

The generalisation of the lute as a symbol for an imaginary past had consequences for the value of lute-shaped guitars on the market. These instruments did not have to meet the same demands, such as criteria of age, or brand name, as instruments in previous generations. Specialised knowledge about the value of certain instruments and the fame of old makers had been lost. Age, brand names, and rarity, which had been crucial selling points of old lutes in the past, became instead the important selling points for other instruments, especially violins. Furthermore, the lute-shaped guitar was only one of many products on an expanding market for musical instruments. In this market, different market players had a wide variety of business models, executing both sales and repairs. The contact with lutes and knowledge about their production was fading and being replaced by new market strategies in which the lute was being promoted for its tonal quality and ability to evoke the mediaeval world of the Romantic imagination.

5.3.1 Last traces of lute repairs

The emergence of the guitar overlaps with the last verifiable repairs to lutes. While, as Otto already pointed out in 1809, old lutes were being transformed into guitars, ⁷⁵¹ some exceptions can be found in which the lute state (with double courses) was preserved. There were only a few instrument makers in the 19th century whose business model included repairing lutes without changing them into guitars. The repair labels in some instruments offer evidence that there must have still been lute-playing activities, especially in Vienna, until the middle of the 19th century. At this time, the market for plucked and bowed string instruments had already moved towards the production of violins and guitars instead of lutes and viols. However, knowledge about repairing lutes was preserved by a few makers who were connected genealogically with the Füssen lute-building tradition.

Among the last lutes to be produced at the end of the 18th century were the mandoras by Matthäus Wenzeslaus Staudinger (1714 - after 1784), who was born in Vienna and worked in Würzburg. His last extant instruments date

^{751.} Otto, 'Musikalische Instrumente'.

from the 1770s.⁷⁵² After that, it is difficult to prove the actual production of newly built lutes or mandoras: however, repair labels show the continued transformation and maintenance of older instruments. The mandora transformed by Muschl in 1781, which was discussed in the previous chapter, is one such example. Anton Bachmann (1716-1800), who was Königlich Preussischer Hofinstrumentenmacher in Berlin, left his repair labels in several instruments⁷⁵³ which have never been altered towards a guitar. In the case of the instrument in the Paris collection, Jacob August Otto also undertook a repair in 1806 without transforming it into a lute-guitar. After that, the only examples of repairs on lutes or mandoras in which the actual lute state with double strings was preserved are found exclusively in Vienna.

There are three extant repairs undertaken by Matthäus Ignatz Brandstätter (ca. 1791-1851). He took the oath of citizenship in Vienna in 1817 and was part of the organised group of bürgerliche Lauten- und Geigenmacher.⁷⁵⁴ One repair label can be found in a lute by Leonhardt Pradter, dated 1689, which was modified from a 11-course lute to a 13-course lute by the addition of a bass rider by Johann Georg Helmer in 1755 in Vienna.⁷⁵⁵ Brandtstätter was probably doing only a minor repair. The same is true of his interventions on the 13-course theorboad lute by Leopold Widhalm, dated 1755, which was in Brandstättter's workshop in 1826.⁷⁵⁶ The third instrument, which Brandstätter repaired in 1830, is extant without major changes.⁷⁵⁷

Johann Martin Stoß (1778-1838), the last active lute maker of a lute-making family originating from Füssen, was given the title *Kaiserlich Königlicher Hoflauten- und Geigennmacher* in Vienna in 1814. His activities with lutes can be observed in four examples that bear his repair labels dating between 1813

^{752.} Staatliche Hochschule für Musik Berlin 375, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110827 (Version 29. July 2020) [lost since 1945]; York Castle Museum DA 1828, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110705 (Version 29 July 2020).

^{753.} MIMB 4492, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110694 (Version 29 July 2020); MdlM E.27, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110641 (Version 29. July 2020).

^{754.} Willibald Leo von Lütgendorff, Die Geigen- und Lautenmacher vom Mittelalter bis zur Gegenwart / nach den besten Quellen bearb. von Willibald Leo von Lütgendorff (Frankfurt/Main: Frankfurter Verlagsanstalt, 1922), 58.

^{755.} KHM SAM 45, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110468 (Version 29 July 2020).

^{756.} GNM MIR 903, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110846 (Version 29 July 2020).

^{757.} Hungarian National Museum Budapest 1951.45, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110318 (Version 29 July 2020).

and 1835.⁷⁵⁸ On two 13-course lutes only minor repairs, such as the change of the bridge, the addition of frets to the soundboard, and the glueing of cracks, can be assumed.⁷⁵⁹ In the case of an instrument in the Germanisches Nationalmuseum, Klaus Martius has suggested that Stoß executed the transformation in 1834 from an 11- or 13-course lute to an 8-course mandora.⁷⁶⁰ This would be the latest known transformation of a lute into a mandora.

The tradition of and knowledge concerning lute repairs seem to have been preserved and passed down in the workshops that were still connected to the craftsmanship passed on by the lute-making families originating in Füssen. One repair on a lute can be connected to Franz Schmidt (1814-1870) in 1843, who also worked in Vienna.⁷⁶¹ The last extant repair label in a lute that was not changed into a guitar dates from 1854 and is by Anton Hofmann (1814-1871). He was not only the successor of Johann Martin Stoß, whose workshop he took over in 1838, but he also bought the estate of Matthäus Ignatz Brandstätter in 1851.⁷⁶² He was thus – in a material and immaterial way – the successor of the last lute makers in Vienna, who were genealogically connected to the Füssen lute-making tradition. The instrument labelled "Georgius Epp Lauten unnd Geigenmacher inn Wien Anno 1631" was altered several times before until it ended up as a 13-course lute with bass rider.⁷⁶³ Hofmann probably did only minor maintaining repairs.

Johann Martin Stoß was the last Kaiserlich Königlicher Hoflauten- und Geigennmacher in Vienna with a Füssen background. With one exception, since its introduction in 1637, this title was only granted to makers originating from the Füssen region.⁷⁶⁴ In Vienna, the craft was organised by a Bruderschaft, which was ruled by a limited number of masters who were connected through

^{758.} Focht, Martius and Riedmiller, Füssener Lauten- und Geigenbau: Europaweit, 213–215.

^{759.} Gesellschaft der Musikfreunde GdM 56, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110487 (Version 29 July 2020); GNM MIR 901, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110844 (Version 29 July 2020).

^{760.} Focht, Martius and Riedmiller, Füssener Lauten- und Geigenbau: Europaweit, 214; GNM MIR 868, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110231 (Version 29 July 2020). The fourth instrument in the Czech National Museum 607 E, mXp 4110248, could not be examined.

^{761.} Museum für Hamburgische Geschichte 1904.704, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110997 (Version 29. July 2020).

^{762.} See Lütgendorff, Die Geigen- und Lautenmacher vom Mittelalter bis zur Gegenwart / nach den besten Quellen bearb. von Willibald Leo von Lütgendorff, 58.

^{763.} Sammlungen Stift Heiligenkreuz, Musixplora ed. Josef Focht, https://musixplora.de/mxp/4111020 (Version 29 July 2020).

^{764.} Focht, Martius and Riedmiller, Füssener Lauten- und Geigenbau: Europaweit, 204.

familial ties. In such a dense network, a controlled and sustainable transfer from one generation to the next of capital, materials, functional infrastructure and craft knowledge was possible. It is therefore conceivable that even in a time when the production of lutes was no longer part of the business, the knowledge of lute making, as well as the necessary tools, were still present in workshops of makers such as Stoß, Brandstätter, and Hofmann. In other cities this knowledge might have been lost when workshops were not taken over by a successor. In Passau, for example, the *Hoflautenmacher* Simon Schödler died without having a successor to whom he could leave his workshop. The last mention of him and his workshop is a newspaper notice in 1794, appealing to his heirs to come forward and claim their inheritance.⁷⁶⁵

The last productions of lutes and repairs that actually preserved the lute in its previous condition are all connected with the genealogical link to the Füssen lute making tradition. The decline of the lute and the rise of the guitar coincided with the end of a dominance of families originating from Füssen, which had ruled the instrument market for several generations. The specialised knowledge that was necessary for lute making was – with a few exceptions – no longer needed and was, therefore, not passed down to the next generations. Indeed, in 1854, the year of the lute repair by Anton Hofmann, Karl Emil von Schafhäutl admired the low price of a mandora which was presented by Georg Tiefenbrunner at the First German General Industrial Exhibition in Munich, observing that "our present violin makers are no longer familiar with the making of the curved back composed of ribs bent over fire."⁷⁶⁶ In fact, it must be assumed that the craft and the manufacturing techniques, as they were handed down over centuries in the Füssen lute-making tradition, were lost sometime between the end of the 18th and the beginning of the 19th century. The market still demanded the lute form, but in the guitar manner, which was part of a new economic sector that was no longer part of the genealogical or technical tradition of the lute makers.

^{765. &#}x27;Citat. Schödlers Erben etc.', Wiener Zeitung, no. 36 (3 May 1794): 1358-1359.

^{766. &}quot;unsere gegenwärtigen Geigenmacher mit der Verfertigung des gewölbten aus krumm gebrannten Spänen zusammengesetzten Bauches nicht mehr vertraut sind." Karl Emil von Schafhäutl, 'VI. Gruppe. Instrumente. IV. Abschnitt. Musikalische Instrumente', in Bericht der Beurtheilungs-Commission bei der Allgemeinen Deutschen Industrie-Ausstellung zu München im Jahr 1854, ed. Herrmann, Friedrich Benedict Wilhelm von (München: Georg Franz, 1855), 132.

5.3.2 New commercial strategies

The people who were involved in the transformation and sale of lute-shaped guitars came from a wide variety of backgrounds. This group of people, who either left their repair labels in altered lutes or advertised lute-shaped guitars in print media, was a mixture of trained and untrained craftsmen, as well as dealers who acted as retail salesmen. The trained craftsmen had typically received a traditional education as violin makers, and were dealing with the production, repair, and resale of guitars and other instruments, while the rest entered the market from outside of the craft. This represented a paradigm shift among those participating in the production of these instruments. Whereas in previous generations it was mainly trained craftsmen who possessed the knowledge to interact with these objects, now in response to the market demand people with a diversity of backgrounds were engaging with these instruments.

Samuel Fritzsche (1751-1824), who still used the label Geigen- und Lauten-macher was, like Christian Daniel Fritzsche (1782-1843), involved in the transformation of lutes into guitars. Samuel Fritzsche was the pupil of Christoph Friedrich Hunger and took over his workshop in 1787. Hunger was the successor of the lute maker Johann Christian Hoffmann, making Fritzsche, in a way, part of a line of lute makers, even though Hunger produced mainly da braccio-instruments. The material capital (e.g. wood, tools, etc.) was, however, still passed down to the next generation. Similarities in the dendro-chronological analysis suggest that both Hunger and Fritzsche were still using up the wood once acquired by Hoffmann. Samuel and Christian Daniel Fritzsche may have been related, but it is difficult to prove.

Jacob August Otto (1762-1830), known for his numerous publications, was a violin maker and a pupil of Franz Anton Ernst (1745-1805), himself a violin maker, violinist, *Konzertmeister*, and composer. In 1788, Otto applied for the title *Weimarischer Hofinstrumentenmacher* (royal instrument maker of Weimar), which he received without any connected privileges or salary. His only possible motive for seeking this title must have been a business strategy, hoping that the title would increase his sales. In his text published in 1817, Otto informed the readers that he had handed over the guitar business to his

^{767.} Private ownership, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110683 (Version 29 July 2020); MIMUL 5462, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4015462 (Version 29 July 2020); private ownership, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110798 (Version 29 July 2020).

^{768.} Heller, 'Umfeld und Mitarbeiter Joann Christian Hoffmanns', 414.

^{769.} Michel, Gitarren in Sachsen und Thüringen bis 1850, 424.

sons and that "for the last ten years many, partly instrument makers, partly carpenters"⁷⁷⁰ would build guitars. As previously mentioned, the increasing demand for guitars was also being met by unskilled workers, presumably at more favourable prices. Joseph Rohrer, for example, reported in 1804 that farmers from Mittenwald would deal in guitars at the Tyrolean border.⁷⁷¹ Otto, of course, wanted to distinguish his work from the lower quality products of unskilled guitar makers, and this was another reason why he sought the title of court instrument builder for no other obvious benefits. In some cases, there are records of the tension between skilled and unskilled instrument makers was. In Markneukirchen, the violin makers protested in 1832 because too many carpenters were making guitars.⁷⁷²

In Leipzig, one of these carpenters working with instruments was Johann Gottlieb Knößing (1765-1849), from whom two transformations of lutes into guitars are known. He worked as a carpenter for some time with David Roentgen in Neuwied and later in Leipzig. His activities as a musical instrument maker are documented from 1800.⁷⁷³ Another important unskilled craftsman who was involved in the transformation of old lutes into guitars was Johann Friedrich Ludwig Lohstöter. According to Gustav Schilling, he was a servant in Celle who used his free time for building instruments – mainly pianos – and learning the organ.⁷⁷⁴ A transformed lute with his repair inscription is extant in the Metropolitan Museum New York.⁷⁷⁵

Many transformations, however, remained unsigned. This could point to the fact that many instruments were repaired and transformed by retail shops, who gave the work to their associated craftsmen. One of these shops could have been the shop of Bernhard Keil in Gotha.⁷⁷⁶ He had originally opened a store selling books and art, but soon shifted his focus to the more profitable business of selling all kinds of musical instruments. One lute-shaped guitar,

^{770. &}quot;seit zehn Jahren sehr viele, theils Instrumentenmacher, theils Tischler" Jacob August Otto, *Ueber den Bau und die Erhaltung der Geige und aller Bogeninstrumente* (Halle and Leipzig: Ruffsche Buchhandlung, 1817), 33.

^{771.} See Joseph Rohrer, Bemerkungen auf einer Reise von der türkischen Gränze über die Bukowina durch Ost- und Westgalizien, Schlesien und Mähren nach Wien (Wien: Pichler, 1804), 291.

^{772.} See Michel, Gitarren in Sachsen und Thüringen bis 1850, 258–263.

^{773.} Michel, 403–405.

^{774.} Schilling, Encyclopädie der gesammten musikalischen Wissenschaften oder Universal-Lexicon der Tonkunst, 281.

^{775.} MET 89.2.153; MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110228 (Version 29 July 2020).

^{776.} Michel, Gitarren in Sachsen und Thüringen bis 1850, 401.

probably produced around 1830, with his label is extant in the Bayerisches Nationalmuseum Munich.⁷⁷⁷ A similar business was opened by Carl August Klemm (1768-1830) in Plauen and Leipzig in 1809. He was a member of the Gewandhausorchester and opened a musical instrument retail shop in 1809. Both Keil and Klemm published their product range in several advertisements in local newspapers and in Preis-Courants, offering a high diversity of instruments and accessories. In Klemms's Preis-Courant, dating from around 1820, a huge variety of instruments and forms were offered (see fig. 5.9). Different types of pianos, classified by wood and form, violins, violoncellos, organs, zitherns, strings, bows, and different types of wooden and metal wind instruments. Among the plucked instruments, there were guitars offered "nach beliebiger Form" ("in any desired shape"), harps in lute shape and guitars in lute shape with or without English mechanine heads.⁷⁷⁸ Klemm also indicated that all music supplies could be obtained at his shop. It is reasonable to assume that he also offered a repair service.

A similar diversity of musical instruments, of which the lute-shaped guitar was one, was offered by other dealers, who had – unlike Klemm and Keil – a background as craftsmen. Georg August Gottfried Otto (1789-1857), the oldest son of Jacob August Otto, advertised the production and repair of all kinds of stringed instruments, like violins in the Cremonese style, violoncellos, guitars, lyres, and lutes ("Lauten").779 The son of Samuel Fritzsche, Johann Samuel Fritzsche jun. (1791-1828), also offered old and new instruments of the violin family, but also "Guitarren in Lauten- und gewöhnlicher From" 780 (guitars in lute and ordinary shape), as well as rosin, bridges, and repairs. Having a wide variety of products to offer was one of the business strategies of the 19th-century musical instrument industry. Indeed, entrepreneurs were involved in a diversity of business ventures. Klemm, for example, also operated a rental agency for musical instruments. In Vienna, Martin Stoß served as an agent for the procurement of rental pianos.⁷⁸¹ In some cases, the makers were involved in fields that seemed to differ significantly from their main occupation. Georg Tiefenbrunner, maker of several kinds of stringed instruments in Munich

^{777.} BNM Mu 5, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110991 (Version 29 July 2020).

^{778.} Carl August Klemm, Preis-Courant, Landesarchiv Thüringen – Hauptstaatsarchiv Weimar, Hofmarschallamt.

^{779. &#}x27;Kauf- und Handels-Sachen', Allgemeiner Anzeiger der Deutschen, no. 288 (31 October 1815): 3015; 'Annonce', Allgemeiner Anzeiger der Deutschen, no. 297 (31 October 1818): 3212.

^{780. &#}x27;Empfehlung', Leipziger Zeitung, no. 87 (14 April 1825): 894.

^{781. &#}x27;Kundmachung', Wiener Zeitung, no. 232 (9 October 1821): 685.

was the publisher of a mandolin manual by Johann Baptist Cramer⁷⁸² and had a royal privilege to produce a grease for wagons and machines.⁷⁸³

Apart from having a diversity of products, innovation was another important business strategy. It was the reputation associated with the improvement of an instrument as well as its unique selling point in a highly competitive market, as well as the opportunity to hold an exclusive patent for a certain kind of innovation that motivated the invention of new formal and functional parts.⁷⁸⁴ One example is the mechanisation of the guitar tuning system, for which several different solutions coexisted. A famous example of a patented guitar tuning from this period was the Stauffer style tuning system, for which Johann Georg Stauffer received the patent in 1825.⁷⁸⁵ Stauffer was prolific in his innovations, inventing the *Arpeggione* as well as innumerable improvements to the technical layouts of all kinds of musical instruments. Lute-shaped guitars were also subject to these strategies of innovation and clever marketing. In 1809, Jacob August Otto explained the disadvantages of lutes that were transformed into guitars in an extensive advertisement and presented the results of a long study as a solution:

"Schon lange schätzte man die alten Lauten, um des angenehmen Tones willen, sie zu den so sehr beliebten Guitarren umzuschaffen. Aber der Bau eines Lauten-Körpers und Halses verhält sich ganz anders zu der einer Guitarre, da die Unterbauung einer Lautendecke auf 12 oder 24 Saiten und die einer Guitarre hingegen nur auf 6 Saiten berechnet ist, auch die Länge eines Lauten Körpers oft nicht gestattet, den Hals mehr als 6 – 7 halbe Töne lang zu lassen, um die gehörige Mensur herauszubringen, so bleibt das umgeschaffene immer ein unvollkommenes Werk, und bekömmt nie das Vollständige und Angenehme, was man von diesem Instrument verlangen kann. Ich bin nach langer unermüdeter Anstrengung so glücklich gewesen, eine neue Art Lauten-Guitarre zu erfinden, die dem Ton der größten Theorben-Laute nichts nachgibt, und doch

^{782.} Johann Baptist Cramer, Anweisung die Mandoline von selbst zu erlernen nebst einigen Uebungsstücken: Nach Bortolazzis Methode für die sechs-saitige Mandoline (München: Georg Tiefenbrunner, 1860).

^{783.} Königlich-bayerisches Kreis-Amtsblatt der Pfalz (Speyer, 1861), 1123.

^{784.} In this context, the term 'patent' is not used as the legal term connected to present legislation, but in the meaning of a protected production.

^{785.} Erik Pierre Hofmann, Pascal Mougin and Stefan Hackl, Stauffer & Co: La guitare viennoise au XIXe siècle: die Wiener Gitarre des 19. Jahrhunderts: the Viennese guitar of the 19th century (Germolles-sur-Grosne: Les Éditions des Robins, 2011), 44–64.

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I Guittarre nach beliebiger Form, von ordinairen und feinen Holz in ver-
     schiedenen Farben, sowohl einfach als auch mit Alabaster und Perlenmut-
     ter verziert, mit und ohne Engl. Maschinen gut bezogen, pro Stück
                                                           3 bis 30 Rthlr.
 2 Guitarre fein in Lautenform, mit Engl. Maschinen und 6 Saiten bezogen,
 a Guitarre fein in Lautenform, ohne Engl. Maschinen und 6 Saiten bezogen,
 Guitarre fein in Spanischer Form Engl, Maschinen und 6 Saiten bezogen,
 z Guitarre fein in Russischer Form ohne Maschinen und 7 Saiten bezogen,
                                                                   Rthlr.
1 Guitarre fein in Englischer Form mit Maschinen und 6 Drath Saiten be-
  Schlag-Kästehen und Futterale, nach Gute, Werth und aufserer Schon-
      heit.
  Kinder-Violinen in kleine und mittel Sorten; sodann feine große Violinen
      in Dutzend.
                                                Nr. 2. Rthlr.
Ordinaire Nr. 1.
                         Rihlr.
                                                Nr. 4. Rthlr.
        besetzte Nr. 3. Rihlr.
                                               Nr. 6. Rthlr.
                  Nr. 5. Riller
Eingelegte
                                          glatte N . 8. Rthlr.
               Nr. 7. Rthlr.
        grosse
                                               Nr. 10. Rthlr.
                 Nr. 9. Riblr.
Mit Rändern
                                          ganz besetzt Nr. 12. Rthlr.
      halb besetzt Nr. 11, Rthlr.
Eingelegte Nr. 13. Rehlr.
                                          feiner Nr. 14. Rthlr.
                                          feiner Nr. 16. Echlr.
        ausgesetz Nr. 15 Rihlr.
Concert-Violinen Nr. 17. Rthlr.
                                          feiner Nr. 18. Rthlr.
                                     Elf. Schnecke Nr. 20. Rthlr.
        Elfenbein Nr. 19. Rthlr.
 Alte feine gut conditionirte Violinen von zo Rehlr. bis 60 und 80 Rthlr.
        pro Stück. LAND BUILD
 Alt-Violen oder Bratschen von 4 bis 16 Rtldr.
 Violon-Cellos von 5 bis 14 Rihlr, auch zuweilen alte ganz feine,
 Vogel- und Dreh- Orgeln, welche 8 bis 16 Stück Spielen
 Knobelsdorfer Schachtel-Geigen und Zittern in allen Nummern.
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Figure 5.9: Excerpt from the *Preis-Courant* of Carl August Klemm, ca 1820

nur die Größe einer gewöhnlichen Guitarre nebst Länge im Halse und Mensur hat, und eben so bequem und leicht im Spielen ist. Ich biete hiermit solche Freunden der Musik und des Gesanges um den billigen Preis von 3 Louis d'or an."⁷⁸⁶

For a long time, the old lutes were valued for the sake of their pleasant sound, and they were converted into the very popular quitars. But the construction of a lute body and neck is guite different from that of a guitar, since the substructure of a lute soundboard is calculated for 12 or 24 strings and that of a guitar, on the other hand, for only 6 strings, and the length of a lute body often does not permit the neck to be more than 6-7 semitones long in order to produce the appropriate scale, so that the altered object always remains an imperfect work and never achieves the completeness and pleasantness that one can demand from this instrument. After a long and relentless effort, I have been so fortunate as to invent a new kind of lute-quitar, which does not miss anything from the sound of the largest theorbo-lute, and yet has only the size of an ordinary guitar, together with length of neck and scale, and is just as comfortable and easy to play. I hereby offer such a guitar to friends of music and singing for the cheap price of 3 Louis d'or.

It remains unclear whether Otto invented a whole new instrument or only a better technique for adapting older lutes to a more convenient guitar layout with improved sounding qualities. As in other publications by Otto, the sound of the lute was deemed an important characteristic that had to be preserved, even as the instrument was altered to meet new musical demands. His statement that what is transformed always remains an imperfect work, expresses an attitude that would seem to be contradictory to the valuation of old lutes in the past. The immaterial value of age, that was attached to old lute bodies and their material constitution, was now seen as a disadvantage. To Otto, it was not the material evidence of the past – the antique object itself – that needed to be preserved, but rather the immaterial quality of its sound. In this way, Otto presented the view of an inventive businessman who believed he had succeeded in overcoming the failures of the past by technical innovation while maintaining the valued quality of the sound.

^{786.} Otto, 'Musikalische Instrumente', 2533.

5.3.3 Shift of market-relevant knowledge and value

Until the end of the 18th century, the valuation and trading of lutes, as well as the discourse around the instruments as objects, was dominated by an awareness of the various factors signifying their age. These included the (supposed) better tonal quality of old instruments due to their material properties, a feature which would presumably improve with time, and the prestigious reputation of certain makers of the past. Moreover, the provenance and biography of the object was valued: if the instrument could boast a famous lineage then it could be sold for a higher price. The look of age - traces of use, visible wear, fragmentation – rather than material integrity was seen as a signifier of quality. Finally, the rarity of old objects and their classification as antiques increased their value. This connection between the age and perceived quality of an instrument (and its retail value) was not lost during the 19th century, rather, it was concentrated on a different group of instruments. The popularity of violins by certain makers, such as Stradivarius, Guarneri del Gesù, and Jakob Stainer and the exorbitant increase in their prices was due – at least in part – to the presence of these objects in bourgeois music culture. Concerts took on new cultural and social importance, providing not only a stage for star players and composers but also for certain musical instruments and their makers; the cult of genius, which venerated the creators of musical works, also began to deify the violin.⁷⁸⁷

On the same market with the same market players and in the same region in which lute-shaped guitars were being traded, old violins – or those which appeared so – were also being sold. The criteria of age, quality, rarity, and brand name were now being attached to violins rather than lutes or lute-shaped guitars, whose signifiers of age and quality had vanished from common knowledge. In one advertisement by Otto, in which he described his new lute-shaped guitar, he also offered violins, violas, and cellos made of Italian wood in the Cremonese style. Otto claimed to have invented a machine with which the instruments were treated for two months, after which the sound would be indistinguishable from an instrument that was 50 years old. This approach of mechanical ageing, which is still in use today, sees the ageing of the physical material as a decisive feature of the object's quality. The decline in the importance of lute makers is evident in sources in which lute-like instruments

^{787.} Gino Cattani, Roger L. M. Dunbar and zur Shapira, 'Value Creation and Knowledge Loss: The Case of Cremonese Stringed Instruments', *Organization Science* 24, no. 3 (2013): 813–830, https://doi.org/10.1287/orsc.1120.0768.

^{788.} Otto, 'Musikalische Instrumente', 2533.

appear next to violins: in most cases only the names of the violin makers are mentioned. For example, an announcement in the *Münchner Anzeiger* of 1802 read: "A selection of musical instruments, all made by the best masters and very well kept, are for sale at the cheapest price. Namely, a Würzburg violin of medium size; a viola; two Doux violins; a mandora; six ordinary violins and two small ones for children to learn, partly by Steiner, Kremona, Albani and others.⁷⁸⁹

By the mid-19th-century, the names of Jacob Stainer and of Cremonese violin makers were much more well known than the names of lute makers. As shown in section 4.3.4 of the previous chapter, the names of Hans Frei and Laux Maler had already disappeared from common knowledge and from the reference works at the end of the 18th century. In Gaßner's *Universal-Lexikon der Tonkunst*, for example, only a few lute makers, such as Joachim Tielke, who was known for his elaborate decorations and extraordinary choice of materials, were described in a short entry. Both Antonio Stradivari and Jacob Stainer, by contrast, have much more detailed entries. On Stradiviari, Gaßner stated that his instruments were highly valued due to their quality and rarity, and were worth up to several thousand *Gulden*.⁷⁹⁰ In the description of Stainer and his instruments, Gaßner warned the reader that there were many forgeries on the market.⁷⁹¹ The valuation of violins on qualities like rarity, age and the association with a famous maker, not to mention their exorbitant prices, is comparable to the way in which lutes were valued on the market in the previous century.

With a few notable exceptions, lutes gradually came to be valued and advertised more for their aesthetic charms than for their provenance or brand name. In 1796, for example, six instruments were offered in an advertisement in the *Reichs-Anzeiger* in Gotha. Next to a viola d'amore, a flute, a viola and a "Stainersche Violine", two lutes were offered, which had been, the advertisement claimed, in the possession of Luise Adelgunde Gottsched (1713-1762).⁷⁹² Since the marriage of Gottsched with her husband Johann Christoph

^{789. &}quot;Eine Parthie musikalischer Instrumente, sämmtlich von den besten Meistern verfertiget und ganz wohl behalten, stehen um billigsten Preis feil. Nämlich ein Würzburger mittelmäßig großer Violon; ein Pratsche; zwey Doux-Violinen; eine Mandora; sechs ordinäre Geigen und zwey kleine zum lernen für Kinder, theils von Steiner, Kremona, Albani etc." 'Feilschaften', Münchner Anzeiger, no. 31 (4 August 1802): 1632.

^{790. &}quot;welche [...] sehr theuer (mit mehreren 100, ja mehreren 1000 guldens) bezahlt werden." Gaßner, Universal-Lexikon der Tonkunst: neue Hand-Ausgabe in einem Bande; mit Zugrundlegung des größeren Werkes, 805.

^{791.} Gaßner, 797.

^{792. &#}x27;Annonce', Kaiserlich privilegirter Reichs-Anzeiger, no. 106 (10 May 1796): 2016–2017.

was childless, it could be that Gottsched's niece and adopted daughter Victorie Eleonore, who had remained in Saxony, inherited the instruments and eventually sold them.⁷⁹³ The first instrument was described as a lute or theorbo, which was the most beautiful of its kind that has ever been made. The second was described as the "oldest and first of these instruments" ("das älteste und erste dieser Instrumente"). Here, age and beauty and the link to a famous previous owner were noted as favourable qualities. The makers of the instruments, however, remain unmentioned.

In the case of lute-shaped guitars, their attribute of age and the fact that they were lutes did not entirely disappear from their trading context. Though the maker's name was rarely referred to, in some advertisements the age and the former type of the instrument was mentioned. In 1804 the following advertisement appeared in the Weimarer Wochenblatt: "guitar with travel bag, formerly lute by Andreas Seydel, Lissa 1682, is for sale together with the guitar school by Hofmeister and tuning fork". Another, in the Münchner Tagblatt in 1841, read: "a very beautiful lute from the 17th century, with an excellent tone, set up as a guitar is to be sold".

This reference to the authenticity of the old object was also made in some repair inscriptions in altered instruments. In an instrument, probably made in Rome in 1576, the Leipzig-based violin maker Friedrich Schmidt signed his work with "Repariert aus einer Laute von Friedrich Schmidt in Leipzig 1808" ("Repaired from a lute by Friedrich Schmidt in Leipzig 1808").⁷⁹⁶ He indicated explicitly the former state of the instrument as 'lute'. Also Johann Friedrich Ludwig Lohstöter remarked "Zu einer Guitarre umgearbeitet von J: F: L: Lohstöter. Celle. 1807." on his repair label in an altered lute.⁷⁹⁷ During his alteration, he coated the inside of the back entirely with paper and probably

^{793.} Kurt Wölfel, 'Gottsched, Johann Christoph', 1964, accessed 14 May 2022, https://www.deutsche-biographie.de/pnd118541013.html#ndbcontent.

^{794. &}quot;Eine Guitarre mit Reisefutteral, vormals Laute von Andreas Seydel, Lissa 1682, ist nebst der Guitarre-Schule von Hofmeister, und Stimmgabel, zu verkaufen." 'Anzeige', Weimarisches Wochenblatt, no. 23 (21 March 1804): 105, the mentioned lute manual could be an earlier edition of Lehmann, Neue Guitarre-Schule oder die einfachsten Regeln die Guitarre auch ohne Lehrer spielen zu lernen: Zweite, verbesserte und vermehrte Auflage.

^{795. &}quot;Am Färbergraben Nro. 1 1/2 im 2
ten Stock ist eine sehr schöne Laute aus dem 17. Jahrhundert, mit vortrefflichem Tone als Guitarre eingerichtet, zu verkaufen." 'Allerlei', Münchner Tagblatt 15, no. 260 (20 September 1841): 1250.

^{796.} Musikinstrumentenmuseum Markneukirchen (hereafter: MIMNK) 657, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110508 (Version 29 July 2020).

^{797.} MET 89.2.153, Musi Xplora, ed. Josef Focht,
 https://musixplora.de/mxp/4110228 (Version 29. July 2020).



Figure 5.10: (a) Label by J.F.L. Lohstöter indicating his alteration of a lute as well as the place and date of production of the object (MET 89.2.253); (b) handwritten repair label by Friedrich Schmidt noting the previous state of the instrument as lute (MIMNK 657)

covered the original label. Lohstöter therefore transferred the information about the production of the lute onto a separate label on which he wrote only: "Frankfurt 1627". He does not name the maker of the instrument. Whether this is connected to the loss of knowledge about old lute makers, or if the original label was simply illegible, remains unknown. As another example in which a repair label makes reference to the instrument's previous state, Daniel Fritsche left a repair label in a lute signed "1651 IN PADOVA Vendelio Venere" on which he remarked: "Zur Gitarre arrangirt von Daniel Fritsche in Leipzig 1808." These repair labels demonstrate a degree of reverence for the original object and a desire to be connected with its history. These represent the few examples in which a craftsman has documented details of his interventions inside the object. By referring to the previous state of the object in their repair labels, they were demonstrating an awareness that their intervention changed the classification of the instrument from a lute to a guitar.

In other sources, however, lutes and lute-shaped guitars were valued for other reasons. Both Johann Samuel Fritsche jun. (in 1820) and Johann Georg Langerwisch (in 1824) advertised a lute-guitar with a good sound in the *Leipziger Zeitung*, observing that it would be a nice Christmas present.⁷⁹⁹ The object,

^{798.} Private ownership, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110478 (Version 29 July 2020).

^{799. &#}x27;Verkauf', Leipziger Zeitung, no. 247 (14 December 1820): 2928; 'Verkauf', Leipziger

in this case, was reduced to the quality of an ordinary commodity, a present, probably addressed to a male buyer for a friend or wife, since the lute-shaped guitar – as the guitar in general – was often considered as an instrument for women. In the estate of a violin maker in Berlin in 1849, two lutes are mentioned along with two violins by Amati, one by Hoffmann, four by Stainer, and one by Guarneri. Again, the names of the lute makers were not mentioned, even though the dates of production were given very precisely as 1564 and 1614. This suggests that the names of the makers would have been legible, but mentioning them would have made no sense. ⁸⁰⁰ The remark that both instruments would be "interesting for antique collectors because of their old age" expresses the little practical use that was associated with these objects.

During the 19th century, the market-relevant knowledge concerning lutes and lute-shaped guitars was subject to generalisation. The specialised knowledge concerning the production of lutes had disappeared, even if in Vienna some lute repairs can be traced until the middle of the century and indicate a cultural understanding of lutes by their former definition. Newly produced lute-shaped guitars, however, were part of the portfolio of several dealers and makers, especially in Saxony and Thuringia. Their production was detached from the lute-making tradition since they were produced by applying guitar-making techniques, which will be discussed later. The adaptation of old lutes into guitars was executed by craftsmen with a diversity of educational backgrounds and business models, mostly not genealogically connected with lute makers. The specific knowledge about the materials and historical quality of lutes, the names of the famous makers, which had been a very sophisticated part of the market, was no longer present and consequently almost no advertisements refer to it. Such knowledge about the fame of makers, the rarity and the high price of their products, came to be almost exclusively focussed on violins. The immaterial value of old lute lute bodies that were reused in order to make lute-shaped guitars was reduced to the fact that they had been lutes in former

Zeitung, no. 294 (13 December 1824): 3372.

^{800.} It should also be borne in mind that an advertisement in a newspaper was usually paid by characters or by lines, which is why only the most essential information would have been given.

^{801. &}quot;Die von dem verstorbenen Instrumentenmacher Straube hinterlassenen Violinen, als 2 Amati, 1 Hoffmann, 4 Stainer, 1 Guarnerius, a. m. a. [...] sollen unter dem Werthpreise verkauft werden, und liegen Mohrenstr. No. 20., 2 Treppen hoch, in den Vormittagsstunden zur Ansicht aus. [...] so wie über 1 Laute v. J. 1574., und 1 Theorbe v. J. 1614; beide wegen ihres hohen Alters für Antiquitätensammler merkwürdig." 'Annonce', Königlich priviligirte Berlinische Zeitung von Staats- und gelehrten Sachen, no. 282 (2 December 1849): 30.

5 The Lute-Shaped Guitar at the Beginning of the 19th Century

times. This played on the symbolic power of the object, for which it was not necessary to know the maker, merely that the instrument had – at least – the appearance of age. This was typically accomplished by the instrument being advertised as old or by the explicit remark that an instrument had been transformed from a lute into a guitar. The musical value of the lute-shaped guitar was further reduced to its tonal quality, which was connected to its function as accompanying instrument. With this function, the lute-shaped guitar took one of several positions in a huge market of musical instruments. The growing demand for guitars, violins, pianos, and all other sorts of instruments was met by new business strategies based on a variety of business models and characterised by the offer of a large range of products. This market had very little in common with the exclusivity of the lute market of the previous centuries.

5.4 The Lute-Shaped Guitar: Organology and Transformations

The integration of the lute into the wide range of guitar types, coupled with the nontraditional background of the new generation of makers, led to the application of different methods and techniques for transforming old lutes into guitars. Even though the transformation of old lute bodies into different lute types had been going on for centuries, the solutions for certain material and technical issues evolved from a long tradition in which the craft knowledge was transferred from one generation of lute makers to the next. Furthermore, the preferences of customers for certain materials and stylistic features had remained relatively stable over the centuries. During the 19th century, however, the transformation of old lutes into guitars was taken over by makers who were steeped in the traditions of violin and guitar making, which added a new layer of technical solutions to the old objects. Like other guitars, lute-shaped guitars were the subjects of invention and experimentation, an important business strategy, which left material traces on the objects.

5.4.1 Extant lute-shaped guitars and their classification

Over the course of this study, I have examined a total of 87 lute-shaped guitars that could be identified as former lutes or mandoras, which were transformed during the first half of the 19th century. The dated and signed interventions point mainly to German cities like Leipzig, Dresden, Berlin, Nuremberg, and Frankfurt/Main. These cities had a rich cultural and economic life dominated by the bourgeoisie and were often the home base for makers and dealers.

Identifying lute-shaped guitars in public and private collections can prove challenging. The guitar disposition is rarely described in catalogues or in scientific literature, making it impossible to determine without visual examination. In the past, organological research was more focussed on determining the original state of an instrument than on tracing its transformations. Generally, the study and documentation of instruments that were altered during the 19th century has been seen as less important than similar work on instruments that have been preserved in their earlier state. Moreover, the hybrid state of the lute-guitar and its various historical layers have caused problems of classification and terminology, especially in the early catalogues of musical instrument

collections, which were often based on the Hornbostel-Sachs classification system. Within this system, lutes and guitars are distinguished by the form of their body. Hornbostel and Sachs even remarked that "Lutes whose body is built up in the shape of a bowl are classified as bowl lutes", ⁸⁰³ while guitars are classified as "Necked box lutes or necked guitars". ⁸⁰⁴ Georg Kinsky had already referred to this problem in his catalogue of the Heyer collection two years before the publication of Hornbostel-Sachs, and had categorised the lute-shaped guitars in the section "Guitarren abweichender Bauart" ("guitars with differing construction"). ⁸⁰⁵

Furthermore, lute-shaped guitars exist in different dispositions. Apart from a six-stringed model, other types with additional bass strings can be found. Around the middle of the 19th century, Georg Tiefenbrunner advertised a luteshaped guitar with nine strings as a mandora. Also, a type with 14 strings can be found by the same maker. 806 This diversity of types is hard to categorise with the standard terminology, and the lack of specific research studies on this topic makes it difficult to understand these instruments within a cohesive historical and material context.⁸⁰⁷ Since the guitar and the lute underwent a revival at the end of the 19th century, many instruments were reused or altered during this period. Today it is not always easy to determine whether or not the shape of a lute-guitar was applied at the beginning or at the end of the 19th century, since similar techniques and stylistic features were used. Moreover, many instruments were restored to an earlier state even more recently in the last few decades. When there is no detailed documentation, a thorough examination of the instrument is required in order to determine whether or not they were once lute-guitars.

The lute-shaped guitars that were altered during the first half of the 19th century, however, bear some distinct features that can also be found in the technology of guitar making from this period. The extent to which these features were implemented depended on the required degree of transformation,

^{802.} Erich von Hornbostel and Curt Sachs, 'Systematik der Musikinstrumente: Ein Versuch', Zeitschrift für Ethnologie, no. 4 und 5 (1914): 579–580.

^{803.} Erich von Hornbostel and Curt Sachs, 'Classification of Musical Instruments: Translated from the Original German by Anthony Baines and Klaus P. Wachsmann', *The Galpin Society Journal* 14 (1961): 23.

^{804.} Hornbostel and Sachs, 23.

^{805.} Kinsky, Musikhistorisches Museum von Wilhelm Heyer in Cöln: Band 2: Zupf- und Streichinstrumente, 155–157.

^{806.} See S. Kirsch, 'Die Mandora im neuen Quartett für alte Instrumente', 43.

^{807.} Christ Hirst, 'Did the lute actually die out? The lute in the 19th century and new directions for the 'modern lute', *Lute News*, no. 126 (2018): 18–21.

that is, how profound the performed alteration was. It is important for us to consider the material integrity of these transformed instruments for several reasons. During the earlier centuries, material age was an important signifier of value; it was one element in a certain expertise, which also included instrument shapes, materials, and names of makers. The look of age and an eclectic construction was seen as a criteria of quality. After this discourse was lost during the late 18th century, however, the material integrity of these instruments no longer had the same function. Instead, a unity of design was preferred. Otto commented on the disadvantages of the altered lutes, saying that "the transformed [instrument] always remains an imperfect work, and never acquires the completeness and pleasantness that one can demand from this instrument."808 The imperfections to which Otto referred were not only in the disposition of the design, but the technical constraints on handling and playing the instrument that resulted from the altered layout. This demand for unity of design resulted in the loss of material diversity among lute-shaped instruments. Since the lute shape had become little more than a symbol, detached from any concrete association with its history and age, this loss of material integrity did not matter very much to 19th-century makers and players. The general lute-shape of the bowl was sufficient to evoke the associated ideas, which were integrated in the aesthetic concept of the Romantics, and to provide the tonal character for which this guitar type was appreciated.

Regarding their material integrity and unity of design, the lute-shaped guitars dating from the first half of the 19th century can be divided into three groups. The first group consists of instruments in which an old lute body was reused while all other parts (the soundboard, the neck, the bridge, and the pegboard) were renewed to make a lute-guitar (see fig. 5.11). In these instruments, the unity of style and modern design features are clearly visible, as only the back has been taken over. All other parts have been made according to the modern fashion, tonal concept, and technology. The back, composed of several ribs, is the core part of the instrument. On a technological level, its production required specific knowledge, which was partly lost around 1800. On an acoustical level, it provided the predisposition of the characteristic sounding qualities, which were attributed to this guitar type. On the level of social and cultural significance, the lute back served as a distinct identifier for the lute, signifying its connotations.

^{808. &}quot;so bleibt das umgeschaffene immer ein unvollkommenes Werk, und bekömmt nie das Vollständige und Angenehme, was man von diesem Instrument verlangen kann." Otto, 'Musikalische Instrumente'.



 ${\bf Figure~5.11:~Lute-shaped~guitars~with~several~renewed~parts}$



Figure 5.12: Lute-shaped guitars with preserved soundboards or necks

The second group consists of instruments in which more essential parts from an earlier state – including the back – have been preserved, such as the top, the neck, and in some cases also the pegbox. By preserving these parts, the scope for design and practical layout for playing was limited. Leaving more of the old material led to an eclectic style, which did not meet the demand for stylistic unity in the same way as the more thoroughly altered instruments. The preserved parts also imposed technical constraints concerning the configuration for playing, such as the neck length, which allowed only a certain string length and a limited number of frets. The preservation of these individual parts, however, saved time and labour and, above all, avoided certain interventions which the craftsman may not have known how to execute, since many of the craftsmen who were altering lutes at this time were not primarily specialised in guitar making. In many cases, the previous state was close to the shape of a lute-guitar. During this study, a total of 19 instruments as being former mandoras could be identified, which already had similar dimensions to the lute-shaped guitar. The third group is that of newly built instruments. Here, the formal language of the lute was used, and we find in some cases details like rosettes or back bent pegboxes. The production, however, followed the technological principles and traditions for the making of guitars, mandolins and violin, and had no link with the lute-making tradition of the Füssen makers.

Luted-shaped guitars are not only hybrids in classification, but also in technology. Transformed instruments are testimonies to different technological traditions. As objects, they unify the technological features of lute-making tradition with the approaches of guitar making in the 19th century. In order to characterise these differences, the features of technology and design must be compared to the information given in the most important source for guitar making of the early 19th century, Gustav Adophh Wettengel's *Lehrbuch* from 1828.⁸⁰⁹ His section on the construction of the guitar describes the technology of guitar making in the Vogtland region during the first third of the 19th century. Though it is limited in its scope and does not cover all of the various styles, designs, and technological features that coexisted, in the following it will serve as a reference for guitar making in Saxony during this period. In order to compare the traditions of lute and guitar making, it is necessary to reduce the wide variety of designs and technical details to stereotypes which

^{809.} Gustav Adolph Wettengel, Vollständiges, theoretisch-praktisches auf Grundsätze der Akustik, Tonkunst und Mathematik, und auf die Erfahrungen der geschicktesten italienischen und deutschen Meister begründetes Lehrbuch der Anfertigung und Reparatur aller noch jetzt gebräuchlichen Gattungen von italienischen und deutschen Geigen: Für Instrumentmacher und Musikfreunde; Mit 16 lithogr. Tafeln (Ilmenau: Voigt, 1828).



Figure 5.13: Lute-shaped guitars made in the 19th century

can be found in both categories of instruments.

5.4.2 The application of guitar technology to lutes

Use of material and material properties

The use of specific materials and their properties in the tradition of lute making differs from the approaches in guitar making. This can be observed in the construction of the soundboard, where the application of the physical properties of the wood and especially its anisotropic characteristics are handled differently. Lute soundboards often have an extremely fine grain, which gives them enough stiffness to be crafted rather thinly (1.2 to 1.9 mm). The thickness is not uniform. The additional static support is provided by up to seven (or sometimes more) transverse bars above the bridge and smaller bars below.

The bars are rather thin and their grain orientation is parallel to the glueing surface. In 1809, Otto commented on these technological characteristics, observing that "the construction of the lute body [...] is quite different from that of a guitar, since the support of a lute top is calculated for 12 or 24 strings and that of a guitar, on the other hand, for only 6 strings".⁸¹⁰

According to Wettengel, guitar soundboards should be "always perfectly even and equally thick in all places". 811 In his description and illustration, he notes six transverse bars for the soundboard, of which one is placed diagonally (see fig. 5.14c). In some cases of the transformation of lutes into guitars, the lute soundboard was kept with its existing bars, but in many cases the soundboard was renewed according to the new technical demands. My analysis of luteshaped guitars with renewed soundboards has shown that the numbers of bars can vary. In many cases, four or five transverse bars can be found, including sometimes a diagonal bar. Occasionally, a construction of crossed bars was applied, which could be a later addition dating from the end of the 19th century. In general, the bars are thicker than in lutes and the orientation of the wood grain is perpendicular to the glueing surface, which provides greater stiffness compared to parallel annual rings. The thicknesses of the soundboards that were analysed are mostly around 2.5 mm with a range of 1.8 mm in the thinnest parts and in the thickest parts up to 3.0 mm. It can be assumed that an even distribution of thickness was the goal in these alterations, though it seems not to have been attained. The grain of the wood for the soundboards of lute-shape guitars are often not as fine as those of lutes.

The approach to constructing lute and guitar soundboards was different. While lute soundboards were stiffened by adding more bars to a thin plate, guitar soundboards relied on fewer bars to reinforce an already thick plate; these two approaches resulted in different vibrational behaviours of the soundboards. The use of a perpendicular orientation of the annual rings of the bars could have been rooted in the tradition of violin making, to which Wettengel often referred. The violin's bass bar, for example, is also in perpendicular orientation

^{810. &}quot;Aber der Bau eines Lauten-Körpers und Halses verhält sich ganz anders zu der einer Guitarre, da die Unterbauung einer Lautendecke auf 12 oder 24 Saiten, und die einer Guitarre hingegen nur auf 6 Saiten berechnet ist" Otto, 'Musikalische Instrumente'.

^{811. &}quot;Sie ist stets vollkommen eben und an allen Stellen gleich dick" Wettengel, Vollständiges, theoretisch-praktisches auf Grundsätze der Akustik, Tonkunst und Mathematik, und auf die Erfahrungen der geschicktesten italienischen und deutschen Meister begründetes Lehrbuch der Anfertigung und Reparatur aller noch jetzt gebräuchlichen Gattungen von italienischen und deutschen Geigen: Für Instrumentmacher und Musikfreunde; Mit 16 lithogr. Tafeln, 420.

to the soundboard. However, the extant lute-shaped guitars show a diversity of possibilities for the construction of the soundboards (see fig. 5.14). When the old soundboard was preserved, the bars were either also preserved (see fig. 5.14a), or further bars were added. The rose was either removed to create the soundhole of a guitar, or it was preserved. In cases where the soundboard was renewed, it is common to find four or five transverse bars.

Wood joints

The particular technique of joining pieces of wood on these instruments depended on several factors: namely, the static purposes of the parts or joints in question, and the particular technical tradition to which the maker belonged. In lute making, the important joint between the body and the neck was typically reinforced by a nail. The joint between the back and the soundboard was not reinforced by any internal lining. As described in chapter 2.4.3, a textile or parchment lace could be added externally. The joint between the neck and the pegbox was usually a simple rabbet joint with overlapping surfaces. In lutes and mandoras that were changed into lute-shaped guitars, however, a different joinery approach can be observed.

In the craft of guitar making at the beginning of the 19th century, the neck was typically attached by a sliding dovetail joint. That is, the upper block of the body was carved out into a triangle shape, into which the counter part of the lower end of the neck (heel) could be inserted. This kind of joint is possible because of the characteristic design of the heel of the guitar neck, which provides a wider surface than the cross section of the neck. In lute-shaped guitars, however, the heel does not exist, and therefore different solutions for the neck joint had to be found. In most cases, when the neck was renewed, the lower part of the neck was set as a whole piece through the upper block. Therefore, the upper block had to be hollowed out in the shape of a counter profile of the neck of the inserted part (see fig. 5.15d). In technical terms, this type of joint is similar to a mortise joint. In some cases, the joint was reinforced with additional nails or screws (see fig. 5.15c). In cases where the old neck was preserved, the old neck joint remained untouched and the nail is still visible (see fig. 5.15a).

^{812.} See Wettengel, Vollständiges, theoretisch-praktisches auf Grundsätze der Akustik, Tonkunst und Mathematik, und auf die Erfahrungen der geschicktesten italienischen und deutschen Meister begründetes Lehrbuch der Anfertigung und Reparatur aller noch jetzt gebräuchlichen Gattungen von italienischen und deutschen Geigen: Für Instrumentmacher

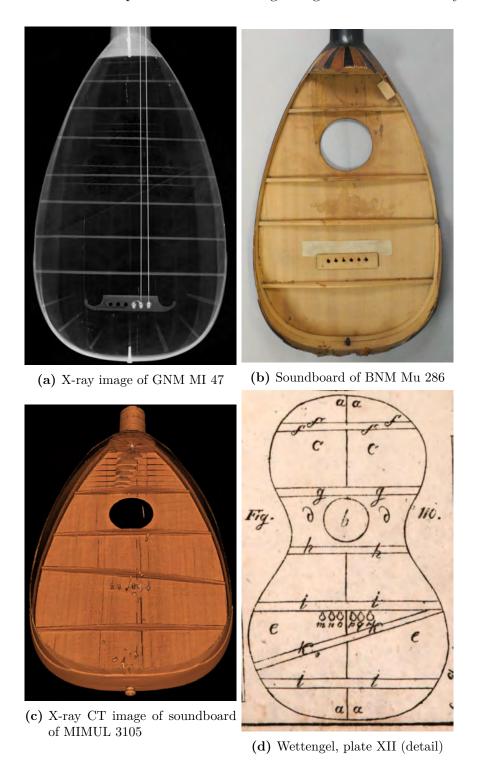


Figure 5.14: Soundboards of lute-shaped guitars and Wettengel's illustration

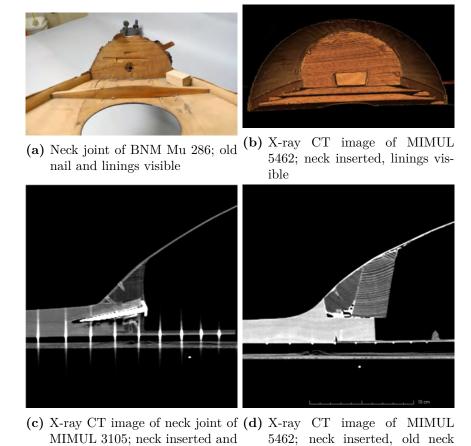


Figure 5.15: Neck joints of lute-shaped guitars

block extension still visible

nailed



(a) Neck joint decorated, (b) Neck joint covered, (c) Neck joint covered, DMM 5434 MIMNK 657 MdlM D.AD.40381

Figure 5.16: Covered neck joints

Since the new guitar neck was mostly narrower than the previous lute neck, the area of the upper block had to be adapted. In some cases, the upper block was narrowed in order to match the new neck width. In other cases, the base of the neck was enlarged to match the previous width in this part. In order to hide this area, a decorative solution was added to some instruments (see fig. 5.16). Here, the joint between the neck and the body is hidden under an additional layer of wood or ivory, which was adapted to match the design of the neck or body.

In lute making, dovetail joints were not used at all. In guitar making at the beginning of the 19th century, this joining technique was often used at the joint of the neck and body, but also at the joint of the neck and headstock. ⁸¹³ In general, a variety of joining techniques for guitar headstocks can be observed in this period, depending on the design of the head and the existing condition of the neck. In cases where the old neck was preserved, the old mortise of the lute pegbox could be reused and the headstock had to be adapted.

In lute-shaped guitars, the joint between the soundboard and the back was almost always reinforced by wooden linings. As Wettengel noted, this technique came from the craft of violin making. He wrote that the "ribs of the guitar are fitted with counter ribs, which are completely similar in shape to those of the violin, only relatively thicker and wider, and are also made of spruce."⁸¹⁴

und Musikfreunde; Mit 16 lithogr. Tafeln, 422.

^{813.} Jahnel calls this joint the "Wiener Schwalbenschwanzverbindung". It is characteristic for Viennese guitars, but also for the guitars made in Saxony during this period. Franz Jahnel, *Die Gitarre und ihr Bau: Technologie von Gitarre, Laute, Mandoline, Sister, Tanbur und Saite* (Frankfurt/Main: Das Musikinstrument, 1963), 149.

^{814. &}quot;Ferner sind auch die Zargen der Guitarre mit Gegenzargen, die denen der Violine an





(a) Dovetail joint of head stock in (b) Reuse of the mortise, Bachhaus Eis-4015462 enach I 15

Figure 5.17: Joints of head stocks in lute-shaped guitars

These reinforcements, into which the bars were inserted, enlarge the glueing surface and add stability to the ribs. When adding these linings to lute bodies, the boundary conditions of the soundboard are changed towards more rigidity, which changes the vibrational behaviour of the soundboard. Furthermore, the lining slightly reduces the vibrationally active surface of the soundboard. These linings can be found on all kinds of instruments, both with preserved and renewed soundboards (see fig. 5.15a and fig. 5.15b).

The different wood-joining techniques were influenced by the violin-making tradition. Its application to lute-shaped guitars can be seen as an expression of this tradition, which was detached from traditional lute making. The application of linings has an impact on the rigidity of the back and soundboard, and therefore on the overall sound of the instrument, even if the old soundboard was preserved.

String attachment and layout

When lute-type instruments were transformed into guitar-shaped lutes, major changes had to be made concerning the form of the pegbox, the fingerboard,

Gestalt vollkommen gleich, nur verhältnißmäßig dicker und breiter, und auch von Fichtenholze sind, [...] versehen worden." Wettengel, Vollständiges, theoretisch-praktisches auf Grundsätze der Akustik, Tonkunst und Mathematik, und auf die Erfahrungen der geschicktesten italienischen und deutschen Meister begründetes Lehrbuch der Anfertigung und Reparatur aller noch jetzt gebräuchlichen Gattungen von italienischen und deutschen Geigen: Für Instrumentmacher und Musikfreunde; Mit 16 lithogr. Tafeln, 423.

and the bridge. As in the cases shown above, the differences in transformational technique were an expression of different technological approaches and solutions for statics issues. A change in the pegbox was required to reduce the number of strings and had consequences for the technique of tuning and the overall design of the instrument. A change of the fingerboard might also affect the playing technique. A change of the string termination at the bridge would have consequences on the sound. In the following, the technical details of the pegbox, fingerboard, and bridge are considered.

In lutes, two main forms of pegboxes can be found: the bent back pegbox and the elongated pegbox on theorbos. In all cases, the pegs are inserted on the side of the pegbox. This means that the piece of wood for the pegbox must be chosen and positioned in such a way so that the radial direction (main rift direction) does not point in the same direction as the pegs, in order to avoid splitting. In guitars at the beginning of the 19th century, the most popular headstock was in an hourglass shape with the pegs inserted on the back of the pegbox. The technique of inserting pegs perpendicular to the plane of the soundboard and fingerboard can already be found in baroque guitars and requires a different choice of the wood grain in order to avoid splitting. Molitor criticised this technical construction for tuning since it produced a lot of pressure on the neck due to the force one had to apply to press the pegs towards the head stock while tuning. As a consequence, this required a more stable construction of the body, which had negative consequences for the sound.⁸¹⁵

Wettengel presented different designs and technical solutions for guitar tuning systems. He noted that they existed in various forms and he presented tuning systems with mechanics that facilitated tuning and avoided putting too much pressure on the neck.⁸¹⁶ The development of tuning systems was part of several technological experiments of mechanisation, which were sometimes protected by patents.⁸¹⁷ The head stock needed to be changed to transform a lute or mandora into a guitar. In lute-shaped guitars, the headstock in an hourglass

^{815.} See Molitor, Große Sonate für die Guitare allein, als Probe einer besseren Behandlung des Instruments, 11.

^{816.} See Wettengel, Vollständiges, theoretisch-praktisches auf Grundsätze der Akustik, Tonkunst und Mathematik, und auf die Erfahrungen der geschicktesten italienischen und deutschen Meister begründetes Lehrbuch der Anfertigung und Reparatur aller noch jetzt gebräuchlichen Gattungen von italienischen und deutschen Geigen: Für Instrumentmacher und Musikfreunde; Mit 16 lithogr. Tafeln, 427.

^{817.} See Hofmann, Mougin and Hackl, Stauffer & Co: La guitare viennoise au XIXe siècle: die Wiener Gitarre des 19. Jahrhunderts: the Viennese guitar of the 19th century, 44-46.

shape was most common, but the application of more modern approaches with sophisticated tuning mechanisms can be found as well (see fig. 5.18c).

The second fixing point of the string is the bridge. In lutes, the bridge is a thin block of wood with attached decorative points at both ends, which is glued on top of the soundboard (see fig. 5.19a). The strings are inserted through a hole parallel to the soundboard and fastened by a sling knot. This characteristic attachment contributes to the typical sound of the lute. As Plath⁸¹⁸ has demonstrated with the Mexican vihuela, which has a similar string termination, the sling knot implies two virtual string lengths. This string termination causes a beating, which might be reinforced in case of lutes due to the double stringing for every course. As Plath has shown, this beating does not occur in the string termination of classical guitars.

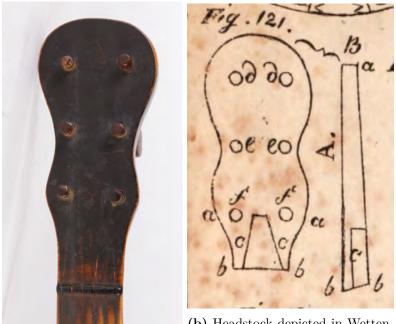
The typical string termination at the bridges of early 19th century guitars is characterised by a small saddle, which serves as a firm stop of the string (see fig. 5.19d). Behind the saddle, the strings are inserted into a hole, which penetrates the actual bridge and the soundboard, and are fixed with a wooden pin. Wettengel distinguished three types of bridges, but all of them have the characteristic saddle. The first type is rather flat and is equipped with a saddle made out of bone or brass. It is used when the fingerboard is in the same plane as the soundboard. The second type is used when the level of the fingerboard is above the soundboard, as it still is on modern guitars today. Then, the bridge has to be higher and the saddle can be integrated and made of the same piece as the bridge. The third type differs only in variations in style, width, or length. Since the bridge was one of the parts that had to be changed during a transformation of a lute-type instrument into a guitar, a wide variety of styles of bridges can be found on these instruments (see fig. 5.19).

Between the bridge and the pegbox is the fingerboard. In lutes, it mostly consists of a thin layer of ebony veneer, which can be slightly curved or flat, but is always in the same plane as the soundboard. The frets are made of gut strings and are tied around the neck. As mentioned before, two solutions

^{818.} Niko Plath, 'Acoustical Analysis of the Mexican Vihuela', in *Proceedings of the International Symposium on Musical Acoustics (ISMA)* (Le Mans, 2014), 493–497.

^{819.} These questions require further examination.

^{820.} See Wettengel, Vollständiges, theoretisch-praktisches auf Grundsätze der Akustik, Tonkunst und Mathematik, und auf die Erfahrungen der geschicktesten italienischen und deutschen Meister begründetes Lehrbuch der Anfertigung und Reparatur aller noch jetzt gebräuchlichen Gattungen von italienischen und deutschen Geigen: Für Instrumentmacher und Musikfreunde; Mit 16 lithogr. Tafeln, 440–442.



(a) Headstock of MIMUL 5462

(b) Headstock depicted in Wettengel, plate XIII



of MIMNK 2370

 (\mathbf{c}) Headstock with machine heads (\mathbf{d}) Headstock in baroque guitar style of MIMNK 0657

Figure 5.18: Headstocks of lute-shaped guitars

5 The Lute-Shaped Guitar at the Beginning of the 19th Century



Figure 5.19: Bridges on lute-shaped guitars compared to a lute bridge

for the fingerboard exist for guitars. In the first, which is similar to the lute, the fingerboard is on the same level as the top plate. In lute-shaped guitars, this version can be found when the old neck was preserved, but also when the neck was replaced. The other solution was to glue a separate fingerboard onto the neck, which in many cases reached down into the soundboard, almost to the soundhole. Wettengel suggested that pear wood should be used for the fingerboard, and that it should be stained black. In both cases the frets were not tied but inserted into the fingerboard and differed both in number and in material. According to Wettengel, the frets were necessary because the guitar was an instrument for women who would have difficulty with depressing the strings, especially in higher positions. Today, however, this opinion must be assessed critically. As for materials, Wettengel suggested the use of brass or bone for the frets, which were glued into the fingerboard⁸²¹ and both can be found on lute-guitars.

When transforming lute-type instruments into lute-shaped guitars, the layout

^{821.} Wettengel, Vollständiges, theoretisch-praktisches auf Grundsätze der Akustik, Tonkunst und Mathematik, und auf die Erfahrungen der geschicktesten italienischen und deutschen Meister begründetes Lehrbuch der Anfertigung und Reparatur aller noch jetzt gebräuchlichen Gattungen von italienischen und deutschen Geigen: Für Instrumentmacher und Musikfreunde; Mit 16 lithogr. Tafeln, 437.

of the neck and the number of frets could be affected by constructive constraints. In lutes, the position of the bridge is rather close to the lower end of the instrument. The neck is mostly set up for nine, or a maximum of ten frets. For Otto, this was one of the reasons why transformed lutes were imperfect. He commented that "the length of a lute's body often does not allow the neck to be more than 6-7 semitones long in order to bring out the correct scale". In guitars of that period, on the other hand, it was common to have eleven frets on the neck, and 17 frets in total. In case that the neck length of a lute-type instrument was preserved, the bridge could be moved towards the neck in order to increase the number of frets on the neck. This changed the ratio between neck length and body mensur allowing more frets to be applied to the neck. The disadvantage, however, was the reduction in string length, as Otto described. In lute-shaped guitars, however, the bridge was often placed further towards the centre of the soundboard.



Figure 5.20: Fingerboard wear. Green: light wear, orange: medium, red: heavy

Nonetheless, many of the extant lute-shaped guitars have fewer frets on the neck than guitars from the same period. On a transformed mandora by

^{822. &}quot;auch die Länge eines Lauten Körpers oft nicht gestattet, den Hals mehr als 6-7 halbe Töne lang zu lassen, um die gehörige Mensur herauszubringen" Otto, 'Musikalische Instrumente'.

Nikolaus Dopfner in the Hessisches Landesmuseum,⁸²³ only seven frets can be found. Other instruments have eight or nine frets on the neck. More frets could only be added when the soundboard was renewed or the neck was changed. When the soundboard was preserved, the position of the rose limited how far towards the fingerboard the bridge could be placed. When the soundboard and neck were renewed, both bridge and soundhole could be positioned closer to the neck and thus provided the demanded string length and a greater number of frets.

The fact that transformed lute-shaped guitars had fewer frets on their necks might have contributed to their use as accompanying instruments. With a shorter neck, the more virtuosic playing style in higher positions can not be realised. An analysis of the fingerboards of the lute-shaped guitars in the MIMUL has confirmed this assumption. For the examination, the visible wear on the fingerboards was classified in three categories: heavy, moderate, and light, which were depicted in the colours red, orange, and green. One instrument with eleven frets on the fingerboard shows the most wear in the higher positions, while the other instruments with fewer frets show wear mainly in the first positions (see fig. 5.20).

The changes that were made to the pegbox, bridge, and fingerboard when transforming a lute-type instrument into a lute-shaped guitar affected the statics of the instrument and had consequences on its sound production as well as on the requisite playing technique. The use of fixed frets was a new approach in the layout of the instrument. While wound frets on lutes could be moved to react to the harmonic purity and age of the gut string or to different temperaments in several keys, the guitar fingerboard presented a rigid subdivision according to equal temperament. This change is thus connected to the history of equal temperament, which was widely established at the same time that the guitar was enjoying its first peak in popularity at the end of the 18th and beginning of 19th century.⁸²⁴ The bridge design of guitars used a rather fixed string termination, which did not allow a beating of the string, which was typical for the lute and instruments with similar string attachment. Finally, the characteristic shape of the body and the position of the bridge could limit the number of frets on the fingerboard, which might be connected to the use of the lute-shaped guitar as an accompanying instrument.

^{823.} HLMD Kg 67:105, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110472 (Version 29 July 2020).

^{824.} Mark Lindley, 'Temperaments', in $Oxford\ Music\ Online$, ed. Mark Lindley (Oxford University Press, 2001), https://doi.org/10.1093/gmo/9781561592630.article.27643.

Decoration techniques

Apart from the practical layout, different techniques were applied for the decoration of the instruments, which reflect different technological traditions and could also have consequences on the sounding qualities of the instrument. The decoration of lutes was characterised by the choice and combination of materials. The most common and typical ornamental element was the rose. Other decoration was achieved by marquetry or the application of engraved plates, mostly made of precious materials like ivory or tortoise shell, best exemplified by the instruments of Joachim Tielke. Since the guitar was considered a fashion item at the beginning of the 19th century, transformed lutes were adapted to the current fashion as well.

The use of marquetry was connected to the technological tradition of using veneer to cover surfaces. In the lute-making tradition, the neck, fingerboard, and sometimes the pegbox were often covered with veneer. This technique gave the maker the opportunity to choose either a uniform style, or to combine different materials in stripes, patterns, or other kinds of ornamentation. In 19th century guitar making, on the other hand, instead of using veneer, the surfaces of the headstock, neck, and sometimes fingerboard were stained black and varnished. This allowed for a free choice of wood, independent of its visual appearance. Wettengel suggested beech and pear wood, but also maple can be found for all named elements. This technique reduced production costs: it was faster because the process of veneering was omitted, and no expensive materials were necessary.

Instead of marquetry, the use of inlays or intarsia was more common for guitars, especially in Saxony. While marquetry juxtaposes different thin layers, which are applied together, intarsia is made by carving out a pattern in a surface in which a different material is inserted. Wettengel describes a characteristic star, a combination of dark and bright coloured materials, which can be found in several lute-shaped guitars. ⁸²⁶ It was a characteristic feature of the makers from Saxony – especially the region around Markneukirchen – and can be found on many guitars in other shapes as well. In this area, the production

^{825.} Wettengel notes its use for the head stock, bridge, and the neck. See Wettengel, Vollständiges, theoretisch-praktisches auf Grundsätze der Akustik, Tonkunst und Mathematik, und auf die Erfahrungen der geschicktesten italienischen und deutschen Meister begründetes Lehrbuch der Anfertigung und Reparatur aller noch jetzt gebräuchlichen Gattungen von italienischen und deutschen Geigen: Für Instrumentmacher und Musikfreunde; Mit 16 lithogr. Tafeln, 427–428.

^{826.} Wettengel, 421.







MIMUL 0572

MIMNK 2370

(a) Inlay on soundboard of (b) Inlay on soundboard of (c) Inlay on cap of MIMNK 2370

Figure 5.21: Characteristic decorative elements

of such decorative elements was part of the portfolio of specialised craftsmen, which explains the stylistic similarity.⁸²⁷ A very prominent example of a highly decorated instrument is the lute-guitar labelled by Magno Tieffenbrucker and transformed by Johann Benjamin Fritzsch in 1817. 828 Fritzsch used the typical star on the soundboard, the top of the headstock and even on the back, where he inserted it into the cap (see fig. 5.21c and 5.18c).

The bridge of an instrument can also be decorated. While lute bridges were typically decorated simply with punched marks, veneer, and subtle tips on the sides, guitar bridges were often decorated with more elaborate moustaches, in which the lateral endings of the bridge were embellished. Wettengel stated that the "mere bridge would appear too bare". 829 This decoration, which consisted of mostly floral elements, was already common for baroque guitars and can be found on many lute-shaped guitars. These bridge decorations existed in a variety of forms on all guitar types of this period. Furthermore, the outer edge of the soundboard could also be decorated with inlays of different materials, as in the case of the lute transformed by Fritzsch.

The soundhole (or rose) was also a prime location for decorative elements. In some cases when the old lute soundboard was preserved, the characteristic rose was conserved as well. If not, the rose was cut out. When a new soundboard

^{827.} Michel, Gitarren in Sachsen und Thüringen bis 1850, 350-351.

^{828.} MIMNK 2370, MusiXplora, Ed. Josef Focht, https://musixplora.de/mxp/4110975 (Version of 29 July 2020).

^{829. &}quot;Der bloße Steg würde [...] gar zu kahl erscheinen." Wettengel, Vollständiges, theoretisch-praktisches auf Grundsätze der Akustik, Tonkunst und Mathematik, und auf die Erfahrungen der geschicktesten italienischen und deutschen Meister begründetes Lehrbuch der Anfertigung und Reparatur aller noch jetzt gebräuchlichen Gattungen von italienischen und deutschen Geigen: Für Instrumentmacher und Musikfreunde; Mit 16 lithogr. Tafeln, 442.



Figure 5.22: Rose and soundhole on lute guitars

was applied, we typically find soundholes, and only rarely imitations of lute roses. In the case of an instrument transformed by Johann Georg Langerwisch in Leipzig in 1816, the soundboard was covered with black varnish and a metal rose was inserted to produce a strong visual contrast (see fig. 5.22a). Like in other guitar types, the soundhole can be surrounded by a decorative inlay in various forms (see fig. 5.22b). However, the removal or absence of the rosette changes the acoustic properties of the instrument drastically, which was already noted by Molitor. As seen in the previous chapter, a void area within the soundhole increases the body resonance (*Helmholtz* resonance). Molitor assumed that the large opening would rather weaken the tone than help its projection. He suggested, even if one could not decide to use a lute body as the basic design for the guitar, to at least to cover the opening in the soundboard in the manner of those of harpsichords, lutes, or mandoras.⁸³⁰

The decoration of lute-shaped guitars was often adapted to the contemporary style by using the same techniques as were being used in guitar making. The use of dyed instead of veneered surfaces focused on the surface finishing mostly using shellac polish which had also become common in furniture making during the same period. It provided the possibility of an even surface independent of the wood choice and avoided the expense of ebony veneer. The application of moustaches to the bridges picks up the decorative elements that were already

^{830. &}quot;so würde ich dennoch vorschlagen, [...] die Oeffnung am Deckel aber, nach Art der Resonanzböden an den Klavieren, Lauten oder Mandoren, zu verdecken." Molitor, Große Sonate für die Guitare allein, als Probe einer besseren Behandlung des Instruments, 11.

common for guitars in previous centuries. The removal of the rose, or the eschewal of such a decorative element in the soundboard, changed the first resonance of the body and significantly affected the acoustic disposition of the instrument.

The transformation of lute-type instruments into lute-shaped guitars added a new layer to these objects, which had been built and maintained for centuries by a long line of craftsmen steeped in the tradition of lute making. From the beginning of the 19th century onward, the techniques used by the generation of guitar makers who took over the craft differed in certain important details from the lute-making tradition. The use of materials, the approach of dealing with statics issues, their methods of joinery and of string attachment reflect both the change in technology and the shift in current fashion. Some of the new approaches had a strong influence on the vibrational behaviour of the instruments, others are mainly features of technique and design. The grade of implementation of technical and design features depended on the extent of transformation. The physical predisposition of the lute, especially the neck length and the position of the bridge, can produce constraints for the transformation of the instrument in the demanded unity of style and function. These constraints might be responsible for the fact that in many lute-shaped guitars, all parts except the back were replaced in order to provide a proper string length, enough frets on the neck, and a sound ideal expected from this kind of instrument. The result was a group of instruments with a diversity of technological layers which were not easy to categorise with standard organological vocabulary due to their hybrid character in style, technology, and classification.

5.4.3 Layers of paper and parchment as reinforcements: Lutes as carriers of fragments

The use of paper, parchment, and other materials to reinforce joints and cracks was a common technique for production and repair throughout the history of stringed instrument production. In many instruments, the numerous interventions for maintenance, repair, and alteration left several layers of reinforcing material, which can be analysed in a similar manner to archaeological stratigraphy.⁸³¹ In many cases, so-called binder's waste or printer's waste was used,

^{831.} This aspect has remained unconsidered in this study so far because it has been necessary to maintain a certain chronology in the discussion in every chapter. The study of these materials is, furthermore, an interdisciplinary approach.

which is often defined as "any paper bearing text, either printed or manuscript, that has been repurposed for a non-textual use." The use of these materials in lutes makes them objects carrying information for philological disciplines. Furthermore, every intervention on the instrument might have left a material trace typical for its period resulting in different layers on the inside of their bodies representing the history of their transformation.

In fact, the history of the lute is strongly connected with the history of paper. Beneath parchment, paper was used in the construction of lutes for several purposes: inside the back as a lining to reinforce the joint between the ribs, during production for templates for certain parts, as printed models, as internal support for the fragile rose in the soundboard, and as a carrier for the signature on the label. According to Focht, Martius and Riedmiller, 833 paper and lutes can be considered as "siblings" because they grew up at the same time. Both are typical products of the early modern market and were produced and traded in similar business models. Like other early modern products, paper was sold on a standard market in fixed trading formats in terms of the size and number of sheets of paper.⁸³⁴ By 1500, paper became cheaper than parchment and available through an established trade, which stimulated book projects and the production of codices on paper. Both lutes and paper require a financing network and a trade for production and distribution. Like the lute, paper was also marked with a brand – the watermark – to identify the origin and the manufacturer. Furthermore, both products share the fact that the same techniques for production in similar quality were used from the 16th until the end of the 18th century, before they were replaced by modern technology during the 19th century. Finally, both products were used, reused, or recycled over a long period of time and underwent different forms of transformation.

Today, the inside of the instruments often shows several layers of reinforcements consisting of different materials. On the one hand, these added layers can be read as a parable on the history of the instrument, since the physical layers build up a stratigraphy which represents the various technological layers of repair, maintenance, and transformations the instrument has undergone. On the other hand, studying this stratigraphy connects the materiality

^{832.} Anna Reynolds, "Worthy to Be Preserved": Bookbindings and the Waste Paper Trade in Early Modern England and Scotland, in *The paper trade in early modern Europe*, ed. Daniel Bellingradt and Anna Reynolds, Library of the written word – The handpress world (Leiden and Boston: Brill, 2021), 346.

^{833.} Focht, Martius and Riedmiller, Füssener Lauten- und Geigenbau: Europaweit, 200. 834. See Bellingradt, Vernetzte Papiermärkte: Einblicke in den Amsterdamer Handel mit Papier im 18. Jahrhundert, 40.

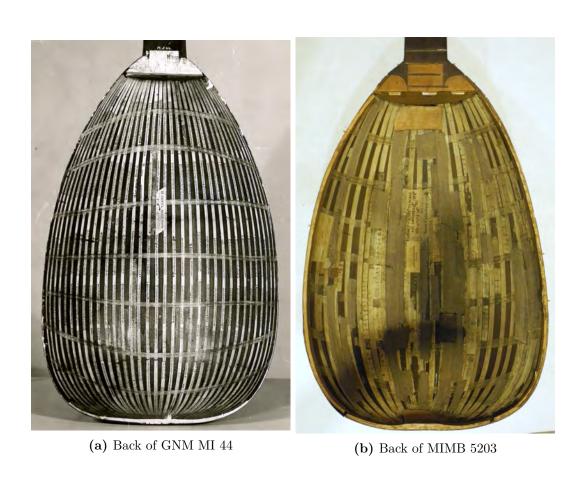


Figure 5.23: Reinforcements in lute backs

of the instruments to studies in early modern history, which is often referred to as fragmentology.⁸³⁵ In this discipline, repurposed manuscript fragments and printer's waste, which are mostly found in old bookbindings, are systematically recorded and analysed.⁸³⁶ In bibliographical research, fragments of mediaeval manuscripts and incunabula can represent unknown prints or editions.⁸³⁷ Sometimes musical pieces can be discovered, and the material used for binding can contribute to knowledge about historic bookbinding techniques.⁸³⁸

The reuse of paper and parchment as raw material, especially for bookbinding, is well known. As Hirschi and Spoerhase, 839 Bellingradt 440 and Wirth 441 have shown, the destruction of books and their reuse was part of the literary discourse from the 17th to the 19th century. This discourse was motivated by the philological view of paper and parchment as vehicles for the written word, and therefore for ideas. From an art-historical standpoint, on the other hand, these materials might have been considered more important for the production of visual artworks. From a general view of the history of objects, more fields of uses and reuses for paper and parchment are evident. These include their use in reinforcing composite objects, as raw material for objects of papier-mâché, bookbinding, and, in the case of paper, for the production of recycled paper and cardboard. For these uses, the physical qualities of the material were more important than their suitability for writing or the content of the text they bore. Thus, any kind of material, whether new or old, could be used, as long as it suited the purpose. However, second-hand materials were cheaper

^{835.} Hanns Peter Neuheuser and Wolfgang Schmitz, eds., Fragment und Makulatur: Überlieferungsstörungen und Forschungsbedarf bei Kulturgut in Archiven und Bibliotheken, vol. Band 91, Buchwissenschaftliche Beiträge (Wiesbaden: Harrassowitz Verlag, 2015).

^{836.} Today, 2829 mediaeval fragments are recorded in the online database of an association of different libraries called *Fragmentarium*, see: https://fragmentarium.ms/ (accessed 22 April 2022).

^{837.} See Lotte Hellinga, *Incunabula in Transit: People and Trade*, vol. 47, Library of the Written Word (Leiden: Brill, 2018), 207.

^{838.} See Oliver Duntzke and Falk Eisermann, 'Fortschritt oder Fidibus? Zur Bestimmung, Bewahrung und Bedeutung von Inkunabelnfragmenten', in *Fragment und Makulatur*, ed. Hanns Peter Neuheuser and Wolfgang Schmitz, Buchwissenschaftliche Beiträge (Wiesbaden: Harrassowitz Verlag, 2015), 300–306.

^{839.} Caspar Hirschi and Carlos Spoerhase, 'Kommerzielle Bücherzerstörung als ökonomische Praxis und literarisches Motiv. Ein vergleichender Blick auf das vorindustrielle und digitale Zeitalter', in *Buchzerstörung und Buchvernichtung*, ed. Christine Haug and Vincent Kaufmann, Kodex (Wiesbaden: Harrassowitz, 2013), 1–23.

^{840.} Bellingradt, Vernetzte Papiermärkte: Einblicke in den Amsterdamer Handel mit Papier im 18. Jahrhundert, 110–120.

^{841.} Uwe Wirth, '(Papier-) Müll und Literatur: Makulatur als Ressource', Zeitschrift für Deutsche Philologie 133 (2014): 19–32.

and lowered the costs of production.

The trade in used paper and parchment was part of the commodity range on paper markets. In German, the trade term *Maculatur* was used from the 18th century on and referred to paper that had been soiled and was used, for example, for wrapping. It might have been printed or unprinted, white or grey. Furthermore, it included books that found no readers, and which booksellers sold to merchants and other traders at a low price.⁸⁴² It should be emphasised that this term could refer not only to paper but also to parchment. The numerous circumstances that might have produced Maculatur are still being explored.⁸⁴³ Reynolds⁸⁴⁴ reports of the reuse of books after the dissolution of monasteries. Other sources could have been several steps into the printing process, such as proofs, misprints, but also damaged books, or certain canonical texts that had become obsolete after church reforms. Over time, items such as school books became out of date and might have been traded as raw material.⁸⁴⁵ As a commodity, binder's or printer's waste was much cheaper than new paper. 846 From the 17th century on, waste paper was sold at the Leipzig fair by weight. According to Pollard, waste paper or parchment "seldom have strayed from the place where it was first considered to be waste; and only at that place it is likely to have been used in a binding."847 Thus, the reuse of these materials was strongly connected to the local market network.

When waste paper or parchment is used as raw material to be integrated into other objects, it changes its function from being a material for the transmission of writing and is reduced to its material qualities. In Michael Thompson's $Rubbish\ Theory$, becoming waste or raw material is an important stage on the way from transience to durability in objects. In his approach, Thompson focuses on the question of how second-hand objects become antiques and how objects are

^{842.} See Art. "Maculatur" Krünitz, Oekonomische Encyklopädie oder allgemeines System der Staats- Stadt- Haus- und Landwirthschaft, 152.

^{843.} The reuse of books was the topic of a conference held in Wolfenbüttel in 2018, see Daniel Bellingradt, 'Das gebrauchte Buch / The Used Book. Jahrestagung des Wolfenbütteler Arbeitskreises für Bibliotheks-, Buch- und Mediengeschichte, 24.09.2018 – 26.09.2018 Wolfenbüttel', 2018, accessed 11 June 2022, https://www.hsozkult.de/event/id/event-87347.

^{844.} Reynolds, '"Worthy to Be Preserved": Bookbindings and the Waste Paper Trade in Early Modern England and Scotland', 343.

^{845.} Hellinga, Incunabula in Transit: People and Trade, 213.

^{846.} See Bellingradt, Vernetzte Papiermärkte: Einblicke in den Amsterdamer Handel mit Papier im 18. Jahrhundert, 86.

^{847.} Graham Pollard, 'The Names of Some English Fifteenth-Century Binders', *The Library* 25, no. 3 (1970): 196, https://doi.org/10.1093/library/s5-XXV.3.193.

determined worthy of being preservation.⁸⁴⁸ By becoming binder's waste, ready for reuse, the first, transient function of being a printing proof, for example, is left behind and the material gets attached to objects that are considered more durable. Musical instruments in general, and lutes especially, which were considered durable objects, worth keeping for a long time, have served as carriers for such materials. However, the analysis of such reinforcement materials in musical instruments has only recently become a serious subject of study.⁸⁴⁹ On the one hand, the documentation of the fragments inside the instrument can contribute to the field of fragmentology. On the other hand, it can provide further insights into the techniques for repair and transformation of musical instruments and its interconnectedness with the local paper market.

Even though lutes provide, through their elongated shape and large inner surface, good preconditions for long, consecutive fragments, analysing these fragments presents certain challenges. Apart from the rare case of a soundboard being removed, only a small part of the inside of the instrument is visible through the rose or soundhole. In most cases, the openings of the rose are even too small to insert an endoscope. It is therefore rarely possible to fulfil the standards of documentation that are common in bibliographic research. During the work on this dissertation, the material of lining strips from production and later reinforcements were documented in 74 lutes. In 69 cases, the material of the lining strips could be identified. In 60 cases, the layers of later repairs and reinforcements of cracks were recorded. However, from these observations, some conclusions can be drawn concerning the use of materi-

^{848.} Michael Thompson, 'Benji the Binman and his Anti-archive', in *Archivprozesse*, ed. Hedwig Pompe and Leander Scholz, Mediologie (Köln: DuMont, 2002), 102.

^{849.} Stéphane Vaiedelich, 'Vers une organologie scientifique et prospective: l'exemple des deux vihuelas parisiennes', in *Aux origines de la guitare*, ed. Joël Dugot, Les cahiers du Musée de la Musique (Paris: Musée de la Musique, 2004), 74–82; Donatella Melini and Roberta Tonnarelli Corsi, 'Frammenti ebraici strumenti musicale: un' insolita relazione', *Materia giudaica: rivista dell'associazione italiana per lo studio del giudaismo* 22 (2017): 249–257; Jean-Philippe Échard and Laura Albiero, 'Identifying Medieval Fragments in Three Musical Instruments Made by Antonio Stradivari', *Fragmentology* 4 (2021): 3–28, https://doi.org/10.24446/V4UB.

^{850.} Recorded categories are: context of transmission and information carrier, dimensions, place and time of origin, page layout, main writing style or type, mark-up elements, writing tools, content. See Hanns Peter Neuheuser, 'Handreichung Handschriftenfragmente', in Fragment und Makulatur, ed. Hanns Peter Neuheuser and Wolfgang Schmitz, Buchwissenschaftliche Beiträge (Wiesbaden: Harrassowitz Verlag, 2015), 339–355; Wolfgang Schmitz, 'Fragmente von Inkunabeln - Eine praxisorientierte Einführung', in Fragment und Makulatur, ed. Hanns Peter Neuheuser and Wolfgang Schmitz, Buchwissenschaftliche Beiträge (Wiesbaden: Harrassowitz Verlag, 2015), 309–322.

als during production, repair, or alteration, and about what was considered waste.

Reinforcements in lutes during production

During the production of lutes, the joints between the ribs were reinforced with strips 0.5 to 0.8 cm wide, though sometimes they were also placed perpendicularly to the ribs. To reinforce the joints of a lute back with nine ribs, a surface of ca. 230 cm² is needed. If one recalls the mass production of lutes in the 16th and 17th centuries, it becomes clear that there was a high demand for reinforcement material. However, there is no indication of such material in the known inventories of lute workshops from this period. In 1636, Mersenne described this process in his Harmonie Universelle by remarking that "[i]t is also necessary to glue small strips of vellum or paper on the inside of the joints."851 According to the *Encyclopédie* edited by Diderot and d'Alembert, vellum is defined as a type of parchment which is made from the skin of a stillborn or suckling calf.⁸⁵² It is more even, finer, and whiter than parchment made from the skin of sheep or goats. Vellum was the finest and most expensive quality of parchment, widely used for illuminated church manuscripts and artworks.⁸⁵³ These works, however, once they were considered waste, could have become the raw material for the construction of lutes.

Among the 73 instruments analysed for this study, only 13 objects could be identified in which vellum was used as reinforcement material during production, while in 53 cases paper was used. It is safe to assume that the use of parchment in lutes was far less common than paper, and it might have been connected to the value of the material for the ribs. Five of these instruments in which vellum was used as a reinforcement are made of ivory, four of ebony, and the others of maple or ash. On the other hand, only two instruments made of ivory could be found in which paper was used. Further instruments have to be analysed, but a tendency can be seen that vellum was used for instruments made of materials with a high density and a high representative value. In most

^{851. &}quot;Il faut aussi coller des petits tranches de velin, ou de papier sur les iointures en dedans." Mersenne, Harmonie universelle: Contenant la théorie et la pratique de la musique. Seconde Partie. Livre Second, 49.

^{852.} Art. Parchemin Denis Diderot and Jean Baptiste Le Rond d'Alembert, eds., Encyclopédie ou Dictionnaire raisonné des sciences, des arts et des métiers: Tome Onzieme. N-Pari, vol. 11 (Neufchâtel: Samuel Faulche, 1765), 929.

^{853.} See Gabriel Peignot, Essai sur l'Histoire du Parchemin et du Vélin (Paris: Antoine-Augustin Renouard, 1812), 28–29, 57.

cases, the parchment is reused binder's waste, so it contains writing. In two cases the content can be identified.

For the lute labelled "Laux Maler" in Paris, the maker used pages of the old testament, bearing content of the Book of Sirach, the Book of Isaiah, and the Book of Proverbs, dating probably from the 15th century.⁸⁵⁴ While the first instrument is made of figured ash wood, the second of ivory. It is labelled "IN VENETIA 164[...] MARTINVS SELOS GERMANVS."855 The joints between the 15 ribs are reinforced with fragments in bastarda blackletter script with red rubricated initials taken from an antiphonary dating from the 15th century (see 5.24a). While these examples show cases in which several consecutive pages of a book were probably used, in other instruments strips of different origins with different writings can be found. 856 However, it was not only binder's waste that was used exclusively as a source for vellum in lutes. In some cases, such as an ivory lute altered by Andreas Berr in Vienna in 1699, the parchment is blank without any writing and of highest quality (see fig. 5.24b). According to the named examples, the use and reuse of vellum mostly taken from manuscripts dating from the time before 1500 can thus be proven for a period of at least 200 years, independently from the place of production.

Concerning the physical properties, handmade paper has similar qualities to parchment for the purpose of reinforcing a joint. Its chaotic fibre structure provides a suitable support to prevent the joint between the thin ribs from opening. In many cases, common blank white paper, as it was available for writing or printing, was used, though blank recycled paper (distinguishable by its colour) can also be found. White paper was not the only product of the paper producers: blue paper, for example, was often used by artists, and by the end of the 18th century, coloured paper came into fashion for printing and writing. In general, grey or brown paper was not specially coloured, but received its colour from the dirt or the ink on the recycled papers which were used as raw materials. It was mainly sold for wrapping and packing of goods, especially groceries and relatively cheap items. ⁸⁵⁷ In lutes, this kind of paper

^{854.} MdlM E.2005.3.1; the author analysed the different layers inside the instrument during a research stay in 2018. A more detailed documentation of the layers and the content was done by Salomé Bloœdé during an internship in July 2021.

^{855.} GNM MINe 262, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110769 (Version 29 July 2020).

^{856.} For example in the instruments labelled "Matheus Epp in Strasburg 1617" (MIMUL 0547) and "Jeremias Würffel" in Greifswald 1738 (MIMUL 0451). In the latter, the strips are partly taken from a choir book.

^{857.} See Bellingradt, Vernetzte Papiermärkte: Einblicke in den Amsterdamer Handel mit Papier im 18. Jahrhundert, 52–53, 57.



(a) GNM MINe262



(b) Vellum in lute in Boston MfA 1986.7

 ${\bf Figure~5.24:~Vellum~as~joint~reinforcement}$

can be found in instruments mainly dating from the end of the 17th and 18th century.

From a bibliographic point of view, the reuse of printed or lettered paper is most interesting. Paper that had been used for manuscripts, such as letters, was often cut lengthwise in order to obtain long strips, which makes reconstruction of the content extremely difficult. Printer's waste, however, was often taken out of large folios, which could be cut laterally, preserving more of the written text. Among the 53 examples of lutes with ribs reinforced with paper, the reuse of printed paper could be documented in 12 cases, and the content of four of the prints has been identified. For the instrument labelled "Hans Frei in Bologna 1597", 858 a print of Nicolaus de Tudeschis' (1386-1445) Commentaria was used. The type setting is very close to that of an edition published 1530 in Lyon, but differs in certain details.⁸⁵⁹ Whether it was a misprint, a proof, or just a different edition, must be the subject of further discussion. Only the text, but not the edition of a print of Bartouls de Saxoferrato's Commentaria in primam Codicis partem could be identified in an instrument labelled "IN PADOVA, Michielle Harton 1.6.0.2.".860 The exact edition still needs to be found. 861 In two cases, however, the exact edition could be found. The first was in another instrument by Hans Frei, 862 probably made in Bologna in the 16th century. The print is a book on physics (Super octo libros physicorum) by Walter Burley (1275-1345) in an edition printed in Venice in 1501.863 The text on f. 65v and f. 67v matches the fragments in the book. The second is an edition by Baldus de Ubaldis (1327-1400) dating from 1541, which combines his Infortiato Commentaria and Super Digesto Novo Lecutra (see 5.25). 864 The

^{858.} Museo Civico Medievale Bologna 1780, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110916 (Version 29 July 2020).

^{859.} Chapter XXII Summarium, Nicolaus de Tudeschis, Commentaria egregii decretoru[m] doctoris domini Nicolai Tudeschis: Siculi: Abbatis Monacensis: Archiep[iscop]i Panormitani: sanct[a]eq[ue] Roman[a]e ecclesi[a]e Cardinalis: in ... Decretaliu[m] libros. 4/5: Panor[mitanus] in Quartum [e]t Quintum Decre[talium (Lyon: Giuncta, 1527).

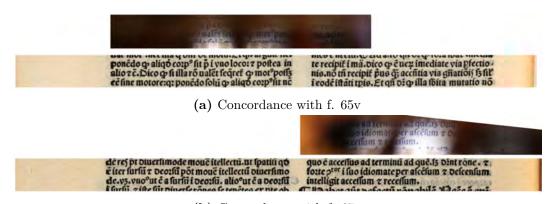
^{860.} GNM MI 45, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110774 (Version 29 July 2020).

^{861.} An edition printed in Basel in 1588 differs clearly from the one used in the instrument, see Bartolus de Saxoferrato, In I. Partem Codicis Commentaria (Basel: Episcopius, 1588), 259–260.

^{862.} KHM SAM 30, MIMUL MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/41 10427 (Version 29 July 2020).

^{863.} Gualterus Burlaueus, Super octo libros physicorum (Venetia: Torresanus de Ascula, 1501).

^{864.} Baldus de Ubaldis, Baldus Perusinus Super Infortiato: Commentaria Subtilia Necnon Copiosa (Lyon: Compagnie des libraires, 1541).



(b) Concordance with f. 67v

Figure 5.25: Concordances of fragments with Walter Burley's *Super octo libros physicorum* in a lute labelled "Hans Frei" (KHM SAM 30)

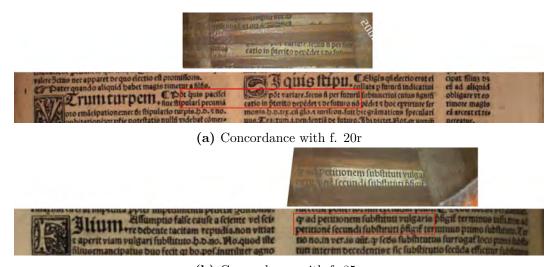
joints of the 35 ribs of the instrument labelled "Iacuo Stadler" in 1619 in Naples are reinforced with narrow fragments of this edition (see 5.26).⁸⁶⁵

All printed editions date from the 16th century and are in rather large formats, which provide a good surface for the production of long paper strips. Three of the texts concern canon law and one physics. Interestingly, works by Baldus de Ubaldis and Bartouls de Saxoferrato, the two most important representatives of the school of commentators (or postglossators), are represented. Why these books were considered waste and were repurposed for the production of lutes warrants further study.

Reinforcements of cracks during repairs and alterations

In 60 lutes examined for this study, one or several layers of reinforcements dating from later repairs could be documented and distinguished according to their stratigraphy and materiality. In 19 cases, only one additional layer after the initial layer was recorded. In 21 cases, two repair layers could be identified, in ten cases, three, and in seven cases four layers. More layers – up to eight – were found in only a few instruments. Since mostly only a part of the inside of lutes is visible, these numbers represent only the minimum number of possible layers that could be observed. Furthermore, reinforcements might have been removed during later interventions. Sometimes the whole instrument

^{865.} MdlM E.26, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110440 (Version 29 July 2020).



(b) Concordance with f. 85v

Figure 5.26: Concordances of fragments with Baldus de Ubaldis' *Super Digesto Novo Lectura* in a lute labelled "Iacouo Stadler", MdlM E.26

was covered by a layer of paper or textile so that nothing underneath could be analysed. The diversity of materials and documents used for repairs is greater than those used for the original production of the instrument. In addition to blank, printed, and manuscript paper, parchment of all qualities can be found in lutes, among other repair materials such as fabric, or wood. The content of the documents and their age (when it was possible to identify them) varied considerably. This variety represents the diversity of what was considered – and traded as – waste during different periods in different places, and what kinds of materials were used for repairs.

In some instruments, notated music can be found. In the aforementioned instrument labelled "Hans Frei in Bologna 1597", in addition to layers of blank white paper, brown paper, linen, there is one single piece of paper showing some musical notation. While this example represents a rather singular finding, a larger sheet of music was used, probably by Leopold Widhalm, during his alteration in 1757 of a lute labelled "Cristoffolo Hoch". The 22 strips are ca. 1 cm in width and the longest fragment shows 14 staves. On one of the strips the name "Johann Christian Grätzler" is written in a Kurrent (German cursive) handwriting, though his identity remains a mystery.

^{866.} GNM MI 55; MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110547 (Version 29 July 2020).

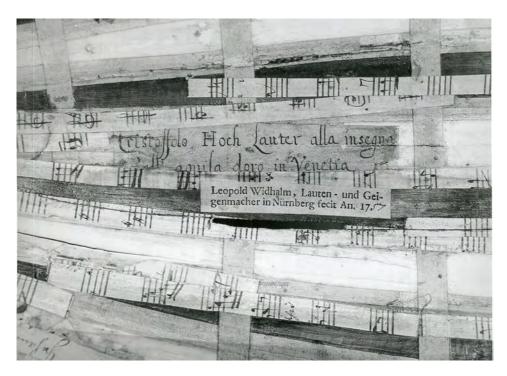


Figure 5.27: Notes used for repair in GNM MI 55

In instruments with several layers, a combination of materials and documents builds a complex stratigraphy of reinforcing materials. In the case of a lute labelled by Pietro Railich in Venice in 1644, it was probably Matthias Hummel who transformed the instrument in 1695 and used a print from the 16th century for his repairs (see fig. 5.28). Broad strips taken from Paulus de Castro's (ca. 1360-1441) Commentaria in ius Romanum were glued in a lateral direction. The type setting is very similar to an edition published 1575 in Venice, but differs in some details. Belse It is remarkable that Hummel at the end of the 17th century used the same type of printer's waste for repairs as was used during the 16th and early 17th century for lute production. One can conclude that a market for these papers must have still existed. Another layer of reinforcement in the same instrument can be connected to the intervention by Karl Sigmund Elias Bang, Belse who worked on the instrument in 1830 in

^{867.} See Ian Watchorn, 'Lauteninstrumente im Germanischen Nationalmuseum Nürnberg' (Nürnberg, 26 April 1989), 28–29.

^{868.} Paulus de Castro, In primam digesti veteris partem commentaria (Venetia: Iunta, 1575), f. 148v.

^{869.} Karl Sigmund Elias Bang, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/b1609 (Version 1 April 2011).

Nuremberg and left a repair label. The papers in different sizes show calculations and skilful geometric sketches. The handwriting in German Kurrent on the fragments is similar to the one on the label. When Bang died in 1852, he was described as a carpenter and drawing teacher at the school of crafts, 870 which would connect his craft to the sketches. It is thus possible that these papers came from Bang's own private stock of paper waste rather than from a market for binder's waste.

During his alterations to a lute, Antonio Stradivari used discarded manuscripts to reinforce repairs. The fact that Stradivari used fragments for reinforcing the inside of the ribs of violins, cellos, and also guitars is well known.⁸⁷¹ In this instrument, the joints between the ribs are reinforced with white paper strips, on which handwriting can be observed in some places. Another layer of thin parchment, also with handwriting, is glued in a lateral direction and might date from the time of production. The next layer consists of 22 visible strips in different sizes on which cursive handwriting in Italian can be discerned. Two handwritings with different inks can be distinguished and it is not clear whether these fragments were applied at the same time. The same is true for some pieces showing empty staves. Since the handwritings of the Stradivari workshop have been well studied by D'Agostino, 872 it could be possible to determine whether the manuscript was a paper used in the context of the workshop, or waste paper, which was purchased specifically to be repurposed. Another layer consists of only six visible strips of white paper in different sizes, which probably dates from the transformation of the instrument into a lute-shaped guitar in 1877 by Dominikus Kasper, who added another layer of 31 pieces of grey fabric, which cover large portions of the other fragments. The two pieces of conifer wood glued close to the upper block and the back probably date from the same intervention. Other, smaller wooden parts are of an earlier date and were inserted without removing the soundboard. However, according to the stratigraphy, the instrument was opened at least four times in order to add more reinforcing material during an intervention.

In many instruments, the different layers create complex puzzles of several materials dating from different periods. In the lute labelled "Laux Maler" in Paris, at least eight layers consisting of paper, parchment, and textile were

^{870. &#}x27;Gestorbene', Neue Münchener Zeitung, no. 207 (31 August 1852): 1666.

^{871.} Échard and Albiero, 'Identifying Medieval Fragments in Three Musical Instruments Made by Antonio Stradivari'.

^{872.} D'Agostino, 'Le scritture dei reperti stradivariani - Handwriting on Stradivarian Artefacts'.



Figure 5.28: Lute with labels by Railich, Hummel and Bang. Different layers of waste paper, GNM MI 45



Figure 5.29: Inside of the back the lute repaired by Antonio Stradivari, MIMB 5203

added over the course of several interventions spanning at least four centuries. Due to the consistency of their overlap, the chronological succession of the fragments can be determined from the time the lute was made, before 1552, until the most recent intervention dating from a restoration in 2003, just before the instrument was acquired by the museum. It is only possible to determine the sequence of the layers if the overlapping of the individual parts results in a clear stratigraphy and the fragments can be distinguished on the basis of the materials or the writing they carry. In some cases, the fragments do not overlap, or they represent different individual ages. That is, when fragments stemming from older bibliographic sources are applied on top of younger fragments they create an incongruent sequence of layers. This is the case in a lute labelled by Marx Unverdorben in the 16th century in Venice (see fig. 5.30).⁸⁷³ One repair label by Daniel Achatius Stadlmann in Wien dating from 1718 indicates a transformation, probably to an 11-course lute. Inside the bowl, many fragments with different handwritings in several languages can be found, indicating numerous repairs and alterations, probably in different countries. The most recent layer might be connected to an intervention presumably undertaken at the end of the 19th or at the beginning of the 20th century, when the soundboard was equipped with a modern cross

^{873.} Stift Herzogenburg, Lower Austria, MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110973 (Version 29 July 2020).

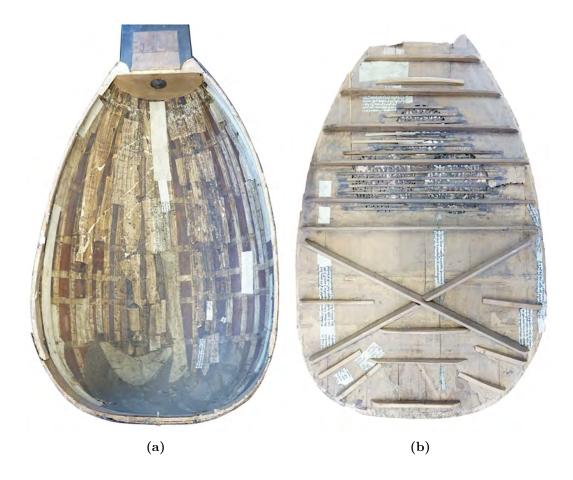


Figure 5.30: Inside of back and soundboard of a lute labelled by Marx Unverdorben, mXp 4110973

barring. The topmost fragments were taken from two manuscript documents in Gothic characters, probably dating from a time before the instrument was produced.

A similar situation can be found in the aforementioned ivory lute, in which an antiphonary of the 15th century was used as a source for vellum. The content of the texts corresponds to the services during the Holy Week and points to southern Germany or Austria as the region of use, where the instrument was built.⁸⁷⁴ The writing is characterised by a round minuscule typical of the 15th century and red time structures for the liturgy of the hours, for example, the

^{874.} All information about the manuscripts in this instrument are based on the exchange with Prof. Dr. Meta Niederkorn, Historisches Hilfswissenschaften, Institut für Geschichte der Universität Wien.

responsorium. In a later repair, a layer of blank, thin parchment strips was added, which has a lower quality than the vellum. The repair might have been undertaken by Gregori Ferdinand Wenger, who turned the instrument into either an 11-course lute or into a mandora in 1709, since his repair label covers one of the strips. A dendrochronological dating suggests that the soundboard was replaced by him. The next layer consists of twelve rather large pieces taken from a manuscript with Gothic letters. It was possible to virtually reassemble three fragments into one bigger piece and another three into a second bigger part of the manuscript. The text is a moral-theological treatise from a genre of 15th-century meditation literature used for the *lectio privata*. The writing is in bastarda style and characterised by emphasis of important sentence beginnings by internal lines in the body of the letter. Two different writers could be distinguished. During the 19th century, the instrument was turned into a lute-shaped guitar, which was repaired and equipped with a new headstock by Georg Dennhöfer in Nuremberg, who left a repair label with the date 1875. His label is written on a thick piece of parchment underneath the soundboard, so the use of at least six other pieces of the same type may be connected to his intervention. The stratigraphy of further fragments does not allow clear determination, due to the incongruent ages of the documents and a lack of clear overlaps. Underneath the soundboard, some cracks were reinforced with parts of an official document from Germany dating from the time between 1515 and 1530. Here, too, three parts could be assembled. The "WIR" in the *intitulatio* is legible, but the following name is missing. In the text, the name "Wilibald" appears and money is mentioned: "Gulden". Furthermore, one layer of several strips of thin, white paper shows part of a printed coat of arms and a cursive handwriting, probably taken from a letter. It was possible to date the characteristic beginnings of the words to the third or fourth quarter of the 17th century. A similar thin white paper bears a coloured drawing of a woman's face.

In total, this instrument carries fragments from six different contexts. Four of them are reused manuscripts dating from different periods between the 15th and 17th century, but were not applied consecutively in order of age. The ecclesiastical and administrative institutions in and around Linz, Augsburg, and Nuremberg, where the instrument was built or altered, represent a lot of possible sources for waste paper and parchment. In this case, Pollard's assumption that binder's waste is processed regionally can be confirmed.

The reason for the application of more and more reinforcing materials was the constant use, maintenance, transformation, and change of function of an instrument over more than 300 years. Thus, the additional layers of fragments



Figure 5.31: Inside of back and soundboard of GNM MINe 262



Figure 5.32: GNM MINe 262, details of the reinforcements of the joints (layer 1)

in lutes show the diversity of documents and materials, such as parchment, paper, and fabric in different qualities, which were considered waste or suitable for repair purposes. They also represent the minimum number of times an instrument had to be opened to carry out repairs and alterations.

For the production of lutes, vellum manuscripts provided the high quality necessary for the reinforcement of joints in instruments of precious and dense materials. Large folio editions of canon law and other academic subjects provided large sheets of paper from which long strips could be cut to cover the joints. During the different periods, a wide array of materials and documents was used or repurposed as repair materials. During the 19th century, however, when the fashion for guitars resulted in the idea of a soundhole instead of a rose for lute-shaped guitars, the entire inside of the back was often covered by a layer of dark coloured paper or fabric. This unified the visible inner surface and covered up the instrument's history of repairs and alterations. This was in keeping with the demand for a uniform design and it also added rigidity to the corpus. It can also be seen as a symptom of the loss of historical knowledge concerning the lute and of the cultural shift towards the generalisation of the lute as a symbol rather than an antique object, evoking earlier ages. A systematic study of the reinforcing layers in lutes and other instruments might lead to further insights about the material history of the objects as well as enrich the bibliographic and fragmentological research.

Conclusion

This chapter described the lute-shaped guitar at the beginning of the 19th century as one type of guitar, among others, that was being produced by reusing old lutes, and which was strongly associated with the accompaniment of the Lied and a simple playing technique. By this period, the specialised



(a) Assembled fragments: layer 3, writer 1



(b) Assembled fragments: layer 3, writer 2

Figure 5.33: Reassembled fragments in GNM MINe 262, moral text for lectio privata, 15th century



 $\textbf{Figure 5.34:} \ \text{Reused official document in GNM MINe 262}, 1515\text{-}1530 \ (\text{reassembled})$



Figure 5.35: Fragments, probably dating from the 17th century, in GNM MINe

knowledge about the lute, its music, and their makers, which had been such an important part of amateur connoisseurship in the previous generation, had vanished. Due to the lute's disappearance from cultural life, the term 'lute' could be redefined and imbued with Romantic ideas. In the hands of the new type of artists, like Theodor Körner, who emerged in the 19th century, the lute became poeticized, projected into the distant past, becoming part of an imaginary idea of the mediaeval world. As objects, guitars in lute-shape were valued mostly for their tonal qualities and symbolic power within this poetic concept, and not for their age or the fame of their makers like before. The tradition of venerating old instruments was, instead, transferred to violins.

To meet the growing demand for guitars for amateur musicians, the business strategies of makers and salesmen had to adapt. Craftsmen who interacted with musical instruments and transformed lutes into lute-shaped guitars came from different professional backgrounds. When transforming old lutes into lute-shaped guitars, the craftsmen applied techniques from the tradition of violin and guitar making. These concerned techniques of wood joinery, the use of materials, string attachment, and decoration. These interventions caused lute-shaped guitars to be perceived later not only as hybrids between guitar and lute, but also as hybrids in terms of technological traditions.

The last part of the chapter widened the focus to consider another aspect of the material history of these instruments. The analysis of the different layers of paper and parchment reinforcement, which were applied during repairs and alterations, illustrates the diverse biographies of these objects, showing the connection between lute making and repair and the practice of reusing binder's waste. As a parable, this analysis reflects the recycled character of old instruments with an interdisciplinary approach. It has shown that, in most lutes, different layers of reinforcements are still visible as testimonies of different epochs of reuse, while in many lute-guitars these layers were covered by one big monochrome layer. Hiding the underlying layers can be interpreted as a kind of generalisation and elimination of the actual object's biography – a development which the lute in general experiences on other levels during this period

6 Conclusion

Coming back to the philosophical problem of the Ship of Theseus and the question of its identity as a growing object, one can conclude that the answer must be culturally derived. The identity cannot be defined by the number of original parts or the traces of its production. Rather, it is shaped by the culture that venerated it and the technological interventions that developed over time to ensure its preservation. The Ship of Theseus is no longer only what it was, but what it has become: the result of a complex process of cultural accumulation.

The culture of the preservation of objects is rooted in the significance that a society bestows upon them. This study has traced the lute in its several cultural functions from the 17th to the 19th century: as a musical instrument, as a symbol, as a commodity, and as an object which had to be adapted, repaired, and altered by several generations of lute makers. Lutes existed in different types in every period, sharing the distinct feature of the lute body. As the most central part of the instrument, it has remained the most stable, becoming a crucial aspect of its veneration as it contains, among other markers of value, the proof of its age. It is the carrier of all distinct features that serve to identify the instrument as a lute, to classify the quality of the instrument according to its shape and materiality, and to assess its value due to its shape, material and maker. As a consequence, all other parts could be changed without causing the instrument to lose its identity, or its quality of age. The lute body was the foundation for all possible alterations and experiments. In the cases in which the body was severely altered, as in cut lutes, it lost its value. Long after the practice of lute-playing with double courses had gone out of fashion, the shape of the lute body served as a signifier for the lute-guitar and as a symbol of the past.

This study has employed an interdisciplinary approach, using a broad spectrum of sources from treatises, lute manuals, forewords in printed lute music and depictions of lutes in literature, poetry and visual arts to construct a narrative of the appreciation of old lutes. This narrative traces the historicist tendencies among groups of lute players characterised by their awareness of the history of the lute and their makers, which prompted the veneration of old instruments as early as the time of the 30 years war, and which extended into the 19th century. The diverse sources have shown the manifold influences that led to this sustained phenomenon. It first appeared at a time when the European network of lute making was devastated. The market dominance of lute making by the families stemming from the Füssen region had hindered the development of similar structures in other countries. The large demand for lutes in France, for example, the European centre of lute music, could no

longer be fulfilled. Instruments from the heyday of lute making became luxury objects due to their scarcity and cultural exaltation. The latter was connected to certain brand names which were already famous before. As objects, they were treated similarly to other collectibles, such as antiques and objects in cabinets of curiosities. The cultural knowledge of lutes within the discourse of the upper class was quite sophisticated, including detailed information about the qualities of lutes, the names of the makers, and their materiality. This specialised, historicist knowledge remained a part of the discourse until the end of the 18th century. Due to the lack of written and iconographic sources depicting the lute in Vienna around 1700, it was necessary to turn to other methods in order to determine the constitutional power of old instruments. In this case, basic calculations concerning the material properties of gut strings permitted a retrospective determination of the size of the lutes in Radolt's lute concert on the basis of an applicable tuning pitch. During the saddle period going from the 18th into the 19th century, the lute was first associated with musical amateurs, before professional and amateur activities then vanished. By analysing the conceptual history of the term 'lute', this study has shown how its significance and connotation changed at the beginning of the 19th century.

The trade in lute-type instruments was analysed by comparing it to existing economic models. Distinguishing between the standard and status markets has made it possible to demonstrate the importance of the social rank of the market players. Specialised dealers, lutenists, and consultants were involved in the trade that saw the highest prices for old lutes or lute fragments. The prices depended on the knowledge of consumption concerning lute makers of the past and the formal characteristics of their products. The most famous and expensive lutes were connected to the attribute Bolognese, which can refer either to the place of production or the form. Owners of instruments connected with this attribute, or with the most famous name, Laux Maler, could be identified in the highest parts of society. It was possible to show the importance of alteration and repair in the business models of the lute makers from craft regulations and other sources concerning lute makers such as Johann Christian Hoffmann in Leipzig. The repair label was identified as being an important part of this business model, on the basis of an applicable identifier of age and quality, but also of advertising. The change in a trade in old lute bodies was linked to the changing musical culture and social restructuring. The musical activities at the beginning of the 19th century demanded other instruments, such as the guitar, and the instrument market adapted. The lute-shaped guitar was integrated into the portfolio of makers and dealers who were detached from the tradition of lute-making, finding new business models for distribution.

The technical analysis presented the material changes that were necessary for the adaptation of the lute into different lute-types. During the dissertation project, more than 100 instruments in private and institutional collections were examined, measured, photographed, and documented in a standardised scheme. When possible, further imaging techniques like X-ray and computed tomography were applied and existing documentations consulted. This approach, combined with the integration of the information into the database structure MusiXplora, provided a comparability of the objects concerning events, places and people involved, as well as technical details of the instruments. By correlating the observed and documented technical details with written and visual sources, the technical traditions and structures of knowledge transfer in the craft could be identified. This made it possible to distinguish between the different historical layers in an object, to identify regional characteristics of certain objects, and also to differentiate between guitar and lute making technologies. The consequences of the repairs and alterations for the vibrational behaviour of the instruments were explained, when possible, by using simple acoustic models. In order to enhance my technical understanding of the instruments being studied during this project, I built a 6-course lute in a state congruent with sources from around 1550 and subsequently altered it into an 11-course lute. I had planned further alterations with the view of reconstructing a possible object biography, but these plans were hindered due to the COVID-19 pandemic.

The structure of this study allows the narrative of the lute to unfold in both a vertical and horizontal directions. In the vertical direction, it shows the musical development of the lute within a certain time period and region. Horizontally, the changes in music, social significance of the instrument, concepts in trade strategies and the technical developments can be compared over an extended period. Every chapter gradually sharpens its focus from a wider perspective to the actual objects. Distinguishing the different spheres in which the lute was involved provides a useful separation of concepts and methodological approaches, with the goal of illuminating the network from different perspectives. In this study, the lute was understood as the centre of a network of many actors: makers, traders, owners, musicians, audience, composers, musical texts, performance venues, trade of materials, and many more. Changes to certain elements of this network over time have been a particular focus of this study. Craftsmen became repairers, transforming rather than producing new instruments. Changes in social activities and conventions led to new busi-

ness models. The social status of lute owners, lute players and the sociocultural value of their musical activities shifted from being associated with the aristocratic elite to connoting the often-mocked musical amateur. This affected the type of instrument they played and their repertoire. Old lutes were the stable centre of these changing factors. As objects, they were adapted to serve across ever-changing cultural paradigms.

A historical study over such a long period has its limitations. This work has not always been able to provide similarly detailed information on all topics covered, and, in some cases, the strict chronological order and distinction between social and economic aspects could not be maintained. The first chapter covers a whole century, while the other chapters focussed on narrower time frames. This was due largely to the goal of following distinct changes in musical developments and instrument types, but was also dictated by the availability of sources. Furthermore, the focus had to be on the centres of musical and craft activities concerning the lute and later the guitar. Accordingly, the later histories of the lute, in England and France, for example, or the use of the lute-shaped guitar in other regions, were not considered. Regarding the selection of lute types, not all existing variations of lutes for solo music could be described. Moreover, the study does not examine the later career of the lute during the 19th and 20th century, which remains a topic for future study.

The revival of early music and the beginning of private musical instrument collections, which later turned into museums, is closely connected with the lute and its different historical forms. In 1886, Oskar Fleischer⁸⁷⁵ published an article about the French lutenist Denis Gaultier containing transcriptions of his compositions. It is one of the first extensive historical studies on a lutenist, and its influence on the early music movement still needs to be studied. The first known dated lute with double courses was by Arnold Dolmetsch and dates from 1893.⁸⁷⁶ At the same time, the guitar experienced a revival in several countries, and lute-shaped guitars and lutes with double strings were used. Instruments from this period differ significantly in style and disposition from the written and material sources. The question of why makers and musicians at that period preferred instruments in the modern style to exact copies according to the models they found in collections has yet to be examined carefully. The hybrid state of lute-type instruments due to the different alterations they had undergone might have been irritating to the first organologists who studied

^{875.} Oskar Fleischer, 'Denis Gaultier', Vierteljahrsschrift für Musikwissenschaft 2 (1886): 1–180.

^{876.} MdlM E.980.2.332; MusiXplora, ed. Josef Focht, https://musixplora.de/mxp/4110604 (Version 29. Juli 2020).

them. This attitude is evident in several restorations, as with the lutes labelled "Laux Maler" in the GNM and in the V&A. During the interventions in the last third of the 20th century, all elements not dating from the time of initial construction were removed in order to present only what was regarded as 'original'. The motivation and values that led to this kind of reconstruction can be seen as the antithesis of the idea of a grown object. A study of the revival of the lute and the transformations of the instruments from the beginning of The Museum Age to the present day would have to include a reflection on the history of historically informed performance practice as well as on modern approaches to restoration. Additionally, the evolution of the term 'original' as a description of the state of conservation of art works in general and musical instruments in particular merits exploration.

The reception of the most famous lute maker, Laux Maler, served as a golden thread throughout in this study. While earlier studies have concentrated on a single aspect of the life or reception of Maler, all known sources concerning the reception of the instruments attributed to his name – including forgeries - were included in this study. However, Laux Maler's reception does not end at the beginning of the 19th century. In 1869, Carl Engel presented his collection of musical instruments in the journal The Athenaeum, in which the instrument by Laux Maler (today in the V&A) is described in the following manner: "nothing has been altered on it, except the tuning pegs - brass and ivory screws having been substituted for the original pegs. The contrivance, as well as a painting of flowers on the sound-board, is probably not older than about a hundred years. The cracks on its pear-shaped body have been carefully mended, and, in my opinion, rather contribute to its dignity, like the wrinkles of a venerable grandsire. Its tone is remarkably fine."877 This instrument served as an example of a lute in the first edition of *The Grove*. In the depiction in the dictionary we can see a heavily altered instrument in a guitar state with additional bass strings. 878 The assessment of the condition as 'unchanged' or 'original' has changed through growing research in this field. As mentioned above, it would be interesting to trace how the perception of these instruments as almost unchanged objects influenced the instrumentarium of the early music movement. In German speaking countries, similar descriptions of lutes by Laux Maler in the Lobkowicz collection⁸⁷⁹ and in studies on early

^{877.} Carl Engel, 'Musical Instruments', The Athenaeum, no. 2162 (3 April 1869): 472.

^{878.} Art. Lute. George Grove, ed., A Dictionary of Music and Musicians (A.D. 1450-1888), vol. 2 (London: Macmillan and Co., 1880), 175–177.

^{879.} D.E., 'Der deutsche Ursprung des Geigenbaus in Italien', $Die\ Presse\ 25,$ no. 327 (27 November 1872): 1–2.

6 Conclusion

violin making in Italy⁸⁸⁰ served to construct a narrative of the foundation of the school of Italian violin making by Germans. Motivated by a nationalist sentiment connected to the founding of the German Reich in 1871, the German names of lute makers in the 16th and 17th centuries in Italy, and especially the fame of the name Laux Maler, offered an occasion to claim credit for the invention of the modern violin as an important form of cultural achievement. A study dedicated to Laux Maler could, in the future, include all of these aspects and cover the different receptions of his fame over a long period.

After the fame of the lute and the knowledge concerning their makers vanished at the end of the 18th century, the violin and its virtuosos were given a stage in the modern format of the public concert. Violins by Cremonese makers, and especially those by Stradivarius, began to be worshipped in a similar way as lutes had been in the centuries before. The appreciation of age and certain brand names of bowed stringed instruments, such as viols and violins, and their constant adaptation to new musical needs is comparable to the history of the lute. In fact, Thomas Mace was already using the same attributes and arguments for the high value of old viols as for olds lutes. Mace states, "yet we chiefly Value Old Instruments, before New; for by Experience, they are found to be far the Best."881 The extreme age of all materials used, such as wood, glue, parchment, paper and varnish, he considered, caused them to dry over time. Through this process, they are "made Gentle, Rarified, or (to say Better, even) Ayrified; so that That Stiffness, Stubbornness, or Clunquiness" 882 would give way to a better playability and movability of the wood. According to Mace, "Age Adds Goodness to Instruments; therefore They have the Advantage of all our Late Work-men."883 This argumentation has remained largely unchanged to the present day, even if the circumstances of musical performance, trade and ownership, as well as the research methods used to try to prove this hypothesis, have changed. The approach of connecting the reception of objects with material, musical, socio-cultural and economic perspectives could be transferred and adapted to study the history of the appreciation of old violins. Like lutes, old violins can be regarded as luxury objects capable of fulfilling several functions as musical instruments, symbols, collectibles, commodities and investments, traded in specific market forms such as auctions.

By tracing the history of the lute in terms of its significance in the musical,

^{880.} Edmund Schebeck, Der Geigenbau in Italien und sein deutscher Ursprung: eine historische Skizze (Prag, 1874), 3.

^{881.} Mace, Musick's Monument, 245.

^{882.} Mace, 245.

^{883.} Mace, 246.

6 Conclusion

social, economic and technological cultures in different periods, this study contributes to organology as a field of material culture studies. It evaluates the actual extant material substance of the instruments and diversity of the different historic layers and transformations, which are difficult to grasp with monocausal explanation patterns. One instrument can represent several functions, instrument types, and musical contexts. The motivations for reuse and adaptation have to be explained according to the changing cultural processes. For musical instrument collections, it could be desirable to include these object biographies in the presentation of the instruments and to explain how they have changed their physical appearance since leaving the workshop. Furthermore, a lute made in the 16th century and is today in the state of a 13-course lute might have a greater narrative potential than an object in an unaltered state.⁸⁸⁴ By combining different methodological approaches with further systematic development of the database structure MusiXplora, this study profited from the evaluation of big data sets and shows the potential of the use of digital structures in contemporary research in the humanities. Due to their nature as a digital research environment, modern database structures allow the utilisation of all events affecting an object: its use, trading history, repairs, and changes in typology. In the future, this work might serve to further develop the visualisation and transfer of knowledge in the context of museums by depicting the object biography of the instruments. Finally, this study aims to stimulate further research focusing on the identity of grown objects as products of a cultural development.

^{884.} A first attempt to present this development was made during an exhibition at the GNM. See Sebastian Kirsch and Klaus Martius, 'Ein Objekt - vier Instrumente', in *Abenteuer Forschung*, ed. G. Ulrich Großmann, Ausstellungskataloge des Germanischen Nationalmuseums (Nürnberg: Verlag des Germanisches Nationalmuseums, 2019), 170–174.

2.1 2.2	Tuning instruction for a suite by Bouvier in Ballard (1638), p.40 One of the few representations of a lute with two pegboxes in French painting. Jacques Linard: The Five Senses and the Four	20
	Elements, 1627, Musée du Louvre, inv. no. DL 1970-12, © 1997	27
0.2	RMN-Grand Palais (musée du Louvre) / Daniel Arnaudet	27
2.3	Decorations on a lute, MdlM E.25. Photos: © Jean-Marc Anglès	36
2.4	Representations with lutes in Ripa's <i>Iconologia</i> : (a) Sanguigno	90
	per l'aria, (b) Consuetudine, (c) Europa, (d) Scandolo	39
2.5	Lute as judge of love, peace, and war in La Rhétorique des Dieux	42
2.6	Values of lutes with the attribute 'old' in Paris inventories	
	(1587-1648)	52
2.7	Trademark (circled in red) on the engraving by Pierre Woeiriot	
	de Bouzey (1562) depicting Caspar Tieffenbrucker. © gallica.bnf.fr	
	/ BnF	73
2.8	Lutes with Bolognese outline in 17th century illustrations: (a)	
	François de Troy: Charles Mouton, 1690 (Paris, Louvre, inv.	
	no. RF 2469). Photo: © 2008 RMN-Grand Palais (musée du	
	Louvre) / Franck Raux; (b) Illustration in the Lute School of	
	Perrine, Paris 1679; (c) Godfrey Kneller: Arabella Hunt, 1692,	
	Cabinet Office London. Photo: https://commons.wikimedia.or	
	g/wiki/File:Arabella_Hunt_(Godfrey_Kneller_1692).png; (d)	
	Frans van Mieris the Elder: Portrait of François de le Boë	
	Sylvius and his wife, 1672 (Gemäldegalerie Alte Meister Dresden,	
	inv. no. 1743). © Gemäldegalerie Alte Meister, Staatliche Kun-	
	stsammlungen Dresden. Photo: Elke Estel	80
2.9	Prices for lutes with attribution of provenance in Paris invent-	
	ories 1587-1661	83
2.10	Earliest known dated labels from production and repairs by	
	Barttner (or Garttner) and Helm, Salzburg Museum 1087. Photo:	
	Sebastian Kirsch	88

2.11	Signature by "Monsieur Dumesnil", MdlM E.2005.3.1. Photo:	
	Musée de la musique, Paris	89
2.12	1 1 0	
	box of the lute altered by Stradivari. Photo: Heidi von Rüden,	
	2021; Musikinstrumenten-Museum, SIM SPK Berlin and Cacci-	
	atori, Fausto, ed. Antonio Stradivari: Disegni, modelli, forme.	
	Cremona: Museo del Violino, 2016. Photos: Vico Chamla, Stu-	
	dio Pi Tre, Alessandro Bardelli	94
2.13	Lute, presumably expanded from eight courses to 12 courses,	
	label: Mangno Tieffenbrucker in Padua // Fatto nel anno 1504	
	lynope // M()o. Hagiopolita Renou: // Anno 1675. Photos:	
	Sebastian Kirsch	98
2.14	(a) Corpus by Wolfgang Wolf, top, neck and pegbox probably	
	1645. Photos: Urs Langenbacher; (b) Corpus by Jonas Steh-	
	elin with additions by Böningk, CT section and detail of upper	
	block. Photos: Sebastian Kirsch	99
2.15	(a) Neck of the instrument altered by Bochem in 1673, Veste	
	Coburg, XXV/2. Photo: Friedemann Hellwig; (b) pegbox on	
	corpus labelled "Vendliò Venere" HLMD Kg. 67:106. Photo:	
	Klaus Martius	101
2.16	Hendrick Martensz. Sorgh: Lute player, 1661, Rijksmuseum	
	Amsterdam, inv. no. SK-A-495 (detail). Photo: Dupper Wzn.	
	Bequest, Dordrecht	103
2.17	Hand-coloured engraving by Nicolas Bonnart: Damon joüant de	
	l'Angelique (1686-1690), Los Angeles County Museum of Art,	
	M.2002.57.104	105
2.18	(a) Angélique, corpus labelled by Wendelin Tieffenbrucker, 17th	
	century modification, YCMI 4563.1960. Photo: Belle Skin-	
	ner Collection; (b) Angélique MdlM E.980.2.317. © Jean-Marc	
	Anglès (c) added piece of ebony in the groove of the upper nut,	
	Photo: Sebastian Kirsch	106
2.19	Burn marks on the inside of lute soundboards: (a) MfA 1986.7.	
	Photo: Boston MfA; (b) MdlM E.2005.3.1: also on the rose	
	bars. Photo: Sebastian Kirsch; (c) GNM MI 1011. Photo:	
	Sebastian Kirsch	109
2.20	Soundboard of the lute labelled "Laux Maler", MdlM E.2005.3.1.	
	© Jean-Marc Anglès	112
2.21	Frans van Mieris (I): The Letter Writer (detail), 1680, Rijks-	
	museum Amsterdam inv No SK-A-261	113

2.22	Various buttons presumably added later: (a) Corpus signed	
	"Jacob & Ulrich Tieffenbrucker // In Venetia.", ca.1550, altered	
	1696 by Thomas Edlinger (private property, Vienna). Photos:	
	Sebastian Kirsch; (b) Corpus signed "Magno dieffopruchar a	
	venetia // 1604", alteration by Matthias Fux, Vienna 1685,	
	Kremsmünster Abbey, decorated knob (detail) and profile of	
	upper button visible in X-ray. Photos: Sebastian Kirsch, X-	
	ray: Klaus Martius	114
2.23	(a) Cut upper block; (b) reinforcement, both on an instrument	
	made during this dissertation. Photos: Sebastian Kirsch	115
2.24	Upper block reinforcements visualised by radiographs: (a) CT	
	section of the lute repaired by Jakob Weiß in Kremsmünster,	
	mXp 4110982. CT-image: Hospital Martha-Maria, Nuremberg;	
	(b) Angélique, MdlM E.980.2.317. X-Ray: Laboratoire Musée	
	de la musique, Paris; (c) CT sectional image of lute signed by	
	Michael Garttner, Salzburg Museum 1087. CT-image: Mark	
	McCoy, Salzburg	116
2.25	(a) Back of a lute altered by Jakob Weiß (KrAb, mXp 4110982)	
	with joint in the middle (Photo: Sebastian Kirsch); left: Joint	
	visible CT cross-section of the upper block (CT-image: Hospital	
	Martha-Maria, Nuremberg). (b) Corpus, anonymous, joint in	
	the middle of the back, Öberösterreichisches Landesmuseum	
	Mu 66. Photo: Klaus Martius (c) Cut-down corpus, unsigned,	
	joint in the middle, DM 35252. Photo: Deutsches Museum,	
	München, Archiv, CD_L7302-16	118
2.26	Theorbo, altered by Michael Alban mXp 4110945; top right:	
	repair signatures of Alban and Josef Krenn, joints of segments	
	visible; bottom right: View from above: eleven segments form	
	the newly assembled back. Photos: Sebastian Kirsch	119
2.27	(a) Rep weave, (b-d) board weave. (a) Corpus labelled "Hans	
	Frei in Bologna", KrAb mXp 4110287. Photo: Sebastian Kirsch	
	(b) Textile ribbon to the lute with repair label by Andreas	
	Berr, Boston MfA 1986.7. Photo: Sebastian Kirsch (c) Corpus	
	by Georg Greiff, HLMD Kg 67:103. Photo: Friedemann Hell-	
	wig (d) Corpus labelled by Wendelin Tieffenbrucker, HLMD Kg	
	67:1066. Photo: Friedemann Hellwig	122
2.28		
	ropolitan Museum of Art, inv. no. 50.189; (b) Lute Player	
	(detail), French School, Hamburger Kunsthalle, inv. no. 532.	
	Photo: bpk / Hamburger Kunsthalle	123

2.29	Caravaggio, Lute Player (a) Version in the Hermitage, St Petersburg, painted 1595-96 (inv. no. ge-45). Photo: Hermitage Mu-	
	seum; (b) Version in the Metropolitan Museum of Art, New	125
2.30	(a) Schematic representation of the neck transition for a lute with six courses; (b) Widening of the neck for a lute with eight courses while retaining the dimensions of the old top (previous	
2.31		126
2.32	signed by Giorgio Reicart, MIMB 4666. Photos: Sebastian Kirsch (a) Eustache Le Sueur: Réunion d'amis, 1640 (commissioned	126
	by Anne de Chambré), Louvre inv. no. INV 8063; (b) detail: the lutenist Denis Gaultier holding a lute with highlighted	100
2.33	fingerboard tips. Photos: Sebastian Kirsch	128128
3.1	Tunings of the different lutes in Radolt's first lute concert	143
3.2	Maximum lengths and diameters (blue) for lute strings in Radolt's lute concert at $a' = 460 \mathrm{Hz}$. Comparison with extant in-	151
3.3	struments and the bore diameter of their bridges Maximum lengths and diameters (blue) for lute strings in Radolt's lute concert at $a'=487.35\mathrm{Hz}$. Comparison with extant	151
3.4	instruments and the bore diameter of their bridges Possible instruments for Radolt's first lute concert: (a) Lute	152
	signed "In Venetia Vendelinus Venere. // Anno 1626", modified around 1700, KHM SAM 616; (b) Lute signed "Hans Frey", modified around 1700, KHM SAM 29; (c) Lute signed "Jacob"	
	Langenwalder // Fiessen 1627", modified by Matthias Greimbl, Kremsmünster 1678, KrAb mXp 4110726. Photos: Sebastian	
3.5	Kirsch	154
J.J	nese Lauten- und Geigenmacher, WStLA, Hauptarchiv – Akten,	105
	A1: 3/1696	165

3.6	Seal of the bürgerlichen Lauten- und Geigenmacher in Vienna.	
	Recto and verso of the last page of the regulations of the Vien-	
	nese Lauten- und Geigenmacher. WStLA, Hauptarchiv – Ein-	
	zelstück 3.11.R2.49 - Geigenmacher	168
3.7	Seals in the last will of Andreas Bär: (a) Andreas Bär, (b) Jo-	
	hann Joseph Roth, (c) Ferdinand Knittlmayr, (c) Johann Riedl.	
	WStLA, Hauptarchiv – Einzelstück 1.2.3.1.A1.3385/1722 - 3385/1	722
	Testament Andrä Beer 1722	170
3.8	Labels of (a) MIMUL 3237 and (b) MIMUL 5188. Photos:	
	Fabian Everding	172
3.9	Repair labels by Fux: (a) MIMB 5198; (b) lute labelled "Tief-	
	fenbrucker" MdlM D.AD.48483. Photos: Sebastian Kirsch	174
3.10	Necks and pegboxes of the lutes in Kremsmünster Abbey, Upper	
	Austria. Photo: Sebastian Kirsch	177
3.11	Lutes in Bolognese shape: (a) "Johannes Blasius Weigert", Linz	
	1721 (GNM MIR 898). Photo: © GNM; (b) "Hans Frei" and	
	"Matthias Fux () in Wienn 1683 zuegericht." KrAb mXp	
	4110287; (c) Unsigned instrument, KrAb 4110375; (d) "Laux	
	Maler" (probably fake) and "Churfürstlich instrumentmacher	
	// Martin Kaiser Verneiert", Neukloster, Wiener Neustadt, mXp	
	4110404. Photos (b-c): Sebastian Kirsch	179
3.12	(a) Lute, signed "Hans Frei" and "Heinrich Kramer Lauten //	
	und Geigenmacher zu gericht Wienn 1711" mXp 4110300; (b)	
	Lute, signed "Magno dieffobruchar a venetia 1501" and "Hein-	
	rich Kramer Lauten und // Geigenmacher in Wienn 171(3) //	
	zu gericht", KHM Vienna, SAM 711; (c) Lute, signed "Pietro	
	Raillich al Santo in Padoua 1669" and "Johann Antoni Fichtl	
	// zuegericht inn Wienn 1720", MET 2008.3a, b; (d) Lute,	
	signed "Michael Garttner // in Salzburg 1524", "walthassar	
	Helm/ in Saltzburg . 1594" and "Andreas Ferdinandus Mayr	
	//Hof=Laut= und Geigenmacher// in Saltzburg an. 1723 / re-	
	paravit 1723", Salzburg Museum 1087. Photos: (b) Sebastian	
	Kirsch, (c) © Salzburg Museum, InvNr. MI 1087	181
	First part of the movement 101 in the manuscript CZ-Lb 28 .	184
3.14	Aria in A-minor by Count Losy, PL-Wu Ms. RM 4142, p.82.	186

3.15	(a) Black stained outside lining, probably added by Mathias Fux	
	during his work in 1689 on an instrument signed "Wendelinus	
	Tieffenbrucker", MdlM D.AD.48483, mXp 4110930; (b) Lining	
	with profile, to be removed before removing the soundboard,	
	theorbo by Rudolf Höß, Munich, 1698, GNM MI 101. Photos:	
	Sebastian Kirsch	188
3.16	Replaced parts in soundboards (slightly highlighted): (a) The-	
	orbo by Rudolph Höß, Munich 1698, GNM MI1011; (b) Tiorbino,	
	signed "Tobbia Fiscier Siena 1710.", MIMUL 0502, mXp 4010502;	
	(c) "Hans Frei", modified by Mathias Fux in 1683, KrAb mXp	
	4110287; (d) Angélique, MdlM E.980.2.31. Photos: Sebastian	
	Kirsch	190
3.17	X-ray images (inverted colour) of the soundboards of four lutes	
	in Kremsmünster Abbey: (a) Lute body signed "Magno dief-	
	fobruchar a venetia. 1604", modified by Matthias Fux in 1685,	
	mXp 4110503; (b) Lute body signed "Hans Frei", modified by	
	Mathias Fux in 1683, mXp 4110287; (c) Unsigned lute in Bo-	
	lognese shape, modified around 1685, mXp 4110824; (d) Lute	
	body (anonymous), modified by Jacob Weiß in Linz in 1720,	
	mXp 4110982. X-Rays: Klaus Martius	192
3.18	Soundboard of a lute made by the author after Laux Maler (CT-	
	image): (a) initial state for six courses; (b) same soundboard	
	after the modification to eleven courses. Green: added bars,	
	red: bars modified in height. CT-images: Eva Seifert, Walter	
	Wilke, (Leipzig University Hospital), Sebastian Kirsch	194
1 1		100
4.1	Tuning and ambitus of the 13-course lute and the German theorbo	199
4.2	Carmontelle: Mr de Kohault, musicien autrichien, Musée de	വാ
1.9	, , , , , , , , , , , , , , , , , , , ,	203
4.3	Portrait of Christian Gottlieb Scheidler by Christian Xeller (ca.	205
4.4	1812), Historisches Museum Frankfurt am Main, inv. no. B 363	200
4.4	Roman depiction of a lute-shaped instrument in Baron's <i>Un-</i>	015
4 5	tersuchung p. 31	215
4.5	Interpictoriality in Baron's <i>Untersuchung</i> : (a) Depictions in	
	Otto Sperlings Ad Nunnum, p. 69; (b) Baron's reproduction	
	p.15; (c) Depiction of Jewish stringed instruments in Athanas-	
	ius Kircher's Musurgia Universalis p. 48; (d) Baron's reproduc-	
	tion p. 43; (e) Depiction in Hans Neusidler's <i>Lautenbuch</i> ; (f)	010
	Baron's reproduction p. 58	218

4.6	Life dates of lute makers mentioned in Baron's <i>Untersuchung</i> .	
	Visualisation in MusiXplora	221
4.7	Prices for lutes, repairs, and modifications according to the cited	
	sources. The yearly costs for maintenance given in Kämbl's bills	
	have been converted from Gulden into Reichsthaler	235
4.8	Laux Maler labels: (a) GNM MI 54. Photo: Friedemann Hell-	
	wig; (b) Baron's <i>Untersuchung</i> ; (c) MdlM E.2001.1.1; Photo:	
	Sebastian Kirsch (d) London V&A 194:1, 2-1882; ©Victoria &	
	Albert Museum, London(e) Lobkowicz 1931E. Photo: Dr. Jan	
	Čižmář; (f) Lobkowicz 1408E. Photo: Dr. Jan Čižmář; (g) Halle	
	MS 168. Photo: Roland Hentzschel; (h) GNM MI 619. Photo:	
	Klaus Martius; (i) KHM SAM 28. Photo: Sebastian Kirsch; (j)	
	Wiener Neustadt, mXp 4110404. Photo: Sebastian Kirsch	242
4.9	Additional piece on the bass side of the neck, bridge is offset	
	to the bass side. Lute labelled "hans fichtoldt // in fiessen	
	// 1627" with later modifications, MdlM E.998.2.2. Photo: $\ \ \ \ $	
	Jean-Marc Anglès	246
4.10	Different forms of bass riders on modified lutes: (a) Lute by	
	Joachim Tielke, Hamburg 1676, modified between 1720-1750,	
	MIMUL 0496; (b) Lute (1550-1650) with later modifications,	
	MfA 1986.7; (c) Lute labelled "hans fichtoldt // in fiessen //	
	1627" with later modifications, MdlM E.998.2.2. Photos: Se-	
	bastian Kirsch	247
4.11	e v	
	sion from 11 to 13 courses: (a) Johann Wilhelm Stör: Portrait	
	Ulrich Haffner (1732, A-Wn). Photo: ONB Wien; (b) Por-	
	trait Adam Falkenhagen (1737-1739, Herzog August Bibliothek	
	Wolfenbüttel, inv. no. A 6327). Photo: Herzog August Biblio-	0.40
1.10	thek Wolfenbüttel; Bilddatei: haba-06327 CC	249
4.12	,	
	bruker.", modified by Thomas Edlinger in 1724, National Mu-	
	sic Museum, Vermillion (SD) 10.214. Photos: National Music	
	Museum, The University of South Dakota, Bill Willroth, Sr.,	250
1 19	Photographer	250
4.13		วรา
111	the auction catalogue of the Amerling collection in 1912 Old lute body, neck probably made by Fux in 1681, 11-course	252
4.14	theorbo pegbox with additional riders for 13 courses in total,	
	MIMB 5199. Photos: Sebastian Kirsch	255
	TATTATO 0199. I HOTOS. DEDUSTIAN IZHSUH	∠∪∪

4.15	Theorbo and its neck extension with three pegboxes, labelled	
	"1613//IN PADVOA Vvendelio Venere" and repaired or modi-	
	fied by Sebastian Schelle in 1723 and 1726, MIMUL 3357. Pho-	
		257
4.16	Lute, transformed into a mandora with 6 courses. Neck made	
	smaller. Old width can be deduced from the visible traces of	
	the former fingerboard tips. Paris, MdlM E.1184. Photos: ©	
	Jean-Marc Anglès	259
4.17	Lute body by Leonhard Pradter, transformed into a mandora	
	with 7 courses by Johann Joseph Muschl in Prague, 1781 (BNM	
	Mu7). Photos: Sebastian Kirsch	261
4.18	Plate LVI of Gabriel von Seidl's Der Neubau des Bayerischen	
	Nationalmuseum in München, showing the instrument in its	
	mandora state in the showcase (red mark). Detail enlarged on	
	the right	262
4.19	Mandora made by Jacob Weiß in 1726, front and detail of the	
	pegbox (Oberösterreichisches Landesmuseum Linz Mu 63). The	
	treble rider was added later. First and lowest courses are single.	
	Photos: Klaus Martius	264
4.20	Mandora made by Daniel Achatius Stadlmnann, Vienna 1720,	
	front and detail of the pegbox (KrAb mXp 4110375). The treble	
	rider and the last peg were added later: Photos: Sebastian	
	Kirsch (left) Andreas Ursel (right)	265
4.21	Lute, labelled "Laux Maler", Germanisches Nationalmuseum,	
	GNM MI 54, before restoration. Photo: Friedemann Hellwig .	268
4.22	Diverse examples of hollowed out upper blocks: (a) "Laux Maler",	
	GNM MI 54. Photo: Friedemann Hellwig; (b) "Laux Maler",	
	GNM MI 619. Technical drawing: Klaus Martius;(c) Tiorbino,	
	labelled "Matteo Sellas", MIMUL 0495. CT-image: Eva Seiftert,	
	Walter Wilke Hospital University Leipzig, Sebastian Kirsch; (d)	
	"Laux Maler", MdlM E.2005.3.1. Photo: Sebastian Kirsch;	
	(e) Lute, labelled "Leopold Widhalm" 1755 and "Matth. Jg.	
	Brandstätter reparavit Vienna A. 1826", GNM MIR 903. Photo:	
	Klaus Martius; (f) "Joachim Tielke", 1676, bass rider later,	
	MIMUL 0496. Photo: Sebastian Kirsch	270
4.23	(a) Rose of lute labelled "Laux Maler", Lobkowicz E 1408; (b)	
	Rose of lute labelled "Laux Maler" in MdlM E.2005.3.1. (Photo:	
	© Jean-Marc Anglès)	271

5.1	Lute-shaped guitars with five double courses in the MdlM. Pho-	
	tos: (a) Daniel Sinier de Ridder (b) © Jean-Marc Anglès	276
5.2	August Harder's setting of Rochlitz's poem An die Laute	281
5.3	Johann Franz Xaver Sterkel's setting of Rochlitz's poem An die	
	Laute	282
5.4	Photographs of Theodor Körner's lute. Photos: (a) Peschel	
	1898, p. 98 (b) © SLUB / Deutsche Fotothek / Möbius, Walter	292
5.5	Leaflet of the Körnermuseum, 1875	293
5.6	Caspar David Friedrich: Der Traum des Musikers, chalk draw-	
	ing, around 1826/27, Hamburger Kunsthalle, inv. no. 41113.	
	Photo: bpk Hamburger Kunsthalle Elke Walford	298
5.7	Johann Georg Schreiner: Die Lautenspielerin, lithography after	
	Adolf Schmidt, private property	300
5.8	Julius Schnorr von Carolsfeld: Nemisee mit Lautenspieler, 1821,	
	pen and brown ink over pencil, Staatliche Kunstsammlungen	
	Dresden, Kupferstichkabinett, inv. no. C 1908-866. © Kupferstich	1-
	Kabinett, Staatliche Kunstsammlungen Dresden. Photo: An-	
	dreas Diesend	301
5.9	Excerpt from the <i>Preis-Courant</i> of Carl August Klemm, ca	
	1820. Photo: Markus Zepf / Landesarchiv Thüringen – Hauptstaa	t-
	sarchiv Weimar, Kunst und Wissenschaft – Hofwesen A 9671,	
	Bl. 2	320
5.10	()	
	as well as the place and date of production of the object (MET	
	89.2.253); (b) handwritten repair label by Friedrich Schmidt	
	noting the previous state of the instrument as lute (MIMNK	
	657). Photos: Sebastian Kirsch	325
5.11	Lute-shaped guitars with several renewed parts. Photos: (a&b	201
- 10	Marion Wenzel) (c) Sebastian Kirsch	331
5.12	1 0 1	000
F 10	tos: (a & b) Sebastian Kirsch (c) Marion Wenzel	332
5.13	Lute-shaped guitars made in the 19th century. Photos: Se-	22.4
F 14	bastian Kirsch	334
3.14	Soundboards of lute-shaped guitars and Wettengel's illustra-	
	tion. Photos: (a) Klaus Martius (b) Sebastian Kirsch (c) CT-	
	image: Eva Seifert, Walter Wilke, (Leipzig University Hospital), Sebastian Kirsch	337
5.15	Neck joints of lute-shaped guitars. Photos: (a) Sebastian Kirsch	JJ 1
0.10	(b-d) CT-images: Eva Seifert, Walter Wilke, (Leipzig Univer-	
	sity Hospital). Sebastian Kirsch	338

5.16	Covered neck joints. Photos: Sebastian Kirsch	339
5.17	Joints of head stocks in lute-shaped guitars. Photos: Sebastian	
	Kirsch	340
5.18	Headstocks of lute-shaped guitars. Photos: Sebastian Kirsch .	343
	Bridges on lute-shaped guitars compared to a lute bridge. Pho-	
	tos: Sebastian Kirsch	344
5.20	Fingerboard wear. Green: light wear, orange: medium, red:	
	heavy. Photos: Sebastian Kirsch	345
5.21	Characteristic decorative elements. Photos: Sebastian Kirsch.	348
5.22	Rose and soundhole on lute guitars. Photos: Sebastian Kirsch	349
	Reinforcements in lute backs. Photos: (a) Friedemann Hellwig	
	(b) 5203, Lute, Photo: Sebastian Kirsch, 2019; Musikinstrumente	n-
	Museum, SIM SPK Berlin	352
5.24	Vellum as joint reinforcement. Photos: (a) Sebastian Kirsch	
	(b) Boston MfA	358
5.25		
	ros physicorum in a lute labelled "Hans Frei" (KHM SAM 30).	
	Photos: Sebastian Kirsch	360
5.26	Concordances of fragments with Baldus de Ubaldis' Super Di-	
	gesto Novo Lectura in a lute labelled "Iacouo Stadler", MdlM	
	E.26. Photos: Sebastian Kirsch	361
5.27	Notes used for repair in GNM MI 55. Photo: GNM	362
5.28	Lute with labels by Railich, Hummel and Bang. Different layers	
	of waste paper, GNM MI 45. Photo: GNM	364
5.29	Inside of the back of the lute repaired by Antonio Stradivari,	
	5303, Lute, Photo: Sebastian Kirsch, 2019; Musikinstrumenten-	
	Museum, SIM SPK Berlin	365
5.30	Inside of back and soundboard of a lute labelled by Marx Un-	
	verdorben, mXp 4110973. Photo: Sebastian Kirsch	366
5.31	Inside of back and soundboard of GNM MINe 262. Photos:	
	Sebastian Kirsch	368
5.32	GNM MINe 262, details of the reinforcements of the joints (layer	
	1). Photos: Sebastian Kirsch	369
5.33	Reassembled fragments in GNM MINe 262, moral text for <i>lec</i> -	
	tio privata, 15th century. Photos: Meike Wolters-Rosbach, Se-	
	bastian Kirsch	370
5.34	Reused official document in GNM MINe 262, 1515-1530 (reas-	
	sembled). Photos: Meike Wolters-Rosbach, Sebastian Kirsch	371

5.35 Fragments, probably dating from the 17th century, in GNM MINe 262. Photos: Meike Wolters-Rosbach, Sebastian Kirsch 372

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