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Draft Research Proposal

Virtual Reality Art: A study and forecast on the application of virtual reality in the field of contemporary art

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Abstract:

We are jumping into an era of iterative technological innovation, just as the age of computers and the Internet stimulated a large number of artists to turn to digital art creation and gave rise to new aesthetic trends in art; now that VR technology is relatively mature and related creative applications are emerging, a new generation of art is sprouting in this hotbed. Based on the current discussion of the relationship between technology and humans, virtual reality has been extended in the fine art field, but there is a lack of more vertical in-depth research. The purpose of this study is to review the impact of virtual reality technology on the current fine art field and to find the possible impacts of virtual reality art in the future. This study addresses the application of virtual reality in the field of fine art, and comprehensively explores virtual reality art from the perspective of its media properties and philosophical properties. It provides a more vertical reference for the application of virtual reality technology in the field of fine art and contributes to the precise advancement of virtual reality art research. To explore the current state of application of virtual reality technology in the field of fine art, and the impact of virtual reality as an artistic medium and philosophical concept on the art creation process. To find out whether virtual reality has the potential to change the theory and technology of art making in the future. To learn how virtual reality will affect the art market in the future. To predict the possible future explosion of virtual reality art. I decided to adopt a mixed-methods approach. I will use phenomenological interviews with relevant artists and professionals, take surveys, read documents, do an auto-ethnographic practice, etc. to collect data. Narrative analysis, documentary analysis, comparative analysis, etc. will be used to analyze data.

Key Words:

Literature Review

What is Virtual Reality? According to dictionary. Webster's states:

Virtual: "being in essence or effect though not formally recognized or admitted"

Reality: "a real event, entity, or state of affairs"

So literally. Virtual Reality is "an event or entity that is real in effect but not in fact."

Micheal Heim, based on the history of VR technology, argues that virtual reality has the following properties: Simulation, Interaction, Artificiality, Immersion, Telepresence, Networked Communications. (1993: 109- 128). He defines virtual reality as "an immersive interactive system based on computable information" (1998: 6). In David Chalmers' work on virtual reality, he redefines virtual reality "as an immersive, interactive, computer-generated environment" (2017: 312). Many researchers nowadays note that immersion, presence, and interactivity are considered as the main attributes of VR technology.

Grant Tavinor's newest book, *Aesthetics of Virtual Reality Media*, illustrates the lack of academic research on the aesthetics and art of virtual reality at this stage, and the excessive controversy over the metaphysical meaning of virtual reality. In addition, he proposes the theory of "Remediation", arguing that virtualization lies between reproduction and representation: the virtualization of an object is not only a reproduction of the object, but also a remediation of the material form and structure, i.e., the realization of its function in a non-habitual form. ...Virtuality, analytically speaking from a remedial point of view, is remedied as a function or efficiency of X in a non-habitual or unfamiliar form. ..Then... What is the function or structure preserved by the VR medium? It is the agent's experience and interaction (and perhaps experience) with the world. (2021: 26-28)

Tavinor discusses virtual reality as an "artistic medium". Above all, a "medium," in addition to being a transitional material substrate, can also refer to a physical means of achieving a goal, or more simply, a way of doing things. A physical event may have different material instantiations and may transition from one medium embodiment to another without losing its identity. ... We can think of an art medium as the physical means of making a work of art, and what constitutes the physical structure of a work of art. ... Both the physical and intentional components inherent in the concept of art medium will be crucial to the analysis of virtual aesthetics. (2021: 15-20)

In addition, he agrees with Chalmers' statement that "virtual reality is reality". In terms of art, he uses Renaissance perspective as a case study, emphasizing that virtual reality, as an immersive, three-dimensional, computationally generated scene, has a natural "realistic" advantage and has "the potential to reinvigorate realism. " Although Tavinor gives ample evidence and insights into the aesthetic and philosophical aspects of VR, I do not think that Tavinor's understanding of virtual reality art is comprehensive enough; "realism" is only one of many artistic concepts or styles, and there is much more that virtual reality can do for fine art.

Takeshi Okada (岡田 猛), who is the professor of Graduate School of Education at University of Tokyo, specifying his research on Cognitive Psychology of Creativity. He examined Analogical alteration in the production of contemporary art in his paper, which suggests that artists usually experience one or more of three modes of revision when they change their style or make a creative turn: subjective modification, structural modification, and conceptual modification. This reminds me of how VR's media properties offer the possibility of structural modification in art making; and how VR's philosophical properties offer the possibility of conceptual modification in art making.

The medium theory proposed by Marshall McLuhan has provided theoretical support for a number of new media arts. In his book, he writes: "The medium is the message...The wheel...is an extension of the foot...The book... is an extension of the eye...Clothing, an extension of the skin...Electric circuitry, an extension of the central nervous system... All media are extensions of some human faculty- psychic or physical."

(Art Basel) For artists, because it can contain visual, spatial, sonic, and haptic components, VR offers a degree of sensory immersion and a potential for interaction beyond any other presently available medium. Artvisor also suggested that artists could consider virtual reality to be an exciting opportunity. The technology's immersive nature, which allows the artist to embody the spectator within their work, creates a really phenomenological experience. This gives artists a very potent means of communication. If the goal of art is to change our perspective of the world, virtual reality accomplishes this in the most literal sense. (Artvisor, 2018)

Joakim Vindenes and Barbara Wasson's paper examines VR applications from a post-phenomenological framework and proposes both inversion and synchronization relationships for people and avatars. Although they start from an application perspective, it arouses my curiosity to use it in VR art creation. Abramovic's VR installation, *Rising* (2016), can be understood as a reproduction of a synchronization relationship if viewed from the perspective of the relationship between the user and the virtual environment. **(Joakim, V. and Barbara, W. 2021) .**

A virtual reality market report (Grand View Research, 2022) estimates that the worldwide virtual reality market will develop from 2022 to 2030 at a compound annual growth rate (CAGR) of 15.0 percent from its value of USD 21.83 billion in 2021. A digital experience called virtual reality (VR) imitates a three-dimensional real-world environment. To give viewers an immersive experience, VR gear including bodysuits, headsets or glasses, and gloves is employed. The gaming and entertainment industries have been transformed by virtual reality because it enables users to fully immerse themselves in a realistic environment. The market is also growing as a result of the growing use of this technology in instructional training, particularly for teaching engineers, mechanics, pilots, field workers, military soldiers, and technicians in the manufacturing and oil and gas sectors.

All the above information shows that people maintain enthusiasm for virtual reality technology and are keen to explore its philosophy, technology, application, market, etc., but there has been a lack of vertical in-depth research on the fine art field. Of course, there are many virtual art spaces emerging nowadays, and VR curation and VR viewing are gradually becoming popular, but most of these related studies stand from the perspective of users or viewers and focus on display applications, still paying insufficient attention to art creation itself. Therefore, as a growing number of artists begin to experiment with VR to create art, this research will mainly stand from the perspective of artists to study and predict the application of virtual reality in the field of contemporary fine art.

“Perhaps the essence of VR ultimately lies not in technology but in art, perhaps art of the highest order.” — Heim, The Essence of VR, from Michael Heim's book The Metaphysics of Virtual Reality (New York: Oxford University Press, 1993: 109-128.

Aims and Objectives:

The goal of this study is to review the impact of virtual reality technology on the current fine art field and to find the possible impacts of virtual reality art in the future. The two research aims mentioned below are designed with a holistic viewpoint. That is, by investigating these two avenues, we will gain a complete understanding of how new art forms and artistic ideas can be discovered through the application of virtual reality technology.

This study addresses the application of virtual reality in the field of fine art, and comprehensively explores virtual reality art from the perspective of its media properties and philosophical properties. It provides a more vertical reference for the application of virtual reality technology in the field of fine art, and contributes to the precise advancement of virtual reality art research.

A 1: Status Review: The first aim is to review the current state of VR art and analyze the role that virtual reality technology may play in the creation of contemporary art.

The scope of this question encompasses the following issues.

- OB 1: What is the current state of application of virtual reality technology in the field of contemporary pure art?
 - RQ: What is the experience of contemporary pure artists in VR art?
 - ☐ MT: Interviews with VR artists to understand the experiences, processes and attitudes of contemporary artists using VR to create art
 - ☐ MT: Literature analysis
 - ☐ MT: Reflection on self-practice
 - RQ: What is the acceptance of virtual reality art by contemporary pure artists?
 - ☐ MT: Questionnaire
 - ☐ MT: Interview
- OB 2: What is the impact of virtual reality as an artistic medium on pure art creation?
 - RQ: How does the media property of virtual reality affect contemporary art creation?

- ☐ MT: Documentary analysis
- ☐ MT: Interview
- RQ: Does the gender and age of the artist have an impact on the use of virtual reality technology? (Does the degree of adaptation to new technologies determine the ease of artists' creation with VR, and does it complicate the tools and techniques of art creation?)
 - ☐ MT: Set up control groups of artists of different ages and genders for interviews (control analysis)
 - ☐ MT: Questionnaire, quantitative analysis of data
- OB 3: What is the impact of virtual reality as a philosophical concept on art creation?
 - RQ: How does the ontological controversy of virtual reality affect the concept of contemporary pure art creation?
 - ☐ MT: Artist interviews
 - ☐ MT: Literature analysis

A 2: Future Prediction: The second purpose is to investigate the future impact of virtual reality technology on the field of pure art and to predict the explosive period of virtual reality art. To further define this purpose, the scope of my research is

- OB 1: Does virtual reality have the potential to change the theory and technology of art creation in the future?
 - RQ: Is there a unique technique for VR art creation? (Based on VR as an artistic medium)
 - ☐ MT: Interviews with VR artists
 - ☐ MT: Literature analysis
 - RQ: Is there a unique aesthetic to VR art?
 - ☐ MT: Interview with VR artist
 - ☐ MT: Documentary analysis
- OB 2: How will virtual reality affect the art market in the future?
 - RQ: How is VR art collected?
 - ☐ MT: Interviews with VR artists, collectors, related art institutions
 - ☐ MT: Questionnaire
 - RQ: What is the role of VR art in the metaverse and WEB3?
 - ☐ MT: Interviews with VR artists, collectors, related art institutions
 - ☐ MT: Questionnaire
 - RQ: The market operation industry chain of VR art?
 - ☐ MT: Interviews with VR artists, collectors, related art institutions
 - ☐ MT: Questionnaire
- OB 3: What is the relationship between virtual reality art and traditional art?
 - RQ: Is there any difference between the creation process of VR art and traditional art?
 - ☐ MT: Set up a control group of artists from different fields for interviews (traditional artists and VR artists control analysis)
 - ☐ MT: Self-practice reflection
 - ☐ MT: Literature analysis

- RQ: What is the aesthetic relationship between VR art and traditional art?
 - ☐ MT: Set up a control group of artists from different fields to conduct interviews (traditional artists and VR artists control analysis)
 - ☐ MT: Documentary analysis
- RQ: What are the advantages and disadvantages of VR art compared to traditional art?
 - ☐ MT: Interviews with VR artists and traditional artists
 - ☐ MT: Self-practice reflection
 - ☐ MT: Questionnaire, quantitative analysis of data
 - ☐ MT: Literature analysis
- OB 4: Predicting the possible future explosion of virtual reality art
 - RQ: When will VR art explode from the perspective of art history?
 - ☐ MT: Literature analysis
 - ☐ MT: Survey questionnaire, quantitative analysis of data
 - ☐ MT: Interviews with relevant people
 - RQ: Will there be an art style suitable for using virtual reality (medium)?
 - ☐ MT: Literature analysis
 - ☐ MT: Interviews with relevant people

Research Design and Analysis

Research Round 1:

- **Aims:** The first aim is to review the current state of VR art and analyze the possible role of virtual reality technology in the creation of contemporary art.
- **Objectives:** To explore the current state of application of virtual reality technology in the field of contemporary art, and the impact of virtual reality as an artistic medium and philosophical concept on the creation of fine art.
- **Research Questions:** 1. What percentage of contemporary pure artists attempt to create art using VR? 2. Does the gender and age of the artist have an impact on the use of virtual reality technology? 3. How do the media properties of virtual reality affect contemporary art creation? 4. How do the ontological controversies of virtual reality affect the concept of contemporary pure art creation?
- **Methods:** The review of the current state of VR art is a phenomenological one. In this round of research, I approach data collection and analysis from a pragmatic perspective, guided by mixed research methods, both qualitative and quantitative. I will use interviews, questionnaires, auto-ethnography, controlled experiments, narrative analysis, content analysis, documentary analysis, and comparative analysis.

- **Data Collections:** 1. A questionnaire on artists' experiences with VR will be distributed, numbering approximately 100. 2. semi-structured interviews with about 20 artists who have experience in VR art making. 3. self-practice research (auto-ethnography), where the researcher himself experiences practicing VR art making as an artist's perspective and records his reflections.

- **Data Analysis:** 1. Quantitative analysis of the questionnaire; 2. Narrative analysis, content analysis, and discourse analysis of the artists' interview data to discover how virtual reality influences contemporary art creation; 3. Comparative analysis of the interview data by gender and age to investigate whether the degree of adaptation to new technologies determines the ease of artists' use of VR creation. level. 4. In the data analysis of the self-practice action research, since the data collected is diverse, including video, images, text, etc. These materials are interpretive in nature, so narrative analysis and visual analysis are needed to assist in analyzing the data, along with the use of critical reflection.

Research Round 2:

- **Aims:** The second aim is to predict the future impact of virtual reality technology on the field of contemporary fine art.

- **Objectives:** To find out whether virtual reality has the potential to change the theory and technology of art making in the future. To explore how virtual reality will affect the art market in the future. To predict the possible future explosion of virtual reality art.

- **Research Questions:** 1. Does VR as an art medium have its own unique techniques and aesthetics? 2. What periods of art should VR art be compared to from an art historical perspective? 3. How will VR art be collected? 4. What role will VR art play in the metaverse and WEB3?

- **Research Methods:** This round of research is interpretive in its predictions for the future of VR art. Guided by mixed research methods, I will conduct data collection and analysis both qualitatively and quantitatively. I will use methods such as documentary analysis, interviews, narrative analysis, comparative analysis, and critical analysis to collect and analyze data.

- **Data Collections:** 1. Search and read literature related to art history, media, aesthetics, etc. 2. Semi-structured interviews with approximately 20 professionals in art and related fields.

- **Data Analysis:** 1. Find the aesthetic theoretical support and possible future explosion period of VR as an art medium by comparing and analyzing the literature. 2. To discover the potential impact of VR on the art market in the

future by doing narrative analysis, content analysis, and discourse analysis on the interview data of art and related field professionals.

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APPLICATION FOR ETHICAL APPROVAL

In order for research to result in benefit and minimise risk of harm, it must be conducted ethically. A researcher may not be covered by the University's insurance if ethical approval has not been obtained prior to commencement.

The University follows the OECD Frascati manual definition of **research activity**: "creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications". As such this covers activities undertaken by members of staff, postgraduate research students, and both taught postgraduate and undergraduate students working on dissertations/projects.

The individual undertaking the research activity is known as the "principal researcher".

Ethical approval is not required for routine audits, performance reviews, quality assurance studies, testing within normal educational requirements, and literary or artistic criticism.

Please read the notes for guidance before completing ALL sections of the form.

This form must be completed and approved prior to undertaking any research activity. Please see Checklist for details of process for different categories of application.

SECTION A: About You (Principal Researcher)

1	Full Name:	Fu Mengxi			
2	Tick all boxes that apply:	Member of staff:	☐	Honorary research fellow:	☐
	Undergraduate Student	☐	Taught Postgraduate Student	☐	Postgraduate Research Student
					☒
3	Institute/Academic Discipline/Centre:	University of Wales Trinity Saint David			
4	Campus:	Swansea			
5	E-mail address:	2107121@student.uwtsd.ac.uk			
6	Contact Telephone Number:	07864665269			
For students:					
7	Student Number:	2107121			
8	Programme of Study:	Professional Doctorate Art & Design			
9	Director of Studies/Supervisor:	Timi Oneill			

SECTION B: Approval for Research Activity

1	Has the research activity received approval in principle? (please check the Guidance Notes as to the appropriate approval process for different levels of research by different categories of individual)	YES	☒	NO	☐
					Date
2	If Yes, please indicate source of approval (and date where known): Approval in principle must be obtained from the relevant source prior to seeking ethical approval	Research Degrees Committee	☐		
		Institute Research Committee	☒		
		Other (write in)	☐		

SECTION C: Internal and External Ethical Guidance Materials

	Please list the core ethical guidance documents that have been referred to during the completion of this form (including any discipline-specific codes of research ethics, location-specific codes of research ethics, and also any specific ethical guidance relating to the proposed methodology). Please tick to confirm that your research proposal adheres to these codes and guidelines. You may add rows to this table if needed.
1	UWTSD Research Ethics & Integrity Code of Practice ☒
2	UWTSD Research Data Management Policy ☒
3	[List any other relevant documents here] ☐

SECTION D: External Collaborative Research Activity

If there are external collaborators then you should gain consent from the contact persons to share their personal data with the university. If there are no external collaborators then leave this section blank and continue to section E.

1	Institution					
2	Contact person name					
3	Contact person e-mail address					
4	Is your research externally funded?	YES	☐	NO	☐	
5	Are you in receipt of a KESS scholarship?	YES	☐	NO	☐	
6	Are you specifically employed to undertake this research in either a paid or voluntary capacity?	Voluntary	YES	☐	NO	☐
7		Employed	YES	☐	NO	☐
8	Is the research being undertaken within an existing UWTSD Athrofa Professional Learning Partnership (APLP)?	If YES then the permission question below does not need to be answered.	YES	☐	NO	☐
9	Has permission to undertake the research has been provided by the partner organisation?	(If YES attach copy) If NO the application cannot continue	YES	☐	NO	☐

Where research activity is carried out in collaboration with an external organisation

10	Does this organisation have its own ethics approval system?	YES	☐	NO	☐
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	If Yes, please attach a copy of any final approval (or interim approval) from the organisation (this may be a copy of an email if appropriate).
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SECTION E: Details of Research Activity

1	Indicative title:	Virtual Reality Art: A study and forecast on the application of virtual reality in the field of contemporary art		
2	Proposed start date:	15.Nov.2022	Proposed end date:	15.Nov.2023
	Introduction to the Research (maximum 300 words per section) Ensure that you write for a <u>Non-Specialist Audience</u> when outlining your response to the points below: <i>Purpose of Research Activity</i> <i>Proposed Research Question</i> <i>Aims of Research Activity</i> <i>Objectives of Research Activity</i> Demonstrate, briefly, how Existing Research has informed the proposed activity and explain <i>What the research activity will add to the body of knowledge</i> <i>How it addresses an area of importance.</i>			
3	Purpose of Research Activity The purpose of this study is to review the impact of virtual reality technology on the current fine art field and to find the possible impacts of virtual reality art in the future. This study addresses the application of virtual reality in the field of fine art, and comprehensively explores virtual reality art from the perspective of its media properties and philosophical properties. It provides a more vertical reference for the application of virtual reality technology in the field of fine art, and contributes to the precise advancement of virtual reality art research.			
4	Research Question 1. What percentage of contemporary pure artists attempt to create art using VR? 2. Does the gender and age of the artist have an impact on the use of virtual reality technology? 3. How do the media properties of virtual reality affect contemporary art creation? 4. How do the ontological controversies of virtual reality affect the concept of contemporary pure art creation? 5. Does VR as an art medium have its own unique techniques and aesthetics? 6. What periods of art should VR art be compared to from an art historical perspective? 7. How will VR art be collected? 8. What role will VR art play in the metaverse and Web 3.0? (this box should expand as you type)			
5	Aims of Research Activity 1. The first aim is to review the current state of VR art and analyze the possible role of virtual reality technology in the creation of contemporary art. 2. The second aim is to predict the future impact of virtual reality technology on the field of fine art. (this box should expand as you type)			
6	Objectives of Research Activity 1. To explore the current state of application of virtual reality technology in the field of fine art, and the impact of virtual reality as an artistic medium and philosophical concept on the art creation process. 2. To find out whether virtual reality has the potential to change the theory and technology of art making in the future.			

	3. To learn how virtual reality will affect the art market in the future. 4. To predict the possible future explosion of virtual reality art. (this box should expand as you type)
	Proposed methods (maximum 600 words) Provide a brief summary of all the methods that may be used in the research activity, making it clear what specific techniques may be used. If methods other than those listed in this section are deemed appropriate later, additional ethical approval for those methods will be needed. You do not need to justify the methods here, but should instead describe how you intend to collect the data necessary for you to complete your project.
7	Data Collection Methods may be included: Interview, Survey, Observation, Case Study, Documentation, Self-Practice / Autoethnography, Experiment Data Analysis Methods may be included: Narrative Analysis, Content Analysis, Discourse Analysis, Comparative Analysis, Visual Analysis, Critical Analysis, Documentary Analysis, Reflection Analysis (this box should expand as you type)
	Location of research activity Identify all locations where research activity will take place.
8	UK China Online (this box should expand as you type)
	Research activity outside of the UK If research activity will take place overseas, you are responsible for ensuring that local ethical considerations are complied with and that the relevant permissions are sought. Specify any local guidelines (e.g. from local professional associations/learned societies/universities) that exist and whether these involve any ethical stipulations beyond those usual in the UK (provide details of any licenses or permissions required). Also specify whether there are any specific ethical issues raised by the local context in which the research activity is taking place, for example, particular cultural and/or legal sensitivities or vulnerabilities of participants. If you live in the country where you will do the research then please state this.
9	We will follow the various regulations in China and are not involved in specific ethical issues. (this box should expand as you type)

10	Use of documentation not in the public domain: Are any documents NOT publicly available?	NO	☒
		YES	☐
11	If Yes, please provide details here of how you will gain access to specific documentation that is not in the public domain and that this is in accordance with the current data protection law of the country in question and that of England and Wales. (this box should expand as you type)		

	Does your research relate to one or more of the seven aims of the Well-being of Future Generations (Wales) Act 2015?	YES	NO
12	A prosperous Wales	☐	☒
13	A resilient Wales	☐	☒

14	A healthier Wales	☐	☒
15	A more equal Wales	☐	☒
16	A Wales of cohesive communities	☐	☒
17	A Wales of vibrant culture and thriving Welsh language	☐	☒
18	A globally responsible Wales	☐	☒
19	If YES to any of the above, please give details:		
(this box should expand as you type)			

SECTION F: Scope of Research Activity

	Will the research activity include:	YES	NO
1	Use of a questionnaire or similar research instrument?	☒	☐
2	Use of interviews?	☒	☐
3	Use of focus groups?	☒	☐
4	Use of participant diaries?	☐	☒
5	Use of video or audio recording?	☒	☐
6	Use of computer-generated log files?	☒	☐
7	Participant observation with their knowledge?	☒	☐
8	Participant observation without their knowledge?	☐	☒
9	Access to personal or confidential information without the participants' specific consent?	☐	☒
10	Administration of any questions, test stimuli, presentation that may be experienced as physically, mentally or emotionally harmful / offensive?	☐	☒
11	Performance of any acts which may cause embarrassment or affect self-esteem?	☐	☒
12	Investigation of participants involved in illegal activities?	☐	☒
13	Use of procedures that involve deception?	☐	☒
14	Administration of any substance, agent or placebo?	☐	☒
15	Working with live vertebrate animals?	☐	☒
16	Procedures that may have a negative impact on the environment?	☐	☒
17	Other primary data collection methods. Please indicate the type of data collection method(s) below.	☐	☒
	Details of any other primary data collection method:		
(this box should expand as you type)			

If NO to every question, then the research activity is (ethically) low risk and **may** be exempt from **some** of the following sections (please refer to Guidance Notes).

If YES to any question, then no research activity should be undertaken until full ethical approval has been obtained.

SECTION G: Intended Participants

If there are no participants then do not complete this section, but go directly to section H.

Who are the intended participants:		YES	NO
1	Students or staff at the University?	☒	☐
2	Adults (over the age of 18 and competent to give consent)?	☒	☐
3	Vulnerable adults?	☐	☒
4	Children and Young People under the age of 18? (Consent from Parent, Carer or Guardian will be required)	☐	☒
5	Prisoners?	☐	☒
6	Young offenders?	☐	☒
7	Those who could be considered to have a particularly dependent relationship with the investigator or a gatekeeper?	☐	☒
8	People engaged in illegal activities?	☐	☒
9	Others. Please indicate the participants below, and specifically any group who may be unable to give consent.		
	Details of any other participant groups: (this box should expand as you type)	☐	☐

Participant numbers and source Provide an estimate of the expected number of participants. How will you identify participants and how will they be recruited?		
10	How many participants are expected?	Interview 1 participants: ~ 20 Interview 2 participants: ~ 20 Survey numbers: ~ 100 Autoethnography: 1 (this box should expand as you type)
11	Who will the participants be?	Interview 1 participants: Artists Interview 2 participants: Professionals in art field Survey participants: Artists, art students, and/or adults with art experience (this box should expand as you type)
12	How will you identify the participants?	Artists with consistent portfolios, professionals such as art curators, collectors, art managers (this box should expand as you type)

	Information for participants:	YES	NO	N/A
13	Will you describe the main research procedures to participants in advance, so that they are informed about what to expect?	☒	☐	☐
14	Will you tell participants that their participation is voluntary?	☒	☐	☐
15	Will you obtain written consent for participation?	☒	☐	☐
16	Will you explain to participants that refusal to participate in the research will not affect their treatment or education (if relevant)?	☒	☐	☐
17	If the research is observational, will you ask participants for their consent to being observed?	☒	☐	☐
18	Will you tell participants that they may withdraw from the research at any time and for any reason?	☒	☐	☐
19	With questionnaires, will you give participants the option of omitting questions they do not want to answer?	☒	☐	☐
20	Will you tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs?	☒	☐	☐
21	Will you debrief participants at the end of their participation, in a way appropriate to the type of research undertaken?	☒	☐	☐
22	If NO to any of above questions, please give an explanation			
	<i>(this box should expand as you type)</i>			

	Information for participants:	YES	NO	N/A
24	Will participants be paid?	☐	☒	☐
25	Is specialist electrical or other equipment to be used with participants?	☐	☒	☐
26	Are there any financial or other interests to the investigator or University arising from this study?	☐	☒	☐
27	Will the research activity involve deliberately misleading participants in any way, or the partial or full concealment of the specific study aims?	☐	☒	☐
28	If YES to any question, please provide full details			
	<i>(this box should expand as you type)</i>			

SECTION H: Anticipated Risks

	Outline any anticipated risks that may adversely affect any of the participants, the researchers and/or the University, and the steps that will be taken to address them.		
	If you have completed a full risk assessment (for example as required by a laboratory, or external research collaborator) you may append that to this form.		
1	Full risk assessment completed and appended?	Yes	☐
		No	☒
2	Risks to participants For example: sector-specific health & safety, emotional distress, financial disclosure, physical harm, transfer of personal data, sensitive organisational information		
	Risk to participants: - VR Motion sickness	How you will mitigate the risk to participants: - I will inform the participants in advance, communicate in time if there is	

	- With long-term use of VR, participants may become detached from reality and feel a sense of unreality <i>(this box should expand as you type)</i>	discomfort, and ensure that participants get sufficient rest. - Provide psychological counselling <i>(this box should expand as you type)</i>
3	If research activity may include sensitive, embarrassing or upsetting topics (e.g. sexual activity, drug use) or issues likely to disclose information requiring further action (e.g. criminal activity), give details of the procedures to deal with these issues, including any support/advice (e.g. helpline numbers) to be offered to participants. Note that where applicable, consent procedures should make it clear that if something potentially or actually illegal is discovered in the course of a project, it may need to be disclosed to the proper authorities	
	NA <i>(this box should expand as you type)</i>	
4	Risks to the investigator For example: personal health & safety, physical harm, emotional distress, risk of accusation of harm/impropriety, conflict of interest	
	Risk to the investigator: - May cause Motion Sickness and Muscle Pain when the investigator doing autoethnography with VR headset. <i>(this box should expand as you type)</i>	How you will mitigate the risk to the investigator: - Rest 10min for every 30min self-practice with VR headset. <i>(this box should expand as you type)</i>
5	University/institutional risks For example: adverse publicity, financial loss, data protection	
	Risk to the University: - There is no risk to the university <i>(this box should expand as you type)</i>	How you will mitigate the risk to the University: - NA <i>(this box should expand as you type)</i>
6	Environmental risks For example: accidental spillage of pollutants, damage to local ecosystems	
	Risk to the environment: - Using VR devices may cost a lot of electricity. <i>(this box should expand as you type)</i>	How you will mitigate the risk to environment: - We advocate non-essential use and conservation of electricity <i>(this box should expand as you type)</i>

	Disclosure and Barring Service			
	If the research activity involves children or vulnerable adults, a Disclosure and Barring Service (DBS) certificate must be obtained before any contact with such participants.	YES	NO	N/A
7	Does your research require you to hold a current DBS Certificate?	☐	☒	☐
8	If YES, please give the certificate number. If the certificate number is not available please write "Pending"; in this case any ethical approval will be subject to providing the appropriate certificate number.			

SECTION I: Feedback, Consent and Confidentiality

1	Feedback What de-briefing and feedback will be provided to participants, how will this be done and when?
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	A written document will describe the study prior to the start of the research activities to inform the participants. <i>(this box should expand as you type)</i>
2	Informed consent Describe the arrangements to inform potential participants, before providing consent, of what is involved in participating. Describe the arrangements for participants to provide full consent before data collection begins. If gaining consent in this way is inappropriate, explain how consent will be obtained and recorded in accordance with prevailing data protection legislation.
	An informed consent form will be given for participants to read and sign prior to the start of the study activities. <i>(this box should expand as you type)</i>
3	Confidentiality / Anonymity Set out how anonymity of participants and confidentiality will be ensured in any outputs. If anonymity is not being offered, explain why this is the case.
	There is a confidentiality agreement form for participants to read and sign before the research activity begins. <i>(this box should expand as you type)</i>

SECTION J: Data Protection and Storage

	Does the research activity involve personal data (as defined by the General Data Protection Regulation 2016 "GDPR" and the Data Protection Act 2018 "DPA")?	YES	NO
1	"Personal data" means any information relating to an identified or identifiable natural person ('data subject'). An identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person. Any video or audio recordings of participants is considered to be personal data.	☒	☐
	If YES, provide a description of the data and explain why this data needs to be collected:		
2	Some interviews and questionnaires with participants will be involved in this study and will be used to help analyze the research questions. Since the performance of the interviewees' expressions, words, and body movements will have an impact on the data analysis, video or audio recording is required, and I will comply with relevant privacy and data protection regulations to protect this personal data. <i>(this box should expand as you type)</i>		
	Does it involve special category data (as defined by the GDPR)?	YES	NO
3	"Special category data" means sensitive personal data consisting of information as to the data subjects' – (a) racial or ethnic origin, (b) political opinions, (c) religious beliefs or other beliefs of a similar nature, (d) membership of a trade union (within the meaning of the Trade Union and Labour Relations (Consolidation) Act 1992), (e) physical or mental health or condition, (f) sexual life, (g) genetics, (h) biometric data (as used for ID purposes),	☐	☒
	If YES, provide a description of the special category data and explain why this data needs to be collected:		

4	<i>(this box should expand as you type)</i>
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	Will data from the research activity (collected data, drafts of the thesis, or materials for publication) be stored in any of the following ways?	YES	NO
5	Manual files (i.e. in paper form)?	☒	☐
6	University computers?	☐	☒
7	Private company computers?	☐	☒
8	Home or other personal computers?	☒	☐
9	Laptop computers/ CDs/ Portable disk-drives/ memory sticks?	☒	☐
10	"Cloud" storage or websites?	☒	☐
11	Other – specify:	☐	☒
12	For all stored data, explain the measures in place to ensure the security of the data collected, data confidentiality, including details of backup procedures, password protection, encryption, anonymisation and pseudonymisation:		
	Paper documents pay attention to fire and moisture, and folders are filed and locked in a timely manner. Electronic files pay attention to hard disk and cloud backup, and set password protection. Prepare special mobile hard disk or USB flash drive for storing data, and usually put it in a safe place and lock it. The account for storing files in the cloud should be anonymized and account information should not be disclosed to others. <i>(this box should expand as you type)</i>		

Data Protection			
	Will the research activity involve any of the following activities:	YES	NO
13	Electronic transfer of data in any form?	☒	☐
14	Sharing of data with others at the University outside of the immediate research team?	☐	☒
15	Sharing of data with other organisations?	☐	☒
16	Export of data outside the UK or importing of data from outside the UK?	☐	☒
17	Use of personal addresses, postcodes, faxes, emails or telephone numbers?	☐	☒
18	Publication of data that might allow identification of individuals?	☐	☒
19	Use of data management system?	☐	☒
20	Data archiving?	☐	☒
21	If YES to any question, please provide full details, explaining how this will be conducted in accordance with the GDPR and Data Protection Act (2018) (and any international equivalents, where appropriate):		
	According to GDPR and DPA, care should be taken to protect data security when transferring electronic data. Electronic terminals such as desktop computers and laptops should be virus-free before transferring data; mobile hard drives or USB flash drives used for electronic data transfer should be virus-free and have a password for the files. The entire transfer process should only be allowed to be operated by the researcher himself/herself.		

	(this box should expand as you type)		
22	List all who will have access to the data generated by the research activity:		
	The researcher: Mengxi Fu (this box should expand as you type)		
23	List who will have control of, and act as custodian(s) for, data generated by the research activity:		
	The researcher: Mengxi Fu (this box should expand as you type)		
24	Give details of data storage arrangements, including security measures in place to protect the data, where data will be stored, how long for, and in what form. Will data be archived – if so how and if not why not.		
	The data generated during this study will be in the form of both paper files and digital files. Tools such as personal computers, hard drives, USB drives, cloud drives, and folders will be used to store the data. Data will be stored for the entire duration of the study until they are no longer needed. (this box should expand as you type)		
25	Please indicate if your data will be stored in the UWTSD Research Data Repository (see https://researchdata.uwtsd.ac.uk/). If so please explain. (Most relevant to academic staff)		
	NA (this box should expand as you type)		
26	Confirm that you have read the UWTSD guidance on data management (see https://www.uwtsd.ac.uk/library/research-data-management/)	YES	☒
27	Confirm that you are aware that you need to keep all data until after your research has completed or the end of your funding	YES	☒

SECTION K: Declaration

	The information which I have provided is correct and complete to the best of my knowledge. I have attempted to identify any risks and issues related to the research activity and acknowledge my obligations and the rights of the participants. In submitting this application I hereby confirm that I undertake to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice which is published on the website: https://www.uwtsd.ac.uk/research/research-ethics/		
1	Signature of applicant:	Mengxi Fu	Date: August 21, 2022

For STUDENT Submissions:

2	Director of Studies/Supervisor:		Date:
3	Signature:		

For STAFF Submissions:

4	Academic Director/ Assistant Dean:		Date:
5	Signature:		

Checklist: Please complete the checklist below to ensure that you have completed the form according to the guidelines and attached any required documentation:

☒	I have read the guidance notes supplied before completing the form.
☒	I have completed ALL RELEVANT sections of the form in full.
☒	I confirm that the research activity has received approval in principle
☐	I have attached a copy of final/interim approval from external organisation (where appropriate)
☐	I have attached a full risk assessment (where appropriate) ONLY TICK IF YOU HAVE ATTACHED A FULL RISK ASSESSMENT
☒	I understand that it is my responsibility to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice.
☒	I understand that before commencing data collection all documents aimed at respondents (including information sheets, consent forms, questionnaires, interview schedules etc.) must be confirmed by the DoS/Supervisor, module tutor or Academic Director.

RESEARCH STUDENTS AND STAFF ONLY

All communications relating to this application during its processing must be in writing and emailed to pgresearch@uwtsd.ac.uk, with the title 'Ethical Approval' followed by your name. You will be informed of the outcome of your claim by email; therefore it is important that you check your University and personal email accounts regularly.

STUDENTS ON UNDERGRADUATE OR TAUGHT MASTERS PROGRAMMES should submit this form (and receive the outcome) via systems explained to you by the supervisor/module leader.



This form is available electronically from the Academic Office web pages:
<https://www.uwtsd.ac.uk/academic-office/appendices-and-forms/>