

What is the role of the designer/maker in the 21st century and how might this role change in the next ten years ?

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Artificial intelligence (AI) is significantly impacting the creative industry, and is seen as devaluing art through rapid creation. AI is threatening originality, copyrights and some creative professions fear they could disappear in the face of algorithms capable of producing in seconds. It thus raises the question of the role of designers and makers, what is their purpose, how they can differentiate from AI and more generally how they can adapt to a world of technological mutation. This essay will focus on jewellery making and design, in line with my personal practice and will explore the expected changes in the next decade that will impact the role of designers and makers in this field, from ideation, conception and transformation but also sourcing and commercialisation.

The first section will introduce the complex role of jeweller from design to making that requires to encapsulate together cultural and social symbols, personal needs, functionality and aesthetics. The second part will focus on the growing shift between handcraft makers and designers using AI and new technologies. And finally, the importance for designers and makers to start adopting a sustainable mindset and marketing practices will be analysed, in order to fit in the economical and environmental paradigms.

Part 1 - The Multi-faceted Role of Jewellery: how does it impact the role of makers and designers?

Before delving into the role of jewellery makers and designers, it's essential to first understand that jewellery has historically always gone beyond mere decoration, serving complex social, economic, and symbolic functions and acting as a marker of identity and status, personal and societal values.

As a matter of fact, the function of jewellery is rather complex compared to applied arts, crafts or design, such as textile design, ceramics, illustration. Jewellery acts as a supplement to the person wearing it and to people who recognise its meaning. The author Liesbeth den Besten (2011) enumerates the different meanings in her compendium "On Jewellery": social and religious ranging from wedding rings, medals, religious charms and political badges, conveying a social status and often revealed during a ritualistic performance; economical in some cultures and social classes; ornamental to beautify the wearer in every culture and in every historic period; sentimental or memorial to remind of people or events in life like the red poppies worn in the weeks preceding Armistice Day or the Kate Middleton's engagement ring honouring her husband's mother¹; magical, such as amulets or special minerals.

Jewellery embraces also many codes and symbolic messages as honour, love, power, remembrance and status. Here are some examples:

 Peter Andrews / Getty Images	 The Army's version of the Medal of Honor, the nation's highest military award.		 Grant Baldwin / Getty Images
Wedding rings signify love Wedding rings symbolise eternal love and commitment. Exchanged between two people on their wedding day, they are worn to show the world they are married.	Medals represent honour and courage Military medals and ribbons are the symbols of service, honour, commitment, and bravery. You can't earn them without great sacrifice.	Red poppy badge for remembrance for over 100 years. The poppy became a symbol of Remembrance and hope for a peaceful future in the aftermath of the First World War.	A tribute to empowerment and sisterhood During the inauguration, Kamala Harris was wearing a necklace with twenty pearls as a tribute to the twenty founder women from her African-American sorority "Alpha Kappa Alpha" at Harvard, to encourage Black women to achieve.

¹ [Everything to know about Kate Middleton's Engagement Ring \(Brides, 2024\)](#)

Thus, any exploration of jewellery designers' contributions must begin with the role of jewellery itself, as both an object and as a symbol, worn, offered and admired. Jewellery is at the complex crossroads of the wearer, the giver, the viewer and the jewellery maker needs to decipher the world to craft pieces that resonate on individual and collective levels. Therefore, makers and designers are expected to go beyond aesthetics and must be cultural narrators of the past, the present and the future, involved in solving the ever evolving social, environmental and technological problems, balancing local traditions with global trends, discovering and experiencing practices from here and elsewhere.

Designers, makers and artists, are they all-in-one or shall we expect a reinforced differentiation in expertise in the coming years where the designer imagines but does not make, the maker just produces without innovating? And where is the place left for the artist who transforms Jewellery as a medium to express their creativity? Since the sixteenth century, jewellery started to be designed by artists or painters who were not goldsmiths but provided drawings and designs for jewellery to reflect latest fashions².

But, in her compendium, Liesbeth den Besten considers that jewellery has now become a medium of artistic expression challenging conventions, experimenting with industrial materials, abstract forms, and avant-garde concepts, although it is still not recognized as such academically and doesn't get as much as the deserved traction in museums³. She also highlights the different names used interchangeably : *“contemporary jewellery, studio jewellery and art jewellery (mainly used in the US), research jewellery (mainly used in Italy), jewellery design and last but not least author jewellery or jewellery d'auteur”*. While jewellery design distinguishes between the designer and the craftsman/maker, art jewellery implies that jewellery is an art form, beyond the applied arts, and jewellery d'auteur indicates that is made by a finder, an artisan, an innovator using both their mind and their hand through a demanding and unique creative process.

Through this lens, jewellery makers become not only skilled artisans but also cultural commentators, engaging with themes of identity, fashion, and social values. They blur boundaries between art, design and fashion, creating pieces that invite dialogue beyond mere aesthetics and decorative choices. And this is unlikely to change in the next ten years.

² Jewellery through 7000 years (British Museum Publication, 1976)

³ On Jewellery: A Compendium of International Contemporary Art Jewellery (Liesbeth Den Besten, 2001)

Part 2 - How the role of jewellers is impacted with the growing development of new technologies and AI?

The role of a jewellery craftsman in the 21st-century bridges traditional hands-on skills and technological expertise. And this is already the stance of UK universities proposing a curriculum in jewellery crafting and designing. As a matter of fact, among the below five universities, all of them encourage a combination of traditional and technological techniques. A third criteria about ethical practices has also been added and will be explored in the following section.

University	Traditional techniques	Technological techniques	Ethical and sustainable practices
UCA	"...to learn through making and be taught traditional technical skills that go hand-in-hand with material innovation and experimentation."	"You'll be introduced to 2D digital software, including Adobe Illustrator and Photoshop, to give you a fundamental understanding of the role digital technology plays in the design and making process."	"Engaging with themes of inclusivity and diversity situated in the context of global histories, cultures, and politics, you'll explore and build an unbiased and progressive understanding of ethical approaches needed to challenge established industry principles."
University of Edinburgh	"We encourage you to combine new technologies with traditional techniques, • soldering • silversmithing • casting • wax/plaster carving • stone setting • raising • etching "You will collaborate with a range of external manufacturers who offer services such as: • casting • waterjet cutting • acid etching • powder coating	"You will take <u>CAD</u> classes and we will introduce you to programmes such as Rhino and other 3D modeling packages, plus the Adobe suite."	
British Academy of Jewellery	"Gain technical hands-on skills in jewellery manufacturing and production."	"Experiment with new and existing techniques, technologies, processes and materials." "Gain an advanced understanding of new and future technologies, materials, processes, and techniques for jewellery design."	
Birmingham City	"Traditional skills are equally as important as cutting-edge technology"	Our onsite Technology Hub offers expertise in a range of industry-related techniques, including CAD and manufacturing, rapid prototyping, surface finishing, reverse engineering and project management.	
University of Wales Trinity Saint David	"You will learn to work professionally with glass, ceramics, and jewellery, finding your creative voice through a blend of traditional skills"	"...contemporary technologies like laser cutting, waterjet cutting, and 3D printing. The programme also covers jewellery, mould making, CAD/CAM, and 3D scanning."	"Developing innovative approaches to sustainable craft practices".

Jewellers are wizards of transformation - using their mind, their hand and tools to design, create, repair jewelry, and to cut, shape, and polish precious stones and metals. Traditional jewellery techniques are a crucial part of the process of creating jewelry, as they allow jewelers to transform raw materials into stunning pieces. These techniques require skill, precision, and creativity throughout the different steps starting with

ideation, designing, sketching, then prototyping, casting, metalworking, soldering, stone setting and polishing. And makers are still holding value in traditional techniques and tools, and very specialized apprenticeships - soldering, stone setting, polishing.

As it goes to design and sketching, some prestigious Luxury Houses, like Dior, are still using manual sketching to showcase their traditional and craftsmanship knowhow ; but universities, jewellery businesses and studios are already embedding new technologies with Computer Aided Design software (Photoshop, Illustrator...), 3D specialised jewellery design software (JewelCAD, RhinoGold⁴, Cross Gems...) and 3D printing. This enables enhanced precision, faster amendments without compromising on quality, and can be even integrated into manufacturing processes for 3D printing and raw casting models. On one hand, these technologies are threatening traditional design practices but on the other hand, new skills are required to use these softwares.



Exhibition “Designing Jewels”,
l’ECOLE, School of Jewellery Arts
(© Benjamin Chelly)

The Savoir-Faire Behind the
'Dior Print' High Jewellery
Collection



Cross Gems

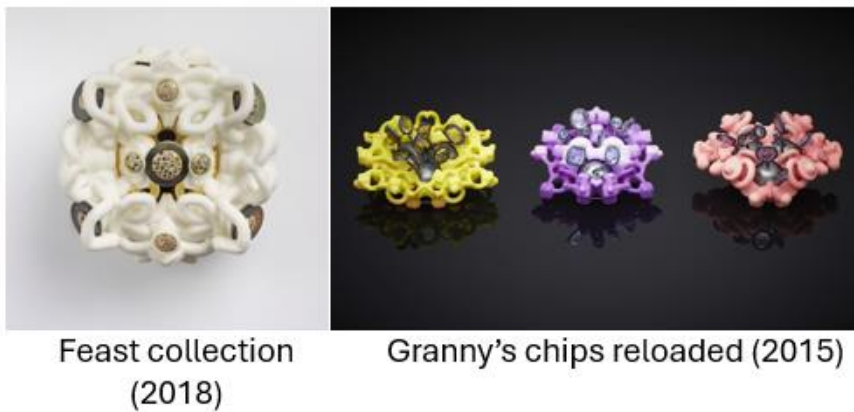


Rhino Gold

⁴ <https://www.rhino3d.com/en/for/jewelry/>

In an increasingly mechanised world, with AI expanding its scope in image and video production and with Metaverse opening new forms of virtual expressions, shall jewellery designers and makers fear technology? Or follow Sun Tzu advice “Keep your friends close; keep your enemies closer” and embrace the new potential?

The artist Silvia Weidenbach has chosen the latter by disrupting jewellery making with her innovative mindset⁵. She is an award-winning jewellery designer and artist based in London. Her work is characterised by a unique fusion of traditional craftsmanship and modern technology. She integrates digital design techniques, including 3D printing, and collaborates with AI to reinterpret jewellery from images of rings spanning over 3000 years of history.



Just as tools enabled our ancestors to develop new skills, AI can help us push the boundaries of our creative potential, but are we ready? This technological revolution raises crucial questions in general and in the context of design and art-related professions, such as ensuring AI is used ethically and responsibly, in respect of copyrights and legislation and with fair algorithms that will avoid social and cultural stereotypes. Some artistic professions, like graphic design, video or music production seem already more at risk than others. And at this stage, jewellery making seems less directly threatened and AI can help artists and creators by facilitating the creative process. As an example, in the appendix, I have displayed some designs after prompting three AI platforms (Open AI Dall-E 3, Open Art and Dall-e free).

Artificial intelligence (AI) poses a more significant threat to designers than to artisans and artists. In the field of design, AI can automate repetitive and simple tasks, reducing the demand for human designers in these areas. AI tools like Canva and Adobe Spark can quickly create logos and graphics, thus threatening certain design jobs.

⁵ [Silvia Weidenbach](#)

However, AI does not replace the human creativity needed to solve complex and emotional problems, which remains an asset for experienced designers. On the other hand, artisans and artists rely more on originality and personal expression, areas where AI is currently still limited.

The opportunities are infinite to learn and innovate, to blend history, traditional practices with new approaches and technologies. It relies on a solid foundation in traditional techniques but also new technological devices, and a daring mindset to always move the needle a bit further. Artists and designers are like wizards, experts in the art of transformation, who know how to replicate their formula and recipes, but who also try to improve them and test new tricks.

Part 3 – The necessity to adapt to new paradigms: rethinking sourcing and entrepreneurial practices

With the increasing focus on climate change, sustainability is also a crucial topic for industries of the 21st century, and it is also the case in jewellery. The Responsible Jewellery Council⁶ (RJC), a global standards and certification organisation created in 2005, advises 1900 companies globally throughout the diamond, gold, and platinum metals supply chain for sustainable and socially responsible practices aligned with the 17 Sustainable Development Goals (SDGs) defined by the United Nations⁷.

They urge: *“Every business in the jewellery and watch supply chain can contribute to the 17 Sustainable Development Goals (SDGs). This is the decade of action and delivery.”*⁸

Jewellery designers are expected to advocate more ethical and sustainable practices ; key changes include the use of sustainable, traceable or recycled materials, the promotion of synthetic stones, and the adoption of ethical, eco-friendly practices - promoting eco-friendly materials, reducing waste, and designing for circular economies. Let's focus on some of these elements and how designers and craftsmen can concretely apply those principles.

The objective is to ensure that materials, including precious metals and gemstones, are sourced transparently from ethical suppliers who adhere to sustainable practices and respect human rights.

The first step is to control the certification of suppliers but a visit in-situ at the mining or pearl farming facilities can be useful to check their transparent practices, in managing biosphere, workers and local communities and create a solid and direct partnership.

Additional opportunities for pearls in jewellery have come from innovative designs using baroque asymmetrical pearls breaking the rounded classical shape that is more rare to obtain. Little h's founder Hisano Shepherd incorporates reclaimed stones from vintage jewellery around baroque pearls and crafts them into unique shapes and designs.

⁶ [The Responsible Jewellery Council \(RJC\)](#)

⁷ [17 SDG Goals \(United Nations\)](#)

⁸ <https://www.responsiblejewellery.com/action/sdgs/>



Little h ([Hisano Shepherd](#))

Another example with the French artist Claire Dufau, whose studio sits in one of the western coast's islands, l'Île d'Oléron designs poetic necklaces and rings inspired by the sea, using what she calls “sea emeralds”, bits of polished glass. She incorporates them into her ceramics and when they melt, they create unique shapes and colour gradation.



Atelier iodé ([Claire Dufau](#))

One could easily imagine some future broken ceramics jewellery as the ones above, repaired according to Kintsugi techniques, joining the sundered pieces with lacquer and powdered gold, silver, or platinum. The kintsugi technique is an extension of the Japanese philosophy of Wabi-Sabi, which sees beauty in the incomplete and value in simplicity and imperfection.⁹

⁹ <https://www.bbc.com/travel/article/20210107-kintsugi-japans-ancient-art-of-embracing-imperfection>



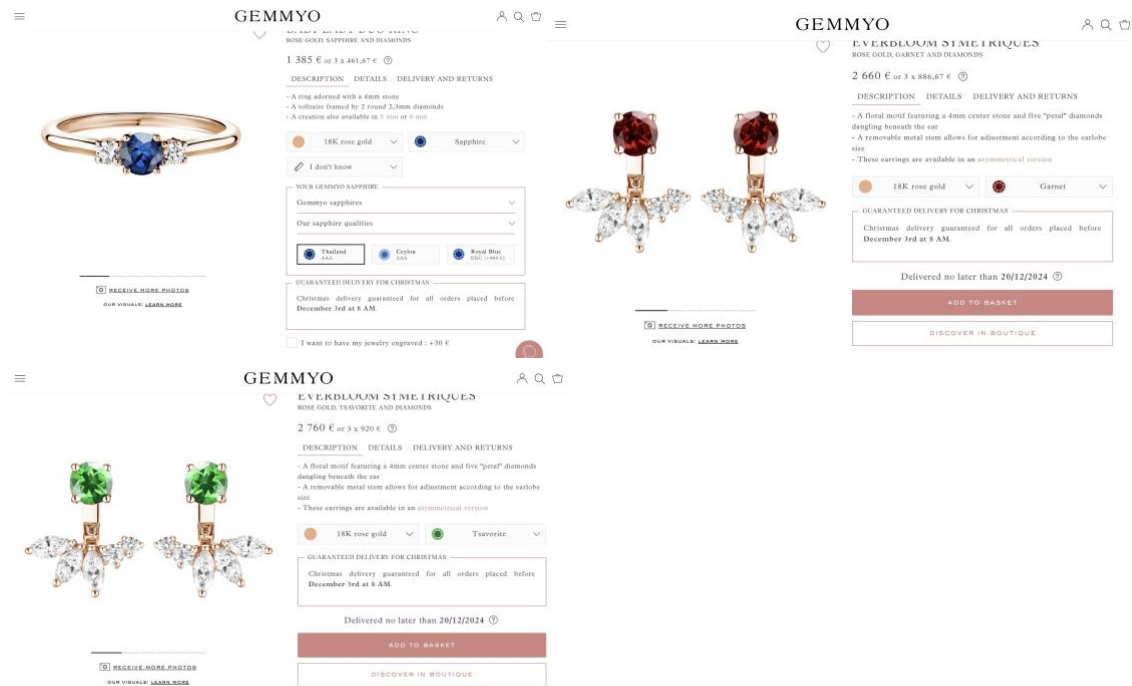
By repurposing these materials, the jewellery industry can help reduce waste, lower energy consumption, and decrease the need for environmentally harmful mining practices. And they are also expected to preserve local traditions while reducing environmental impact.

Self-employment in creative sectors is notably higher compared to the broader economy.¹⁰ As of September 2022, there were 3.1 million jobs in creative and cultural industries, with 32% (989,000) being self-employed, vs 14% in the wider UK economy. As a consequence, training in entrepreneurship, branding, digital marketing and e-commerce platforms to sell directly to consumers via online platforms is essential to succeed. Being present online is equally as important as being visible physically - in local communities, in art fairs or pop-up stands in markets.

Gemmyo¹¹ is a French jewellery brand, and their business model relies on an innovative on-line approach with a new vision of luxury as a modern alternative to the Place Vendôme brands. They propose 100% craftsmanship with a strong focus on high quality gems and clients can personalise their jewel, by selecting the size and the colour of the stone and the design of the ring. Everything can be done online, but they have also started to open some stores in France for more proximity. In an era of mass production, bespoke and personalized products are highly valued. Craftsmen often cater to niche markets where uniqueness and craftsmanship matter.

¹⁰ [Freelancers-in-the-arts-and-creative-sectors \(source: lordslibrary.parliament.uk\)](#)

¹¹ [Gemmyo website](#)



Jewellers also need to be interconnected with engineers, marketers, sociologists, and technologists to create integrated solutions but also with their pairs to foster partnerships, skills and ideas sharing. The UK Crafts Council plays a crucial role in this ecosystem, by advocating for the craft sector, providing resources and support to craft practitioners. They also organize exhibitions, events, and educational programs and conduct research to provide insights into the economic and cultural impact of the craft sector.

Being connected to the world to get inspiration, but also being connected to one's pairs and to one's customers is key for makers and designers and it will remain crucial in the coming years.

Conclusion

In conclusion, this essay has demonstrated that the roles of craftsmen and designers in the 21st century have already undergone significant transformation, driven by technological advancements, evolving consumer trends and an increased focus on sustainability.

Craftsmen today are not just creators of bespoke and high-quality products; they are innovators who blend traditional skills with modern technology.

They are expected to contribute to the environmental challenges and promote sustainable and ethical practices, through eco-friendly or recycled materials and energy-efficient production methods.

They are cultural narrators, balancing global trends with local traditions, creating work that resonates emotionally and culturally. They are expected to preserve our identity and culture in the face of AI that is already surpassing our intelligence and creativity in some fields.

They need to expand their roles beyond artistry and craftsmanship to become interdisciplinary collaborators, connected free-lance entrepreneurs with their partners, customers and to the constantly evolving world.

It also shows the importance for students in craft and design and jewellery-making to develop an open minded approach in their curriculum: building skills with traditional and technological practices, including Artificial Intelligence, to maintain a competitive edge, developing their own creativity, connecting with craft and artistic communities, shaping a thoughtful and responsible craftsmanship and also learning business and marketing through internships or summer student jobs.

AI Test and Learn



Prompt: Rough Colourful pastel sketch drawing of a ring on brown paper Using recycled plastic
(Open Art)



Prompt: from the picture of recycled plastic material, describe the picture in words
> Alma Thomas, kinetic pointillism, abstract brush strokes, abstract painting
(Open Art)



Prompt: An Art Deco ring sketched on brown paper with a pattern like Alma Thomas, kinetic pointillism, abstract brush strokes, abstract painting
(Open Art)



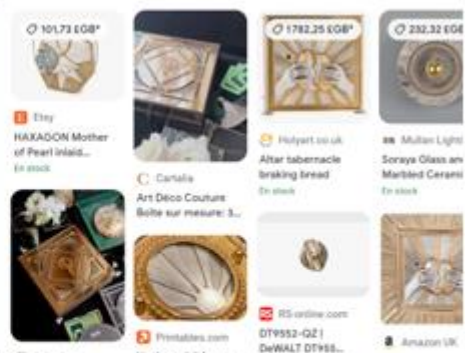
Prompt (enhanced by machine learning): Art Deco design) recycled plastic brooch, sleek and modern, vibrant colours reflecting light, intricate geometric patterns, shiny and polished surface, showcasing sustainability, stylish and eco-friendly, elegant yet bold, high-detail craftsmanship, artistic flair, set against a minimalist background for emphasis, ultra-detailed, high quality.
(Open Art)



Prompt: Jewellery with a stone made with ceramics with an art deco design and kintsugi inspiration
(Dall-e free)



Prompt: Jewellery with a stone made with ceramics with an art deco design and kintsugi inspiration
(ChatGPT - Open AI Dall-E 3)



Going back to Google search, and downloading the Chat GPT picture to check image recognition
(Google Search)

Sources

1. [Everything to Know About Kate Middleton's Engagement Ring \(Brides, 2024\)](#)
2. [Exhibition Designing Jewels \(L'Ecole Van Cleef and Arpels, 2022\)](#)
3. [Savoir-Faire behind the "Dior Print" \(2022\) ; "Customized Jewellery Design" \(Dior Autumn Winter 2022/23\)](#)
4. [The origin of creation \(Van Cleef and Arpels\)](#)
5. <https://www.rhino3d.com/en/for/jewelry/>
6. [The Responsible Jewellery Council \(RJC\)](#)
7. [17 SDG Goals \(United Nations\)](#)
8. <https://www.responsiblejewellery.com/action/sdgs/>
9. <https://www.bbc.com/travel/article/20210107-kintsugi-japans-ancient-art-of-embracing-imperfection>
10. [Freelancers-in-the-arts-and-creative-sectors \(source: lordslibrary.parliament.uk\)](#)
11. [Gemmyo website](#)