

#### VICTORIANS DECODED: ART AND TELEGRAPHY

Edited by Caroline Arscott and Clare Pettitt

With contributions by: Caroline Arscott Anne Chapman Natalie Hume Mark Miodownik Cassie Newland Clare Pettitt Rai Stather

Exhibition Catalogue for the exhibition *Victorians Decoded: Art and Telegraphy* held at The Guildhall Art Gallery, London from 20th September 2016 to 22nd January 2017.

Published by The Courtauld Institute of Art Somerset House, Strand, London WC2R 0RN and King's College London, Strand, London WC2R 2LS. © 2016, The Courtauld Institute of Art, London and King's College, London ISBN: 987-1-907485-053

All sections of this catalogue are available for free download at the project website for Scrambled Messages: The Telegraphic Imaginary 1857-1900

http://www.scrambledmessages.ac.uk/

This website is hosted by King's College, London

Every effort has been made to contact the copyright holders of images reproduced in this publication. This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any way or form or my any means, electronic, mechanical, photocopying, recording or otherwise without the prior permission in writing from the publisher.

Designed by Olivia Alice Clemence

#### BACK AND FRONT COVER:

James Tissot, The Last Evening, 1873 (details), The Guildhall Art Gallery, Corporation of London.







# **FOREWORD**

## Caroline Arscott and Clare Pettitt

# INTRODUCTORY

Victorians Decoded is a vehicle for thinking about science and culture. This research-led exhibition has grown out of a four-year interdisciplinary project, Scrambled Messages: The Telegraphic Imaginary 1857-1900.

Victorians Decoded: Art and Telegraphy puts pictures on display that have not been seen since the nineteenth century and brings scientific papers and instruments out of the archive into the space of the art gallery. The exhibition mixes academic painting with outlying examples to create an unusually comprehensive picture of high art and visual culture in the mid to late nineteenth century. We deliberately turned away from canonical reputation or modernist characteristics as the index for our show. Following 'cable themes' (rather than traditional art-historical trajectories and genealogies) reveals commonalities between works which might previously have been considered to be opposite in tendency, for example Walter Greaves's avant-gardist The Pool of London (1863-1869) and Edwin Landseer's academic work, Man Proposes, God Disposes (1864). These two works are bracketed together to produce a powerful argument concerning passage and impedance. This catalogue has been written by researchers working in a wide variety of different fields and we have streamed and entwined our methodologies through the entries. New lines of argument and startling new interpretations of Victorian works have emerged. The entire sequence of catalogue entries constitutes an intervention in cultural history and the history of science, offering innovative and exciting ways to think about Victorian painting and science.

### **SIGNALS**

Scrambled Messages proposed a reconceptualisation of the way that scientific and technical history can be brought into meaningful contact with the history of art and literary theory. Our interdisciplinary research group includes literary scholars, art historians, historians of science, archaeologists, physicists and engineers. Bringing scientific and artistic objects into conversation with each other can challenge and change accepted notions of the aesthetic or the functional. By taking the idea of the telegraph as the primary object of our investigation we were able to break free of empirical scientific explanation on one hand, and from the non-specificities of literary 'thing theory' on the other. We were able to track the mobility of objects and the ideas instantiated in them in ways that avoid the cybernetic bias of network theory and the anthropocentric bias of traditional theories of art or literary criticism. The result is the generation of a materialist paradigm of nineteenth-century realism that pivots on the notions of mediation that fascinated the Victorians themselves.

### DISTANCE

The thematic emphasis on distance has made possible an engagement with Victorian landscape painting, hitherto relatively neglected by cultural historians. Distance was a challenge for the cable engineers and was central among the marvels rehearsed by Victorian enthusiasts for telegraphy. This exhibition shows that in the Victorian period the spaces of landscape, stretches of coast, ocean depths, river scenery, and grassy or wooded zones were reimagined. Spaces that might be unpeopled (or sparsely occupied) and minimal in feature were conceived of as theatres for action. The action that unfolded was nothing less than the play of industrial and cosmic forces. In this age of electrical signalling it was possible to stake claims for the industrial as the channel for the cosmic. Rather than staging the deeds of naval or mythological heroes, the landscapes of late Victorian art staged the agitation of particles. Energy coursed through substances; light, heat, magnetism and electricity could figure as well as other forces. In a dynamic universe nature was not empty. This exhibition has identified the phenomenon of full emptiness or empty fullness in Victorian landscape. Standard responses to grandeur of scenery and the activation of the sublime were no longer the primary means of engaging with landscape. Poetic parallels, for instance the insistent drone-like rhythms of Swinburne's verse, have informed our analysis of late Pre-Raphaelite, Aestheticist and Academic landscape. Project research on distance has made possible a re-examination of the role of minute observation when nature is conceived of as empty plenitude as in John Brett's coastal scene. It alerts us to repetition, multiplication and ornament in marine painting, as in the work of Henry Moore and William Ayerst Ingram. It enables an assessment of the 'poetic' as a term of appreciation in late Victorian art criticism and equips us to interpret the complex orchestration of mood by artists such as James Clarke Hook and Gustave de Breanski. Theoretical physics and mathematics were pushed forward by the requirements of telegraphy, and the urgency of commercial, political and military applications. An awareness of this has encouraged us to develop ideological readings of the works in the exhibition. Victorians Decoded registers the exploration of nature and experiments with form in the works displayed. Additionally we posit their importance for the social and political fabric of Victorian society.

## **TRANSMISSION**

In the 'Transmission' section of the exhibition the emphasis shifts from scenery to figure painting. Allegorical pictures and genre scenes are brought together to demonstrate Victorian art's envisaging of systems of transmission, putting the linkage of (human) units at the heart of the composition. Within the exhibition historic instruments for sending

messages are brought into close proximity to the paintings. Fingerboards and buttons on instruments are evocative of the somatic dimension of message sending and yield the opportunity to investigate ways in which the social agent, or the body itself, can stand as a metaphor for the substance of the cable. A comparison of human nervous systems with the wires of the telegraph was common and the idea of electricity running through the body was not strange to the Victorians. The issue that was important regarding the nervous system was the relationship between voluntary and involuntary action. For Evelyn De Morgan the spirit message that passes through the nerves is ambivalently placed between a willed contact and a message that flows automatically. Transmission could be a communal project, as Hook saw it, or it could be an unwilled and unwanted process.

In telegraphic transmission the clarity of signaling depended on maintaining a rhythm and tempo that kept elements separate. Instruments were devised to register extremely small variations. Frederic Leighton's *The Music Lesson* (1877) is included in the exhibition as a picture that meditates on minimal difference and the borderline between maintenance of identity and the merging of identity. It suggests a teetering between the binary and hybridized. It is an eloquent example of art that thematises the move from analogue to the compression of the digital in the way that it packs information into pattern and ornament.

#### CODING

In this section, we see artists responding to ideas of coding visually, thinking through repetitive motifs and testing the limits of communication and category formation.

When the electric telegraph first appeared in the 1830s, a particular and specific series of ideas about codes, coding and decoding was already circulating in the nineteenth-century European imagination. Jean-Francois Champollion had deciphered Egyptian Hieroglyphics in the 1820s and British East India Company army officer, Henry Rawlinson had successfully deciphered Cuneiform and started to publish his translations in 1847. In the mid nineteenth century, the long-running debate over the authorship of Shakespeare's plays rested on efforts to decode the texts. Francis Bacon, who was possibly the inventor of binary code, was believed by many to be the 'true' Shakespeare. So there is a wider nineteenth-century context for codes that must also include the work of Darwin and Galton, and the idea of transmissible inherited information that was developing alongside the emerging science of structural linguistics.

Victorians Decoded charts the crucial move from analogue to digital inaugurated by electric

telegraph technology. This has resulted in a focus on the idea of the pattern and structure of binary code, and the kinds of transformations that take place when sending signals. Complex information had to be packed into small enough units to enable it to travel vast distances. The exhibition shows that in the context of coding and decoding, loss was endemic. The physicality of spoken language could not be conveyed and messages could be mangled in transmission through error or technical incapacity. Pictures shot through with melancholy evidence this loss: non-communication and abandoned options are featured in works by Solomon, Tissot and Watts.

#### RESISTANCE

In terms of the theoretical framework of the exhibition it was important to us to include the category of resistance which references the phenomenon of electrical impedance which preoccupied the telegraph engineers. The project has deliberately avoided an account of technological innovation as trouble-free and of modern communications systems as producing ever more transparent connectivity in an information world. Certain strands of Post-Modern theory have had a tendency to view history in these terms, recapitulating the triumphalist claims of Victorian journalists who were ready to assert that the telegraph had abolished space and time. Our researchers are historians who view culture in terms of evolving possibilities and shifting material constraints, and investigators of media and materials acutely aware that 'stuff matters', whether words, paint or the atomic structure of copper. As we consider representation we acknowledge that non-transparency goes beyond medium to form and beyond form to the social conventions governing language and social interaction, with historical mutability at every level. This exhibition celebrates the achievement of establishing transatlantic telegraphic communication 150 years after the laying of the robust cable of 1866 and makes forceful claims for the impact of the new communications technology on the cultural imagination. But it mounts the celebration in a non-triumphalist manner, recognizing that time and space were not abolished, that attention was directed more than ever to the non conductors; insulation and impedance were as important to the cultural imagination as conductivity.

#### PROJECT RESOURCES

This catalogue has been written by the entire team of the Arts and Humanities Research Council funded four-year project, *Scrambled Messages: The Telegraphic Imaginary 1857-1900*. The team consists of Caroline Arscott, Professor of Art History at The Courtauld Institute of Art, author of *William Morris and Edward Burne-Jones: Interlacings* 

(2008) and Chief Curator of this exhibition; Clare Pettitt, Professor of English Literature at King's College London, author of 'Dr. Livingstone, I Presume': Missionaries, Journalists, Explorers and Empire (2007) and Co-Curator of this exhibition; Professor Mark Miodownik, Materials Scientist and Director of the Institute of Making at University College London and the author of Stuff Matters: The Strange Stories of the Marvellous Materials that Shape Our Man-Made World (2013); Cassie Newland, Archaeologist and Post-Doctoral Researcher for the project at King's College London, responsible for the selection of scientific items for the exhibition; Anne Chapman, Literary Scholar, PhD student on the project at King's College London, responsible for the development of teaching materials relating to the project and schools outreach; Natalie Hume, Art Historian and PhD student on the project at The Courtauld Institute of Art, responsible for detailed research on Victorian landscape painting for the exhibition. Additionally Sonia Solicari, Vicky Carroll and Katty Pearce, the curatorial team at the Guildhall Art Gallery, have lent support and valuable advice at every stage of the project. The display of materials in the exhibition gives a small glimpse of the extensive cataloguing, interpretation and conservation undertaken on Wheatstone materials at King's College London as part of the project. Members of the Department of Digital Humanities at King's College London also participate in the project. Our exhibition extends our efforts to encourage free public access to this previously unavailable material. The public-facing nature of the exhibition is paralleled by projectdeveloped schools resources, downloadable from our website.

#### LEGACY OF THE SHOW

We hope that the legacy of this exhibition as a major outcome of our research project will be its impact on historical studies. *Victorians Decoded* shows the benefits of basing research around metaphor. The cable became a metaphor for the Victorians as soon as it was laid. The investigation of metaphor offers a way of exploring historical phenomena from multiple disciplinary viewpoints. Approaching historical conjunctures through freshly emergent metaphors is one way to write history.

# **ACKNOWLEDGEMENTS**

For underpinning support for the Scrambled Messages project and its outputs: the Arts and Humanities Research Council.

For ongoing advice for the Scrambled Messages project: Advisory Board members Graeme Gooday and Roland Wenzlhuemer.

For hosting and realising the exhibition at The Guildhall Art Gallery: the Corporation of London; We are extremely grateful to the Guildhall Art Gallery curatorial team especially Sonia Solicari; Vicky Carroll and Katty Pearce. For exhibition installation and building Tom Scase and Paul Collins, visualisation Domenico Laneve; object-files research Figna Rateliffe

For design work for the exhibition: Matthew Hodges at Matt Hodges Design Limited.

For generously lending a large body of material for the exhibition: King's College London; we are particularly grateful to Catherine Sambrook, Frances Pattman and Brandon High from KCL Foyle Special Collections Library and Patricia Methyen and Lianne Smith from KCL Archives.

For loans: John Winterburn, Pete Norman, De Morgan Foundation, Royal Academy, London; Royal Borough of Kensington and Chelsea (Leighton House); Royal Holloway, University of London; The National Archives.

For support for Alexandra Bridarolli's *The Great Grammatizor: Marvellous Messaging Machine*: The Institute of Making, University College London, particularly Sarah Wilkes.

For extreme dedication and efficiency in assisting with the making of the catalogue: Rai Stather.

For design and technical expertise in the making of the catalogue: Olivia Clemence.

For website development and technical advice: Department of Digital Humanities, King's College London.

For technical advice and catalogue template: the Sackler Research Forum, The Courtauld Institute of Art, especially Alixe Bovey; Fern Insh, James Cameron, Maria Mileeva and original template designer Jack Hartnell.

We are grateful for financial support for the exhibition and the catalogue from Arts and Humanities Research Council; Department of English, King's College London; The Courtauld Institute of Art.

For assistance with publicity: Leanne O'Boyle, David Wilson, Emily Butcher and Michael Sherry.

For creative suggestions: Tilly Blyth, Bill Burns, Mischa Dohler, Roo Gunzi, Pat Hardy, Ali Hossaini and many other friends and colleagues.

#### A NOTE ON ABBREVIATIONS USED IN THE CATALOGUE

Royal Academy/ Royal Academician RA

Associate Royal Academician ARA

Dimensions of artworks are given as height X width

For paintings referenced in the catalogue the medium is oil on canvas, unless indicated otherwise.

Catalogue Contributors -- Caroline Arscott (CA); Anne Chapman (AC); Natalie Hume (NH); Mark Miodownik (MM); Cassie Newland (CN); Clare Pettitt (CP); Rai Stather (RS).

# CONTENTS

Foreword	3
Acknowledgements	8
SECTION 1: SIGNALS	
A Brief Introduction to Electricity	
MARK MIODOWNIK	12
Catalogue Entries for Signals Section	16
SECTION 2: DISTANCE	
Between the Empirical and the Abstract: Grimshaw's The Thames By Moonlight with Southwark Bridge	
NATALIE HUME	28
Profound Repetition: Hook's Deep Sea Fishing	
ANNE CHAPMAN	34
Chatterton's Compound	
CASSIE NEWLAND	40
Catalogue Entries for Distance Section	45
SECTION 3: TRANSMISSION	
Dispersed Consciousness: Evelyn De Morgan's Moonbeams Dipping Into the	
Sea CLARE PETTITT	87
Electrifying the Literal: Topham's Rescued from the Plague	
CAROLINE ARSCOTT	93
Grim Spectres: Logsdail's <i>The Ninth of November</i> , 1888	
CAROLINE ARSCOTT	98
Engineering and Oratorios: Poynter's Israel in Egypt	
CAROLINE ARSCOTT	107
Telegraphic Copper	
CASSIE NEWLAND	114

# **CONTENTS**

Catalogue Entries for Transmission Section	119
SECTION 4: CODING	
Coded Encounters: Tissot's The Last Evening	
ANNE CHAPMAN	145
Catalogue Entries for Coding Section	151
SECTION 5: RESISTANCE	
Franklin's Messages: Edwin Landseer's Man Proposes, God Disposes	
CLARE PETTITT	172
Resistance and Boundaries: Peter Graham's Ribbed and Paled in by Rocks	
Unscaleable and Roaring Waters	
NATALIE HUME	180
Gutta-percha	
CASSIE NEWLAND	188
Catalogue Entries for Resistance Section	193