



Royal Irish Academy Grants Report

Title:	Dr
First Name:	Rachel
Surname:	O'Dwyer
Discipline:	Humanities and Social Sciences
Year of Award:	2018
Project Title	ART CHAINS & ART WORKS: How Are Blockchain Technologies Transforming the Art Market?

1. Research background:

Blockchain technologies are radically transforming business models in the creative and cultural industries. The blockchain is a distributed database; it is a record shared by all participants in a network that cannot be updated without their mutual. As such, a blockchain produces records that are secure, verifiable and which cannot be altered. Its primary use was to verify payments using the cryptocurrency Bitcoin, but more recently blockchains have been used in various contexts where unbreakable records, trust and consensus are required, such as the development of 'smart' contracts, in voting systems and in securing and monitoring supply-chains. Blockchains are now being used to disrupt business models in the creative and cultural industries, including how artworks are funded, sold, copyright protected, how ownership is transferred and how records regarding originality and provenance are documented. While most innovations have focused on the monetisation of digital goods such as music or image files, companies are now developing methodologies for disrupting physical art markets. This research explores and analyses the state-of-the-art in the application of blockchains to physical artworks.

2. Please outline the findings of your research and/or milestones achieved (did you achieve the primary objectives - if not, what did you learn from the process)?

his research produced a state of the art mapping of the space and identified further areas for inquiry including regulatory issues surrounding the tokenisation of physical artworks. Furthermore, the research findings were extended and consolidated in a research visit to UC Irvine California later that summer. The primary dissemination activities of the research are listed below.