**Review Article** 

# Rethinking Polymathy Beyond the Renaissance: Fostering Intersectional, Decolonial and Transdisciplinary Perspectives

Fizza Asif<sup>1</sup>, Asna Mubashira<sup>2</sup>

<sup>1</sup>Research Scholar, College of Art & Design, University of the Punjab Lahore, Pakistan. <sup>2</sup>Associate Professor, Textile Design Department, College of Art & Design, University of the Punjab Lahore, Pakistan. Correspondence: <u>asna.cad@pu.edu.pk</u><sup>2</sup>

# ABSTRACT

Aim of the Study: Polymathy, or the ability to acquire knowledge of multiple disciplines, has long been allied with prodigious masters whose expertise spans various fields and subjects. This article argues traditional conceptions of expertise by exploring how polymathy exhibits intersectional, de-colonial, and transdisciplinary perspectives.

**Methodology:** This is a qualitative study. A descriptive analysis of few selected case studies is represented. The selected study participants are all known names from the arena of Art, Design and Architecture.

**Finding:** This article reveals how polymathy can be a tool for inclusivity and transformation, amplifying voices and knowledge systems historically silenced. By prioritizing the perspectives and experiences of marginalized communities, the expanded definition of polymathy to be more inclusive, equitable, and sensitive to global concerns by elevating the voices and experiences of underrepresented communities. The polymath approach is being adopted by today's artisans, who blend science, technology, design, and art to create ground-breaking and inventive work. Nowhere is this more evident than in the realms of art and design. This article explores the concept of polymathy, examining the benefits and challenges of interdisciplinary collaboration and knowledge sharing. In an era of increasing specialization, polymathy offers a unique approach to creativity, innovation, and problem-solving.

**Conclusion:** Finally, this article argues that polymathy is not solely the domain of exceptional individuals, but rather a mindset and approach that can be cultivated by anyone. The concept of polymathy, that was once synonymous with singular genius, demands reevaluation in today's modern world. By embracing polymathy as a value-based practice and rethinking conventional notions of expertise, we can encourage a more panoramic, collaborative and innovative world.

Keywords: Polymathy, Intersectional, Decolonial, Renaissance.

#### **Article History**

Received: January 11, 2025

Revised: March 23, 2025

Accepted: March 26, 2025

Online: March 30, 2025





https://hnpublisher.com

## 1. INTRODUCTION

The polymath of the 17<sup>th</sup> century who personified Renaissance Humanism, manifesting the belief that humans have the ability to evolve and embrace all forms of knowledge in order to master multiple disciplines and solve any given problem at hand with their intellect. (G, n.d.) The ideal polymath was historically exemplified by individuals like Leonardo Da Vinci and Benjamin Franklin, who excelled in numerous fields of art, science, and diplomacy. Nonetheless, this narrow description of a polymath has long been hailed as a characteristic of outstanding individuals who align with euro-centrism and aristocratic notions of excellence (Murphy, 2014) failing to account for the diverse and dynamic ways in which people from marginalized communities engage in interdisciplinary practices. These contemporary individuals blend knowledge of multiple disciplines to address unique challenges or create something impactful with resources available to them, not from a place of privilege or leisure, but out of necessity and determination. The dominant Western conception of polymathy tends to overlook these diverse, intersectional avenues of learning, thereby reinforcing systemic inequalities and restricting the scope of what it means to be an expert. (Smith, 2004)

The article argues these Eurocentric and prejudiced notions by broadening the concept of polymathy to include opinions from marginalized groups. By incorporating intersectional, decolonial, and transdisciplinary lenses, this article examines how polymathy, when reevaluated offers not only a more inclusive understanding of expertise but also a powerful tool for social transformation. (Crenshaw, 1989) (Said, 1978) Through an exploration of contemporary case studies, we highlight how individuals from marginalized backgrounds are using their multifaceted knowledge and interdisciplinary skills to innovate, resist, and reshape their communities. These case studies demonstrate how polymathy can serve as a pathway to empowerment, creativity, and activism, providing critical insights into a more equitable and sustainable future. By embracing these collective and inclusive narratives, we can envision a broader understanding of polymathy that transcends the boundaries of traditional knowledge systems. (Mignolo, 2011)

Polymathy has emerged as a vital approach to problem-solving and creativity; artists who embrace multidisciplinary approaches of polymathy have become key drivers of innovation. By blending diverse fields of knowledge and creative practices, these artists are using their unique perspectives to tackle problems and spark new ways of thinking, proving that the fusion of art, science, and social awareness can lead to powerful solutions and fresh forms of expression. (Susan Liggett, 2023) Polymathy is no longer a domain reserved for the intellectual elite but rather a mindset and practice that can be cultivated by anyone, regardless of background or resources. This article aims to broaden the definition of polymathy, demonstrating how it can be both a tool of innovation and resistance. In doing so, we envision a more inclusive, equitable, and collaborative future where knowledge is not constrained by the boundaries of traditional disciplines or western oriented perspectives. (Gergen, 2009)

This article analyzed the contemporary landscape of polymathy, profiling individuals and organizations that embody this approach and has discussed the implications of polymathy for art, design, science, and technology, highlighting its potential to drive innovation and progress in the 21st century. (Root-Bernstein, 2015)

### 2. METHODOLOGY

This is a qualitative study. A descriptive analysis of few selected case studies is represented. The selected study participants are all known names from the arena of Art, Design and Artchitecture. They are from marginalized backgrounds so that the wide spread polymathy approach with in the practice of Art and Design and Architecture can be appreciated and the spectrum of interdisciplinary approaches can be comprehended.

# 3. THE HISTORICAL AND EUROCENTRIC CONTEXT OF POLYMATHY

The Renaissance man as the name suggests was a "man" of spectacular geniuses embedded with various forms of knowledge ready to draw from or embark on a creative journey of exploration in order to solve specific problems. A person who is not only skilled in one discipline but extremely well informed in several areas of interest thus someone with a brilliant mind, a creative spirit and a physically strong appearance. (Roman, 2024)

**History:** Traditional polymaths, particularly in the Western context, are seen as masters of diverse disciplines. Leonardo da Vinci and Benjamin Franklin are often hailed as the quintessential polymaths. These individuals were celebrated for their achievements across arts, sciences, and politics, reflecting the European Renaissance belief that human potential could be realized through interdisciplinary mastery. (Burke, 2020)

**Western Bias:** Euro centrism is a term used to identify that the European culture, history and politics are superior to the rest of the world, such that it excludes and discriminates against the viewpoints of the rest of the world. The Egyptian-French Marxian economist and political scientist Samir Amin first used the term "Eurocentrism" as an ideological term in the 1970s. (Develop Diverse, 2024) Colonialism was reinforced on the basis of this ideology. Euro centrism is like the SI unit of colonialism where everything that has a European orientation is considered standard and normal. (Franzki, 2012) In the past, Europe was merely one region of the world, and historically, it was a rather remote one. Its ideologies and technological advancements were greatly influenced by Asia and Africa. However, during the colonial era, Europe established itself as the global center and created an exploitative system that viewed other regions as unequal. (Sam Richards, 1985)

Conventional polymathy is directly linked to Euro centrism as it recognizes only western geniuses and focuses primarily on European "male" polymaths. This limited tradition has overlooked the contributions of non-Western, marginalized, or interdisciplinary thinkers throughout history. As a result, there is a growing call to broaden the understanding of polymathy by incorporating diverse and decolonial perspectives, recognizing the intersections of culture, race, gender, and other factors that have shaped knowledge creation across the globe. (Connell, 2007) (Smith, 2004)This inequality gave rise to exclusion of intellectual contributions from non-westerners such as the Islamic Golden Age, Indigenous cultures, and African, Asian and Latin American traditions. (Said, 1978) The contributions of polymaths like Ibn Sina (Avicenna) and Ibn Rushd (Averroes), whose interdisciplinary work spanned philosophy, science, and medicine, are often disregarded in Western academia. (Masood, 2009) (Rahman, 2022)

**Limiting definitions:** Expertise has been restricted by the narrow definition framework of a Western Polymath that fails to recognize the multi-approach practices of non-western cultures. For a long time, disciplines including ecology, medicine, and spirituality have been merged with African ideologies, Asian practices, and indigenous knowledge systems. The Western polymath myth rarely acknowledges these types of knowledge forms that challenge rigid disciplinary boundaries. (Smith, 2004) Furthermore, Western academic systems continue to disregard non-Western practices, reinforcing the impression that interdisciplinary practices belong solely to Western intellectual traditions. (Nandy, 1983) This obstructs the global potential for polymathy and excludes various epistemologies that could address contemporary challenges.

### 2.1 Leonardo da Vinci

Although he is regarded as the ideal polymath, Leonardo da Vinci's work needs to be interpreted in the Eurocentric frame that frequently overlooks the contributions of scholars from other cultures. For instance, Islamic scholars such as Ibn al-Nafis, who had characterized pulmonary circulation centuries before, had an impact on Da Vinci's anatomical research. (Lyons, 2009) Da Vinci's contributions drew from previous knowledge from Mesopotamia and Ancient Egypt, whose intellectual traditions are frequently disregarded in mainstream Western narratives. In addition, Da Vinci's image as a singular

genius stands in contrast to other civilizations' collaborative, community-based approaches to knowledge production. This demonstrates the Eurocentric bias that has influenced the definition of polymathy and the people who are hailed as polymaths. (Masood, 2009)

# 4. POLYMATHY AND INTERSECTIONALITY: EXPANDING THE FRAMEWORK

**Intersectionality:** This concept examines how overlapping identities such as gender, class, race and ability directly affect access to opportunities and recognition. This lens shows how power structures determine who is considered a polymath, frequently leaving out members of underrepresented groups. (Collins, 2015) (Crenshaw, 1989)

**Knowledge Hierarchies**: The hierarchical structure of knowledge that favors Western intellectual traditions is challenged by intersectional analysis. It criticizes how Black, feminist, and Indigenous knowledge systems are frequently overlooked by prevailing theories of knowledge, especially Western science. (Collins, 2000) These systems, rooted in diverse lived experiences, have long been dismissed or undervalued by mainstream academic disciplines.

**Empowerment through Polymathy:** An intersectional approach to polymathy broadens the scope of expertise, embracing diverse knowledge systems and perspectives. By recognizing the value of interdisciplinary practices across cultures and identities, it fosters collective intelligence and empowers marginalized communities to create solutions that are more inclusive and relevant to their needs. (Mignolo, 2011) (Nash, 2008)

# 5. DECOLONIZING POLYMATHY: GLOBALIZING KNOWLEDGE AND PRACTICES

**Decolonizing Polymathy:** To decolonize polymathy, we must confront the dominance of Western intellectual notions that have historically defined what knowledge is valued and who is considered an expert. Western polymaths like Leonardo Da Vinci or Benjamin Franklin often symbolize individualistic, compartmentalized approaches to knowledge. This model excludes Indigenous, African, and other non-Western epistemologies, which have long integrated disciplines in holistic and interdisciplinary ways. Decolonizing polymathy involves dismantling euro centrism to make space for multiple knowledge systems. (Santos, 2016)

**Reevaluating Expertise:** In Western systems, expertise is often defined by excelling formal education and academic credentials, excluding traditional knowledge keepers and community leaders. For instance, indigenous knowledge combines spirituality, art, and ecology to provide a more comprehensive view of the universe than Western academic compartmentalization. Our understanding of polymathy is expanded by acknowledging this type of multidisciplinary expertise, which enables more inclusive answers to contemporary problems. (Geniusz, 2009) (Eve Tuck, 2012)

# 6. POLYMATHY IN ART, DESIGN, AND TECHNOLOGY: MERGING DISCIPLINES FOR COLLECTIVE INNOVATION

In the modern day world, polymathy is increasingly evident in the domains of art, design, and technology, where interdisciplinary collaboration is the key to solving complex problems. Artists, designers, and technologists are merging multi disciplines like engineering, social justice, and environmental sustainability to address global challenges. (Buchan, 1999)

For example, design thinking is a practice that blends art, social sciences, and technology to develop novel solutions in fields like healthcare, education, and urban planning. This approach emphasizes empathy, collaboration, and creativity; core elements of polymathy that integrate more inclusive, human-centered solutions. (Brown, 2009)

Zaha Hadid is one prominent polymath figure in this field; her architectural projects combine technology, engineering, and art. The Guangzhou Opera House and the London Aquatics Centre are two examples of

her inventive constructions that exemplify how interdisciplinary thought can push the limits of form and function. (Betsky, 2018) Hadid's techniques and style made her work distinct from other architects; her work was unparalleled and innovative such that the element of excitement, eagerness and exploration would come alive in her designs a functional and interactive architectural genius that people could not only see but experience. (Amatalraof Abdullah, 2013)

Although combining these fields fosters innovation and creativity, there are still obstacles to overcome. The full potential of polymathy in various domains is frequently hampered by institutional reluctance to cross-disciplinary collaboration and the cultural expectation of specialization. Fortunately, polymathy still inspires innovative ideas, particularly when dealing with difficult problems like social justice, climate change, and global health. Hal Foster in his book "The Return of the Real" stresses greatly on collaboration and multi-disciplinary approach of knowledge sharing; "This is one way in which the critique of the avant-garde continues, indeed one way in which the avant-garde continues. And this is not a recipe for hermeticism or formalism, as is sometimes alleged; it is a formula of practice. It is also a precondition of any contemporary understanding of the different phases of the avant-garde." (Foster, 1996) His work emphasizes the importance of collaboration across fields, which aligns with the polymath perspective of using diverse knowledge systems to tackle complex, global challenges and explore new avenues.

# 7. CASE STUDIES: POLYMATHY IN ART AND DESIGN FROM MARGINALIZED COMMUNITIES

Artists and designers from marginalized communities have long used polymathic approaches to blend disciplines in response to complex issues like racial inequality, social justice, and environmental sustainability. Their work pushes boundaries, challenges dominant narratives, and offers alternative futures through art, design, technology, and activism.

# 6.1 Case Study 1: Theaster Gates

In his polymathic endeavors, South Side Chicago artist and urban designer Theaster Gates combines social activism, architecture, sculpture, and urban planning. By transforming underutilized areas into community centers through projects like the Dorchester Projects, Gates addresses racial and economic disparities while promoting social justice and cultural involvement. His creations demonstrate the power of art and urban planning to revitalize deprived communities. He founded the Rebuild Foundation in 2009, and together with the city, they have converted over 30 abandoned local structures into beautiful, reasonably priced housing and cultural venues. In its first year of operation, the Stony Island Arts Bank, which has been accessible to the public since late 2015, attracted close to 60,000 visitors. Mr. Gates is constantly collecting African-American cultural artifacts for that community center and exhibition space. (Sheets, 2017)

Gates's art focuses on land development, sculpture, performance, and space theory. By utilizing his passion and expertise in urban planning and preservation, Gates revitalizes abandoned areas. Well-known for recycling art-world wealth, Gates's art centers on the potential for "life within things." Gates deftly upends the ideals of art, land, and people. The idea of Black space as a formal exercise—one that is characterized by artistic agency, collective desire, and pragmatic strategies—is one he challenges in every facet of his work. (Theaster Gates, 2019)



Figure 1 Serpentine Pavilion 2022 designed by Theaster Gates © Theaster Gates Studio. Photo: Iwan Baan. Courtesy: Serpentine.

One of the most notable works by Theaster Gates includes, the Serpentine Pavilion 2022. Originally intended as a place for community meeting, meditation, and engagement with a focus on sacred music, Black Chapel serves as a stage for Serpentine's live program all summer long and beyond, providing the public with opportunities for introspection, connection, and joy. (Serpentine Galleries, 2025) (Maria-Cristina Florian, 2022)

# 6.2 Case Study 2: Kehinde Wiley

Nigerian-American artist Kehinde Wiley is renowned for challenging historical depictions of race, identity, and power through his unique combination of classical portraiture and modern street culture components. He draws inspiration from ancient European portraiture traditions and incorporates contemporary street art and hip-hop culture into his polymath work, which blends fine art, fashion, and social criticism. In the "World Stage" series, Wiley challenges racial and colonial prejudices by displaying black figures in his large-scale project of intricate images. His art combines activism with fine art to provide a modern perspective on empowerment from a culturally sensitive angle. (Brooklyn Museum, 2015)

Some of the famous works by Wiley include, "The World Stage." Jamaican men and women in the show adopt poses from British portraiture from the 17th and 18th centuries. The link between the island and her previous colonial authority is shown in the contrast between the sitter and the art historical references. In order to represent the modern urban setting, Wiley is reenacting this history by changing the gender and race of the archetypal art-historical hero. Both the source picture and the symbolism of Jamaican culture, with its own people and particular ideals of youth, beauty, and elegance, are referenced in the characters' arrogant posture. Brazil, China, Israel, Nigeria, Senegal, and Sri Lanka have all been included in earlier "World Stage" series shows, which have taken place at galleries and museums across Europe and the United States.

Wiley captures a posture, a history, and a culture in his incredibly detailed renderings of his subjects for this endeavor. Jamaica is filtered through elements of British history to produce something completely original; different images, such a modern tattoo and a wallpaper design by William Morris, combine to make equal pieces of the story. As one of the most prominent painters of our day, the artist keeps revolutionizing the art of portraiture. (Stephen Friedman Gallery, 2013)



Figure 2 Kehinde Wiley Portrait of Richo Gable, 2013

Wiley frequently blurs the lines between conventional and modern representational techniques in his paintings. While referencing particular Old Master paintings, he rendered his figures in a realistic manner. Wiley gives his figures, which are somewhat bigger than life size, heroic attitudes that suggest strength and spiritual enlightenment. These positions of spirituality and power filter Wiley's depiction of masculinity. (Visual Diplomacy USA Blogpost, 2019)



Figure 3 Kehinde Wiley, President Barack Obama, 2018, National Portrait Gallery

Perhaps the most famous piece of art by Kehinde Wiley is his picture of President Barack Obama, which has cemented Wiley's reputation as a courageous and important artist. President Obama spent the most of his upbringing in Hawaii, therefore the jasmine blossoms are in honor of that state. The African Blue Lilies are for his Kenyan father. Chicago, where President Obama was a senator and began his presidential campaign in 2007, is represented by the chrysanthemums and the warm brown chair, which functions as a sort of transition piece between the greens of the flora and President Obama's onyx suit, contrasts greatly with the flowery background's cool tone. The portrait possesses masculinity, visibly unified together are two prominent features person ability and vulnerability. (Ivy, 2019)

# 6.3 Case Study 3: Ai Weiwei

Chinese artist and activist Ai Weiwei is well known for his interdisciplinary approach, which challenges social and political norms by fusing activism, art, architecture, and design. Weiwei frequently addresses themes like censorship, government oppression and the refugee crisis in his art, which he uses to address violations of human rights, freedom of speech, and social justice.



Figure 4 Ai Weiwei - Sunflower Seeds, Tate Modern, Turbine Hall, via Creative Commons



Figure 5 Ai Weiwei's Sunflower Seeds: Close-up

His "Sunflower Seeds" project, which was shown around the Turbine Hall of the Tate Modern in London, featured millions of hand-painted porcelain sunflower seeds. The work discussed Chinese culture, individualism, and mass manufacturing while also gently criticizing Chinese labor practices. His work engages the art world and the general public in international discussions about activism and human rights

by fusing conceptual art, traditional Chinese craftsmanship, and social commentary while also highlighting the connection between the individual and collective approach. (Anapur, 2024)

Despite their realistic appearance, the millions of tiny pieces that make up Ai Weiwei's Sunflower Seeds appear to be alike, but they are all distinct. These life-sized sunflower seed husks are really meticulously hand-crafted in porcelain. Experts at small-scale workshops in the Chinese city of Jingdezhen have carefully carved and painted each seed. They are the result of hundreds of expert hands, not an industrial process. The 100 million seeds create an apparently endless landscape as they are poured into the inside of the Turbine Hall's enormous industrial area. The millions of tiny pieces that make up Ai Weiwei's Sunflower Seeds appear to be alike, but they are all distinct. These life-sized sunflower seed husks are really meticulously hand-crafted in porcelain, despite their realistic appearance. China and porcelain are practically synonymous, and Ai Weiwei has used ancient techniques to create what has long been one of China's most valued exports. Sunflower Seeds challenges us to examine the geopolitics of contemporary cultural and commercial interchange as well as the "Made in China" phenomena in greater detail. Significantly, Ai Weiwei's simple seed husk, which has been replicated millions of times and is full of symbolic significance, inspired both concern and optimism about the power of people together. (Tate Modern, 2010)

Apart from his artistic creations, Ai Weiwei has advocated for political reform using his voice and platform. His documentary "Human Flow" combines activism with filmmaking, demonstrating his multidimensional approach to using several artistic mediums to address global challenges. (Amazon Content Services LLC, 2018)

# 6.4 Case Study 4: Shantell Martin

In her polymath practice, British-born artist of Jamaican heritage Shantell Martin combines technology, performance, and sketching. Themes of identity, cultural history, and self-expression are explored in Martin's work, which is well-known for her large-scale murals and live drawing performances. Martin challenges conventional limits and engages different audiences on social concerns by fusing art, design, and technology through partnerships with well-known brands and artists.

### 6.5 Collaborative Approaches

Shantell Martin on collaborative practices reveals that, "she worked with brands like Martone Cycling Co and Artspace. She believes that, it is super rewarding to work with talented people; they inspire her with their expertise and obsession of their skill. She loves to see others thriving and growing. If she doen't know how to do something, she collaborates with people who do. She believes that the world is her canvas so why would she put herself in a box?" (Depict, 2015)



Figure 6 New/NOW Shantell Martin

## 6.6 NBMAA NEW/NOW exhibition

NEW/NOW was the artist's largest installation to date, showcasing more than 20 years of work. Alongside these unique tiny pieces are a couch, love seat, and ottoman that Martin developed in 2019 with the help of the French business Ligne Roset using textiles she created with Momentum design Studio in 2017. (Shantell Martin, 2025)A selection of Martin's outstanding recent collaborations were also on display, including those with MIT, The New York City Ballet, Max Mara, Puma, Martone Cycling Co., and interior designer Kelly Wearstler. (Shantell Martin: NEW/NOW at NBMAA)

Transparency 2020, an expansive site-specific mural, was made in conjunction with her show at the NBMAA. Every element of the show demonstrated Martin's passion for sketching. A variety of early sketchbooks and sketching tools provide unique insights into her creative process. These demonstrate how sketching has always been the basis and starting point for her creative processes. From extremely intricate compositions made with 0.05mm graphic drawing pens to the looser and more expansive pictures produced with markers that define her latest work, drawings from 2008 to the present demonstrated the evolution of Martin's style. Her continuous discovery of the self is reflected in the motifs, language, and cast of characters that emerge, which have changed along with her drawing materials and skills. Martin's collaborative endeavors may be seen in a variety of pieces that demonstrate her interest in commerce, technology, and her own personal history. (Shantell Martin, 2025)

## 6.7 Case Study 5: Isa Rodrigues

Isa Rodrigues grew up on the Portuguese coast and is now a Brooklyn-based textile artist and instructor. She is a co-executive director and founder member of the Textile Arts Center, a valuable resource for the local and international textile communities. Through creative experimentation, she aims to use her weavings to visualize and express a feeling. Her use of textiles gives her access to special memories that may emerge through imagery or the tension of the weave itself. (Rodrigues, 2021)

As a textile design teacher and educator, she investigates via practice and study how textiles are closely related to memory, human beings, and the land; she also looks at how this information is stored in the materials, structures, and processes, much like a language or code. She is also interested to learn more about art education as a way to conserve material culture and build community. (Isa Rodrigues, 2024)

In an interview conducted by Sahana Srinivasan, when asked about communal practices, Rodrigues while stressing greatly on the importance of knowledge sharing, networking and connection, stated that, The communal aspect of her work is evident in teaching and in establishing spaces, or in collaborating in the making of craft spaces such as the Textile Arts Center. Creating these kinds of spaces is significant, not just for the availability of space, but also for the access to a community of creators and collective resources. Particularly given that many textile methods are rooted in ancestral wisdom. She has taken part as an organizer and collaborator in various community initiatives focused on cultivating natural dye gardens in public areas and providing resources, such as Sewing Seeds, the Textile Dye Garden at Pratt, and The Mothership in Tangier." (Rodrigues, WIP Artist Highlight: Isa Rodrigues, 2024)



Figure 7 Materia-Memoria, 2022 by Isa Rodrigues

One noteworthy work by Rodrigues, comprising silk organza that has been sewn along with indigo, ocean water and time; emphasizing how each of these are interconnected. The fabric manipulation was done by hand and the elements are embedded in the fabric material with the memory of the pleats and the scrunches, while, the ocean water has worn down the fabric. (Isa Rodrigues, 2022)

# 8. POLYMATHY AS A MINDSET: CULTIVATING AN INCLUSIVE APPROACH TO KNOWLEDGE

### 7.1 Redefining Expertise

Polymathy is not an innate trait but a mindset that can be implemented. Specialization has historically been used to identify competence, which restricts innovation and multidisciplinary thinking. (Epstein, 2019)argues that generalists—those who cultivate a broad range of knowledge and experiences—are often better at solving complex, multifaceted problems because they can draw from various fields of expertise. This underscores the idea that polymathy is not limited to a specific set of talents, but a practice that can be nurtured and developed through diverse experiences. On the other hand, polymathy promotes cross-disciplinary learning, in which expertise from several disciplines is combined to tackle challenging issues. According to (Araki, 2018) who elaborates on the idea of polymathy as a mentality, adopting a polymathic perspective enables people to bridge knowledge across areas, allowing them to adapt and tackle complex social difficulties. Institutions may foster the growth of polymathic thinkers who are adaptable, inquisitive, and adept at bridging concepts from several fields promoting restructuring educational frameworks to prioritize interdisciplinary learning. (Ulfat, 2024)

# 7.2 Cultural Shifts

A cultural change is necessary for polymathy to flourish. In a world where creativity frequently arises from merging various viewpoints, teamwork among different fields can yield more thorough solutions to

worldwide issues. (Ahmed, 2019) promotes embracing versatility in education, emphasizing that polymathy flourishes when people are not constrained by strict academic or professional norms. Through promoting interdisciplinary cooperation in educational institutions, workplaces, and communities, (Juliet Bourke, 2019) societies can enhance collective intelligence. For instance, combining insights from the sciences, arts, and social sciences can result in more sustainable environmental policies or innovative technological solutions.

## 7.3 Call to Action

To promote polymathy, institutions and organizations may create educational initiatives that promote interdisciplinary learning, enhance mentorship that connects various fields, and cultivate partnerships between communities and academia. This would allow people from various backgrounds to participate in knowledge generation, dismantling obstacles that restrict access to interdisciplinary knowledge. (Nussbaum, 2010)

# 9. CONCLUSION

This article has examined how polymathy as seen through an intersectional, decolonial, and transdisciplinary perspective, can function as a significant instrument for social change. By transcending the conventional, Eurocentric notion of polymathy, we create opportunities for various interdisciplinary knowledge frameworks to be acknowledged and appreciated. The case studies of Theaster Gates, Kehinde Wiley, Ai Weiwei, Shantell Martin, and Isa Rodrigues demonstrate how polymathy is currently practiced; it is not merely an individual endeavor, but rather a shared, collaborative initiative that combines art, activism, and social change. These polymaths leverage their diverse knowledge to tackle challenges such as urban inequality, cultural representation, and human rights, showcasing how polymathy can promote innovation and bring about significant change in underrepresented communities. To unlock the complete potential of polymathy, we need to shift from restrictive definitions of expertise and develop frameworks that promote collaboration and inclusiveness among various fields. By fostering polymathy as a mindset—an approach that appreciates varied viewpoints and collaborative problem-solving—we can enable communities to develop more sustainable, fair solutions to the intricate issues of our interconnected world.

#### Acknowledgement

None.

#### **Disclosure Statement**

No potential conflict of interest was reported by the authors.

#### **Funding Source**

The authors received No funding to conduct this study.

### ORCID's

Fizza Asif <sup>1</sup> https://orcid.org/0009-0009-0782-8146 Asna Mubashira <sup>2</sup> https://orcid.org/0000-0003-0743-6846

#### REFERENCES

Ahmed, W. (2019). The Polymath: Unlocking the Power of Human Versatility. Wiley.

- Amatalraof Abdullah, I. b. (2013). Zaha Hadid's Techniques of Architectural Form-Making. *Open* Journal in Architectural Design, 1(1), 1-9. DOI: <u>10.12966/ojad.11.01.2013</u>
- Araki, M. (2018). Polymathy: A New Outlook. *Journal of Genius and Eminence*, 3(1), 66-81. DOI: <u>10.18536/jge.2018.04.3.1.06</u>
- Betsky, A. (2018). The Complete Zaha Hadid. Thames and Hudson.
- Brown, T. (2009). Change by design: How design thinking transforms organizations and inspires innovation. HarperCollins.
- Buchan, R. (1999). *Design Research and the New Learning. London Design Council.* Brighton and Hove: University of Brighton.
- Burke, P. (2020). The Polymath: A Cultural History from Leonardo da Vinci to Susan Sontag. New Haven and London: Yale University Press.
- Collins, P. H. (2015). Intersectionality's Definitional Dilemmas. Annual review of sociology, 41, 1-20. https://doi.org/10.1146/annurev-soc-073014-112142
- Eve Tuck, K. W. (2012). Decolonization is not a metaphor. *Decolonization: Indigeneity, Education & Society, 1*(1), 1-40.
- Murphy, K. (2014). Robert Burton and the Problems of Polymathy. Renaissance Studies, 28(2), 279–297. https://doi.org/10.1111/rest.12054
- Nash, J. C. (2008). Re-Thinking Intersectionality. *Feminist Review*, 89(1), 1-15. https://doi.org/10.1057/fr.2008.4.
- Rahman, O. (2022). From House of Wisdom to the European Renaissance: The Enduring Legacy of the Golden Age of Islam (Vol. 3.). Dhaka, Bangladesh.: A Sleek Publication.
- Root-Bernstein, R. (2015). Arts and crafts as adjuncts to STEM education to foster creativity in gifted and talented students. *Asia Pacific Education Review*, *16*, 203-212.
- Smith, L. T. (2004). *Decolonizing Methodologies: Research and Indigenous Peoples*. University of Otago Press.
- Susan Liggett, R. E. (2023). Creativity in Art, Design and Technology: Springer Series on Cultural Computing. Springer.