



# TRADITIONAL EUROPEAN CRAFT PRACTICES

An International Specialised Skills Institute Fellowship.

**LUCA LETTIERI**

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# i. Acknowledgements

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The Fellow would like to thank the following individuals and organisations who generously gave their time and their expertise to assist, advise and guide him throughout his IAF Fellowship.

## Awarding Body – International Specialised Skills Institute (ISS Institute)

The ISS Institute plays a pivotal role in creating value and opportunity, encouraging new thinking and early adoption of ideas and practice by investing in individuals.

The overarching aim of the ISS Institute is to support the development of a “Smarter Australia”. The Institute does this via the provision of Fellowships that provide the opportunity for Australians to undertake international skills development and applied research that will have a positive impact on Australian industry and the broader community.

The International Specialised Skills Institute was founded 28 years ago, by Sir James Gobbo AC, CVO, QC, and former Governor of Victoria, who had a vision of building a community of industry specialists who would lead the up-skilling of the Australian workforce. The Fellowship Program builds shared learning, leadership and innovation across the broad range of industry sectors worked with. Fellows are supported to disseminate learning's and ideas, facilitate change and advocate for best practice through the sharing of their Fellowship learning's with peers, colleagues, government, industry and community.

Since its establishment 28 years ago, ISS Institute has supported over 450 Fellows to undertake research across a wide range of sectors which in turn has

led to positive change, the adoption of best practice approaches and new ways of working in Australia.

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## Fellowship Sponsor - The Italian Australian Foundation

The Fellow sincerely thanks the Italian Australian Foundation (previously known as the Italian Services Institute) for providing funding support for this Fellowship and to the ISS Institute. The Italian Australian Foundation was established, inter alia, to advance the education of Australian residents who are of Italian descent. The Fellowship provides the opportunity for successful Fellows to advance their skills and knowledge. The Italian Australian Foundation and ISS Institute work with the successful recipients upon their return to share and publicise the learnings and recommendations from their Fellowship investigation.

## Personal Acknowledgements

### **In Australia**

- » Kingsley Mundy, IAS
- » Jam Factory, Adelaide

### **In Italy**

- » Roberto Cavagnoli – Luthier. Cremona
- » Arcangeli Pietro S. N. C. – Glass blowing mould makers, Murano, Venice
- » Scarpelli mosaici – Pietra Dura Workshop
- » Fonderia Artistica Mapelli – Foundry, Milan

### **In Denmark**

- » Kristian Frandsen – Cabinet Maker

## ii. Executive Summary

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Luca Lettieri is a multidisciplinary Furniture maker, this Fellowship has allowed Luca to gain practical skills and historical knowledge in areas of woodworking, weaving, stone work and casting.

The purpose of the Fellowship was to undertake a research trip focusing on gaining knowledge and skills relating to traditional European craft practices in Italy, Germany and Denmark. The aim of the Fellowship was to visit workshops of skilled artisans to better understand traditional techniques and better understand how practical traditions are passed down through generations for cultural preservation.

Secondly a portion of the Fellowship was dedicated to meeting with curators of culturally significant museums and galleries to better understand the diverse ecology of the European craft tradition through historic objects and the cultural and economic impacts that were the catalyst for such works.

The photographic cataloguing of these skill-based workshops will provide a framework for the Fellow to transfer these skills through formal workshops in order to add value to the Australian craft landscape.

# 1. Fellowship Background

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Luca Lettieri is a multidisciplinary artist who has a background in formal cabinet making. Luca has worked in commercial furniture workshops and small studios since he was 18 also completing additional study at the Sturt School for Wood in Mittagong NSW, Australia's most recognised school for formal cabinetmaking techniques. In this time Luca was taught by leading woodworking craftspeople in Australia including David Upfil-Brown and Neil Erasmus. Both fostered his passion for working with hand tools and staying true to traditional methods. Luca is now based in Adelaide where his practice combines traditional joinery along with uses of other materials such as Ceramic and precious metals to create bespoke pieces for private commissions and his exhibition practice.

Luca is greatly inspired by his Italian heritage, his family were subsistence farmers from Rofrano, a small village In the Province of Campagnia. He draws from the tradition of resourcefulness and frugality that forced subsistence farmers to problem solve and attempt tasks with little to no formal training and only tasset knowledge out of a need to create.

## Qualifications:

- » Certificate IV Furniture Design & Technology – Sturt School for Wood
- » Jam Factory Associate
- » Certificate III Design Fundamentals – Swinburne TAFE
- » ISSI Fellow

## Aims of Fellowship Program

- » To observe and participate in the learning of traditional woodworking techniques specific to Italy such as violin making and wooden glass-blowing and mould making.
- » To visit museums and galleries where exhibitions focus on folk and craft traditions specific to Europe to develop further understanding of his own family history and the importance of European culture on the Australian furniture making industry, with the aim to continue the legacy of craft and provide a well-informed learning platform for others.
- » To learn Danish paper cord weaving specific to furniture, a skill not accessible in Australia.
- » Develop short workshops to better facilitate the training of skills learned abroad based on traditional teaching methods used in Europe, with the aim to further the skills of Australian craft practitioners.

## The Australian Context

Australia has a rich tradition of woodworking born from European settlers coming to Australia and setting up workshops and businesses. The large influx of Europeans post the First and Second World Wars further bolstered the workforce and provided both skilled craftspeople and unskilled labour who contributed to the running of large scale furniture manufacturers. Since this period, Australia has had a steadily declining furniture industry and as a result, less skilled craftspeople to provide training and mentorship for young people wanting to learn various woodworking crafts.

During the period 2010 - 2017 in the joinery trades, the number of apprenticeship commencements and completions per year dropped from 2661 to 1176. Of these, 80% were cabinetmakers and 20% were specialised Joiners, French polishers, Wood Machinists etc.

With this documented fall in student numbers, registered training organisations offering furniture specific training of a high level are also in decline. Whilst there is a resurgence of independent training institutions and crafts people providing workshops of high calibre, they are only accessible for those who possess the financial means to do so, thus contributing to the creation of an educational class system.

Furthermore, some woodworking skills are not available to learn within Australia. Neither RTO's or private institutes/individuals offer these. For example, there is currently no training organisation that offers skills in Papercord Weaving for chair seats or Woodturning specific to glass mould manufacturing.

## Identifying the knowledge and skills enhancement areas

### Skills gaps

- » Construction of wooden glass blowing moulds
- » Understanding of joinery techniques
- » Understanding of weaving techniques (Danish cord)
- » Access to materials
- » Knowledge of restoration techniques specifically Australian timbers
- » Strategies for promoting traditional craft training
- » Relationship of modern technologies and traditional ones

To properly address skills gaps the following activities were completed;

- » -Visiting traditional woodworking workshops in Rome, Florence, Venice, Copenhagen, Berlin
- » Investigating forms of education used in Italy to transfer these skills
- » Discussing sourcing of materials and sustainability approaches used by European practitioners to replicate possible Australian equivalents based on workability and characteristics
- » Visiting museums and galleries to better understand the cultural background of practices and traditions both in relation to work and sociologically.

Outcomes achieved include:

- » Learning practical techniques in violin construction with Luthier Roberto Cavagnoli
- » Practical wood turning training in Murano
- » Visiting Vatican Restorations workshops to understand cultural and practical preservation of objects

Following a formal summary of the Fellowship experience, a series of workshops are being developed that will teach the techniques learned during the Fellowship trip. The workshops will be set up as small group workshops and delivered in Adelaide and include presentations by various craft institutes.

In addition, several recommendations will be made to craft industries, education bodies and professional associations based on the research undertaken on this Fellowship. These will focus on how we can better understand European craft traditions and how they can influence the Australian craft landscape.

## Glossary

<b>Gouge</b>	A round shaped chisel
<b>Tear Out</b>	Breaking of fibres due to tool being used against the grain direction
<b>Roughing</b>	Deep cuts with a chisel or plane to remove large amount of material quickly
<b>Purfling</b>	A narrow decorative edge inlaid into the top plate and often the back plate of a stringed instrument
<b>Veneer</b>	A thin piece of timber .6mm – 1mm usually applied to a substrate
<b>Turned</b>	A technique of making components round with the help of a wood lathe



## 2. Fellowship Learnings

### Vatican Museo, Vatican City



*Mosaicist constructing floral image*

The Fellowship was focused on two main outcomes, learning from traditional European craft practitioners and a research component that explored craft techniques and traditions in order to better understand the lineage of craft and how it might be transferred generationally more effectively.

The Fellow identified the Vatican as an integral part of the European craft typology as it not only commissions new works to be made, it also has a long tradition of preserving existing works for future generation.

Through an Australian Patron of the Arts the Fellow was able to participate in a private tour of the museum collection, as well as visit the restoration workshops and Mosaic workshops.



*Glass pieces awaiting cutting*

The Mosaic workshop within the Vatican is responsible for both the production of new works and the repair and restoration of existing pieces for example the restoration of 10,000 square meters of mosaics within Saint Peters Basilica. The workshop employs 8 full time mosaicists all specialising in different techniques within the art form, these artists all undertake a traditional multiple year apprenticeship to learn the hand skills necessary to produce works of high calibre. Workers at the Mosaic workshop use glass which is coloured and made in Venice and hold stock of 1000's of colours some which have been in stock since the studios formal establishment in 1727.

The artists in the Mosaic studio also pioneered the filate enamels technique, which allowed them to create minuscule mosaic tiles that comprise the incredibly detailed works in the Basilica. This technique sees the artists use a 900°C flame to heat the glass in a small crucible until it becomes molten. A metal rod is then used to stretch the cooling glass into long glass rods which can be stretched to as thin as 1mm before being broken into smaller pieces to be used in mosaic works.

This technique is primarily used to create small glass filament for micro mosaic works as well as allowing artists to distinctly colour match and produce unique colours much like the mixing of oil paints.



*Glass being melted together in crucible to create custom colours and textures for mosaic images*



## Roberto Cavagnoli – Luthier Cremona, Italy

Roberto Cavagnoli (born 1975) is a Cremonese based violin maker, who graduated from the International School of Violin Making “Antonio Stradivari” in 1993, under the guidance of Giorgio Scolari. Cavagnoli has since won multiple international awards for his violins, violas and cellos which are made in the antique Cremonese traditional.

The Fellow undertook a workshop with Roberto in his studio where process techniques were explained and demonstrated, and the history of these processes were discussed.

A violin starts its life as a billet as pictured, Luthiers traditionally use Spruce for the tops and internal components of the violin and maple for the backs & necks. The pegs, tailpiece and buttons are commonly made from dense hardwoods such as ebony or, rosewood.

In a modern violin, a solid ebony fingerboard is common although historically rare due to scarceness. Maple or a combination of Poplar and Maple where used as an alternative.

Roberto purchases trees that are old growth which usually



*Maple billets used to construct violin backs*

means no younger than 120 years old and only uses timbers grown at high altitude, on the north face of a mountain. Most of the Spruce used comes from the Italian Dolomites. Spruce is used primarily for its strength along the grain which allows the tension to be applied to the strings, but it's flexibility across the grain allows for the reverberation that's essential for an instrument sound. The Maple is used for its ability to stretch whilst the spruce is in compression under the force of the strings, the aesthetic qualities of the maple are also very important to the Instrument and pieces are usually selected with a consideration to tone and beauty.

Cavagnoli demonstrates the shaping of the inside of the front portion of the violin; the roughing work is done with a gouge and the tool is used across the grain as material is much easier to remove and minimises problems with tear out. The internal shaping of the violin is integral to the instruments sound. Cavagnoli notes that he is forever refining and adjusting the internal shape according to individual pieces of timber and previous experiences with finished instruments. The inside is then shaped further with a convex bottomed plane and scrapers to its final shape before the violin is assembled.



*Roberto Cavagnoli demonstrates using a gouge to hollow out the inside face of the violin*

Here Cavagnoli demonstrates cutting the groove for the Purfling; he does this with a handmade tool of his own making which is an integral part of Luthier training. Historically many luthiers made their own specific tools as they were scarcely available and expensive, to this day toolmaking is still part of the studying a luthier undergoes. The Purfling acts a decoration on the top of the instrument and consists of multiple thin layers of veneer glued together, it commonly consists of two outside layers of pear wood which are dyed black and an internal piece of poplar for contrast.



*Roberto Cavagnoli cutting grooves for purflings*

Through the workshop with Roberto Cavagnoli the Fellow was able to obtain knowledge of the construction methods of violins and have a conversation with Roberto about possible Australian timber species that might aid in the making process as ebony is getting harder to obtain. The Fellow has also arranged to teach Roberto how to make sound posts, a turned element of a violin when he is next in Australia. This is a wonderful skills exchange opportunity.



*Pernambuco, Ebony and Mother of Pearl details on violin and viola bows*



## Scarpelli Mosaici – Pietra Dura Workshop, Florence, Italy

Scarpelli Mosaici is a workshop located in central Florence that produces mosaic works made from semi-precious hard stone, predominantly gathered in the hills around Florence.

Stone varieties include limestone, quartz and granite. These local stone varieties are combined with lapis lazuli, malachite and turquoise imported from overseas to create images. The stone is cut into thin sheets of usually 1-3mm then the shapes are cut out and pieced together, much like a jigsaw.

Here an artisan is demonstrating how the stone is cut; the bow saw which consists of a timber frame and string, is drawn back through an emery slurry which allows the saw to cut through the stone, the artisan glues small pieces of the precious stone to a substrate which allows him to cut multiple components at once.

This workshop employs 80% of the artists currently working in Pietra Dura and is one of a handful of studios that continues this historical art form.

## Arcangeli Pietro S. N. C. – Glass Blowing Mould Makers, Murano, Italy

The Arcangeli brothers are wood turners and machinists who specialise in the production of wooden glass blowing moulds for use in the glass blowing workshops of Venice, they also produce Optic moulds made from metal which are used to create pattern and textures on glass blown objects.

These artisans start the process by cutting up large sections of green timber, which is timber that is still wet and recently felled. Green timber is used because it is softer and more easily worked. The moisture in the wood also assists in blowing



*Finished moulds being preserved in water to prevent splitting and cracking due to drying out of the moulds as it creates a layer of steam that slows down the burning of the moulds, ensuring that it can be used for a longer duration.*

The Arcangeli brothers use European Beech as it is available in large sections and has even seasonal growth which is ideal as the moulds deteriorate at an even rate. European Cherry is also a commonly used species to produce glass blowing moulds. To ensure that the wood does not over dry it is stored in vats of water until mounted on the lathe to be turned, subsequently the mould once made, is kept submerged for the entirety of its working life. A glassblower then uses the mould in the production of glass pieces. Instead of creating forms free hand the internal shape of the mould governs the overall form and therefore speeds up the making time and ensures consistency in form. Moulds have been used in glassblowing since the second quarter of the 1st century AD.



*(left): Arcangeli brothers mount Beech wood blank on lathe*

*(bottom): Arcangeli brothers hollowing the internal portion of the mould using a large metalworking bit*







The pieces of beech are cut into large rounds before they can be mounted on the lathe. The mould blank is then lifted and mounted onto the lathe. The outside of the mould is then turned creating parallel sides on the cylinder, this is an important step as it creates a datum point so the mould can be taken off the lathe and rotated for the cutting of complicated shapes.

The artisan then starts to hollow out the internal part of the mould, for this they first use large scale drill bits mounted on a lathe. Once a void is created in the middle the artisan mounts a large cutting tool which is custom made on premises to start the internal shaping. Each mould shape requires a different profile cutting tool and they are changed regularly during the process. Once the internal shape is achieved the mould is then sawn in half along its vertical axis to allow the glass object to be taken out once blown. Holes are also drilled in the walls of the mould to allow excess steam to escape during the blowing process otherwise air pockets can occur leading to irregularities.

*Arcangeli brothers further refine the internal shape of the mold using custom workshop made tooling specific to each mold profile*

## Kristian Frandsen – Cabinet Maker, Copenhagen, Denmark



*Kristian Frandsen pictured in his Copenhagen based Studio*

Kristian Frandsen is a Danish cabinet maker who apprenticed under the royal craftsman of Amalienborg (the home of the Danish royal family). He later did additional study at Capellagarden School of Craft and Design and is a member of the Danish Cabinetmakers Association.

The Artisan was completing a small cabinet piece during the time of the Fellows visit, Frandsen has a focus on using Danish materials wherever possible and was completing a piece in Bog Oak, a rare form of semi petrified oak from peat bogs in the Jutland region of Demark. Frandsen creates works of exceptional quality that are a culmination of traditional techniques and Danish design sensibilities.





*Detail of 'MoOn' box crafted from Danish Bog Oak*

## 3. Personal, Professional and Sectoral Impact

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This Fellowship has provided an incredible opportunity to learn skills that are unobtainable in Australia. The chance to interact with skilled artisans from different countries and open up channels of communication that provide scope for future collaboration and teaching possibilities will have a great impact not only on the Fellow but also the small craft community in Australia.

The Fellow has already used skills obtained during his Fellowship travels to assist fellow craftspeople in the glass blowing community with production of glass blowing moulds and has provided woodturning training to fellow South Australian woodworkers in an effort to spread this specific knowledge.

The Fellow has also produced multiple exhibition works since the completion of the trip, referencing skills and information learned. These works have been exhibited at galleries including Sophie Gannon in Melbourne and the Tasmanian Ceramic Triennial in Hobart in May, 2019.

The Fellow is in discussion with the craft institute The Jam Factory in Adelaide, to design and deliver small workshops to the public where both current craftspeople and the general public will be given the opportunity to practice and produce works routed in the European craft tradition.

# 4. Recommendations and Considerations

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## Recommendation 1 – Government Support

- » Supporting craftspeople and artists via access to more federal funding. Funding bodies such as AUSCO to provide funding to more trade and craft sectors for the creation of exhibitions that will increase the public understanding and appreciation of craft skills
- » Fund more public art pieces and commission skilled craftspeople to work in conjunction with communities to create work to inspire people to choose craft as a career path.
- » Create a culture where the arts are seen as a vital and integral part of life that benefits all citizens.

## Recommendations 2 – Education and Training

- » Bring European craftspeople to Australia to encourage diverse approaches to learning and skill set development
- » Higher Education and VET art and design courses:
  - » include wooden mould making courses to widen knowledge and appreciation, and to offer woodturning as a course/unit.
  - » include Violin and Instrument making history courses to widen knowledge and appreciation, and to offer Instrument making as a course/unit.
- » Deliver more workplace based training that focus on the specific skills relative to that business that will add to the tasset knowledge of the apprentices, and encourage inter workshop learning experiences where apprentices/ trainees

are encouraged to spend time in other workshops to provide a larger scope of knowledge even when addressing the same technical skill

- » Take cues from Journeyman style European training, where after an apprenticeship the worker is required to work for small periods of time in multiple workshops to better understand techniques from other perspectives and have an opportunity to work with a variety of timber species before being awarded their full accreditation. This would better elevate skills and material knowledge and help foster a community of practice.
- » Imbed small business studies in all art and design courses to better equip people to survive as self-employed artisans which will then enrich the landscape of makers and crafts people within our country

## Recommendations 3 - Industry and professional organisations

- » Facilitate exhibitions, conferences and workshops to excite the public about craft practises and create occasions for people to view craft in a different light.
- » Encourage young tradespeople to work across multiple disciplines to broaden knowledge.
- » Educate the public about the labour-intensive process required to produce handmade objects and instruments.

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