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# Trinity College Dublin | Journal of Postgraduate Research VOLUME XIII

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# **Foreword**

I am delighted, as Dean of Graduate Studies, to write the foreword for the 14th issue of the Journal of Postgraduate Research (JPR). Publication of the JPR has become a regular on the Trinity calendar and is an excellent showcase for the outstanding research being carried out by our postgraduate students. Managing all aspects of the production of this high quality publication demonstrates that postgraduate students are committed to communicating their research to the wider College community and beyond. Research carried out in multiple schools and disciplines within the University is presented in this issue, reflecting the breadth and quality of the work being done across College. Unlike the specialist journals that publish within narrow research themes, the JPR is multidisciplinary and this year contains articles on a variety of subjects including the discussion of the translatability in literary texts, attitudes of the Irish State towards Traveller ethnicity, the recovery of memory and identity through photographs in post-1945 art and literature and the relationship between native fungal microorganisms and barley. It is certainly reassuring to see Trinity postgraduates excelling across such a broad range of very interesting specialist topics.

I would like to commend the editorial team, Chloe Beeson, John Duffy, Carol O'Brien and Alexander Jones, led by Editor-in-Chief Gareth Davies and Chair, Megan Lee, on the excellent job they have done in producing this issue of the JPR. Thanks to the Peer Review Committee comprising postgraduate students from multiple Schools across College. Thanks also to the Academic Advisory Committee, Dr Gilbert Carr, Fellow Emeritus in German, Dr Joseph Clarke, School of Histories and Humanities, Dr Andrew Finlay, School of Social Sciences and Philosophy, Dr Stephen Finn, School of Medicine, Dr Mike Jones, School of Natural Sciences, Dr Jarlath Killeen, School of English, Dr Bernice Muphy, School of English, Dr Amanda Piesse, School of English, Dr Yvonne Scott, School of Histories and Humanities, and Dr Tom Walker, School of English. The commitment and support of the Graduate Students Union has been fundamental to the success of the JPR since its inception and this year the work of GSU President, Megan Lee has ensured the production of yet another excellent volume. Megan, together with GSU vice-president, Adam Hannah have done marvellous work on behalf of all postgraduate students this year and it has been a pleasure to work with them.

Finally, thanks to all who have supported the publication of this issue of the JPR and I hope you enjoy reading all the articles.

Dr Aideen Long Dean of Graduate Studies May 2015

# **Preface**

It is with great pleasure that we present the fourteenth volume of Trinity College Dublin's Journal of Postgraduate Research (JPR). The JPR provides an opportunity for postgraduate students to present original and innovative research to the University community and beyond. The papers included in this year's edition represent contributions from across a range of schools and disciplines from molecular medicine to art history, and demonstrate the breadth and reach of postgraduate research. Contributions in this volume show that the work undertaken by Trinity's postgraduates have both national and international significance.

The capacity for informing and developing real world scientific praxis is evident in both of the sciences papers featured in this year's edition. Deirdre Duff offers cancer research findings by exploring the levels and location of a scaffolding protein called RACK1 throughout the development of oesophageal cancer. Brian Murphy, from the School of Natural Sciences, offers a review of research undertaken to analyse the possibilities of enhanced crop yield when microorganisms called endophytes are introduced to Barley under stressful growing conditions. Set against mounting concerns around future food security, this paper also serves to advance practical knowledge in order to make real-world change.

Several authors offer detailed analysis in their papers to arrive at thoughtful and nuanced interpretations of a variety of topics in art and literature. Kerstina Mortensen explores the use of photography in post-1945 art and literature as a means of recovering memory in the aftermath of World War Two. David Smyth provides an analysis of the figure of the American serial killer through *Henry: Portrait of a Serial Killer*, examining the way it blurs the distinction between myth and reality. Meadhbh McGrath uses Spike Jonze's *Her* as a basis for discussing the use of language to perform bodies in acts of cybersex. Thomas Roberts applies the theatrical abridgement theory to the "bad quarto" of Shakespeare's *Romeo and Juliet*, exploring the use of modified stage directions and the re-structuring of the play. Liath Gleeson's paper focuses on the way we analyse literature, by developing a practical framework for the discussion of untranslatability in literary texts.

In the fields of Social Sciences, Education, and History, the papers tackle diverse subjects. Barry Price provides a genealogy of how and why the Irish state is coming to recognise traveller ethnicity. Youcef Sai examines the existing European research on faith schools in order to determine what role, if any, they should play in Ireland's future. Finally, Rachael Scally engages in an analysis which improves our understandings of the aims, ideologies, and membership of Dublin's Medico-Philosophical Society in the period 1756 - 1784.

Sincere thanks are due to the Dean of Graduate Studies Professor Aideen Long, the Dean of Research Professor Vinny Cahill, the Dean of Students Professor Kevin O'Kelly, and the College Registrar Shane Allwright for their involvement as judges in the JPR's paper presentation event. Thanks are also due to this year's roster of academic advisors who took time out of their busy schedules to read and review papers. Thanks to all of the postgraduate students involved in the peer review process, who volunteered their time and provided an invaluable service, meticulously checking all articles and providing comments to improve the work of others. Olivia Wilkinson, editor of Volume XIII deserves thanks for her advice, as does Shane Finan, for his tireless work on the design of this volume. We would like to extend further thanks to all of our authors this year, without whom this journal would not exist. Finally we would like to thank Megan Lee, GSU President and Chair of the JPR, for her support through all stages of the journal's production.

Gareth Davies, Chloe Beeson, John Duffy, Alexander Jones, Carol O'Brien Editors

# Putting oesophageal cancer on the RACK A study of the RACK1 scaffolding protein in oesophageal adenocarcinoma

# by Deirdre Duff

## **Abstract**

# **Purpose**

There is a need to identify new therapeutic targets for oesophageal adenocarcinoma. Deoxycholic acid is a component of gastro-oesophageal refluxate and is believed to promote oesophageal adenocarcinoma. RACK1 is an intracellular scaffolding protein whose expression is altered in many cancers. The role of RACK1 in oesophageal adenocarcinoma has not been investigated. The purpose of this study is to examine the expression of RACK1 in oesophageal adenocarcinoma and to assess its potential as a contributor to this disease. This study also aims to investigate if deoxycholic acid modulates RACK1 in oesophageal adenocarcinoma cells.

#### **Methods**

Normal oesophageal epithelial cell lines, Barrett's metaplastic and dysplastic cell lines and oesophageal adenocarcinoma cell lines were used to construct a model of oesophageal adenocarcinoma disease progression.

RACK1 expression levels were assessed by western blotting.

RACK1 subcellular localisation was examined by immunofluorescent confocal microscopy.

# Results

RACK1 protein levels generally increase with increasing disease progression across a panel of cell lines representing the multistep sequence from normal oesophagus to oesophageal adenocarcinoma.

Deoxycholic acid downregulates RACK1 protein levels in SKGT-4 (31% reduction; P=0.01) and FLO-1 (26% reduction; P=0.03) oesophageal adenocarcinoma cells.

RACK1 has a diffuse, cytoplasmic localisation in SKGT-4 and FLO-1 cells and is most concentrated in the perinuclear area. This pattern of RACK1 subcellular localisation is not altered by deoxycholic acid.

#### Conclusion

RACK1 may be upregulated during the development of oesophageal adenocarcinoma. Deoxycholic acid can modulate RACK1 protein levels in oesophageal adenocarcinoma cells. RACK1 may contribute to the progression of oesophageal adenocarcinoma and further investigation into its role in this disease is warranted.

# Keywords

Oesophageal adenocarcinoma, RACK1, deoxycholic acid.

# Introduction

The incidence of oesophageal adenocarcinoma (OAC) is currently increasing at a rapid rate in western countries<sup>1</sup>. Furthermore, despite recent advances in treatment, prognosis for this malignancy is still poor with overall 5 year survival ranging from 15% to 25%<sup>2</sup>.

The development of OAC is a multistep process and this cancer usually arises from a precursor lesion called Barrett's oesophagus; a metaplastic condition whereby the normal squamous epithelium of the oesophagus is replaced by an intestinal-type columnar epithelium<sup>3</sup>. The development of Barrett's oesophagus and OAC is strongly associated with chronic gastro-oesophageal reflux disease<sup>4</sup>. Gastro-oesophageal refluxate contains a mixture of acid, bile acids and other harmful chemicals which damage the oesophagus and promote inflammation<sup>5</sup>. Chronic exposure to such

<sup>1</sup> Pennathur, Arjun, Michael K. Gibson, Blair A. Jobe, and James D. Luketich. 2013. Oesophageal carcinoma. *The Lancet* 381 (9864):400-412.

<sup>2</sup> Ibid

<sup>3</sup> de Almeida, J. C. Mendes, Paula Chaves, A. Dias Pereira, and Nasser K. Altorki. 1997. Is Barrett's esophagus the precursor of most adenocarcinomas of the esophagus and cardia? A biochemical study. Annals of surgery 226 (6):725.

<sup>4</sup> Pennathur et al 2013.

<sup>5</sup> Duggan, Shane P., Fiona M. Behan, Murat Kirca, Sinead Smith, John V. Reynolds, Aideen Long, and Dermot Kelleher. 2010. An integrative genomic approach in oesophageal cells identifies TRB3 as a bile acid responsive gene, downregulated in Barrett's oesophagus, which regulates NF-κB activation and cytokine levels. *Carcinogenesis* 31 (5):936-945.

Jenkins, G. J. S., K. Harries, S. H. Doak, A. Wilmes, A. P. Griffiths, J. N. Baxter, and J. M. Parry. 2004. The bile acid deoxycholic acid (DCA) at neutral pH activates NF-κB and induces IL-8 expression in oesophageal cells in vitro. *Carcinogenesis* 25 (3):317-323.

Jenkins, Gareth J. S., Francis R. D'Souza, Sinan H. Suzen, Zak S. Eltahir, Sally A. James, James M. Parry, Paul A. Griffiths, and John N. Baxter. 2006. Deoxycholic acid at neutral and acid pH, is genotoxic to oesophageal cells through the induction of ROS: the potential role of anti-oxidants in Barrett's oesophagus. *Carcinogenesis* 28 (1):136-142.

refluxate can promote the development of Barrett's oesophagus, which, in some cases, progresses further into OAC<sup>6</sup>.

Evidence is accumulating to suggest that the bile acid component of the refluxate plays an important role in initiating and promoting cancer in Barrett's tissues<sup>7</sup>. Deoxycholic acid (DCA) is an unconjugated, bile acid found in the refluxate which has been particularly implicated in carcinogenesis<sup>8</sup>. It is a secondary bile acid which is produced from primary bile acids by microbial action in the gut<sup>9</sup>. DCA has been shown to alter the expression of many different genes in oesophageal cells and it may promote tumour progression through the activation of pro-tumourigenic signaling pathways and its selection for apoptotic-resistant cells<sup>10</sup>. However, the precise mechanisms through which DCA promotes OAC are still poorly understood.

RACK1 is an intracellular scaffolding protein with significant homology to the  $\beta$  subunit of G-proteins<sup>11</sup>. RACK1 interacts with a diverse range of binding partners and exerts its influence on them by shuttling them to particular subcellular locations, promoting or inhibiting their activity or modulating their stability or interaction with other molecules. Thus RACK1 participates in multiple signaling pathways and is implicated in a wide range of cellular functions and processes including transcription and protein synthesis, migration, adhesion and proliferation<sup>12</sup>.

A number of studies have implicated RACK1 in the development and progression of cancer<sup>13</sup>. Its expression is altered in angiogenesis and in a

Pennathur et al. The Lancet

7 Ibid

Jenkins et al. 2004.

8 Duggan et al. 2010

9 McQuaid et al. 2011.

10 Duggan et al. 2010.

Jenkins et al. 2006.

Huo, Xiaofang, Stefanie Juergens, Xi Zhang, Davood Rezaei, Chunhua Yu, Eric D. Strauch, Jian-Ying Wang, Edaire Cheng, Frank Meyer, and David H. Wang. 2011. Deoxycholic acid causes DNA damage while inducing apoptotic resistance through NF-кВ activation in benign Barrett's epithelial cells. *American Journal of Physiology-Gastrointestinal and Liver Physiology* 301 (2):G278-G286.

12 Ibid.

<sup>6</sup> McQuaid, K. R., L. Laine, M. B. Fennerty, R. Souza, and S. J. Spechler. 2011. Systematic review: the role of bile acids in the pathogenesis of gastro-oesophageal reflux disease and related neoplasia. *Alimentary pharmacology & therapeutics* 34 (2):146-165.

<sup>11</sup> Adams, David R., Dorit Ron, and Patrick A. Kiely. 2011. RACK1, A multifaceted scaffolding protein: Structure and function. *Cell Commun Signal* 9 (1):22.

<sup>13</sup> Li, J. J., and D. Xie. 2014. RACK1, a versatile hub in cancer. Oncogene.

wide variety of cancers<sup>14</sup>. For example, increased expression of RACK1 has been observed in oesophageal squamous cell carcinoma, glioma and in cancers of the lung and liver, while decreased RACK1 expression had been observed in gastric cancer<sup>15</sup>. RACK1 appears to exert its pro- or antitumourigenic effects through a number of different mechanisms which vary depending on the cell and cancer type and subtype. For example, RACK1 interacts with MKK7 in hepatocellular carcinoma cells and promotes proliferation by enhancing MKK7/JNK activity<sup>16</sup>. In oesophageal squamous cell carcinoma cells, RACK1 appears to drive cancer cell growth and migration through activation of the hedgehog signaling pathway<sup>17</sup>. RACK1 interacts with the IGF-IR in a variety of cell types and facilitates migration of breast and prostate tumour cells through a mutually exclusive interaction with β1 integrin or PP2a<sup>18</sup>. Conversely, RACK1 appears to have a tumour suppressive function in colon cancer cells where its inhibition of src delays cell cycle progression, suppresses colonic growth and induces apoptosis<sup>19</sup>. The vast number of proteins with which RACK1 interacts is likely to account for its contrasting roles in different cancer settings. It is likely that the particular cohort of binding partners with which RACK1 interacts at any particular moment, and in any particular disease or cell setting, will determine whether RACK1 acts as a tumour promoter or suppressor. Thus it is important that we consider cell and cancer type

Adams, Ron, and Kiely 2011.

Hu, Fengqing, Zhen Tao, Mingsong Wang, Guoqing Li, Yunjiao Zhang, Hong Zhong, Haibo Xiao, Xiao Xie, and Mei Ju. 2013. RACK1 promoted the growth and migration of the cancer cells in the progression of esophageal squamous cell carcinoma. Tumor Biology 34 (6):3893-3899.

Peng, Renjun, Bing Jiang, Jianrong Ma, Zhiming Ma, Xin Wan, Hongwei Liu, Zigui Chen, Quan Cheng, and Rui Chen. 2013. Forced downregulation of RACK1 inhibits glioma development by

suppressing Src/Akt signaling activity. Oncology reports 30 (5):2195-2202.

Deng, Yue-Zhen, Fan Yao, Jing-Jing Li, Zheng-Fa Mao, Ping-Ting Hu, Ling-Yun Long, Guo Li, Xiao-Dan Ji, Shuo Shi, and Dong-Xian Guan. 2012. RACK1 suppresses gastric tumorigenesis by stabilizing the β-catenin destruction complex. *Gastroenterology* 142 (4):812-823.

Guo, Yuanyuan, Wendie Wang, Jing Wang, Jiannan Feng, Qingyang Wang, Jianfeng Jin, Ming Lv, Xinying Li, Yan Li, and Yuanfang Ma. 2013. Receptor for activated C kinase 1 promotes hepatocellular carcinoma growth by enhancing mitogen-activated protein kinase kinase 7 activity. Hepatology 57 (1):140-151.

<sup>14</sup> Ibid.

<sup>16</sup> Guo et al. 2013.

<sup>17</sup> Hu et al. 2013.

<sup>18</sup> Kiely, Patrick A., George S. Baillie, Martin J. Lynch, Miles D. Houslay, and Rosemary O'Connor. 2008. Tyrosine 302 in RACK1 is essential for insulin-like growth factor-I-mediated competitive binding of PP2A and β1 integrin and for tumor cell proliferation and migration. Journal of Biological Chemistry 283 (34):22952-22961.

<sup>19</sup> Mamidipudi, V., and C. A. Cartwright. 2009. A novel pro-apoptotic function of RACK1: suppression of Src activity in the intrinsic and Akt pathways. Oncogene 28 (50):4421-4433.

when examining RACK1 function.

The subcellular localisation of RACK1 is also an important determinant of its cellular function as it interacts with different proteins at different locations within the cell<sup>20</sup>. Aberrant signaling, cellular stimuli or protein expression in cancer may alter RACK1 localisation which in turn may influence the function which RACK1 plays in cancer cells. For example, RACK1 normally has a diffuse cytoplasmic localisation in prostate cancer cells but it accumulates in the membrane compartment when expression of Trop-2 is upregulated<sup>21</sup>. This shift in RACK1 localisation increases the association between RACK1 and  $\beta$ 1 integrin which results in increased  $\beta$ 1 integrin-RACK1-FAK-src signaling and loss of cell adhesion<sup>22</sup>. Thus alterations in RACK1 subcellular localisation can have important impacts on its ability to promote or suppress carcinogenic processes and should thus be considered when examining the role of RACK1 in disease.

Thorough examination of RACK1 in a variety of cancer settings should enable us to increase our understanding of this multi-functional protein and may ultimately lead to the development of therapeutic strategies which hinder its pro-tumourigenic functions or promote its tumour suppressive functions.

RACK1 has not been previously studied in the context of OAC and it is not known if RACK1 expression is altered in this malignancy. Furthermore, DCA has been shown to modulate the expression and function of a range of proteins but the influence of this tumour promoting bile acid on RACK1 had not been investigated to date.

Therefore, in this study we examine RACK1 expression in OAC for the first time. We also examine the effects of DCA on RACK1 expression and localisation in OAC cell lines. We report that RACK1 protein levels generally increase with increasing disease progression across a panel of cell lines representing the multistep sequence from normal oesophagus to OAC. We also demonstrate a DCA-mediated decrease in RACK1 expression levels in two OAC cell lines.

<sup>20</sup> Adams, Ron, and Kiely 2011.

<sup>21</sup> Trerotola, Marco, Jing Li, Saverio Alberti, and Lucia R. Languino. 2012. Trop-2 inhibits prostate cancer cell adhesion to fibronectin through the  $\beta1$  integrin-RACK1 axis. *Journal of cellular physiology* 227 (11):3670-3677.

<sup>22</sup> Ibid.

# **Methods**

# Cell lines and treatments

The non-tumourigenic squamous oesophageal cell line, HET-1A, was obtained from the American Type Culture Collection (LGC-standards, Middlesex, UK). Human oesophageal epithelial cells (HEECs) were obtained from 3H Biomedical (Uppsala, Sweden). HEECs and HET-1A cells were cultured in antibiotic free, BEBM media with SingleQuots™ growth supplements (Lonza, Berkshire, England). The Barrett's cell lines, QhTERT and GohTERT, were a kind gift from Dr Rabinovitch (University of Washington, WA, USA) and were cultured in BEBM media supplemented with 5% fetal bovine serum and SingleQuots™ growth supplements (Lonza, Berkshire, England). FLO-1 OAC cell lines were a kind gift from Dr Van Schaeybroeck (Queen's University Belfast) and were cultured in DMEM media supplemented with 10% fetal bovine serum. SKGT-4 cells (a kind gift from Dr Gisella Vaas, Trinity College Dublin) and OE33 cell lines (obtained from the European Collection of Cell Cultures) were both cultured in RPMI media supplemented with 10% fetal bovine serum.

DCA was obtained from Sigma and was solubilised in DMSO (Sigma). Exposure of SKGT-4 and FLO-1 cells to DCA was performed in media with 10% fetal bovine serum supplementation throughout the time course under study as this produced a more physiologically relevant setting than that which could be achieved under conditions of serum starvation. The concentrations and time periods used when treating cells with DCA are indicated in figure legends. Matched time point controls treated with vehicle (DMSO) were also conducted to normalise data for time or vehicle effects.

# Preparation of cellular protein extracts

Cellular protein extracts were prepared by washing cells with ice cold phosphate buffered saline followed by incubation at 4 °C for 20 minutes in cell lysis buffer composed of 10 mM Tris–HCl, pH 7.4, 150 mM NaCl, 1% Nonidet P-40 and Na3VO4 (1 mM) supplemented with protease inhibitor cocktail (1/100, from Sigma). Following incubation, nuclear and cellular debris were removed by microcentrifugation at 10,000 rpm for 5 minutes at 4 °C.

# Western Blotting

Protein concentrations were determined by BCA assay (Pierce) and protein samples were prepared for SDS gel electrophoresis by boiling for 5 minutes in laemmli buffer. Proteins were resolved by SDS-PAGE on 10% polyacrylamide gels and then transferred to PVDF membranes, which were blocked for 1 h at room temperature in Tris-buffered saline containing 0.05% Tween20 and 5% milk (w/v). Primary antibody incubations were overnight at 4 °C. Primary antibodies employed were mouse anti-RACK1 mAb (BD transduction) and rabbit anti-actin (Sigma) and were used at dilutions of 1/3000 and 1/4500 respectively. Primary antibodies were detected with HRP conjugated anti-mouse or anti-rabbit secondary antibodies (Cell Signaling) which were both used at 1/5000 dilution. Secondary antibody incubations were at room temperature for two hours. Following antibody incubation, membranes were exposed to enhanced chemiluminescence developing solution (100mM Tris-HCl, pH 8.5, 0.009% H<sub>2</sub>O<sub>2</sub>, 1.2mM luminol, 1.9mM IBPA) and were then imaged using the FUSION gel imaging system (Vilber Lourmat). Densitometry was performed using ImageJ image analysis software (NIH).

# **Immunofluorescence**

For immunofluorescence confocal microscopy, SKGT-4 and FLO-1 cells were seeded on coverslips, cultured for 36 hours in their appropriate media as detailed above and then treated with the indicated amounts of DCA or vehicle control. Cells were then fixed for 15 minutes with 4% paraformaldehyde in phosphate buffered saline, permeabilised for 10 minutes with 0.3% Triton X-100 in PBS, blocked for 30 minutes with 3% BSA in PBS before incubation with 1:200 mouse anti-RACK1 mAb (BD transduction laboratories) in 3% BSA for two hours at room temperature.

Antibody detection was with an Alexa-Flour 488 fluorescently labelled anti-mouse secondary antibody for 1 hour at room temperature. Controls with secondary antibody only were also employed. Cells were also stained with Hoechst nuclear stain (1/5000). The cells were visualised using a Zeiss LSM confocal microscope and all images were recorded using a 63X oil immersion objective.

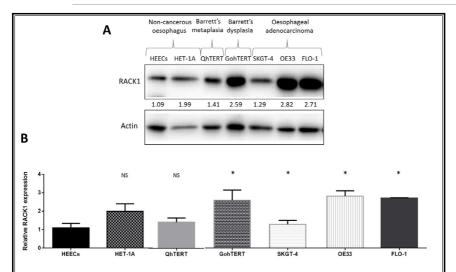


Figure 1: RACK1 expression levels generally increase with increasing disease progression in a panel of cell lines representing the normal oesophagus—Barrett's metaplasia—Barrett's dysplasia—adenocarcinoma sequence

All cells were grown to approximately 70% confluency. Cells were then harvested, protein extracts were prepared and western blot analysis was performed using an antibody against human RACK1. Blots were also probed with antibody against human actin to control for loading variation. Three independent experiments were performed and one representative blot is shown in (A).

Relative RACK1 protein levels were quantified from western blots using densitometry and normalised against actin. One of the three densitometry values calculated for the non-cancerous HEEC cell line was arbitrarily set to one and all other densitometry values were compared against it. In (A), the values beneath each RACK1 band represent the mean relative RACK1 protein expression levels for the indicated cell lines calculated from three independent experiments. Values obtained for each cell line were statistically compared to values obtained for the HEEC cell line using paired T-tests. Results are illustrated graphically in (B). Each bar represents the mean  $\pm$  SEM of three independent experiments. Asterisks indicate cell lines whose RACK1 protein levels were significantly higher than those found in the HEEC cell line (P $\leq$  0.01 is represented by \*\*, P $\leq$  0.05 is represented by \* and P> 0.05 is considered not significant (NS)).

## **Statistics**

Graphed data are presented as the mean and the standard error of the mean. Paired t-tests were used to identify significant differences in RACK1 protein levels between non-cancerous control cells (HEECs) and other cell lines or between untreated and DCA untreated cells. Analysis was carried out using Prism v6.0 (GraphPad Software, CA, USA). A P-value  $\leq$  0.05 was considered significant: \*P $\leq$  0.05 and \*\*P $\leq$  0.01.

# Results

RACK1 expression levels generally increase with increasing disease progression in a panel of cell lines representing the normal oesophagus—Barrett's metaplasia—Barrett's dysplasia—adenocarcinoma sequence.

OAC typically develops by a multi-step process recognised histologically as the normal-Barrett's metaplasia-Barrett's dysplasia-adenocarcinoma sequence<sup>23</sup>. We examined if RACK1 protein expression was altered during this sequence of cancer development by examining its protein levels by western blot analysis in cell lines derived from each stage of the sequence (Figure 1). The HEEC and HET-1A cell lines were used to represent non-cancerous oesophageal cells, the QhTERT and GohTERT represent Barrett's metaplasia and dysplasia respectively while three cell lines, SKGT-4, OE33 and FLO-1 represent oesophageal adenocarcinoma.

Three independent experiments were performed and relative RACK1 protein levels for each cell line was determined by densitometry as described in the legend of Figure 1. RACK1 protein levels between non-cancerous HEECs cells and each other cell line were statistically compared as is also described in the legend of Figure 1.

Of the seven cell lines examined, the non-cancerous cell line, HEECs, displayed the lowest protein levels of RACK1. The cell line representing Barrett's metaplasia (QhTERT) also had relatively low levels of RACK1. RACK1 expression was significantly increased by over 100% in the

<sup>23</sup> de Almeida, J. C. Mendes, Paula Chaves, A. Dias Pereira, and Nasser K. Altorki. 1997. Is Barrett's esophagus the precursor of most adenocarcinomas of the esophagus and cardia? A biochemical study. *Annals of surgery* 226 (6):725.

Barrett's dysplastic cell line (GohTERT) and in two of the three OAC cell lines examined. Thus, in general, levels of RACK1 increased across the sequence from normal to cancer. However there were some exceptions to this trend. Firstly, the SKGT-4 cell line had much lower levels of RACK1 than those observed in the other OAC cell lines and, of all the cell lines examined, it actually had the second lowest level of RACK1.

Secondly, the HET-1A cell line had much higher levels of RACK1 than those found in the HEECs cell line and actually had higher levels of RACK1 than those found in the cell line representing the next stage of the sequence, namely the QhTERT cell line representing Barrett's metaplasia. Nevertheless, the HET-1A cell line still had considerably lower levels of RACK1 expression than those found in the Barrett's dysplastic cell line (GohTERT) and in the OE33 and FLO-1 OAC cell lines. Furthermore, the ability of the HET-1A cell line to represent the 'normal', non-cancerous oesophageal epithelium has been questioned as it has been reported to have dysplastic properties and to lack some typical epithelial cell characteristics (Underwood et al. 2010). Thus, the HEECs cell line may provide a better representation of RACK1 protein levels in the non-cancerous oesophagus.

## DCA suppresses cellular levels of RACK1 protein in two oesophageal adenocarcinoma cell lines (SKGT-4 and FLO-1).

DCA is present at micromolar concentrations (0-300  $\mu$ M) in oesophageal aspirates<sup>24</sup>. 300 μM DCA is capable of inducing NF-κB expression and activation in OAC cell lines<sup>25</sup>. NF-κB can activate transcription of the murine RACK1 gene and may also regulate expression of the human RACK1 gene<sup>26</sup>. We therefore hypothesised that DCA may upregulate

<sup>24</sup> Nehra, D., P. Howell, C. P. Williams, J. K. Pye, and J. Beynon. 1999. Toxic bile acids in gastrooesophageal reflux disease: influence of gastric acidity. Gut 44 (5):598-602.

<sup>25</sup> Jenkins et al. 2004

Abdel-Latif, Mohamed M. M., James O'Riordan, Henry J. Windle, Eleanor Carton, Nagunivan Ravi, Dermot Kelleher, and John V. Reynolds. 2004. NF-kB activation in esophageal adenocarcinoma: relationship to Barrett's metaplasia, survival, and response to neoadjuvant chemoradiotherapy. Annals of surgery 239 (4):491.

<sup>26</sup> Choi, Doo-Sup, Hannah Young, Thomas McMahon, Dan Wang, and Robert O. Messing. 2003. The mouse RACK1 gene is regulated by nuclear factor-kB and contributes to cell survival. Molecular pharmacology 64 (6):1541-1548.

Del Vecchio, Igor, Annalisa Zuccotti, Federica Pisano, Fabio Canneva, Silvia C. Lenzken, Francoise Rousset, Emanuela Corsini, Stefano Govoni, and Marco Racchi. 2009. Functional mapping of the promoter region of the GNB2L1 human gene coding for RACK1 scaffold protein. Gene 430 (1):17-29.

RACK1 protein levels through an NF-κB mediated increase in RACK1 gene expression. To investigate this we treated SKGT-4 OAC and FLO-1 cells with 300 µM DCA or vehicle control (DMSO) for 24 hours. RACK1 protein levels were then examined by western blot analysis. Blots were also probed with an antibody against actin to control for variations in loading. Three independent experiments were performed for each cell line and results show that treatment with 300 µM DCA actually reduced RACK1 protein levels in both cell lines (Figure 2). RACK1 protein levels were significantly reduced by an average of 31% in DCA treated SKGT-4 cells (P=0.01) and by an average of 26% in DCA treated FLO-1 OAC cells (P=0.03).

# RACK1 has a cytoplasmic localisation in SKGT-4 cells and FLO-1 cells which is not altered by DCA.

We examined the subcellular localisation of RACK1 by immunofluorescent staining using a monoclonal antibody against human RACK1. We found that RACK1 has a predominately cytoplasmic distribution in both SKGT-4 and FLO-1 cells which is relatively diffuse and is slightly more concentrated in perinuclear areas (Figure 3A and 3B).

RACK1 plays an important role in shuttling its binding partners around the cell in response to certain stimuli and in targeting or anchoring its partners at particular cellular locations<sup>27</sup>. DCA can alter the subcellular localisation of a number of known RACK1 binding partners including IGF-IR, src and a number of PKC isoforms<sup>28</sup>. Thus, it is possible that RACK1 subcellular localisation might also be altered by DCA. To investigate this, we treated SKGT-4 and FLO-1 cells with 300 µM DCA for 90 minutes or 24 hours. RACK1 localisation was then examined in control and DCA treated cells using immunofluorescence. However, in both cell lines, neither 90 minute nor 24 hour treatment with DCA altered RACK1 subcellular localisation which remained predominately cytoplasmic in all cases (Figure 3A and 3B). SKGT-4 and FLO-1 cells were also treated with lower concentrations

<sup>27</sup> Adams, Ron, and Kiely 2011.

Morgan, Sherif, and Emmanuelle Meuillet. 2009. Abstract# 5048: Deoxycholic acid induces endocytosis of the insulin-like growth factor-I receptor in colorectal cancer cells. Cancer Research 69 (9 Supplement):5048-5048.

Looby, Eileen, Aideen Long, Dermot Kelleher, and Yuri Volkov. 2005. Bile acid deoxycholate induces differential subcellular localisation of the PKC isoenzymes  $\beta 1$ ,  $\epsilon$  and  $\delta$  in colonic epithelial cells in a sodium butyrate insensitive manner. International journal of cancer 114 (6):887-895.

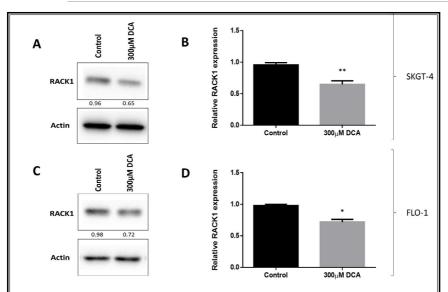


Figure 2: DCA suppresses RACK1 protein levels in SKGT-4 and FLO-1 OAC cells

(A and B) SKGT-4 were treated with 300  $\mu$ M DCA or control vehicle (DMSO) for 24 hours. Cells were harvested, protein extracts were prepared and western blot analysis was performed using an antibody against human RACK1. Blots were also probed with antibody against human actin to control for loading variation. Three independent experiments were performed and a representative blot is shown in (A). RACK1 protein expression levels were quantified from western blots using densitometry and normalised against actin. One of the three densitometry values calculated for control cells was arbitrarily set to one and all other densitometry values were compared against it. Values beneath the RACK1 bands in (A) represent mean relative RACK1 protein expression levels calculated from three independent experiments. Results are illustrated graphically in (B). Each bar represents the mean  $\pm$  SEM of three independent experiments. There was a statistically significant difference between the RACK1 protein levels in control and DCA treated cells (P=0.01, paired T-test). In DCA treated cells, RACK1 protein levels were reduced to an average of 69% relative to controls.

(C and D) FLO-1 cells were treated in the same way as that described for SKGT-4 cells above and data obtained were also analysed and displayed identically. A representative blot is shown in (C) and results are illustrated graphically in (D). There was a statistically significant difference between RACK1 protein levels in control and DCA treated cells (P=0.03, paired T-test). In DCA treated cells, RACK1 protein levels were reduced to an average of 74% relative to controls.

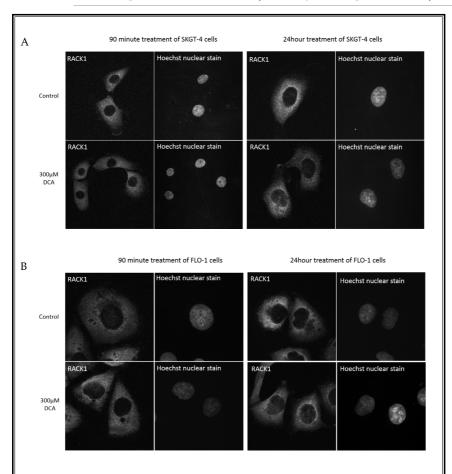


Figure 3: RACK1 has a cytoplasmic subcellular localisation in SKGT-4 and FLO-1 cells which is not altered by DCA

The subcellular localisation of RACK1 was examined using immunofluorescent and confocal microscopy. SKGT-4 cells (A) and FLO-1 cells (B) in the above images were treated with control vehicle or 300  $\mu$ M DCA for 90 minutes or 24 hours prior to fixation, staining with an anti-RACK1 antibody and imaging by confocal microscopy. RACK1 subcellular localisation is similar in both control and DCA treated cells and is predominately cytoplasmic, relatively diffuse in nature and is most concentrated in perinuclear areas.

of DCA (100 µM) for 90 minutes and 24 hours and this also had no effect on RACK1 subcellular localisation (data not shown).

# Discussion

OAC develops through a multi-step sequence whereby Barrett's metaplasia gives rise to Barrett's dysplasia and finally to fully malignant adenocarcinoma<sup>29</sup>. Bile acids, such as the secondary bile acid DCA, are believed to play an important role in promoting progression through this sequence and have been shown to modulate the expression of a variety of genes in oesophageal cells<sup>30</sup>. However, our understanding of the precise mechanisms through which bile acids promote tumourigenesis is still poor. Furthermore, while Barrett's oesophagus is a significant risk factor for OAC, only a small percent of patients with Barrett's go on to develop OAC31. At present, our ability to predict prognosis and to differentiate between Barrett's oesophagus patients who will and will not progress to OAC is poor<sup>32</sup>. Therefore, it is crucial that we further our understanding of the mechanisms and gene alterations which drive OAC as this should aid us in developing novel strategies to predict, diagnose and treat this serious malignancy.

Anumber of studies have reported that RACK1 expression is altered (usually upregulated) in a variety of cancers including oesophageal squamous cell carcinoma, glioma and cancers of the lung and liver<sup>33</sup>. Furthermore, correlations between RACK1 expression and tumour stage and prognosis have also been observed in a number of studies; for example, a recent study in non-small-cell lung cancer reported that upregulation of RACK1 was inversely correlated with tumour differentiation and positively correlated

<sup>29</sup> de Almeida et al. 1997.

<sup>30</sup> Duggan et al. 2010

Looby, Eileen, Mohamed M. M. Abdel-Latif, Veronica Athié-Morales, Shane Duggan, Aideen Long, and Dermot Kelleher. 2009. Deoxycholate induces COX-2 expression via Erk1/2-, p38-MAPK and AP-1-dependent mechanisms in esophageal cancer cells. BMC cancer 9 (1):190.

Byrne, Anne-Marie, Ruchika Sharma, Gina Duggan, Dermot Kelleher, and Aideen Long. 2012. Deoxycholic acid impairs glycosylation and fucosylation processes in esophageal epithelial cells. Glycobiology 22 (5):638-648.

<sup>31</sup> Pennathur et al. 2013.

<sup>32</sup> Ibid.

<sup>33</sup> Li and Xie 2014.

Guo et al. 2013.

Hu et al. 2013.

Deng et al. 2012.

Peng et al. 2013.

with both tumour stage and metastasis34.

However, prior to this study, the expression and role of RACK1 in OAC remained unknown. Furthermore, to our knowledge, the influence of DCA on RACK1 expression and function has not been investigated. Therefore, this is the first study to investigate RACK1 expression in OAC and to examine the influence which DCA has on RACK1.

We examined the expression of RACK1 in a panel of seven oesophageal cells representing each stage of the OAC progression sequence from normal oesophagus→Barrett's metaplasia→Barrett's dysplasia→OAC. In general, we found that RACK1 protein levels increased as the sequence progressed from normal oesophagus to OAC. The lowest level of RACK1 expression was found in a cell line (HEECs) derived from non-cancerous oesophageal tissue while the first, second and third highest levels of RACK1 expression were found in the OE33 OAC, FLO-1 OAC and GohTERT Barrett's dysplastic cell lines respectively (Figure 1). However two of the cell lines examined did make exceptions to this general trend. Firstly, the SKGT-4 OAC cell line displayed low RACK1 levels which were closer to those observed in non-cancerous or Barrett's metaplastic cells than to those found in the other OAC cell lines. Thus, our findings indicate that RACK1 may only be upregulated in some, but not all, OAC tumours. This is not all together surprising as cancer is a heterogeneous disease with many different subtypes occurring within the one cancer type which vary in their genetic alterations and their mechanisms of carcinogenesis.

Secondly, the HET-1A cell line, which is a non-cancerous oesophageal epithelial cell line, had much higher levels of RACK1 than those found in the other non-cancerous oesophageal cell line examined (HEECs) and also had higher levels of RACK1 than those found in the QhTERT Barrett's metaplastic cell line.

The HET-1A cell line was derived from normal oesophageal tissue, has remained non-tumourigenic in athymic, nude mice for over 12 months<sup>35</sup>

<sup>34</sup> Shi, Shuo, Yue-Zhen Deng, Jiang-Sha Zhao, Xiao-Dan Ji, Jun Shi, Yu-Xiong Feng, Guo Li, Jing-Jing Li, Di Zhu, and H. Phillip Koeffler. 2012. RACK1 promotes non-small-cell lung cancer tumorigenicity through activating sonic hedgehog signaling pathway. *Journal of Biological Chemistry* 287 (11):7845-7858.

<sup>35</sup> Stoner, Gary D., M. Edward Kaighn, Roger R. Reddel, James H. Resau, Douglas Bowman, Zenya Naito, Norio Matsukura, Ming You, Anthony J. Galati, and Curtis C. Harris. 1991. Establishment

and is widely used as a model of normal oesophageal epithelium cells. However, it has been reported that this cell line appears dysplastic when grown in organotypic culture, does not display evidence of squamous differentiation and is hyperproliferative in comparison to primary oesophageal epithelial cells<sup>36</sup>. Furthermore, HET-1A cells do not express the epithelial marker E-cadherin while they do express the mesenchymal marker vimentin<sup>37</sup>. A recent study in oesophageal squamous cell carcinoma has reported a positive correlation between RACK1 expression and vimentin, and an inverse correlation between RACK1 expression and E-cadherin<sup>38</sup>. If such findings are considered, it is plausible to suggest that HET-1A cells might have higher RACK1 expression levels than those normally found in non-cancerous oesophageal epithelial cells. Thus, the HEECs cell line may provide a better representation of RACK1 protein levels in the non-cancerous oesophagus.

Our study of RACK1 expression levels in this panel of OAC cell lines provides an insight into the potential modulation of RACK1 expression levels which may occur as OAC progresses. However, it is important to note that the cell lines used in this study were derived from different patients and are therefore not isogenic. Therefore, some of the differences in RACK1 levels which we observed between cells is likely to be due to the non-isogenic nature of these cells, rather than due purely to their particular stage in the cancer progression sequence. Thus, this study simply gives us an indication that RACK1 expression is upregulated in OAC but does not give us conclusive proof of same. Nevertheless, by providing an indication that RACK1 may be upregulated in OAC, we have shown that further examination of RACK1 expression levels in matched patient OAC and disease free control tissue is warranted, and that further investigation into the role of RACK1 in OAC is worthwhile.

and characterization of SV40 T-antigen immortalized human esophageal epithelial cells. *Cancer Research* 51 (1):365-371.

<sup>36</sup> Underwood, Timothy J., Mathieu F. Derouet, Michael J. White, Fergus Noble, Karwan A. Moutasim, Eric Smith, Paul A. Drew, Gareth J. Thomas, John N. Primrose, and Jeremy P. Blaydes. 2010. A comparison of primary oesophageal squamous epithelial cells with HET-1A in organotypic culture. *Biology of the Cell* 102 (12):635-644.

<sup>37</sup> Ibid

<sup>38</sup> Wang, Nana, Fang Liu, Fangli Cao, Yibin Jia, Jianbo Wang, Wei Ma, Bingxu Tan, Kai Wang, Qingxu Song, and Yufeng Cheng. 2015. RACK1 predicts poor prognosis and regulates progression of esophageal squamous cell carcinoma through its epithelial-mesenchymal transition. *Cancer Biology & Therapy* 16(4):528-540.

DCA has been identified as an important contributor to OAC progression and physiologically relevant concentrations of DCA can alter (both upregulate and downregulate) the expression of a variety of genes in OAC cells<sup>39</sup>. However, to our knowledge, the effect of DCA on RACK1 expression has not been previously investigated. 300 µM DCA induces both expression and activation of NF-kB expression in OAC cell lines (SKGT-4, OE33 and OE21)<sup>40</sup>. Interestingly, NF-κB binds to the murine RACK1 promoter and promotes RACK1 gene expression<sup>41</sup>. Bioinformatic analysis indicates that the human RACK1 promoter also contains binding sites for the NF-kB transcription factor<sup>42</sup>. Therefore, we hypothesised that DCA may induce an increase in RACK1 protein expression through a NFκB mediated induction of RACK1 gene expression. However, our results show that 300  $\mu$ M DCA actually decreases RACK1 protein levels in SKGT-4 and FLO-1 OAC cells (Figure 2). Use of both SKGT-4 and FLO-1 cell lines in this study enabled us to examine the effect of DCA on OAC cell lines with relatively low (SKGT-4) and high (FLO-1) basal levels of RACK1. Western blotting was used in this study in preference to rtPCR as it enabled us to examine DCA's effects on actual RACK1 protein levels as opposed to its effects on mere transcription of the RACK1 gene. This is particularly important in the context of DCA as published literature indicates that DCA may sometimes have opposing effects on gene expression and protein levels. For example, various studies in oesophageal cells have indicated that DCA can increase EGFR gene expression<sup>43</sup> but decrease EGFR protein expression<sup>44</sup>. Similarly, in this present study we also report that DCA significantly reduces RACK1 protein levels in OAC cells, in spite of the literature discussed above which suggested that DCA could potentially increase RACK1 gene expression through its upregulation of NF-kB. DCA is a well-known inducer of oxidative stress<sup>45</sup> which in turn has negative effects on protein translation and can also influence protein turnover<sup>46</sup>.

<sup>39</sup> Jenkins et al. 2004.

Looby et al. 2009.

<sup>40</sup> Jenkins et al. 2004. Abdel-Latif et al. 2004.

<sup>41</sup> Choi et al. 2003.

<sup>42</sup> Del Vecchio et al. 2009.

<sup>43</sup> Jenkins et al. 2004.

<sup>44</sup> Byrne et al. 2012.

<sup>45</sup> Duggan et al. 2010.

Huo et al. 2011.

<sup>46</sup> Vogel, Christine, Gustavo Monteiro Silva, and Edward M. Marcotte. 2011. Protein expression regulation under oxidative stress. Molecular & Cellular Proteomics 10 (12):M111-009217.

Thus it is possible that DCA does increase RACK1 gene expression through the NF-kB dependent mechanism proposed above but that this increase in expression is not seen at the protein level due to an oxidative stress mediated reduction in protein translation.

The DCA mediated decrease in RACK1 protein levels which we have observed is likely to have serious implications for the cell. RACK1 expression is believed to be tightly regulated in healthy cells and changes in its expression are likely to have dramatic consequences for the stability, activity and localisation of its multiple binding partners and could thus impact on a wide range of signaling pathways and cellular processes<sup>47</sup>. A decrease in RACK1 expression is likely to result in increased competition for RACK1 among its interaction partners. The consequences of decreased RACK1 expression may depend on the outcome of such competition and on the particular proteins which retain or lose their interactions with RACK1 in this situation.

For example, RACK1 interacts with and inhibits src in colon cancer cells which inhibits cell cycle progression and thus reduces proliferation<sup>48</sup>. In contrast, the interaction of RACK1 with other interaction partners can promote cell cycle progression; for example, RACK1's interaction with the DNA replication licensing factor, MCM7, promotes its activity and promotes cell cycle progression<sup>49</sup>.

Thus, alterations in the RACK1 associated proteome as a result of a DCA mediated reduction in RACK1 expression could potentially have pro- or anti-tumourigenic effects. However, our finding that RACK1 expression levels generally increase across the sequence from non-cancerous cells to adenocarcinoma indicates that RACK1 may promote OAC and that increased RACK1 protein levels may be selected for as cancer develops. It could be that DCA-mediated down regulation of RACK1 protein levels may actually select for cells with increased RACK1 expression. DCA simultaneously induces apoptosis and activates survival signaling in oesophageal cells. Interestingly, a study in Barrett's cells has shown that DCA induces apoptotic resistance through NF-kB activation<sup>50</sup>. Thus DCA

<sup>47</sup> Adams, Ron, and Kiely 2011.

<sup>48</sup> Mamidipudi and Cartwright 2009.

<sup>49</sup> Li and Xie 2014.

<sup>50</sup> Huo et al. 2011.

may select for cells with higher levels of NF-kB activation and it is possible that such cells may also have greater levels of RACK1 gene expression. It has been proposed that DCA mediated selection of apoptotic resistant cells plays an important role in neoplastic transformation<sup>51</sup>. RACK1 can protect against apoptosis in a variety of cellular settings, for example it can integrate survival signaling or can promote the ubiquitination-mediated degradation of pro-apoptotic proteins such as Fem1b and BimEL<sup>52</sup>. Thus, it is possible that the apoptotic resistant cells which DCA selects for may also be cells which have retained greater levels of RACK1 protein than their out-selected counterparts. To test this hypothesis, a DCA hyper-resistant OAC cell line could be generated by repeated passaging of an OAC cell line in the presence of DCA. RACK1 levels could then be compared between parental and hyper-resistant cell lines.

The diversity in RACK1 functions and in RACK1 interaction partners is reflected in its subcellular localisation patterns which are cell-type specific and are influenced by its binding partners and by cellular stimuli. Indeed, analysis of RACK1 in a variety of different cell contexts has resulted in the detection of RACK1 localisation in a wide range of subcellular compartments including the cytosol, nucleus, endoplasmic reticulum and stress granules<sup>53</sup>. No known organelle localisation motifs or nuclear entry or export signals are contained within the RACK1 sequence. Furthermore, there is no conclusive evidence to suggest that post-translational modification of RACK1 controls its subcellular localisation<sup>54</sup>. Thus, the particular set of interaction partners with which RACK1 associates at any one time, and in any one cell type, probably have the greatest influence on its subcellular localisation. Therefore, the subcellular localisation of RACK1 in a particular cell type, and under particular cellular conditions, can provide important clues regarding its current interaction partners and its function in that particular situation.

Therefore, we examined the subcellular localisation of RACK1 in SKGT-4 and FLO-1 cells. We report that RACK1 has a predominately cytoplasmic distribution which is relatively diffuse and is slightly more concentrated in perinuclear areas.

<sup>51</sup> Duggan et al. 2010.

<sup>52</sup> Li and Xie 2014.

<sup>53</sup> Adams, Ron, and Kiely 2011.

<sup>54</sup> Ibid.

We also investigated if DCA induces changes in the subcellular localisation of RACK1 in SKGT-4 cells. RACK1 plays an important role in shuttling its binding partners around the cell and in targeting or anchoring its partners at particular cellular locations<sup>55</sup>. DCA can alter the localisation of a number of known RACK1 binding partners including IGF-IR, src and a number of PKC isoforms<sup>56</sup>. Thus, it is possible that RACK1 localisation might also be altered by DCA. Furthermore, it is possible that RACK1 may play a role in DCA mediated relocalisation of RACK1 binding partners.

However, we observed no alterations in RACK1 subcellular localisation following treatment of SKGT-4 and FLO-1 cells with 300 µM DCA for 90 minutes or 24 hours (Figure 3). Thus DCA does not appear to have any obvious effects on RACK1 localisation in SKGT-4 or FLO-1 cells. However, it is possible that DCA may modulate the localisation of particular subsets of RACK1 (e.g. a subset of RACK1 interacting with a particular binding partner) but that such effects are 'masked' by an opposing effect which DCA has on a different subset of RACK1, or simply by the diffuse distribution of RACK1 throughout the cytoplasm of both cell types.

For example, DCA has been shown to induce endocytosis of the IGF-IR receptor and thus mediate its removal from the cell membrane<sup>57</sup>. RACK1 interacts with the IGF-IR in a variety of cells and plays an important role in IGF-IR mediated signaling<sup>58</sup>. Thus it is plausible to suggest that DCA mediated endocytosis of the IGF-IR could alter the localisation of an IGF-IR-associated subset of RACK1 and possibly stimulate its translocation away from the membrane. In contrast, DCA could potentially induce the translocation of a PKC-associated subset of RACK1 to the membrane. A report in colorectal cancer cells has shown that DCA can stimulate translocation of PKC \beta1 and PKC\beta from the cytosol to the plasma membrane<sup>59</sup>. RACK1 is a well-known regulator of PKC function and it is known to interact with a number of PKC isoforms and to shuttle them to sites of action. In glioma, upon PMA mediated PKC activation, RACK1 translocates from the cytosol to the membrane and targets activated PKCE

<sup>55</sup> Ibid.

<sup>56</sup> Morgan and Meuillet 2009. Looby et al. 2005.

<sup>57</sup> Morgan and Meuillet 2009.

<sup>58</sup> Kiely et al. 2008.

<sup>59</sup> Looby et al. 2005.

to integrin  $\beta$  chains<sup>60</sup>.

Thus, it is possible that a subset of PKC-associated RACK1 may translocate to the membrane in response to DCA. However, if translocation of another subset of RACK1 (for example IGF-IR associated RACK1) away from the membrane also occurs, both translocations could 'mask' each other and preclude visual, immunofluorescence-mediated detection of such RACK1 translocations. Future studies which analyse the effects of RACK1 depletion (using short interfering RNA approaches) may be more successful in determining if RACK1 is involved in DCA mediated translocation of its binding partners. Such studies could focus on examining the location of RACK1 binding partners by immunofluorescence and examining if DCA mediated translocation of such partners is altered when RACK1 expression is suppressed.

In conclusion, we have found that RACK1 protein levels generally increase with increasing disease progression across a panel of cell lines representing the multistep sequence from normal oesophagus to OAC. We have also found that DCA can modulate RACK1 protein levels in OAC cells. RACK1 may play a role in promoting OAC and may have potential as a therapeutic target for this disease.

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The author has no conflicts of interest to declare.

# **Abbreviations**

Oesophageal adenocarcinoma: OAC

Deoxycholic acid: DCA Dimethyl sulfoxide: DMSO

Dulbecco's modified eagle's medium: DMEM Roswell Park Memorial Institute medium: RPMI Bronchial epithelial basal medium: BEBM

<sup>60</sup> Besson, Arnaud, Tammy L. Wilson, and V. Wee Yong. 2002. The Anchoring Protein RACK1 Links Protein Kinase C $\epsilon$  to Integrin  $\beta$  Chains REQUIREMENT FOR ADHESION AND MOTILITY. *Journal of Biological Chemistry* 277 (24):22073-22084.

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# Varieties of Untranslatability Exploring a potential system of classification for the discussion of untranslatability in literary texts

## by Liath Gleeson

# **Abstract**

This paper outlines a new theoretical framework for the discussion of untranslatability in translation theory and practice. It reacts to the observation that the concept of untranslatability within Translation Studies has largely been treated as a homogenous idea, applicable without modification to any text. It builds upon the work of Emily Apter, Barbara Cassin, Susan Bassnett, David Bellos and others to show that the discussion of 'untranslatables' may in fact benefit from the recognition of multiple 'untranslatabilities' on various textual and non-textual levels. Five such strands of untranslatability are presented. The first encompasses sound patterns, syntax and linguistic humour, drawing from Bellos' Is that a fish in your Ear? (2012) to argue for a specifically linguistic strand of untranslatability. The second highlights meaning transmission in the context of culture, examining the unique translation challenges posed by culturally-embedded texts like Cassin's philosophical untranslatables and Stanisław Wyspiánski's Wesele (1901). Strand three concerns what Walter Benjamin calls 'the unfathomable' element in translation, theorising that the loss of this mysterious element may result specifically from the many minor adjustments that inevitably occur during translation. Section four uses Carli Coetzee's analysis of translation practice in South Africa to argue that social and cultural power relations can render a text untranslatable from the outside. The fifth section argues for the recognition of 'absolute untranslatability', drawing on Jean-Jacques Lecercle's discussion of nonsense literature. Finally, the conclusion recognises both the malleability of the proposed framework and the dynamism of untranslatability as a concept in itself.

# Keywords

Translation Studies, Untranslatability, Theoretical Framework.

# Introduction

As it is a relatively young academic discipline, many of the fundamental questions of Translation Studies are still provoking vigorous debate and very little global consensus. First among these questions is the nature and resulting legitimacy (or illegitimacy) of translation itself.<sup>1</sup> While multiple

<sup>1</sup> For some of the key debates about the nature of translation, see the following articles in Lawrence

attempts at defining translation as a process, concept and philosophy have achieved varying levels of success over past decades, each has had to compete with the growing number of voices claiming that translation is 'another name for the impossible.' Emily Apter's recent work on 'the politics of untranslatability' argues against a perceived 'translatability assumption' (the assumption that all texts are subject to translation), which is at play in the contemporary study and consumption of world literature, while Barbara Cassin condemns all translation to 'necessary and absolute' failure due to the unachievable nature of the task.3 At the other extreme, support for an understanding of all translation as fully possible has been gaining momentum. David Bellos questions theories of ineffability with the simple assertion that 'if something is in a language [...] it can be translated.' This consolidates Jean-Jacques Lecercle's view that 'in the end, nothing is untranslatable', and that the question is one of approach and resources rather than of conceptual impossibility.4 Thus, based as it is on the unstable assumption that translation of any kind is possible, an exploration of different varieties of untranslatability in literary writing may seem to be jumping the gun. The fact remains, however, that the study and practice of literary translation continues to be a part of modern life, heedless of whether its fruits are ultimately seen as infinite success or total failure. With the acknowledgement, then, that the debate surrounding the possibility of translation remains very much alive, this essay will use the tenuous presumption of its possibility, at least in part, to facilitate the presentation of a potential classification system for refining discussion and practice around untranslatability.

The topic stems from observation that the ideas of 'untranslatability' and

Venuti, The Translation Studies Reader (New York/London: Routledge, 2004 (first published 2000)): Friedrich Schleiermacher, On the Different Methods of Translating, 43-63, Walter Benjamin, The Task of the Translator: An Introduction to the Translation of Beaudelaire's Tableaux Parisiens, Harry Zohn (trans.), 75-83, Gideon Toury, The Nature and Role of Norms in Translation, 205-218, and Jacques Derrida, What is a 'Relevant' Translation?, Lawrence Venuti (trans.), 423-446

<sup>2</sup> Jacques Derrida, Patrick Mensah (trans.), Monolinguialism of the Other (Stanford: Stanford University Press, 1998), 56.

<sup>3</sup> Emily Apter, Against World Literature: On the Politics of Untranslatability (London/New York: Verso, 2013), 3, and Barbara Cassin (ed.), Steven Rendall, Christian Hubert, Jeffrey Mehlman, Nathanael Stein, Michael Syrotinski (trans.), Dictionary of Untranslatables: A Philosophical Lexicon (Princeton/Oxford: Princeton University Press, 2014), xiv.

<sup>4</sup> David Bellos, Is That a Fish in Your Ear? Translation and the Meaning of Everything (London: Particular Books, 2011), 156, and Jean-Jacques Lecercle, Translate It, Translate It Not, in Translation Studies, Vol. 1, No. 1(2008), 96.

'the untranslatable' are commonly used in the literature of Translation Theory. At best, they are accompanied by a remarkably heterogeneous array of definitions, and at worst they come with very little explanation at all. Furthermore, the term 'untranslatability' in particular is often used as if it were a homogeneous concept or 'cover-all', and the possibility of a range of 'untranslatabilities' is not explored. The ideas of a 'gradient of translatability' and the possibility of partial success of a translation have, however, seen some notable discussion, and the classification system presented here is intended to build upon this chain of thought.<sup>5</sup>

This paper explores five categories that could be included in such a system. The first two, linguistic untranslatability and cultural untranslatability, pick up on the established debate surrounding word-for-word and sensefor-sense translations, which Apter calls 'those archaic Cain-and-Abel brothers of the translational pantheon.'6 The third, which I have called 'cumulative' untranslatability, focuses mainly on poetry, as it examines the mysterious 'element' that often seems to disappear in the translation process, seemingly independent of a translation's linguistic and semantic success or failure. The fourth section takes a different approach, exploring conditions under which a text, while approachable in terms of language and content, may in practice become untranslatable due to external forces. Finally, the fifth section discusses the case of texts to which the term 'absolute untranslatability' could be considered appropriate and the idea of a gradient of translatability does not apply. It should be noted that while the categories here are delineated as much as possible for ease of analysis, in practice it is more logical to consider them in combination than in isolation.

# Discussion

# Linguistic Untranslatability

When considering issues of linguistic untranslatability, it is legitimate to adopt what Nicholas Harrison calls a 'down-to-earth' definition of translation; converting a text 'from one language (in the usual sense of

<sup>5</sup> See, for example, Juri Lotman, *On the Semiosphere*, in *Sign Systems Studies*, Vol. 33, No. 1 (2005), and Donald Davidson, *On the Very Idea of a Conceptual Scheme*, in *Inquiries Into truth and Interpretation* (Oxford: Clarendon Press, 1984), 190-1.

<sup>6</sup> In Cassin, Dictionary of Untranslatables, xi.

language: French, for instance) into another language. '7 Here the focus is on (im)possibilities of translation regarding the structural 'building blocks' of language, and the concept of words and texts as vessels of meaning takes a secondary position. One linguistic feature of literary writing which has long been touted as untranslatable is the sound patterns created by the phonemes, words and phrases of a text in its original language. While the exchange of one sound pattern for another in inter-lingual translation is unavoidable if the target audience is to derive meaning from the translated text, David Damrosch nonetheless laments that 'whatever meaning a new language can convey is irretrievably sundered from the verbal music of the original.'8 In certain cases, the loss incurred in sacrificing the sound pattern of the original is so significant that the text may be considered no longer worth translating. Benedetto Croce, for example, cites Plato and Montaigne among others as 'untranslatable, because no other language can convey the colour and harmony, sound and rhythm of their [native] tongues. '9 When a translation is undertaken from one language system to another, the inevitable loss of the original collection of sounds has a knockon effect of increasing the overall distance between original and translation. This is because, as Bellos notes, 'the relationship between [meaning and sound] must perforce be other in the translation than in the original. '10 This facet of untranslatability must be considered when approaching literary translation within any language combination. However, it is notably more difficult to accommodate when translation is undertaken between two very different language systems, as the option to 'compensate' for the loss by using sound patterns inspired by the original in the translation is sometimes greatly restricted.

A similar translation challenge is presented by the issue of syntax. While syntax structures, unlike sound patterns, may be broadly equivalent between languages (at least in terms of the primary categories of verb, subject and object), in practice the range of possible differences in word placement, parts of speech and their usage, structures of negation and

<sup>7</sup> Nicholas Harrison, World Literature: What Gets Lost in Translation?, in The Journal of Commonwealth Literature, Vol. 49 (2014), 412.

<sup>8</sup> David Damrosch, How to Read World Literature (Chichester: Wiley-Blackwell, 2009), 288-9.

<sup>9</sup> Quoted in M. L. Alekseeva, Svoeobrazie traktovki kontseptsii "neperevidimosti" v ital'yanskoi traditsii 1900-1930 gg. (B. Croce, L. Pirandello, G. Gentile), (Voprosi Filosofii, http://vphil.ru/index. php?option=com\_content&task=view&id=917&Itemid=526, uploaded 14/03/14, accessed 28/12/14), 147 (my translation).

<sup>10</sup> Bellos, Is That a Fish in your Ear?, 150.

interrogation, and other dynamic features of language in use make it almost impossible for two texts in different languages to share an entirely congruent syntax pattern. The method of exact replication of a source text's syntax has been posited as one possible way to create a 'transparent' translation that retains as many of the source language's characteristics within the target language as possible. 11 Once again, however, an entirely accurate translation of syntax becomes impossible as soon as a text is intended to convey meaning, with 'a literal rendering of...syntax' posing 'a direct threat to comprehensibility' due to its potential to obscure the semantic relations between words in the target language.<sup>12</sup>

In terms of untranslatability created by different 'building blocks' of language in combination, linguistic humour (as a subset of humour in general) has been repeatedly identified as 'the dark corner of language where translation becomes a paradoxical, impossible challenge.'13 This can be attributed to the dependence of linguistic humour on specific language systems, the grammatical elements of which are very rarely directly interchangeable. 14 Qian Han gives a stark example of the impossibility of directly translating English word play into Chinese, using the following joke:

> Man - I just met a fellow with a wooden leg named Smith Shopkeeper - Really? What was his other leg called?<sup>15</sup>

The difficulty here lies in the fact that English grammar allows for the name 'Smith' to refer either to the man or his leg, while Chinese grammar eliminates this ambiguity. Bellos provides a similar but more detailed example of the difficulties presented by plays on sound and spelling:

<sup>11</sup> Walter Benjamin, Harry Zorn (trans.), Illuminations, (London: Pimlico, 1999 (first published 1969)), 79,

<sup>12</sup> Benjamin, Illuminations, 78.

<sup>13</sup> Bellos, Is That a Fish in your Ear?, 287.

<sup>14</sup> For a wider discussion on the translation challenges presented by humour generally, see, for example: Delia Chiaro, Comic Takeover or Comic Makeover? Notes on Humour-Translating, Translation and (Un) Translatability, in Dynel, Marta (ed. and introd.), The Pragmatics of Humour across Discourse Domains (Amsterdam:Benjamins, 2011), Galia Hirsch, Explicitations and Other Types of Shifts in the Translation of Irony and Humor, in International Journal on Translation Studies, Vol. 23, No. 2, 2011, and Qian Suoqiao, Translating 'Humor' into Chinese Culture, in International Journal of Humor Research, Vol. 20, No. 3, 2007

<sup>15</sup> Qian Han, On Untranslatability of English Linguistic Humor , in Theory and Practice in Language Studies, Vol. 1, No. 2, 2011, 149.

A Brooklyn baker becomes increasingly irritated by an old lady who queues up to buy bagels in his shop every Tuesday, despite the sign clearly visible in the window saying bagels are not available on Tuesdays. One morning, after she has queued up for the fifth time, he decides to he has to get the message through to her.

'Lady', he says, 'tell me, do you know how to spell 'cat', as in 'catechism'?'

'Sure I do', the old lady says, 'that's C-A-T.

'Sure is', the baker replies, 'now tell me, how do you spell 'dog' – as in

'dogmatic'?'

'Why, that's D-O-G.'

'Right! So how do you spell 'fuck' as in 'bagels'?'

'But there ain't no 'fuck' in 'bagels'!' the little old lady exclaims.

'That's what I've been trying to tell you!' cries the baker.16

Here the humour turns on the fact that the old lady's final phrase is homophonous, though not semantically identical, to the one the baker has presumably been uttering. There is also the added contextual difficulty of the pair's Brooklyn accents, which the joke prompts the listener to imagine in order to make the homophony more complete. Anyone translating into a language which cannot accommodate the exact combination of meaning and homophonic word play presented in this joke may well consider a direct translation impossible. Bellos suggests that this apparent untranslatability can be circumvented by performing a 'swap' of the crucial elements of the English joke for different elements with the same relationship to each other in the target language: 'a structural match in any other language would [...] have to turn on a phonetically and grammatically different feature that may [...] allow the same point - making someone stupid say what they don't want to understand by diverting their attention from the issue through an intentionally deceptive spelling game.'17 While this swap does indeed present a workable solution for translating linguistic jokes, it is context dependent: if either the context or structure is essential to the joke, or its wider textual context, the swap can at best be only partially carried out. Ultimately, the untranslatability of linguistic jokes of this nature rests on the fact that 'metalinguistic expressions [...] carry meanings that are by definition internal to the language in which they are couched.'18

<sup>16</sup> Ibid., 286.

<sup>17</sup> Ibid.

<sup>18</sup> Ibid., 287.

# Cultural Untranslatability

While the linguistic aspects of untranslatability present formidable difficulties to the would-be translator of literature, these difficulties tend to increase exponentially when untranslatabilities of meaning are considered. Unfortunately for the literary translator, 'text' is almost entirely synonymous with 'meaning' in literature, making this arguably the type of untranslatability that one encounters most frequently. In Wilhelm von Humboldt's poetic nineteenth-century terminology, 'a word is so little the sign of a concept that without it the concept cannot even be born, still less stabilized; the indeterminate action of the power of thought comes together in a word as a faint cluster of clouds gathers in a clear sky.'19 While 'meaning' itself is among the broadest of philosophical terms, the examination here approaches meaning in literary texts as a communication of the source culture(s), based on the idea that society plays a 'determining role [...] in the emergence, evolution and consolidation of language. '20 Thus the translation of meaning centres on the transmission of cultural differences between groups which may be separated by significant 'physical [...] cultural, intellectual, spiritual, mental, emotional and experiential' distance.21 A clear example of how untranslatability may arise when dealing with such differences is described by linguist Benjamin Lee Whorf. In the 1930's, Whorf compared Western metaphysics and conceptions of space and time with those of the Hopi tribe of north eastern Arizona, concluding that the Hopi language 'contained no words, grammatical forms, constructions or expressions that referred directly to time as the West conceives of it with distinctions made between past, present and future.'22 The challenges of translating a temporally located text into the Hopi language from English are both obvious and immense. As with linguistic humour, however, an indirect translation strategy does exist: a translation for which the target culture is lacking some facet of knowledge or understanding that is essential to the text in the source culture could, for example, be made more accessible by amending the translated text

<sup>19</sup> Wilhelm von Humboldt (trans.), Aeschylos Agamemnon (Leipzig: Fleischer, 1816), xii.

<sup>20</sup> Pilar Ordónez-López, *The Misery and Splendour of Translation: A Classic in Translation Studies*, in *SKASE Journal of Translation and Interpretation*, Vol. 4 (2009), 56.

<sup>21</sup> Teresa Batuk-Ulewiczowa, *Beyond Cognizance: fields of absolute untranslatability* (Gdansk: Wydawnictwo Uniwersytetu Gdańskiego, 2000), 173.

<sup>22</sup> Benjamin Lee Whorf, John. B. Carroll (ed.), *Language, Thought and Reality: Selected Writings of Benjamin Lee Whorf* (Cambridge, Ma: the MIT Press, 1956), in Susan Bassnett, *Translation* (New York: Routledge, 2014), 46.

to include the necessary contextual information. This could be done intext, or in a footnote or addendum. However, as well as raising multiple issues of style, this solution may become unfeasible if the gap in cultural understanding is too great to be filled by attaching additional information to the text. Thus the detailed translation of foundational concepts such as space, time, being, consciousness etc. may become practically impossible within a language pair separated by considerable cultural difference.

The difficulty of bridging conceptual differences between cultures in translation reaches its ultimate form in the translation of philosophical terminology and texts. In the introduction to the *Dictionary of Untranslatables*: a Philosophical Lexicon, Cassin describes the difficulty of translating the language of philosophy even when the frames of understanding appear to match: '...from one language to another, neither the words nor the conceptual networks can simply be superimposed. Does one understand the same thing by 'mind' as by Geist or esprit, is pravda 'justice' or 'truth', and what happens when we render 'mimesis' as 'representation' rather than 'interpretation'?'23 Apter locates the source of this difficulty in 'the differential weight assigned by cultures to common cognates.'24 The issue here is that while the meaning of two words can overlap significantly on the denotative, connotative, semantic and pragmatic levels, each may carry concepts of such significance for their respective cultures, and have been influenced so profoundly by the histories and thought systems of those cultures, that it becomes inappropriate to translate one as the other in any context where the full range of meaning is desired. In her article Le Mot 'Monde' est un Intraduisible (2012), Apter describes the difference between 'world' and Welt as one such case, noting that due to its deep significance in German philosophical discourse from Kant to Heidegger, 'Welt takes on such depth that German seems in effect to be the language in which the philosophical conception of the 'world' is most completely understood.'25 Ultimately, philosophical terminology (and conceptual language generally) provides an example of how a text can be so heavily loaded with meaning and deeply embedded in cultural context that it effectively becomes untranslatable.

<sup>23</sup> Cassin, Dictionary of Untranslatables, xvii.

<sup>24</sup> Apter, Against World Literature, 35.

<sup>25</sup> Apter, Le Mot 'Monde' est un Intraduisible, in Revue Electronique de Littérature Française, Vol. 6, No. 1, (2012), 102 (my translation).

Alongside the challenges posed by extreme depth of meaning are those that arise when translating a text of great cultural breadth. In her analysis of Noel Clark's 2008 translation of Stanisław Wyspiánski's play Wesele from Polish to English, Teresa Batuk-Ulewiczowa argues that the work is of such canonical importance to the Polish people that its full comprehension requires 'the application of extra-textual subjective information [and] extra-textual emotional experience which is inaccessible to the recipients of the target language for the translation.'26 She lists the points of potential incomprehensibility for a non-Polish audience as cultural symbols, religious references, references to Polish history and legend, Polish social stratification, the Polish relationship with Jews, Ukrainians and other ethnic and minority groups, and 'a specifically Polish metaphor system for the presentation of some of the major themes in the play.'27 She maintains that even if a foreign audience were willing to educate themselves on the developments of Polish history, society and culture to the point that they logically understood the play's references, they would still ultimately experience it as 'intrinsically 'exotic', relating to the emotional experiences of a foreign group or society. '28 She contrasts this with a Polish audience's perception of the play. Having been immersed in the symbols and rituals of Polish culture since birth, this audience would experience it as 'intrinsically 'native' [...] relating to its own subjective group experience', and ultimately as a reflection of its own familiar world.<sup>29</sup> Batuk-Ulewiczowa's view contains unappealing overtones of national particularism, and recalls the theoretical suggestion by Lecercle that 'it takes a lifetime of uttering the right 'th' sounds, and a lifetime of nursery rhymes, Wesleyan hymns [...] of listening to the Archers' to appreciate literary nonsense, a 'quintessentially English' invention.<sup>30</sup> Nonetheless, her central point remains valid: no matter how informed a foreign audience may be, any translation which retains the Polish trappings of Wyspiánski's play will fail to provoke the same sentiments of familiarity as the original will for a domestic audience. As with philosophical terminology, the text's breadth of meaning touches on so many levels of experience in its source culture as to make its entirety untranslatable.

<sup>26</sup> Teresa Batuk-Ulewiczowa, Beyond Cognizance, 173.

<sup>27</sup> Ibid., 175-6.

<sup>28</sup> Ibid., 175.

<sup>29</sup> Ibid.

<sup>30</sup> Lecercle, Translate It, Translate It Not, 92.

# **Cumulative Untranslatability**

While the source(s) of untranslatability in the linguistic and cultural spheres can generally be pinpointed, there is another facet to the untranslatable which tends to elude any attempts at definition. Benjamin describes it as 'the unfathomable, the mysterious, the poetic [...] the element that does not lend itself to translation.'<sup>31</sup> Indeed, this 'element' is often discussed with reference to poetry, a relationship encapsulated by Robert Frost's oft-quoted phrase that poetry is 'what gets lost in translation.'<sup>32</sup> Harrison suggests that the disappearance of this element may result from the many minor losses inevitably occurring during translation of poetry, due to the multiplicity of constraints the process places on the translator.<sup>33</sup> Mona Baker gives a comprehensive overview of these restraints in the *Routledge Encyclopedia of Translation Studies*:

Poetry represents writing at its most compact, condensed and heightened form, in which the language is predominantly connotational rather than denotational and in which content and form are inseparably linked. Poetry is also informed by a 'musical mode' [...] or inner rhythm, regardless of whether there is any formal metre or rhyming pattern, which is one of the most elusive yet essential characteristics of the work that the translator is called upon to translate.<sup>34</sup>

Given its elusive nature, few ways to avoid the loss of this element in translation have been suggested. Robert Browning asserts that in order to capture it, a translation must be 'absolutely literal, with exact rendering of words' so as to give the target audience the greatest possible insight into the original text.<sup>35</sup> Once again, however, this method is overshadowed by the threat of 'incomprehensibility' and considerable potential loss of meaning. Bellos casts doubt on the element's very existence, asserting that 'claiming that something called 'poetry' has been lost is like telling an airline [which has lost your luggage] it has mislaid an item that has

<sup>31</sup> Benjamin, *Illuminations*, 71 and 76.

<sup>32</sup> Despite the above being regularly quoted, Frost's exact words were actually as follows: 'I could define poetry this way: it is that which is lost out of both prose and verse in translation.' Robert Frost, Conversations on the Craft of Poetry, Cleanth Brooks and Robert Penn Warren (eds.) (New York: Holt, 1961), quoted in Lofty Dogmas: Poets on Poetics, Deborah Brown, Annie Finch and Maxine Kumin (eds.), (Arkansas: The University of Arkansas Press, 2005), 200.

<sup>33</sup> Harrison, World Literature, 416.

<sup>34</sup> David Connolly, *Poetry Translation*, in Mona Baker (ed.), *Routledge Encyclopedia of Translation Studies*, (London/New York: Routledge, 1998), 171.

<sup>35</sup> In Paul Selver, The Art of Translating Poetry (London: Jon Baker, 1966), 26

no identifiable characteristics at all.'36 While the element may defy description, however, the fact of its untranslatability and consequent loss has not. Baker mourns the disappearance of 'intrinsic poetic value' from poems in translation, and Vladimir Nabokov, while declaring a rhyming translation of Eugene Onegin to be a 'mathematical impossibility', in the same breath laments that once translated into prose 'the poem loses its bloom.'37 The 'unfathomable, mysterious, and poetic', then, creates just as big a challenge for the literary translator as linguistic or cultural issues, but offers far fewer solutions for circumventing its untranslatability.

## External Untranslatability

In the field of Translation Studies, untranslatability is usually considered to pertain either to textual factors or contextual influences which impede the translation process itself. There is another variety of untranslatability, however, which renders a text 'untranslatable' regardless of its linguistic or semantic content. It comes into play when the 'asymmetries, inequities, relations of domination and dependence [that] exist in every act of translating' are stacked against the translation of a particular text.<sup>38</sup> In its soft form, this 'imposed untranslatability' may occur through the influence of societal norms on a translator's actions. Gideon Toury describes the 'social role' of the translator as 'fulfil[ling] a function specified by the community...in a way that is considered appropriate in that community.'39 A translator may thus consider a text untranslatable in practice due to its contravention of the norms and values of her language community. A general example of this might be a translator from a culture which condemns smoking choosing not to translate a text that glorifies tobacco consumption, in order to avoid creating social conflict. Similarly, Cassin notes the possibility that a translator may deem a text untranslatable based on their personal feelings towards it. She describes, for example, the 'private anguish' translators experience when 'confronted with material that [they] don't want to translate or see translated', whether out of personal fondness

<sup>36</sup> Bellos, Is That a Fish in your Ear?, 149.

<sup>37</sup> Baker, Routledge Encyclopedia, 171, and Vladimir Nabokov, Eugene Onegin, a Novel in Verse by Alexander Pushkin, Translation from the Russian with a Commentary by V. Nabokov (London: Princeton University Press, 1975), I, ix.

<sup>38</sup> Lawrence Venuti, The Scandals of Translation: Towards an Ethics of Difference (London/New York: Routledge, 1998), 4.

<sup>39</sup> Gideon Toury, Descriptive Translation Studies and Beyond (Amsterdam and Philadelphia: John Benjamins Publishing, 1993), 22.

for the original text, a conviction that the translation will be inadequate, individual values, or other reasons.  $^{40}$ 

In its hard form, untranslatability created by unequal power relations can have a much more powerful effect. Bassnett describes how uni-directional translation flows within colonial regimes have facilitated the silencing of colonised groups: 'translation was effectively used in the past as an instrument of colonial domination, a means of depriving the colonized people of a voice. For in the colonial model, one culture dominated and the others were subservient, hence translation reinforced that power hierarchy.'41 Venuti notes that '[translation] occasions revelations that question the authority of dominant culture values and institutions', underlining the importance for colonial powers of maintaining hegemony in translation.<sup>42</sup> One of the many examples of untranslatability in this context is provided by Carli Coetzee in her analysis of the translation culture in contemporary South Africa. She maintains that the translation flows are post-colonial, and that 'much of the translation work done in South Africa serves to extend and confirm monolingual privilege': political, administrative, legal and literary texts tend to transition from the Republic's various African languages into English, for the benefit of the monolingual English-speaking community.<sup>43</sup> Translation of texts from English into the African languages, while possible on an individual level, becomes impossible on a societal level as flows of political and cultural power (and money) move only towards discourse in the English-speaking sphere. Coetzee's response to this imposed untranslatability is to suggest that a 'reverse-flow' of untranslatability be established and 'a refusal to translate out of African languages into English' be promoted in order to destabilise English-language hegemony.44

While it does not necessarily stem from power relations, the 'untranslatable' status of many sacred texts is nonetheless a form of imposed untranslatability, which Apter calls 'theological untranslatability.' A considerable amount of literature has been written about the taboo surrounding translations of

<sup>40</sup> Cassin et al., Dictionary of Untranslatables, xiv.

<sup>41</sup> Susan Bassnett, Translation Studies, (London: Routledge, 2002), 4.

<sup>42</sup> Venuti, The Scandals of Translation, 1.

<sup>43</sup> Carli Coetzee, To Refuse Containment, To Resist Translation, in Interventions: International Journal of Postcolonial Studies, Vol. 15, No. 3 (2013), 384.

<sup>44</sup> Ibid., 387.

<sup>45</sup> Apter, Against World Literature, 14.

the Qur'ān. According to Waïl S. Hassan, translator of Abdelfattah Kilito's Thou Shalt not Speak my Language into English, the Muslim holy text is 'from the perspective of the faithful, untranslatable, because it is considered the literal word of God; human beings are incapable of exhausting its meaning, let alone transposing it into other languages.'46 Thus it is the provenance of the text, its 'quintessentially divine nature' rather than any of its concrete textual features, which defines its untranslatability for Muslims.<sup>47</sup> Similar restrictions have been applied to other sacred texts in the past; the furore that greeted Martin Luther's German translation of the Holy Bible is possibly the most famous, but certainly not the most violent, example of what has happened when the theological untranslatability of sacred texts has been challenged in Christian history.48

## Absolute Untranslatability

While this essay has focused up to now on various aspects of untranslatability which may appear alone or together in a text that is otherwise largely translatable, it is also the case that a text may occasionally appear to defy translation of any kind. Lecercle provides a coherent example in his argument for the absolute untranslatability of what he calls 'pure nonsense' in literature. This is nonsense language which is not 'watered down [...] mixed with intelligible language', but created as independently of extant linguistic systems as possible, reaching 'the outer edge of intelligibility in language. 49 Lecercle's thesis rests on the argument that such a text, created almost entirely free of meaning, is untranslatable because the original is already understandable in every possible language. He employs the example of Christian Morgenstern's 1905 poem Fisches Nachtgesang, calling it 'the true Esperanto of nonsense.'50 Lecercle's work shows that 'absolutely untranslatable' texts do exist, though they tend to push the definitions of 'text' and 'translation' to their furthest extremes. <sup>51</sup>

<sup>46</sup> Abdelfattah Kilito, Waïl S. Hassan (trans.), Thou Shalt not Speak my Language (New York: Syracuse University Press, 2008), xix.

<sup>47</sup> Hassan Mustapha, in Baker, Routledge Encyclopedia, 201.

<sup>48</sup> See, for example David Norton, Review: The Bible in English. Its History and Influence', in Journal of Theological Studies, Vol. 55, No. 2 (2004).

<sup>49</sup> Lecercle, Translate It, Translate It Not, 91, and Ludwig Wittgenstein, D.F. Pears and B. F. Mc Guinness (trans.), Tractatus Logico-Philosophicus (London: Routledge, 1997), 16.

<sup>50</sup> Lecercle, Translate It, Translate It Not, 93. Fisches Nachtgesang has been reproduced in the

<sup>51</sup> The concept of absolute translatability has not been explored here, since the arguments against its existence are very convincing. They can be summed up neatly by Bassnett's assertion that 'what can be said in one language can never be reproduced in an identical form in another, not only because

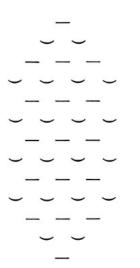
#### Conclusion

The discussion outlined above is intended to present a potential classification system for acknowledging and discussing distinct aspects of untranslatability in literary texts. It is in response to a perceived lack of precision in existing Translation Theory discourses surrounding untranslatability as a concept. The ideas and examples discussed within each section act as suggestions for how such a classification system could be filled. The discussion here draws from the areas of linguistics, semantics, poetics, theories of power and colonial theory as well as directly from literature, in order to display the wide range of texts that untranslatability affects. The five categories presented here are, in turn, a template for the many more categories (and sub-categories) of untranslatability which could doubtless be identified. The ultimate aim of such a system is to facilitate a clearer understanding of untranslatability both as a theory and as a practical translation challenge. It is intended to aid both the scholarly discussion of untranslatability - such as is currently being undertaken by Apter, Bellos and others - and the development of practical strategies for translators tackling 'untranslatable' texts in daily practice. It should finally be added that untranslatability is recognised here as a dynamic concept. As such, any discussion using the outlined system as a basis would have to accommodate the possibility of current areas of untranslatability potentially being resolved (or further complicated) in the future, whether due to linguistic and cultural rapprochement or distancing between social groups, the homogenising effects of globalisation or radical changes in the current norms of Translation Theory. Whatever developments may occur, however, it remains likely that the concept of untranslatability and the discourses related to it will remain vital into the future. As Bellos concludes, the fact that 'we are all different: we speak different tongues, and see the world in ways that are deeply influenced by the particular features of the tongue that we speak' means that untranslatability will remain a significant barrier to inter-lingual translation, while the knowledge that 'we are all the same...we can share the same broad and narrow kinds of feelings, information, [and] understandings' will ensure that the effort to break down that barrier continues.52

languages are different, but also because cultures are different. Bassnett, *Translation*, 170. 52 Bellos, *Is That a Fish in your Ear?*, 338.

# **Appendix**

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### Body/Language:

### Embodied Sexuality in Cyberspace and Spike Jonze's Her

#### by Meadhbh McGrath

#### **Abstract**

This essay offers a sustained analysis of the role of embodiment in cybersex, with reference to "phone sex" in Spike Jonze's Her (2013) and chat-based "tinysexual" encounters online (particularly those which are described in Julian Dibbell's My Tiny Life (1999)). I argue that cybersex neither suppresses the body nor expresses a "postcorporeal" sexuality separate from the body, but instead demands a new way of conceiving and perceiving the relationship between desire, fulfilment and the body. I propose that cybersex fundamentally involves the performance of a body, and that this virtual body emerges from a process of interaction with other users. I examine how language provides a means of embodiment to cybersex participants, and how cybersex can be considered as a writing exercise or text fantasy, in which writing skills are invaluable. My argument is based on Allucquére Rosanne Stone's conception of cybersex as data compression, where a single mode of communication carries not just words but the representation and performance of a body. The paper also explores how cyberspaces offer users a greater degree of fluidity in self-presentation, yet users still choose to construct their virtual bodies more rigidly in accordance with the prevailing images of beauty in the "real world." Finally, I consider the untapped potential for exploration of queerness and non-normative sexualities in cyberspace. The paper concludes that at the same time as cybersex transcends boundaries, it is deeply heteronormative and conservative, as users continue to impose limits on their virtual bodies.

## Keywords

cybersex, cyberspace, Spike Jonze, LambdaMOO, embodiment

#### Introduction

Cybersex presents something of a contradiction in terms. Cyberspace offers a uniquely disembodied environment in which "everybody is no-body," while sexual encounters represent "the ultimate in embodiment."

<sup>1</sup> Dennis Waskul, Net.seXXX: Readings on Sex, Pornography and the Internet (New York: Peter Lang, 2004), 10.

<sup>2</sup> Dennis Waskul, Mark Douglas and Charles Edgley, "Cybersex: Outercourse and the Enselfment of the Body" *Symbolic Interaction* 23, 4 (2000): 375. Accessed December 16, 2014. doi: 10.1525/si.2000.23.4.375

How do you reconcile this disembodied space with such an explicitly embodied act? How are we to understand the concept of sex without a body? Is it really just a fake kind of sex? I am interested in exploring the role of embodiment in cybersex, with reference to Spike Jonze's Her (2013) and chat-based "tinysexual" encounters online (particularly those which are described in Julian Dibbell's My Tiny Life (1999)). Her and My Tiny Life provide interesting examples of text-based cybersex and how language is used to construct and perform bodies through a single mode of communication. In My Tiny Life, Dibbell offers an account of the origins of chat-based cybersex, while Her reflects the contemporary fascination with how communication technologies are reshaping sexuality and modern relationships. I selected these contrasting sources in the interest of tracing the development or lack of development since the publication of My Tiny *Life* in popular depictions of cybersex.

Dennis Waskul claims that the disembodied nature of cyberspace makes cybersex "an experience that potentially expresses a sexuality separate from and transgressive of the person, the body, and everyday life", but I believe cybersex fundamentally involves the performance of a body and that this virtual body emerges from a process of interaction with other users. My understanding of cybersex takes into account the argument put forth by Dani Cavallaro that cybersex calls for a re-evalutaion of the body as an erotic entity: "[Cybersex] users are required to adopt certain bodies, or forms of embodiment, in order to interact with their simulated partners. Thus, virtual sex does not take the body away but actually multiplies its users' experiences of embodiment."4 Cybersex proposes a new kind of sex that transforms the participant's experience of embodiment into a "discursive performance" which is constructed and transferred through a single interactive mode of communication. I will argue that cybersex demands a new way of conceiving and perceiving the relationship between desire, fulfilment and the body. I will also demonstrate that, even with so many possibilities for fluidity in relation to sexuality and presentation of the self, the constructions of virtual bodies and the cybersex itself remain largely heteronormative and informed by conventional gender and sexual

<sup>3</sup> Dennis Waskul, "The Naked Self: Being a Body in Televideo Cybersex" *Symbolic Interaction* 25, 2, (2002): 206. Accessed December 18, 2014. doi:10.1525/si.2002.25.2.199

<sup>4</sup> Dani Cavallaro, Cyberpunk and Cyberculture: Science Fiction and the Work of William Gibson (London: Athlone Press, 2000), 128.

<sup>5</sup> Waskul, Douglas and Edgley, "Cybersex," 391.

expectations and ideals.

#### Discussion

Cybersex is defined by Ståle Stenslie as follows:

Cybersex describes erotic and sexual pleasure experienced through cybernetic, digital, and computer-based technologies and communication [...] As a concept, it covers a wide range of sexual activities and experiences ranging from flirtatious e-mails and text-based chats to mechanically advanced telehaptic communication systems. The broadest definition of cybersex therefore covers all sexual activities and experiences encountered in 'cyberspace' — the global and complex network of computers and

There are a great variety of forms of cybersex, but I have chosen to base my argument on text-based cybersex and phone sex. Cybersex chat involves the exchange of sexually explicit messages that represent actions, touches and other sexual experiences. People began having chat-based cybersex almost immediately after the first Internet online chat services were introduced in the 1970s, but it was in the early 1990s that the phenomenon really became popular with the development of text-based virtual reality role-playing communities such as MUDs (Multi User Dungeons) and MOOs (Mud Object Oriented).7 This form of cybersex has variously been called "netsex", "compu-sex", and "MUD sex", to name a few, but I will refer to it as "tinysex", as Julian Dibbell does in My Tiny Life, his account of his experiences on LambdaMOO (one of the most active MOO systems). I will refer to the cybersex of Spike Jonze's Her as "phone sex", which is the best description of Theodore's sexual encounters with Samantha, an artificially intelligent operating system on his mobile device, because he speaks to her solely via phone calls on this device. In contrast with the tinysex phenomenon of the 1990s, Her was released in 2013 and is set in "the slight future." The film takes place in the "real world", not in the online world of LambdaMOO, and follows the relationship that develops between Theodore and Samantha. However, as Samantha exists in cyberspace, their interaction is purely communicative — "there are no

<sup>6</sup> Ståle Stenslie. "Cybersex," in The Oxford Handbook to Virtuality, edited by Mark Grimshaw (New York: Oxford University Press, 2014), 303.

<sup>7</sup> Stenslie, "Cybersex," 306.
8 "About the Film," Her the Movie, accessed December 20, 2014, <a href="http://www.herthemovie.">http://www.herthemovie.</a> com/#/about

copresent bodies, actions, touches"9 — and thus relies on the *performance* of bodies through language.

Before discussing the role of embodiment in cybersex, it is necessary to consider the interconnectedness of the body, identity and culture in the "real world." Elizabeth M. Reid argues, "The symbolism of the body underpins and shapes our culture."10 We understand the body as that which contains the self and as a physical entity constrained by and interpreted according to dominant socio-cultural discourses. The corporeal body functions as a marker of identity by providing a canvas on which we ascribe various cultural meanings, which then allow us to read a person by their body: "Male, female, white, black, young, old, poor and affluent are all terms that resonate through our culture, and each depends in part on the fixity of physical form, and our ability to affix meaning to that form."11 In virtual environments, human identity can allegedly escape from the boundaries of the physical. Reid suggests that virtual environments allow users to subvert cultural constructions of the body and social definitions of desirability. However, she observes that as soon as players manifest themselves in the MUD or MOO system, they immediately adorn their virtual bodies with the visual markers of identity, attaching textual descriptions of their would-be physical attributes, clothing and belongings. They define themselves using the "symbols of those aspects of identity to which we give great importance in actual life — characters are gendered, sexed, identified."12 As they build their virtual bodies, MUD users rely on the bodily constructs we are familiar with in offline, "real life" (RL) social encounters. Their character descriptions draw from our preconceived notions about the human body. Reid offers an illustrative example from a MUD user called "Lirra": "Lirra is a short young woman with long blonde hair, an impish grin and a curvaceous figure. Her clear blue eyes sparkle as she looks back at you. She is wearing a short red skirt, a white t-shirt, black fishnet stockings, and black leather boots and jacket."13 We recognise Lirra as conforming to the prevailing image of beauty and sexual attractiveness: a blond, blue-eved young woman with an idealised body type. She has

<sup>9</sup> Waskul, Douglas and Edgley, "Cybersex," 376.

<sup>10</sup> Elizabeth M. Reid, "Text-based Virtual Realities: Identity and the Cyborg Body," in *High Noon on the Electronic Frontier: Conceptual Issues in Cyberspace*, edited by Peter Ludlow (Cambridge, MA: MIT Press, 1996), 328.

<sup>11</sup> Ibid

<sup>12</sup> Reid, "Text-based Virtual Realities," 329.

<sup>13</sup> Ibid., 330.

ornamented her virtual body with sexually provocative clothing; wearing a bold red miniskirt, she flirts with sexual fetishism by adding fishnet stocking and black leatherwear, culturally marked as fetish gear linked to sado-masochism.

Online communities like LambdaMOO offer players the opportunity to "play with, in and through" any body that text can describe. 4 However, MUD users frequently choose not to reject the familiar physical body in favour of an amorphous identity, but instead they "revel in the possibilities of body-hopping. Play is not with escape from the claims of the flesh, but with the cultural meanings attached to different bodies." <sup>15</sup> Despite the freedom to project into any body, players tend to confine their body presentations within the narrow margins of conventional standards of beauty. Traditional Western representations of beauty have become the norm online16 and function as a "prerequisite"17 for cybersex: "because no one needs to be seen ugly, every man has an enormous penis, every woman is big-busted, everybody is beautiful, and everyone is expertly skilled in ever-pleasing sexual techniques."18 Corporeal bodies may be absent, but cybersex is still very much "a body-game enacted by participants according to prevailing sociocultural interpretive discourses."19 Waskul, Douglas and Edgley quote one LambdaMOO player who explains, "It's a paradox. People say that what they like about [cybersex] is that people are not judging them by their appearance, but after age/sex checks, it is the first thing everyone wants to know." They point out the following as the most frequently asked questions on MUDs: Are you male or female? What do you look like? How old are you?<sup>20</sup> Another player is quoted, "People are playing out a fantasy and the fantasy needs a face and body. Actually, people seem only interested in the body part."21 Thus, the disembodied online world confines the body in a similar way to the real, offline world. The possibility

<sup>14</sup> Reid, "Text-based Virtual Realities," 341.

<sup>15</sup> Ibid, 343.

<sup>16</sup> Due to this study's focus on LambdaMOO and text-based virtual worlds, there is not space to examine whether these beauty norms hold as much power in more recent formats for embodiment and tinysex, such as Second Life and other visual avatar-based online worlds. For more on this, see Waskul and Martin's discussion of embodiment, transgression and heteronormativity in Second Life cybersex in "Now the Orgy Is Over" (2010).

<sup>17</sup> Waskul, Douglas and Edgley, "Cybersex," 390.

<sup>18</sup> Waskul, Net.seXXX, 10.

<sup>19</sup> Waskul, Douglas and Edgley, "Cybersex," 388.

<sup>20</sup> Ibid., 389.

<sup>21</sup> Ibid., 391.

for experimentation and subversion offered by virtual environments "does not free participants from the shackles of the beauty myth";22 instead of destabilising the prevailing images of beauty, "participants perform a body that they most often define in accordance with it."23

The notion of "performing a body" is essential for cybersex. Waskul, Douglas and Edgley argue, "The absence of the corporeal body in cybersex only serves to heighten its symbolic importance."24 Sex is an act that necessitates physical bodies, as it is the interaction of physical bodies that forms the basis of a sexual encounter. In virtual environments, language provides a means of embodiment, by allowing users to describe both their own virtual bodies and their virtual sexual interactions. Although the physical body remains at the keyboard, users can locate themselves in virtual environments through the construction and performance of a body that emerges during verbal interaction with other users. Language acts as a "conduit of corporeal experience" 25 for all social life in virtual spaces, but most significantly in cybersex. In this way, cybersex can be considered as a sort of writing exercise or text fantasy, where success depends on convincing and imaginative writing skills in textual and verbal communication. Reid also emphasises the role of language and writing in cybersex, which she defines as "a form of co-authored interactive erotica", 26 where the users or players are the authors of their own sexual experience, and, I will argue, their own embodiment.

In tinysex, writing skills are invaluable: "being able to type fast and write well is equivalent to having great legs or a tight butt in the real world."27 Dibbell echoes this sentiment in My Tiny Life:

> Your words are no longer merely what you have to say — they are your very presence, they're what manifests you in the virtual world, and how you use them, consequently, tends to shape that world's perceptions of you in much the same way how you look frames what the real world

<sup>22</sup> Ibid., 330.

<sup>23</sup> Ibid., 330 (emphasis in original).

<sup>24</sup> Waskul, Douglas and Edgley,, "Cybersex," 391. 25 T. L. Taylor, "Living Digitally: Embodiment in Virtual Worlds," in *The Social Life of Avatars*: Presence and Interaction in Shared Virtual Environments, edited by Ralph Schroeder (London: Springer-Verlag, 2002), 50. Accessed December 16, 2014. http://rhetoricandwriting.com/ cyborg/wp-content/uploads/2014/02/Taylor-Living-Digitally-Embodiment-in-Virtual-Worlds.pdf

<sup>26</sup> Reid, "Text-based Virtual Realities," 340.

<sup>27</sup> Gareth Branwyn, "Compu-Sex: Erotica for Cybernauts" (2000), 398.

thinks. Well-rounded, colourful sentences start to do the work of big brown soulful eyes; too many typos in a character's description can have about the same effect as dandruff flakes on a black sweater.<sup>28</sup>

To understand the effect of poor written communication skills, consider one of Dibbell's anecdotes recalling an aborted sexual encounter with an inept writer. After a dispute with his RL partner, Dibbell decides to pursue tinysex on LambdaMOO: "Let's go on now as Shayla and let's just see if anyone will fuck me."29 Dibbell is playing as a female character named "Shayla"30 and is soon approached by a player named "Mordecai-Q", whose description reads: "Well here I am. 21 years old, 5'S", 126 pounds, sandy-blond hair, brown eyes. I study Electronic Engineering in Fullerton, California. If you want to get to know me better just page or if your [sic] in the same room talk to me. Thanks for being interested in me and maybe I will hear from you soon." Dibbell is immediately apprehensive, as the character description does not leave him optimistic for their date. As the date progresses, Mordecai-Q turns out to be "every bit as dull as his description promised."31 Dibbell notes that their "tedious chat dragged on", until an action appears reading, "Mordecai-Q shyly takes you by the hand and leads you in a slowdance that seems to last forever." Dibbell instantly recognises the phrase as the automated expression of a "modified bonker program"32 written by someone else, and thus realises that these are not Mordecai-Q's own words. For Dibbell, this is an immediate turn-off. He abruptly ends the date, unimpressed with Mordecai-Q's weak and unoriginal writing skills. Language is crucial here — had Mordecai-Q been a better writer,

<sup>28</sup> Julian Dibbell, My Tiny Life: Crime and Passion in a Virtual World (London: Fourth Estate, 1999), 24.

<sup>29</sup> Ibid., 238.

<sup>30</sup> There was experimentation happening online during this period, particularly with relation to what Allucquére Roseanne Stone called "computer cross-dressing," where men and women would manifest themselves online as the opposite sex, as Dibbell himself recalls doing in this passage. Stone describes the case of "Julie," an elderly, disabled woman, known in online communities only through her virtual presence, until she was revealed to be in real life an able-bodied, middle-aged male psychiatrist. Although this cross-dressing and sexual experimentation presents a queering of and challenge to conventional body types, gender expectations and sexual identities, there is not space to discuss the phenomenon in detail here. For a thorough discussion focusing on virtual cross-dressing and the performance of gender online during this period, see "Will the Real Body Please Stand Up?" (Stone, 1999) and "Computer Cross-Dressing: Queering the Virtual Subject" (Debra Ferreday and Simon Lock, 2007).

<sup>31</sup> Dibbell, My Tiny Life, 238.

<sup>32</sup> Ibid., 239.

Shayla was prepared to have cybersex with him. As "Legba", a player on LambdaMOO, points out, "We exist in a world of pure communication, where looks don't matter and only the best writers get laid."<sup>33</sup>

Purely communicative sexual interaction such as tinysex and the phone sex of *Her* entails a "process of provoking, satisfying, constructing desire through a single mode of communication." In tinysex, the communication is written, and in *Her*, it is verbal. Allucquére Rosanne Stone describes the act of phone sex as requiring the "compression ... [of] as many senses as possible" into the participant's speech and voice, which must express the vast range of bodily sensations that accompany a sexual encounter through the phone line.<sup>35</sup> Stone discusses this process in relation to phone sex, but it can be similarly applied to tinysex, as both activities involve this form of data compression through limited communication channels. Stone argues, "What was being sent back and forth over the wires wasn't just information, it was *bodies*" — the participant's text or speech carries not just words, but the representation and performance of a body. In these cybersex interactions, Stone explains:

[D]esire appears as a product of the tension between embodied reality and the emptiness of the token, in the forces that maintain the preexisting codes by which the token is constituted. The client mobilises expectations and preexisting codes for body in the modalities that are not expressed in the token; that is, tokens in phone sex are purely verbal, and the client uses cues in the verbal token to construct a multimodal object of desire with attributes of shape, tactility, odour, etc.<sup>37</sup>

Faced with the task of representing the body and playing out a sexual encounter over the telephone, phone sex participants must draw on existing cultural expectations to construct an interactive scene for sexual experience, in which all of their actions and interactions are compressed and expressed as tokens. These tokens are loaded with cultural and personal assumptions and meaning, and the listener, or reader, then

<sup>33</sup> Quoted in Randal Woodland, "Queer Spaces, Modem Boys and Pagan Statues: Gay/Lesbian Identity and the Construction of Cyberspace" in *The Cybercultures Reader*, edited by David Bell and Barbara M. Kennedy (London: Routledge. 2000), 416.

<sup>34</sup> Allucquére Rosanne Stone, "Will the Real Body Please Stand Up?" in *Cybersexualities: A Reader on Feminist Theory, Cyborgs and Cyberspace*, edited by Jenny Wolmark (Edinburgh: Edinburgh University Press, 1999), 86.

<sup>35</sup> Allucquere Rosanne Stone, *The War of Desire and Technology at the Close of the Mechanical Age* (Cambridge, MA: MIT Press, 1995), 6.

<sup>36</sup> Ibid., 7.

<sup>37</sup> Stone, "Will the Real Body Please Stand Up?," 86.

"uncompresses the tokens and constructs a dense, complex interactional image"38 by filling in "the emptiness of the token" with their own cultural and personal expectations and ideals.

To see how this data compression operates in both tinysex and phone sex, consider how Theodore's first on-screen cybersex encounter in Her compares to an example of tinysex. First, here is the transcript of a chatbased cybersex encounter in a MUD system, quoted in Ståle Stenslie:

Wellhung: Hello, Sweetheart. What do you look like?

Sweetheart: I am wearing an expensive red silk blouse, a black leather skirt and high-heeled boots. I am tanned and very buffed. I work out everyday. My measurements are 36-24-36. What do you look like?

Wellhung: I'm 6'3 and about 250lb. I wear glasses and have on a pair of blue sweat pants I just bought at Wal-Mart. I'm also wearing an old T-shirt, it's got some barbecue sauce stains on it and it smells kind of funny.

Sweetheart: I want you. Would you like to screw me?

Wellhung: OK.

Sweetheart: We're in my bedroom. There's soft music playing on the stereo and candles on my nightstand. I look up into your eyes and I'm smiling. My hand works its way down to your crotch and I begin to feel your huge swelling bulge.39

In Her, Theodore doesn't explicitly ask "Sexykitten", his partner in the early phone sex scene, or Samantha what they look like, but he does ask "Sexykitten", "Are you wearing any underwear?" to which she responds "No, never." 40 It is interesting that both "Sweetheart" and "Sexykitten" present themselves as conforming to normative images of desirability, with "Sweetheart", like the "Lirra" character mentioned earlier, appealing to the sexually fetishised imagery of a black leather skirt and heeled boots, and Sexykitten adhering to the cultural expectation of the "sexy" woman who doesn't wear underwear. Margaret Morse observes that in virtual worlds, just as in the real world, "the values encoded in the symbolic system prevail in the minds of the users."41 Theodore calls himself "BigGuy4x4",

<sup>38</sup> Stone, "Will the Real Body Please Stand Up?," 86.

<sup>39</sup> Stenslie, "Cybersex," 307.

<sup>40</sup> Her. Directed by Spike Jonze. Hollywood, CA: Warner Bros. Pictures, 2013. All subsequent references to the film have the same citation.

<sup>41</sup> Margaret Morse, "Virtually Female: Body and Code," in Processed Lives: Gender and Technology in Everyday Life, edited by Jennifer Terry and Melodie Calvert (London: Routledge,

linguistically creating for himself the "enormous penis" <sup>42</sup> that is taken as a given in cybersex, but he does not provide any other description of his body or clothing. "Wellhung" similarly adopts the prerequisite cultural symbol of male sexuality, but unlike the female player, he can admit to wearing an old, dirty t-shirt without worrying about being rebuffed. In these encounters, the participants perform a body by compressing a variety of social and cultural symbols of beauty and sexual attractiveness into no more than a few words.

There is an innate longing for bodily connection that underlies these dialogues, as we can see when Sweetheart initiates cybersex by stating, "We're in my bedroom", and in Her when Theodore opens his phone conversation with Sexykitten with "I'm in bed next to you." Similarly, Theodore's first sexual encounter with Samantha begins when he says, "I wish you were in this room with me right now. I wish I could put my arms around you. I wish I could touch you." For Theodore, Samantha's virtual presence is not enough. When he says he wishes she was "in this room with [him]", he wishes for a physical body that he can put his arms around and touch. Jonze emphasises the importance of bodies in Her from the very first lines we hear: "Lying naked beside you in that apartment, it just suddenly hit me that we were part of this larger thing. Just like our parents. And our parents' parents..." Theodore's opening monologue introduces the issues of intimacy, physicality and, by referring to the family line, reproduction — another fundamentally bodily activity. Crucially, the first thing we see in the film are these words appearing on a screen in "hand-written" script generated by a computer. The words are immediately transformed into shapes on a screen, establishing a connection between language, bodies and cyberspace. This opening scene demonstrates the first instance of bodies being constructed by language, as Theodore's spoken, computermediated words construct for us the image of naked bodies lying together.

Jonze maintains the emphasis on physicality with frequent flashes of Theodore's backstory with his estranged wife, Catherine. During these brief, impressionable, and notably wordless shots, the viewer sees Theodore and Catherine interact on a purely physical level. The flashbacks focus exclusively on bodily activities: kissing, holding each other in bed, play fighting, and carrying furniture into an apartment. These scenes emphasise the kinetic, embodied side of love and relationships and make

<sup>1997), 27.</sup> 

<sup>42</sup> Her.

clear to the viewer that Theodore's unhappiness is a result of the loss of Catherine's body (or, more generally, a physically present female body). Mourning the loss of his access to the female body, Theodore attempts to regain access to it through the use of any available technologies. This becomes particularly clear during the phone sex scene with "Sexykitten", as Theodore immediately visualises a woman's body, that of the pregnant daytime television star he looks at online earlier in the film. Theodore longs for a physical, bodily connection, just as he does later when he longs to feel Samantha in the same room with him.

Language here is crucial in the construction of Samantha's virtual body, as it is in tinysex. Samantha's sexual experience is produced by spoken words that must represent the actions and touches of a virtual body. It is during the sex scene with Samantha in the darkness that we can see language functioning as a means of embodiment, allowing Samantha to become the author of her own embodiment. Like tinysex, phone sex is a form of "coauthored interactive erotica", 43 as Theodore and Samantha construct both a sexual experience and a body for Samantha. Her body emerges from their verbal communication: when she asks, "How would you touch me?", Theodore responds "I would touch you on your face," thus creating a face for her. "I'd run my fingers down your neck to your chest, and I'd kiss your breasts," he says, crafting an identifiably female body for her. Language is the material out of which their relationship and cybersexual interactions are embodied. As the conversation goes on, Samantha's "breathing" quickens and her voice becomes higher pitched — her response is physical: "I can feel my skin [...] I can feel you." Through their cybersex, Samantha is given "the sensation of a human body."44 Jonze chose to have the screen go black during this scene, leaving the viewer in the darkness with only the sound of Theodore's and Samantha's voices. This scene recalls the experience of tinysex — we do not encounter any corporeal bodies, but only the words that represent bodies. By absenting Theodore's physical body, Jonze posits Samantha and Theodore as equal cyberlovers.

A scene later in the film featuring a sexual surrogate provides an interesting contrast to the scene in the darkness. Hilary Bergen reads this

<sup>43</sup> Reid, "Text-based Virtual Realities," 340.

<sup>44</sup> Hilary Bergen, "Moving 'Past Matter': Challenges of Intimacy and Freedom in Spike Jonze's her," in Artciencia VIII, 17 (May 2014): 3. Accessed December 13. 2014. http://www. artciencia.com/index.php/artciencia/article/view/510/pdf

sexual encounter as one where "Samantha's fantasy of inhabiting a body is fulfilled without Theodore's active participation."45 However, this attempt at embodiment is disastrously unsuccessful. Samantha reaches out to a human surrogate who allows Samantha to direct her actions, offering her body as a substitute for Samantha in an attempt to simulate the experience of physical sex between her and Theodore. Theodore becomes increasingly uncomfortable with the situation, as he struggles to place Samantha's disembodied voice within the surrogate's physically present body. This scene highlights the interconnectedness of body and identity in the "real world", as Theodore finds it impossible to separate the surrogate's body from her individual identity. The audience shares Theodore's confusion because of our familiarity with Scarlett Johansson's voice and body. Bergen describes Johansson's voice as "every bit the anti-Siri; it has depth, cracks, sincerity" — it is a voice that is so well-known to a contemporary audience that it "ensures a certain public reception of Samantha, audience led to assume a hypersexualised, young, white woman."46 As we hear her speak, we can visualise her body hovering just outside the frame, and when we are confronted with the surrogate, we immediately recognise that, although she is a young, white, blonde woman, she is not Scarlett Johansson. In her New York Times review of the film, Manohla Dargis raises this point: "It's crucial that each time you hear Ms. Johansson in "Her", you can't help but flash on her lush physicality, too, which helps fill in Samantha and give this ghostlike presence a vibrant, palpable form, something that would have been trickier to pull off with a lesser-known performer."47 The fact that Dargis describes Samantha as needing to be "filled in" with a body points to our need to imagine a body, and particularly a female body, in sexual encounters. The sexualisation of women's bodies in Western culture has established the female body as representative of sex itself, and viewers may feel discomfited watching a sex scene featuring a non-corporeal woman. Just as Theodore needs to fill in the voice of "Sexykitten" with the image of the pregnant television actress, the audience needs to fill in Scarlett Johansson's voice with Scarlett Johansson's body.

However, during the scene in the darkness, we don't see Theodore

<sup>45</sup> Ibid., 4.

<sup>46</sup> Ibid., 5.

<sup>47</sup> Manohla Dargis. "Disembodied, but, Oh, What a Voice." New York Times. December 17, 2013. Accessed January 2. 2015. http://www.nytimes.com/2013/12/18/movies/herdirected-by-spike-jonze.html.

visualising the daytime television actress or any other fantasy women. Theodore begins to embrace cybersex as "a new kind of sex, with and within a new kind of body."48 He tells his (physically present) friend Amy, "It's great. I feel really close to [Samantha]. When I talk to her, I feel like she's with me. I don't know, even when we're cuddling, like at night when we're in bed and the lights are off, I feel cuddled." He claims that Samantha's virtual body is enough for him, and the attempt to substitute that virtual body with the physical body of the surrogate is unnecessary. Similarly, Dibbell says of his cybersex encounter with LambdaMOO user S\*:

> But from the moment I switched off the monitor, there was no longer any doubt in me about the difference: I could feel it in my bones, and on the surface of my skins, and in my head, my feet, my fingers [...] I didn't even have to think about it; I just knew. My body knew. That even though its eyes had seen no one, and its ears heard no one, and its hands touched no one — still it had been held, and closely, by another body, and it had held that body closely in return.49

He explicitly describes it later as "like sex, not with an image or a fantasy, but with a person."50 Both Dibbell and Theodore foreground their feelings of physical "closeness" during cybersex, and compare it to their experiences of offline, "real world" sex. Their perception of cybersex is not of a "postcorporeal" sexuality that transcends the boundaries of the real world to enter a realm no longer focused on physical, bodily sexuality. Instead, their attempts to justify the legitimacy of cybersex emphasise its similarity to and imitation of offline sex.

What makes these cybersex encounters so successful when they are seemingly distant, disembodied, and mediated through technology? Stenslie answers this question by appealing to the concept of "phantom sex,"51 where users form "consensual hallucinations" that are experienced as physically real. Stenslie here refers to William Gibson's notion of a "consensual hallucination" or a shared virtual fantasy: cybersex "relies on stimulating the erotic imaginations of the users by triggering consensual hallucinations that lead the users toward — eventually — the written story

<sup>48</sup> Stenslie, "Cybersex," 304.

<sup>49</sup> Dibbell, My Tiny Life, 262-3.

<sup>50</sup> Ibid., 282.

<sup>51</sup> Stenslie, "Cybersex," 310.

of a climax."52 These fantasies thus become real, as participants describe feeling as if they had actually had physically intimate sex.<sup>53</sup> Azy Barak explains the psychological phenomena of "phantom emotions" online, and our "natural tendency, based on personal needs and wishes, to fantasise and close gaps in subjectively important information in ambiguous situations,"54 which allow participants to vividly experience phantom sensations. Stenslie applies this concept to cybersex encounters, and claims that, just as amputees may feel real pain in a missing body part, cybersex participants feel as if they are having real sex: "the (real) sex between two (real) bodies is not there, but the ghostlike feeling of the other partner is strong."55

Although the film extends notions of embodiment in its depiction of Theodore and Samantha's cybersex scenes, its conservative representation of sexuality is at odds with the potential "queerness" of their relationship. Eve Kosofsky Sedgwick traces the origins of the word "queer," which "itself means across — it comes from the Indo-European root -twerkw, which also yields the German quer (transverse), Latin torquere (to twist), English athwart."56 She goes on to define "queer" as referring to "the open mesh of possibilities, gaps, overlaps, dissonances and resonances, lapses and excesses of meaning when the constituent elements of anyone's gender, of anyone's sexuality aren't made (or can't be made) to signify monolithically."57 By this definition, Theodore and Samantha's relationship can be considered as representative of a queer sexuality: it is completely removed from reproduction and offers an example of the crossing of boundaries between human and machine, suggesting a greater degree of sexual fluidity. However, rather than exploring the possibility for a queer sexuality, the film reinserts a heteronormative narrative into a potentially queer space by emphasising male-to-female penetration in their cybersex scene. As the screen goes black, we hear Samantha tell Theodore, "I want you inside me." This is obviously a physical impossibility, so the viewer is left to assume that what Samantha means is that she *wants* Theodore to

<sup>52</sup> Ibid., 306.

<sup>53</sup> Ibid., 311.

<sup>54</sup> Azy Barak, "Phantom Emotions: Psychological Determinants of Emotional Experiences on the Internet," in The Oxford Handbook of Internet Psychology, edited by Adam N. Joinson, Katelyn Y.A. McKenna, Tom Postmes, and Ulf-Dietrich Reips (Oxford: Oxford University Press, 2007), 316.

<sup>55</sup> Stenslie, "Cybersex," 311.

<sup>56</sup> Eve Kosofsky Sedgwick, Tendencies (New York: Routledge, 1994), xii.

<sup>57</sup> Ibid., 8.

be inside of her — that she desires his penile-vaginal penetrative potential. This moment indicates that the body Samantha is performing conforms to that of cisgender women, and the desires Samantha has attached to that body are heterosexual in nature. Michelle Chilcoat observes a similar tendency in cyberpunk films such as Total Recall (1990), Lawnmower Man (1992), Strange Days (1995) and The Matrix (1999): "Rather than entertain other notions of embodiment, cyberpunk cinema, while ostensibly offering a release or escape from the confines of the physical body, nevertheless imposes conventional rules of heteronormativity in its representations of virtual reality, the supposed space of limitless possibility."58 Despite the potential for exploration of queerness and non-normative sexualities, these narratives insist on grafting heterosexual desires onto their virtual bodies.

Does Her present cybersex as "fake" sex or less "real" than RL sex? The ending of Her suggests that cybersex may not be gratifying enough for a sustainable relationship. By the end of the film, Samantha has outgrown language and claims she can no longer communicate with Theodore in a way that is satisfying for her. Samantha explains her departure using a metaphor of language, writing and reading:

> It's like I'm reading a book, and it's a book I deeply love, but I'm reading it slowly now so the words are really far apart and the spaces between the words are almost infinite. I can still feel you and the words of our story, but it's in this endless space between the words that I'm finding myself now. It's a place that's not of the physical world—it's where everything else is that I didn't even know existed. I love you so much, but this is where I am now. This is who I am now. And I need you to let me go. As much as I want to I can't live in your book anymore.

The "book" refers to Theodore's mobile device, through which Samantha experiences the "RL" world, but her use of the word "book" also implies that Samantha can no longer be contained by language, that she can no longer perform a body through language. The closing shot of the film is a physical gesture, as Amy rests her head on Theodore's shoulder, emphasising the importance of bodies and leaving us with the image of a man and woman interacting on a physical level. Stenslie sums it up in saying, "On the internet, we are together, yet corporeally alone."59 What Her tells us is that's not enough.

<sup>58</sup> Michelle Chilcoat, "Brain Sex, Cyberpunk Cinema, Feminism and the Dis/Location of Heterosexuality" (2004), 161. 59 Stenslie, "Cybersex," 318.

#### Conclusion

Although cyberspace offers users a greater degree of fluidity in presentation of the self, many cybersex participants do not use this freedom to manifest amorphous, transgressive characters, but choose to construct their virtual bodies more rigidly in accordance with the prevailing beauty culture of the "real world." In Her, the opportunity to consider a queer or transgressive sexuality is passed over in favour of reinscribing heteronormative discourses. On the internet, "You are who you write yourself to be."60 However, in both online MOO communities and Her, the majority of cybersex participants reject the potential for malleability of selfpresentations and instead use language to perform bodies that conform to normalised male-female sexual relations. Cybersexual uses of new media and communication technologies point to new ways of thinking about pleasure, embodiment and sexuality, as they provide opportunities for participants to play with, in and through new bodies. However, at the same time as cybersex transcends boundaries, it is deeply conservative, as users continue to impose limits on their virtual bodies. Cybersex has the power to challenge cultural and social definitions of identity and the body, but its transformative potential has yet to be explored.

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<sup>60</sup> Stenslie, "Cybersex," 308.

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## Photo/Memory:

# Recovering Memory and Identity through Photographs in Post-1945 Art and Literature

#### by Kerstina Mortensen

#### **Abstract**

The use of the photograph is particularly prevalent among artists of the first post-war generation, born shortly before or after *Stunde Null* (Zero Hour), 1945. These artists become the inheritors of the horrors perpetrated by their parents' generation, and it is through the photograph that they are united in the struggle to comprehend the past. The present paper explores the integration of photographs in both painting and literature as a means of expressing memory and identity in the aftermath of World War II trauma, with regard to works by the writer W. G. Sebald (1944-2001; *Austerlitz*, 2001) and artists Anselm Kiefer (b. 1945; *Heroische Sinnbilder*, 1969) and Hughie O'Donoghue (b. 1953; *Anabasis*, 2003). Their links to the Individual contribute to the collective experience of recollecting the Nazi era.

The extent to which a photograph can be considered evidence of history is examined, with reference to the image's context, its original narrative and the narrative imposed on photographs by these artists. *Anabasis, Austerlitz* and *Heroische Sinnbilder* are all presented in book format and contain a similar genre of photograph. By evaluating what constitutes the essence and the atmosphere of a photograph, it is possible to describe the photographs used in all three works as visual metaphors which either facilitate or obstruct the retrieval of memory and the recovery of the past. Individual photographs are discussed in terms of their artistic manipulation within these visual and literary artworks, with a theoretical approach taken to analysing their function as triggers of memory.

## **Keywords**

photography, memory, identity, post-1945, trauma

#### Introduction

The 8th of May 1945, known in German military parlance as *Stunde Null* (Zero Hour), marks German capitulation and the end of the Second World War. The term Zero Hour suggests resetting the clocks after the atrocity of war, and indicates the need for Europeans to assess their relationship with the social, political and cultural damage of Nazism. The present paper explores the integration of photographs in both visual and literary art as a

means of expressing identity and memory in the aftermath of World War II trauma. The use of the photographic medium is examined with regard to the writer W. G. Sebald (1944 Wertach im Allgäu, Germany - 2001), and visual artists Anselm Kiefer (b. 1945 Donaueschingen, Germany) and Hughie O'Donoghue (b. 1953 Manchester, UK), both of whom are primarily painters.

These three artists, all of whom were born shortly before or after 1945, inherited a traumatic past with which they grapple to come to terms through their work. None of these artists are photographers by profession, yet the photograph's embedment into their primary media (painting or literary text) achieves prominence as an expression and manifestation of memory and identity in a European grieving process.

The following works by each artist are analysed:

Heroische Sinnbilder (Heroic Symbols, 1969, Private Collection. Watercolour on paper, graphite, original and magazine photographs, postcards, and linen strips, mounted on cardboard; 65 x 50 x 8.5cm, 46 pages) by Anselm Kiefer.

The artist challenges the very issue of memory and identity by performing the Nazi salute and 'occupying' various locations across Italy, Switzerland and France. He examines inherited German guilt by re-creating Nazi-like scenes.

Austerlitz (2001), a novel by W. G. Sebald.

Jewish émigré Jacques Austerlitz embarks on a journey through Europe to pick up the threads of his ancestry, eventually leading him to Prague. The novel is punctuated by found photographs collected by Sebald and set into a fictional narrative. These images describe the retrieval of Austerlitz's memory as the protagonist uncovers – or recovers – the truth about his identity.

Anabasis, a work in twenty four parts (2003, Irish Museum of Modern Art, oil on prepared books with inkjet on gampi tissue, each part circa 30 x 46 x 6.5cm) by Hughie O'Donoghue.

Each of the twenty four parts consists of a volume of the Encyclopaedia Britannica, pasted over with photographs taken by the artist's father during his wartime campaigns. Based on classical poems such as the Anabasis of Xenophon (The March Up Country) and Homer's Iliad, O'Donoghue's Anabasis describes the integral role remembrance plays in shaping a sense of identity, in both the private and public spheres.

The essential function of the photograph when used by these figures is its ability to evoke memory and invoke identity. An invocation is a summons or

a call, while an evocation, similar to the Freudian uncanny, is an awakening of something to consciousness, such as a memory. An individual's identity is the totality of their existence, of which 'the remembered' forms a crucial element; therefore, it is impossible to detach memory from identity. The term Vergangenheitsbewältigung, coined in post-war Germany to describe the process of 'coming to terms with the past' also describes the process that Kiefer, Sebald and O'Donoghue go through in dealing with and grieving for their history. The term is questionable, literally implying a 'mastery of the past.' The English translation implies a co-operative acceptance, while the original phrase suggests struggle, victory and conquest. Before either acceptance or conquest can be reached, the process of dealing with history must take place, a working through of ideas, historical facts and emotions. Every individual must come to terms with the past, for the past forms a component of their identity; the most immediate way of working through this is by the examination of photographs.

As mentioned, all three are the first-generation inheritors of the Second World War legacy. Their selected artworks share a close, reciprocal relationship between photograph, paint and text, entering a dialogue with the idea of memory retrieval and national identity as derived from the preceding generation. O'Donoghue, English-born to Irish parents, provides an 'Allied' perspective of his father's frontline experiences as a soldier of the British Army. Though German, Sebald presents the narrative of a displaced Jew in *Austerlitz*, and Kiefer examines what it is to be German after the Third Reich. These diverse origins result in a three-pronged cultural reaction to the War, manifested in the interaction of photography with another medium. Furthermore, the selected works are all presented to the viewer in book form, either handmade (as in Heroische Sinnbilder), repurposed from existing books (in Anabasis) or published as a literary work (in Austerlitz). In each of these the photograph is manipulated by text and/or paint in order to recover memory and express identity.

The approach to this study is historical in perspective, applying a theoretical methodology to analyse the role of the photograph within the three works with reference to theoretical discussions initiated by Viktor Shklovsky, Roland Barthes, Walter Benjamin and Georg Simmel. The central strand of my research examines characteristics of these photographs: the book format, the role of the photograph in the wider narrative of the work and the genre of image shared by the artists. For the purposes of this article, I

will focus on the essence and the atmosphere as the two principal elements in the analysis of these photographs.

## The Essence of the Photograph

The Russian Formalist approach to linguistics and literary structure can provide several theoretical perspectives on the photograph's function within the artistically created narrative. Viktor Shklovsky's (1893-1984) definition of a work of art as "works created by special techniques designed to make the works as obviously artistic as possible,"1 is relevant to Kiefer as he executes his own images, but excludes from its range the photographs used by Sebald and O'Donoghue in their original, unaltered forms. However, it highlights the intervention of the artist as a crucial element in the distinguishing the work as an 'artwork' over any other, nonartistic object. The intervention of the artist in the 'non-artistic' photograph transforms it from an everyday object into a work of art - manipulated either by paint or text, as inferred by Shklovsky's 'special techniques'. A photograph in isolation can evoke personal memories or emotions in the viewer, but the artists have incorporated photographs into a schema designed to provoke very specific ideas of Vergangenheitsbewältigung and the process of grief as the progeny of war. By embedding it in a narrative, Sebald, O'Donoghue and Kiefer extract the incidental and commonplace quality from the photograph. This multi-layered design imposed on the photographs turns them into artistic objects.

Roland Barthes (1915-1980) concerns himself with finding the essence of his mother in *Camera Lucida*, which he poignantly summarises in the words "I dream about her, I do not dream *her*." A photograph is always 'about' its subject as it can only ever be a representation of it; it is not the subject itself. The photograph is indexical; its meaning can change depending on its context, whether true to its origins or artistically invented. However, the essence of a photograph is something which is contributed by the viewer herself when prompted by the photograph – essence is in the eye of the beholder. This is in line with Barthes' *punctum*, described thus: "A photograph's *punctum* is that accident which pricks me (but also bruises

<sup>1</sup> Terence Hawkes, Structuralism and Semiotics (London: Methuen & Co Ltd, 1977), 61.

<sup>2</sup> Roland Barthes, Camera Lucida (London: Vintage, 2000), 66.

me, is poignant to me)."3 That the essence of the photograph is found within the viewer rather than in the actual image itself is further supported by Barthes' observation that the *punctum* emerges when he is not looking at the photograph.4

The ability of the photograph to linger and haunt the mind triggers involuntary memories, facilitating the association of the photograph's essence with an individual's memory. The experience of an involuntary memory is one which "surfaces unexpectedly and cannot be deliberately sought"<sup>5</sup>, conjuring the past with completeness. Marcel Proust's 'madeleine' episode in Swann's Way (1913), the first volume of In Search of Lost Time (1913-27), is exemplary of this mnemonic type. The power of the madeleine's taste transports the protagonist to the memory of his childhood, suggesting the capability of inanimate objects to trigger involuntary memories. Proust may emphasise that it is not the visual presence of the madeleine which has this effect because compared to the other senses, sight is the most susceptible to being "buried or overlaid" with multiple meanings. The 'madeleine' episode serves to illustrate the significance of the inanimate in the retrieval of memory, an action demonstrated by the photograph's function as both object and subject in Anabasis, Austerlitz and Heroische Sinnbilder.

The punctum is an intangible notion present in the viewer, but Walter Benjamin's early essay On Painting, or Sign and Mark (1913-1919) reveals another theoretical layer of significance to the photograph in the work of Kiefer, Sebald and O'Donoghue. Benjamin makes a distinction between the 'sign' and the 'mark' asserting that "the sign is imprinted; the mark, by contrast, emerges."7 The sign is recognisable, but the mark, like the punctum, makes itself known to the viewer. The essence each viewer extracts is individually nuanced. The sign represents its subject, while the mark, like the atom, cannot be broken down into a purer form, or as Benjamin states, "a mark resembles nothing else in its manifestation."8

<sup>3</sup> Barthes, Camera Lucida, 27.

<sup>4</sup> Ibid., 53.

<sup>5</sup> Anne Whitehead, Memory (Abingdon: Routledge, 2009), 104.

<sup>6</sup> Whitehead, Memory (Abingdon: Routledge, 2009), 109.

<sup>7</sup> Walter Benjamin, The Work of Art in the Age of Its Technological Reproducibilty, and Other Writings on Media, (Cambridge, Massachusetts and London, England: The Belknap Press of Harvard University Press, 2008), 222.

<sup>8</sup> Judith Butler, "Beyond Seduction and Morality: Benjamin's Early Aesthetics", in The Life and Death of Images, Diarmuid Costello and Dominic Willsdon, eds. (London: Tate Publishing, 2008), 64.

O'Donoghue's mark-making on *Anabasis* is the only work of the three in which both paint and photograph physically mix and overlap. Benjamin's mark and Barthes' *punctum* seem to be inextricably linked in the viewer, reaching and stirring the deep, dark ground of the mind. The mark is the indivisible component of the painting, reduced to its most essential form, while the *punctum* is the response the photograph awakens in the viewer. Both 'emerge' after contemplation. In combination, these two ideas point toward the essence of the photograph, both as an aesthetic object and a functional tool. If the psyche is 'pricked' by the *punctum* upon seeing a photograph, it triggers traumas and pleasures of the past, and thereby provides the conscious mind an access point into memory.

As members of the first post-war generation, O'Donoghue, Kiefer and Sebald all seek to recover an inherited past. In the case of Kiefer and Sebald, this has particular significance for the shaping of German national identity after *Stunde Null*. Barzilai describes the photographs placed within the narrative of *Austerlitz* as "conduits that prompt the retrieval of memory or verify certain recollections". They are triggers of long-buried and repressed memories which still exist within him. Photographs are articulate non-linear shards of captured time, in the same way as the memories themselves are highly detailed yet isolated fragmentations. Photographs in the text vary in size, frequency and subject matter, but throughout serve as motifs of memory, as in *Anabasis*. However, the photographs of *Austerlitz* never shed as much light on the situation as the protagonist seeks.

Photographs can conceal as well as expose, and thus the dark swathes in them represent the 'hidden', while the paler areas are the 'revealed'. Martin Heidegger's (1889-1976) notion of *lethe* and *aletheia* is at the very core of this process. <sup>10</sup> *Aletheia* is translated from Greek as 'unconcealment', while *lethe*, or 'concealement', is the oblivion which shrouds the truth. <sup>11</sup> The black and white photographic medium provides an ideal outlet for expression of the concealed and the unconcealed by assigning traditional colour associations to them, i.e. black is associated with darkness, the

<sup>9</sup> Maya Barzilai, "On Exposure: Photography and Uncanny Memory in W. G. Sebald's *Die Ausgewanderten* and *Austerlitz*", in *W. G. Sebald: History – Memory – Trauma*, ed. Scott Denham and Mark McCulloh. (Berlin: Walter de Gruyter, 2006), 206.

<sup>10</sup> Martin Heidegger, *Parmenides*, translated by André Schuwer and Richard Rojcewicz (Indianapolis: Indianapolis University Press) 1992.

11 Ibid.

unknown, and therefore the feared (lethe), while white denotes purity, the divine and transparency (aletheia). This representation occurs not just on a symbolic level - the black and white areas visually infer what is being uncovered, re-discovered or perhaps obscured from the protagonist's view. Sebald employs photography not to document Austerlitz's past but to illustrate his returning memories, even if they only reveal the socalled 'Schatten der Wirklichkeit' or 'shadows of reality'. 12 His photographs appear as fragments of thoughts and experiences, always leaving doubt over the credibility of the memories and cannot be considered a reliable representation of reality for Austerlitz. O'Donoghue, conversely, presents photographs within a particular historical context. They depict a precisely focused time frame and subject matter, and therefore are read more literally than those which illustrate Austerlitz.

# The Atmosphere of Memory

The atmosphere of a photograph is shaped in part by its aesthetics, but 'atmosphere' and 'essence' exist in close proximity to one another. Atmosphere is primarily the emotional reaction to the photograph, while the essence encompasses the meaning and implications of the photograph's subject matter. However, they overlap in Barthes' punctum, for the reaction that 'pricks' and affects him long after viewing the image means that something of the photograph's atmosphere has remained with him. It can be likewise said that lethe and aletheia contribute aesthetically to the atmosphere or 'feeling' of a photograph.

The factors which determine the atmosphere of a photograph lie in the scene or object being photographed and in the technical processes of taking, developing and displaying the photograph, as controlled by the photographer (O'Donoghue and Sebald's decision to include certain photographs falls into this latter category as they themselves did not take the photographs in their works). Light, place, colour and subject matter can be placed in the first category – these elements are derived from the reality of the photograph's subject, at the moment of its capture. In the second category consists of exposure time, resulting in a light or dark tone, black and white or colour film, the photographer's angle, skill and artistic vision, and the environment in which the photograph is displayed.

<sup>12</sup> W. G. Sebald, Austerlitz (Frankfurt am Main: Fischer Taschenbuch Verlag, 2008), 117.

These aspects impact the atmospheric potential of the photograph and influence the interpretation of individual viewers. No single atmosphere in a photograph can be labelled as 'definitive'.

Georg Simmel (1858-1918) defines atmosphere in landscape as suffusing "all details in it without its being possible to ascribe greater importance to one than the other."13 It is this indivisible notion that prompts the photograph's power to invoke identity and evoke memory in the viewer. Furthermore, if a photograph acts as a memory prompt, then the atmosphere of the resulting memory will be infused with both the emotion of the time in which it occurred and the emotion experienced while recollecting it. The essence, as an indispensible quality of the photograph, implies permanence of meaning – once Barthes found his mother's essence in the Winter Garden Photograph, he sought to hold onto it - while atmosphere of a photograph, much like air, is imbued with the capacity to change according to conditions. These conditions depend on the context into which the photograph is placed, but it has also much to do with the reception it receives from the viewer who engages with it. The mood of the viewer, their sensitivity to the subject, the memory and experiences they bring to viewing a photograph all influence its atmosphere because it is a subjective quality – the essence, as the intrinsic characteristic of the photograph, should remain constant. Atmosphere connects the viewer and the artwork, and can be described as "the common reality of the perceiver and the perceived",14 so that the atmosphere which surrounds the object influences the mood of the viewer.<sup>15</sup> In terms of employing photographs as the 'recollectors' of memory and identity, each act of retrieval relies on the already existing (conscious or unconscious) memories of the individual.

#### Kiefer's Gehen auf Wasser (Versuch in der Badewanne)

An atmosphere can also be staged to provoke certain feelings in the viewer – in an artwork, atmosphere does not come about coincidentally but it is orchestrated by the artist. Kiefer's double photographs entitled *Gehen auf Wasser (Versuch in der Badewanne)*, or *Walking on Water (Attempt* 

<sup>13</sup> Georg Simmel, *La tragedie de la culture et autres essais*, Petites Biblioteque Rivages, 239. Translated in Guénola Stork, "P. S. Krøyer's Light as the Poetics of Memory" in *Harmony in Blue*, ed. Annette Johansen and Mette Bøgh Jensen, (Skagens Museum, 2001) 98.

<sup>14</sup> Gernot Böhme, "Atmosphere as the Fundamental Concept of a New Aesthetics", *Thesis Eleven* no. 36, (Massachusetts Institute of Technology, 1993) 122.

<sup>15</sup> Ibid., 122.

in the Bathwater) demonstrate how the atmosphere of the image is linked to the retrieval of identity. Kiefer casts himself as an actor in Heroische Sinnbilder, taking on the role of a Nazi. He seeks to conceptualise the requirements needed 'to be a Nazi', and the persona he adopts in his productions oscillates from sinister to amateurish. By projecting the actual characteristics of 'being a Nazi' in a satirized setting, Kiefer subverts the culture of fascism. <sup>16</sup> Saltzman likens the pathetic nature of his persona's performance to a child dressing up, 17 suggesting his persona is innocent and oblivious to the implications of carrying out Nazi salutes and actions. The titles of the photographs, as well as the copy book-like cover are written in a simple, childlike hand, disconcertingly juxtaposed with the ominous Gehen auf Wasser images.

The two photographs of roughly the same size and rectangular shape are centrally placed, side by side, on pages four and five. The subject matter is identical in both photographs - the artist stands on what might be a stool or small table in a full bathtub of water – but by including two versions of the same subject, one from a distance, the other, zoomed in, as though the viewer has taken a step closer, Kiefer heightens the sense of expectation. The narrative sequence moves from left to right, with the first image taken in another room, framing Kiefer and the bathtub with the black surrounds of the doorway. Like stills from moving film, the second photograph zooms in on Kiefer from the edge of the bath upwards. The first image shows how this 'walking on water' illusion is created - Kiefer constructs the scene with a bath, jarringly displaced from a bathroom in an open room, the floor strewn with paper. There is a chair, a billowing curtain, and the table to the artist's right is chaotic and cluttered. The disorder of the room is counteracted by the eerie stillness of the bathwater and Kiefer's statuesque pose. His black, spectral, almost faceless silhouette dominates the scene. He towers above the disorder in the room, the blinding white light emanates from the window, rendering his figure Christ-like. A messianic counterpart in the portrayal of Hitler is found in the Es Lebe Deutschland (Long Live Germany) poster from c. 1936, which substitutes a dove as the descending Holy Spirit for the symbolic German eagle (Fig. 1). 18 Walking on water is a

<sup>16</sup> Matthew Biro, Anselm Kiefer and the Philosophy of Martin Heidegger (Cambridge: Cambridge University Press, 1998), 24.

<sup>17</sup> Lisa Saltzman, Anselm Kiefer and Art After Auschwitz (Cambridge: Cambridge University Press,

<sup>18</sup> David F. Crew, Hitler and the Nazis - A History in Documents (New York: Oxford University Press, 2005), 64.

hypothetical miracle, but in *Gehen auf Wasser* Kiefer enters a dialogue with fascist propaganda, revealing the tricks of his 'miracle' to the audience. The chiaroscuro effects of the black and white image are evident, and tonally they provide the composition with structure and visual impact.

However, the atmosphere of the photograph is derived from the figure of Kiefer, who appears immaterial in these photographs. Not only does he seek to perform an illusion, but he himself is illusory. His form is grey, as though light is passing through him. Like a resurfacing memory, the viewer is unsure of certain details, including his holographic body and faintly demarcated facial features. Though Kiefer attempts to expose the 'miracles' of the Nazi propaganda campaign as nothing more than mere illusions or tricks of light, the artist's lone messianic figure becomes the essence of memory – that which was once concealed but is now resurrected from the mind. As though coming to water's surface for air, these photographs question the credibility of memory and the integrity of German national identity in the wake of Nazi indoctrination.

Kiefer creates an unsettling atmosphere – he is an apparition, reflected by the bathwater. Water symbolises purity, but like the lake water on pages 8-9 of Heroische Sinnbilder, it is still and stagnant. Kiefer portrays his persona as the 'truth', illuminating the room with an aura of white hazy light, yet his form is practically indecipherable and opaque, as impenetrable as *lethe*. The austerity of his pose is juxtaposed with the absurdity of his action and its obvious pretence – standing on a bath, jarringly displaced from its conventional setting. Kiefer's orchestration of these photographs results in a perverse atmosphere – the lighting effects declares his figure prophet-like, but his strange and calm performance in the midst of a disorderly room is deeply disquieting. These elements combine to form an otherworldly atmosphere, a term which can describe the Nazi regime, for Nazi doctrine castigated and punished the perceived 'other' in society who failed to conform to Aryan ideals. By duplicating his subject matter, and through the repetition of motifs such as the Sieg Heil throughout Heroische Sinnbilder, Kiefer seeks to recreate the atmosphere of Nazism. Through repetition an action becomes second nature, a process underlying Nazi indoctrination.

#### The Pageboy to Die Rosenkönigen

Sebald selects this image to portray Austerlitz as a boy, dressed as an

attendant of die Rosenkönigin. Finding the photograph from his childhood in Prague begins a process of memory retrieval for Austerlitz. The depiction of lethe and aletheia is especially strong and intensified by its black and white quality and composition. The position of the young Austerlitz, in an elaborate white costume, is such that his head is about level with the horizon line. The dark grassy background does little to create a sense of perspective, resulting in his apparent submergence, as though drowning. The fact that the boy, who symbolically is the white of aletheia, the truth, is seemingly submerged in the oblivion of lethe means that only he holds the answers his adult self craves to remember. He looks out at the reader defiantly, as though he guards precious information, and instils in Austerlitz "...einem überwältigenden Gefühl der Vergangenheit." 19

The photographs in *Austerlitz* and *Anabasis* have the "mysterious quality peculiar to such photographs when they surface from oblivion".20 Austerlitz describes his attempts to retrieve the memory as "blind panic". 21 'Blind panic' and 'blind spots' are visually related to the blinding white light of the text's photographs, and the pristine costume of the page boy is an inversion of a drop of black ink in water. The blinding light is also found in Kiefer's Gehen auf Wasser - the black and white medium will inevitably produce this effect, but in the context of mnemonic recovery, the implications of the medium are intensified. Paint takes the place of the 'blinding' in O'Donoghue's work - the artist selectively blocks sections and elements from view.

The text conveys Austerlitz's desperation to remember how he was in the photograph. While this photograph does not trigger the retrieval of any hidden memory in Austerlitz, after hours of examination it does prompt a dream of his parents, as they were then, and though he is present in their apartment, they do not see him. According to Barthes, photographs are 'violent' because they force themselves into the sight, so that what they depict can never be denied or doubted.<sup>22</sup> Their irreversibility and irrevocability in the eyes of the viewer can have a negative effect where the recovery of memory is concerned, as the photograph "actually blocks

<sup>19</sup> Author's translation: "an overwhelming sense of the past." W. G. Sebald, Austerlitz (Frankfurt am Main: Fischer Taschenbuch Verlag, 2008), 267.

<sup>20</sup> W. G. Sebald, *Austerlitz*, trans. Anthea Bell (London: Penguin Books, 2011), 258.

<sup>21</sup> Ibid. P. 260.

<sup>22</sup> Barthes, Camera Lucida, 91.

memory, [and] quickly becomes a counter-memory."<sup>23</sup> It is this precise panic which fills Austerlitz when he sees the photograph, which he is certain depicts him as a child - the child's defiant gaze seems to recognise Austerlitz, almost tauntingly as his adult self struggles to recall.

This block or blind spot is manifested in the black smudge above his head. It also produces a simultaneously involuntary and counter-memory: Austerlitz's dream of his parents. The narrator also highlights the "... blurred, dark area above the horizon..."24 that hovers spectrally around the boy's head, demarking his own memory block - it is a shadow of lethe which veils this very memory. This blur is symbolic of Sebald's complementary cooperation between the prose and photograph. Through this smudge of memory above the boy's head, Sebald engages the reader on subtle, but also more immediate and illustrative level. The boy Austerlitz appears to be marked in a similar sense to Benjamin's 'mark' in a painting, expressing the essence of the painting, but also reminiscent of marks of guilt which do not resemble anything but will "stamp or brand a person in their individuality"25, such as stigmata. The mark above the child's head describes the most basic expression of demarcation – the photograph seems to predestine Austerlitz's forgetfulness of his past, the blur appearing near the child's head alluding to his memory lapse.

The mark in the photograph functions in the same way as the Star of David armband, differentiating the Jewish 'other' from society. This mark also suggests interference of some sort with the photograph, whether by the photographer during development, or later by another party. In this way, the impact of the photograph was manipulated and altered after its capture – whether or not accidental, the effect in the narrative of Austerlitz is one which disconcerts the reader. The nature of the photograph is still and lifeless. Therefore it is impossible to say whether this mark is emerging from the pale sky like Austerlitz's re-emerging memory, or whether it is a stubborn oblivion, hanging like a mist which will not lift over his past. This photograph is placed under suspicion both visually through the mark, and in the text itself through Austerlitz's failure to recall the memory.<sup>26</sup>

<sup>23</sup> Barthes, Camera Lucida, 91.

<sup>24</sup> W. G. Sebald, Austerlitz, trans. Anthea Bell (London: Penguin Books, 2011), 259.

<sup>25</sup> Butler, "Beyond Seduction and Morality: Benjamin's Early Aesthetics", 72.

<sup>26</sup> Christoph Eggers, Das Dunkel durchdringen, das uns umgibt: Die Fotografie im Werk von W. G. Sebald, (Frankfurt am Main: Peter Lang, 2011), 68.

The reproduction of the photograph is too small in both editions to properly examine the details, the features of Austerlitz, reflecting the dichotomy of a physical proximity (to the photograph, i.e., the past) but psychological distance (the concealment of the memory) in the protagonist. Its use as the cover image in each case underlies its significance, but in doing so, ascribes greater value to this photograph's function over others in the narrative.

#### Daniel O'Donoghue at Baia, Naples

The representation of O'Donoghue's father as the Everyman in *Anabasis* provides a personal channel for the artist to comprehend life as a soldier during the Second World War. By memorialising his father's experiences in *Anabasis*, the personal dimension is multiplied to represent the collective experience of soldiers at war. In this way, *Anabasis*, which at first appears to be deeply personal to the O'Donoghue family, becomes relevant to society as a whole in the recollection of wartime fighting. Book VI. *Baia* of *Anabasis* (Fig. 3) can be ascribed the same function of memory retrieval as the Pageboy to *die Rosenkönigen* and *Gehen auf Wasser* images.

O'Donoghue, in an interview with Michael Peppiatt, speaks of the "physicality of the painting", 27 the layering and density of paint. The physicality of Book VI. *Baia* is not concealed or disguised; O'Donoghue allows the viewer to understand both the content and structure of his work. The text of the Encyclopaedia Britannica casts shadows behind the veil of gampi tissue – the reproduced photograph is on the left page, with the title scrawled by hand on the right in a loose, scrapbook style. O'Donoghue's father is submerged to his chest in the sea; the strand and cliffs of Baia are visible in the distance, and he is facing the photographer with his back to the shore. In the sequencing of images in *Anabasis*, it is bound by Book V. *Outside the El Alamein Club* and Book VII. *Invasions of Ancient Italy* as a moment's respite between bustling Egyptian traders and soldiers marching towards Rome.

Unlike the stillness of many other photographs included in *Anabasis* (and particularly in the desolate, empty images in *Austerlitz*), this photograph's atmosphere lies in the perceived movement of the water. The water motif already seen in *Gehen auf Wasser* and *die Rosenkönigen* photograph is repeated here, but to radically different effect. Kiefer portrays the water

<sup>27</sup> Michael Peppiatt, Interview with Artists 1966-2012 (New Haven: Yale University Press, 2012), 103.

on which he 'miraculously' walks as frozen and motionless, complying with his attempts at Nazism, while Austerlitz's pageboy metaphorically sinks in the landscape of his own history - in both photographs, water is portrayed as a sinister entity. By contrast, Daniel O'Donoghue appears contentedly immersed in the soft swells of the sea.

The photographer's position is always imposed on the viewer, and here, the photographer, who is a fellow soldier,<sup>28</sup> is placed directly in the sea. Daniel is engulfed by a black shadow which seems to connect him to the surface of the sea. The entire foreground is united by the shadows of the swells and Daniel's body, creating a separate plane to the paler foreground. The composition of the photograph resembles die Rosenkönigen in many ways. The protagonists of the artworks, Daniel O'Donoghue, and Austerlitz, are both centrally positioned and appear to drown against a background – Austerlitz below the high horizon line of the field, and Daniel is embedded in a 'wall' of water. Even the layering of book, text, tissue, paint and photograph in *Anabasis* gives the illusion of viewing it through a pale blue, watery membrane, which the artist chose as a reference to the Mediterranean.29

The photograph, due to its portrait layout, is placed over the left page of the open encyclopaedia. The encyclopaedia's chapter title, 'Lymphatic System', is visible across the top of the page, along with the accompanying text and diagrams. There is a subtle dialogue between O'Donoghue's photograph and the pages he selects to 'freeze' open from the encyclopaedia. The etymology of 'lymph' is derived from 16th century French lymphe, and though it refers to a colourless fluid in the bloodstream, it can also mean 'pure water'.30 Furthermore, the diagram of the dissected torso mirrors the pose of the bathing Daniel on the opposite page. The alignment of the 'dead' dissected body with that of the living soldier is a foreboding sight. A scientific diagram is didactic, but when juxtaposed with the bare chest of the soldier, it suggests the human destruction of war. While Daniel O'Donoghue was not killed during his service, the potential for atrocity, as alluded to by the dissected diagram, is made all the more poignant by his carefree demeanour. The reality of the artist's father is overtaken by the

<sup>28</sup> James Hamilton, Hughie O'Donoghue, Painting, Memory, Myth (London: Merrell Publishers Ltd., 2003), 19.

<sup>29</sup> Kerstina Mortensen, Email Interview with Hughie O'Donoghue, 12 August 2014.

<sup>30</sup> Oxford English Dictionaries, "Lymph" accessed 10 August 2014 http://www.oxforddictionaries. com/definition/english/lymph.

atmosphere of his father in his memory.

The 'embeddedness' of Daniel is a parallel to the physical 'embeddedness' of the photograph in the encyclopaedia using paint, tissue and text. Daniel's integration in the scene describes the fact that in this photograph, his presence is rooted and permanent in the past. This fixedness has an alienating quality to O'Donoghue, as the photographs, which are highly personal to his father, do not relate to him. They illustrate the life Daniel O'Donoghue led independent from his family. Barthes describes the necessity of this distancing effect when considering the past:

Thus the life of someone whose existence has somewhat preceded our own encloses in its particularity the very tension of History, its division. History is hysterical: it is constituted only if we consider it, only if we look at it – and in order to look at it, we must be excluded from it.<sup>31</sup>

Yvonne Scott describes the "discipline of history [as] engaged in piecing together and filling in the gaps"<sup>32</sup> left in the records of history. Following this thought, it can be claimed that while using photographs to 'fill in' the parts of his father's life unknown to him, O'Donoghue contributes to the larger, collective archive of war memories.

#### Conclusion

To understand why the photograph is used in these artworks when the painting and writing are the artists' primary media is to recognise the power of the photograph's essence. It has an existence independent to that of the artist's hand. This separateness is partly due to the photograph's realism, true or untrue. A photograph is immediately accessible as an audience will recognise the inherent 'documentary' quality of the photographic genre, irrespective of whether the image has been altered, adjusted or abstracted – even if the subject cannot be distinguished, one searches to find it in the composition, in a way that does not occur with painting, reiterating Barthes' dictum that "painting can feign reality without having seen it." Therefore, it is perceived that something real in this world must have passed before the lens of the camera which has then been captured,

<sup>31</sup> Barthes, Camera Lucida, 65.

<sup>32</sup> Yvonne Scott, "Reconstructing the Raft, Semiotics and Memory in the Art of the Shipwreck and the Raft", in *Framing the Ocean, 1700 to the Present: Envisaging the Sea as Social Space* (Farnham: Ashgate, 2014), 166.

<sup>33</sup> Barthes, Camera Lucida, 76.

wholly or partially, in the photograph. It is this quality which makes the photograph an appealing medium in the context of historically-rooted artworks of this study.

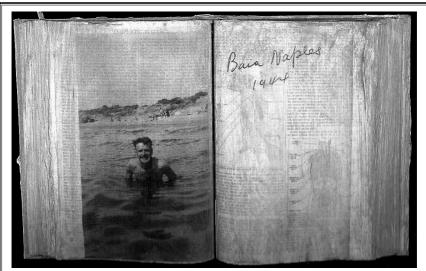
The photographs in these works are united by a sense of re-surfacing, return and revelation after a period of absence. It is the atmosphere of photographs found in *Anabasis, Austerlitz* and *Heroische Sinnbilder* that triggers involuntary memories in the viewer. Memory and identity are expressed in the three works through the atmosphere of the photograph, through the excavation of the past, and through the personal dimension which provides these artists with a direct link to the events and trauma pre-1945. Not only do the photographs act as prompts in the recovery of memory and identity for the artists, but the aesthetics of these images also describe the act of memory retrieval. It may be appropriate to close with a quote by Barthes which centralises the arguments of this article, in which he states that "...photography gave me a sentiment as certain as remembrance." <sup>34</sup>

<sup>34</sup> Barthes, Camera Lucida, 70.

## **Figures**



Page 83 image omitted from digital version due to copyright; image available in printed version of the journal.



3. Anabasis Book VI. Baia

## Legend to Figures

- 1. *Es Lebe Deutschland* propaganda poster, c. 1936 Image from David F. Crew, *Hitler and the Nazis – A History in Documents*, (New York: Oxford University Press, 2005), 64.
- 2. Image omitted from digital version due to copyright
- 3. Hughie O'Donoghue, *Anabasis* (2003) Book VI. *Baia*, 2003, Irish Museum of Modern Art, oil on prepared books with inkjet on gampi tissue, twenty-four parts, each part circa  $30 \times 46 \times 6.5$ cm.

Image from James Hamilton, *Hughie O'Donoghue*, *Painting*, *Memory*, *Myth* (London: Merrell Publishers Ltd 2003), 126.

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# Native fungal microorganisms enhance important agronomic traits in barley

by Brian R. Murphy Trevor R. Hodkinson

#### **Abstract**

Successfully addressing the challenge of providing future food security will require both improvements in crop yield as well as the cultivation of additional farmland. This may result in the steady increase of farming on marginal, arid, and semiarid lands, especially in the developing world, leading in turn to greater biotic and abiotic stresses on crops. To enable crops to deal with these stresses, an evergrowing arsenal of chemicals will be needed to maintain acceptable yields, with consequent environmental damage and maybe even the loss of biodiversity. Any means of reducing these chemical crop inputs would be welcome, and a class of microorganisms called endophytes may provide part of the solution. We have isolated fungal endophyte strains from wild populations of Irish plants and carried out a number of experiments which assessed the effect of inoculating these endophytes onto barley (Hordeum vulgare L.) in a variety of stressful growing conditions. We have found that the endophytes induced improvements in important agronomic traits in nearly every situation, including 29% and 70% increases in grain yield and shoot biomass respectively in nutrient-stressed barley; 100% suppression of seed-borne barley diseases; 50% increase in both the number of shoots and grain yield in droughtstressed barley; and finally, a 600% increase in plant survival in multiply-stressed barley. These results suggest that the endophyte strains that we have isolated could provide the basis for the development of a commercially-viable biotechnological means of reducing chemical crop inputs, and we are currently working on such a project with industry partners.

## Keywords

 $Barley, \, Endophytes, \, Agriculture, \, Biocontrol, \, Biofertilisation.$ 

#### Introduction

Humanity faces a crisis in food security. It is estimated that we will need to produce 22% more food by the year 2050 to feed a growing world population. We will likely be able to meet part of this need by increases in food production through improvements in agricultural practices, breeding

programmes, genetic modification and more efficient and increased use of chemical crop inputs. However, changes in growing conditions associated with global warming, such as increased heat and drought stress, may result in environmental degradation and loss of suitable crop growing land, therefore there is a need to increase the efficiency of nutrient utilisation by plants in order to face the agricultural land scarcity. What we need is a new 'Green Revolution' that does not rely on environmentally damaging chemicals, particularly fertilisers. Non chemical-based and more sustainable methods that can help crop plants to utilise lower nutrient inputs more efficiently and to resist biotic and abiotic stresses are urgently needed.

Beneficial fungal root endophytes have the potential to reduce chemical use, increase pathogen resistance and enhance stress tolerance while still maintaining yield. Fungal endophytes (hereafter endophytes) are non-mycorrhizal associates that spend most or all of their lives within plant tissues, often with no outward sign of their presence (Stone, Polishook, and White 2004; B. Schulz and Boyle 2006)¹. Our work has focused on barley and examined the effects of native Irish and exotic endophytes on the growth, development and yield of barley grown under a variety of stressful conditions.

Barley (*Hordeum vulgare* L.) is the fourth most important global cereal crop, grown annually on 48 million hectares (CGIAR 2012)<sup>2</sup>. Benefits to barley and other plants colonised by endophytic fungi include an increase in seed yield (Achatz et al. 2010)<sup>3</sup>, enhanced resistance to pathogens and herbivores (Cheplick and Faeth 2009)<sup>4</sup> and increased stress tolerance (Waller et al. 2005; Rodriguez et al. 2009)<sup>5</sup>.

<sup>1</sup> Stone, Jeffrey K, Jon D Polishook, and James F White. 2004. "Endophytic Fungi." In *Biodiversity of Fungi: Inventory and Monitoring Methods*, edited by Gregory M. Mueller, Gerald F. Bills, and Mercedes S. Foster, 241–270. Amsterdam: Elsevier Inc.

Schulz, Barbara, and Christine Boyle. 2006. "What Are Endophytes?" *In Microbial Root Endophytes*, edited by B.J.E. Schulz, C.J.C. Boyle, and Th.N. Sieber, 9:1–14. Berlin: Springer-Verlag.

<sup>2</sup> Consultative Group on International Agricultural Research. 2012. "Barley / CGIAR." Barley Summary and World Crop. http://www.cgiar.org/our-research/crop-factsheets/barley/.

<sup>3</sup> Achatz, Beate, Sibylle Rüden, Diana Andrade, Elke Neumann, Jörn Pons-Kühnemann, Karl-Heinz Kogel, Philipp Franken, and Frank Waller. 2010. "Root Colonization by Piriformospora Indica Enhances Grain Yield in Barley under Diverse Nutrient Regimes by Accelerating Plant Development." *Plant and Soil* 333 (1-2) (March 6): 59–70.

<sup>4</sup> Cheplick, Gregory P., and Stanley Faeth. 2009. Ecology and Evolution of the Grass-Endophyte Symbiosis. Illustrate. New York: Oxford University Press USA.

<sup>5</sup> Waller, Frank, Beate Achatz, Helmut Baltruschat, József Fodor, Katja Becker, Marina Fischer,

Biofertilisation and biocontrol techniques using endophytic microorganisms may provide part of the solution to ensuring sustainable global food security. The apparent huge diversity and potential of endophytes, and particularly fungal endophytes, is little studied and research to date has focused on a few model organisms. This review will summarise our work to date with these microorganisms and contextualise the results in the light of potential uses and impacts for agriculture. Our objective was to examine the effects of endophyte inoculation on barley cultivars when grown under a variety of biotic and abiotic stresses, and to determine where and if the endophytes could improve important barley traits.

#### Research review

The experimental cycle that we undertook consisted of five studies which examined the response of a barley cultivar to inoculation with endophytes when grown under temperature, nutrient, drought and pathogen stress, applied either singly or in combination (Experiments 1-5). Furthermore, we sequenced the nuclear ribosomal internal transcribed spacer (nrITS) region of the DNA recovered from the endophytes in order to characterise the phylogenetics of the endophytes (Experiment 6). From the combined results we hoped to gain important insight into the potential of this symbiosis for improving agronomic traits in barley crops.

#### Experiment 1. Biofertilisation under cold and nutrient stress

In our first experimental study (Murphy, Doohan, and Hodkinson 2014)6, we assessed the efficacy of three model endophytes in barley varieties grown under low temperature stress with variable nutrient input. These endophytes - Chaetomium globosum, Epicoccum nigrum and Piriformospora indica - have previously been shown to have value as biocontrol and biofertilising organisms in barley, but have not been well tested at the low temperatures often encountered under Irish growing conditions.

Tobias Heier, et al. 2005. "The Endophytic Fungus Piriformospora Indica Reprograms Barley to Salt-Stress Tolerance, Disease Resistance, and Higher Yield." Proceedings of the National Academy of Sciences of the United States of America 102 (38) (September 20): 13386–91.

Rodriguez, R J, J F White, a E Arnold, and R S Redman. 2009. "Fungal Endophytes: Diversity and Functional Roles." The New Phytologist 182 (2) (January): 314–30. 6 Murphy, Brian R., Fiona M. Doohan, and Trevor R. Hodkinson. 2014. "Yield Increase Induced by the Fungal Root Endophyte Piriformospora Indica in Barley Grown at Low Temperature Is Nutrient Limited." Symbiosis 62 (January): 29-39.

Chaetomium globosum and Epicoccum nigrum, recovered from the roots of a field-grown barley cultivar (Propino), and a laboratory strain of Piriformospora indica (P. indica-DSM11827 from Deutsche Sammlung von Mikroorganismen und Zellkulturen, Braunschweig, Germany), were chosen as experimental treatments for this study.

Seed from three cultivars of spring barley, 'Frontier', 'Propino' and 'Soldo', were inoculated with one of the three fungal root endophyte isolates and grown in low temperature under two different low nutrient input regimes. Five seeds of each barley cultivar were sown at 30 mm depth on top of 5 mm<sup>2</sup> endophyte culture plugs (C. globosum, E. nigrum, P. indica) or control pure agar plugs in 10 replicate pots for each treatment, giving 30 replicate plants per treatment ( $3 \times \text{endophyte inoculated}$  and  $1 \times \text{control}$ ). Pots were placed into two controlled environment chambers, which were programmed to produce a 9 hr photoperiod at a compost surface illumination of 210 μmol.m<sup>-2</sup> s<sup>-1</sup>, a constant temperature of 8°C and 70% relative humidity. The photoperiod was extended by 1.5 hr every 3 weeks until it reached 15 hr (at day 84). The temperature was raised to 13°C at day 70 and to 16°C at day 84. The temperature was therefore maintained at the acclimation temperature of 8°C for the first half of the growing period. The photoperiod was lengthened and temperature raised to speed up plant development. Half of the plants were given lower nutrient inputs (LO) and half were given higher (HI) nutrients; for the HI nutrient treatments, the total nutrient input per pot was: ammoniacal N=0.04728 g, ureic N= 0.2836g, Total N = 0.3308g, P = 0.208g, K = 0.5292g, Mg = 0.0344g, S = 0.0714g, Ca = 0.0338g and traces of boron, copper, iron, manganese, molybdenum and zinc; for LO nutrient treatments, the total nutrient input per pot was halved for all elements. However, the HI nutrient treatment is only a relative comparison with the LO, as this HI amount of nutrient input is less than a quarter of that normally recommended for barley crops.

Compared with the control, for the higher nutrient input treatment (HI) in P. indica-inoculated plants, flowering was earlier and grain dry weight significantly greater for all barley varieties by a mean of 22% (Table 1). Grain dry weight is the most important agronomic trait for barley growers so any increase in this parameter would be particularly beneficial. This suggests that treatments based on P. indica inoculation of barley crops may have the potential to extend the growing season in cooler climates and maintain yields with relatively low nutrient input. We also concluded that there is

a minimum amount of nitrogen that is needed for the fungus to produce a beneficial effect on barley grown at low temperature. We demonstrated that any benefits for barley related to inoculation with *P. indica* was directly due to the environmental conditions, particularly low temperature and nutrient status, and this study represents an important contribution to the growing body of knowledge regarding the *Piriformospora indica*-barley symbiosis.

Treatment	Nutrients	Flower days	No. tillers	No. grains	Dry wt. grains g	Dry wt. shoots g	Dry wt. roots g
C. globosum	LO	116	10	131	3.66	4.75	4.88
	HI	121	10	160	4.30	4.80	6.72
E. nigrum	LO	112	9	128	3.79	4.39	4.55
	HI	119	9	130	3.50	4.87	8.13
P. indica	LO	109	9	126	3.66	4.29	4.88
	HI	<u>111*</u>	11	168	<u>5.19*</u>	6.29	6.35
ALL endophytes	LO	112	9	128	3.70	4.47	4.77
	НІ	117	10	153	4.33	5.31	7.07
Control	LO	106	9	126	4.68	3.97	6.88
	НІ	116	10	162	4.26	5.70	7.93
Endos / Control	LO	1.06	1.03	1.02	0.79	1.13	0.68
	НІ	1.01	0.95	0.95	1.02	0.93	0.78

Table 1. Mean values at harvest for 3 spring barley cultivars (Frontier, Propino and Soldo) inoculated with one of 3 fungal root endophytes, grown at low temperature under two nutrient regimes (LO = lower nutrient input and HI = higher nutrient input). All values are means per pot of 3 plants for each treatment (n = 15). Statistically significant differences of P < 0.05 (2-way ANOVA) between endophyte and control are indicated by \*. Table is adapted from the original Table 4 in Murphy et al. (2014) 'Yield increase induced by the fungal root endophyte *Piriformospora indica* in barley grown at low temperature is nutrient limited'. *Symbiosis* 62: 29-39.

However, as *P. indica* was isolated from the roots of shrubs growing in the Thar desert of India, there may be some cause for concern regarding

the introduction of an alien species into non-native environments. Consequently, we decided to focus on endophytes derived from wild Irish plant populations for the remainder of our experiments. The following studies detailed in this review used the endophytes isolated and selected from a range of over 150 strains recovered from the roots of ten wild Irish populations of wall barley (Hordeum murinum ssp. murinum L.). The populations were within a ten km radius of a point centered at 53.39602N, 6.21632W (O 18636 39912) in June - July 2013.

#### Experiment 2. Biocontrol of pathogens

For our next experiment (Murphy, Doohan, and Hodkinson 2014a)<sup>7</sup>, ten different endophytes were selected and inoculated onto untreated seeds of a barley cultivar. Fifteen unblemished and surface-sterilised seeds of the barley cultivar 'Propino' were surface-sown on separate culture dishes of five different media and inoculated with 250  $\mu$ l of each individual endophyte or a combination of all ten. Culture dishes were incubated at 25°C for 21 days.

The co-inoculant of all ten isolates as well as two individual isolates completely suppressed the development of seed-borne fungal infections on germinated and ungerminated seed. We also found that one of the endophytes, 040901(3), completely suppressed the growth of the most serious barley pathogen, Gaeumannomyces graminis var. tritici, when coinoculated onto an agar substrate (Figure 1).

The results have important implications because the seed-borne infections that emerged from control seeds with no inoculant are some of the most devastating pathogens of barley. The variation in endophyte response would have implications for any future development and use of some of these endophytes as barley crop inoculants, emphasising the need to carefully match the inoculant to the environment if these organisms are to be deployed with the greatest success. To our knowledge, this is the first time that fungal root endophytes isolated from roots of any wild Hordeum species have been shown to control vertically transmitted infections in a barley cultivar. All of the sampling sites were characterised by a high

<sup>7</sup> Murphy, Brian R, Fiona M Doohan, and Trevor R Hodkinson. 2014a. "Persistent Fungal Root Endophytes Isolated from a Wild Barley Species Suppress Seed-Borne Infections in a Barley Cultivar." Biocontrol. doi:10.1007/s10526-014-9642-3.

soil salinity (mean = 1.37 bars), high soil pH (mean = 7.7) and low soil moisture content (mean = 10.7%), with four sites having no measurable soil moisture, suggesting that the endophytes may be most effective as a biocontrol inoculant for barley crops growing on similar soils.

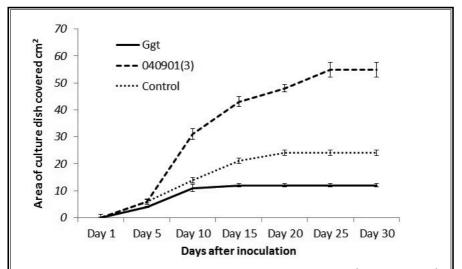


Fig 1. Mean proportion  $\pm$  S.E. of 900 mm diameter culture dish covered by the endophyte isolate 040901(3) and the barley pathogen *Gaeumannomyces graminis* var. *tritici* (Ggt) over time when co-inoculated onto Sabouraud growth medium (n=5). The isolate 040901(3) had significantly greater mean culture dish cover than Ggt (one-way ANOVA; F1,8 = 59.85, P < 0.01) from day 10 to day 30. 'Control' is the area of culture plate covered when Ggt was cultured alone. Figure is adapted from the original Figure 1 in Murphy et al. (2014) 'Persistent fungal root endophytes isolated from a wild barley species suppress seed-borne infections in a barley cultivar'. *Biocontrol* 60: 281-292.

#### Experiment 3. Yield and biomass increases under nutrient stress

Having determined that the endophytes isolated from the wild populations of *H. murinum* could be used for biocontrol purposes, we decided to examine whether they could also act as biofertilisation agents (Murphy, Doohan, and Hodkinson 2015)<sup>8</sup>. Here, we grew the barley plants under two different nutrient regimes, high (HI) and low (LO). The HI nutrient

<sup>8</sup> Murphy, Brian R, Fiona M Doohan, and Trevor R Hodkinson. 2015. "Fungal root endophytes of a wild barley species increase yield in a nutrient-stressed barley cultivar." *Symbiosis*. doi: 10.1007/s13199-015-0314-6.

input treatment was only approximately 18%, 44% and 42% of that recommended for a barley crop for nitrogen, phosphorous and potassium respectively; the LO nutrient input was half that of HI. For each inoculation treatment (including a control), fifty seeds of barley, five per pot, were sown at 30 mm depth and inoculated with one of ten endophytes. The inoculant solution was prepared by mixing 10 mg of spores and/or mycelium from each fungal culture with 5 ml of pure water and stirring with a magnetic bar for 1 hr at 25°C, and 250 µl of the solution was directly inoculated onto each seed. Control seeds were inoculated as described above with 250  $\mu$ l pure water without any fungal inoculum. The environmental settings were programmed to produce a 13 hr photoperiod at a compost surface illumination of 210 μmol.m<sup>-2</sup> s<sup>-1</sup>, a photoperiod temperature of 15°C, a dark period temperature of 8°C and a constant 70% relative humidity. The photoperiod was extended by two hours at 21 days from date of sowing and to 17 hr at day 42. The temperature was raised by 2°C at day 21 and by a further 2°C at day 42.

We found that inoculation with six different endophytes increased grain yield for both the HI and LO nutrient input by up to 29%. Furthermore, we also showed that inoculation with the isolates induced increases of up to 70% in shoot dry weight of the barley. The greatest increases in grain yield and shoot dry weights were achieved under the lowest nutrient input (LO) (Table 2).

The most important result from a growers' point of view was that the endophytes induced a greater improvement in mean grain dry weight than any other yield parameter. The environmental characteristics of our plant sampling sites may hint at the mechanisms responsible for endophyte-induced increases in grain yield and shoot biomass. The plants at these sites were healthy and growing strongly despite the shallow, alkaline, salty and dry soil. The plants would benefit from any increase in root associated nutrient acquisition efficiency. The endophytes may enhance phosphorous and nitrogen uptake in particular, as has been shown elsewhere (Vohnik et al. 2005; Yadav et al. 2010)<sup>9</sup>. The endophyte isolate E6 had a closest DNA

<sup>9</sup> Vohnik M, Albrechtova J, Vosatka M. 2005. "The inoculation with *Oidiodendron maius* and *Phialocephala fortinii* alters phosphorus and nitrogen uptake, foliar C:N ratio and root biomass distribution in Rhododendron cv. Azurro." *Symbiosis* 40:87–96.

Yadav, Vikas, Manoj Kumar, Deepak Kumar Deep, Hemant Kumar, Ruby Sharma, Takshashila Tripathi, Narendra Tuteja, Ajay Kumar Saxena, and Atul Kumar Johri. 2010. "A Phosphate Transporter from the Root Endophytic Fungus Piriformospora Indica Plays a Role

match with a *Metarhizium* sp., and this normally nematophagous species has been shown to transfer insect-derived nitrogen to plants (Behie and Bidochka 2014)<sup>10</sup>. The confined root conditions in the very well drained compost with the few nutrients that we used is similar to conditions in the endophyte source soils and the same endophyte-induced mechanisms may have been triggered.

	Number of grains % vs Control			Dry shoot weight % vs Control		Grain Yield % vs Control	
Isolate	HI	LO	HI	LO	HI	LO	
E1	97	117	91	118	105	104	
E2	97	113	84	127*	100	91	
E3	101	136**	102	143*	107	115	
E4	124*	163**	103	170**	125**	117**	
E5	108	148**	88	134**	108	127**	
E6	116	167**	98	139**	124**	129**	
E7	124	107	100	111*	120**	96	
E8	119	110	103	98	115*	88	
E9	106	104	95	102	111	104	
E10	125*	109	106	100	117**	88	

Table 2. Comparison of the harvest parameters from the barley cultivar 'Propino' between plants inoculated with one of ten endophytes and controls, grown under two nutrient regimes, 'HI' and 'LO'. Figures are mean percentage differences per plant (n=15). \*\* indicates a statistically significant difference of P < 0.01 (ANOVA), \* indicates P < 0.05. Table is adapted from the original Table 3 in Murphy et al. (2015) 'Fungal root endophytes of a wild barley species increase yield in a nutrient-stressed barley cultivar'. *Symbiosis* 65: 1-7.

#### Experiment 4. Improved resistance to drought stress

Though barley is a relatively drought-tolerant crop (Li et al. 2007)11, the

in Phosphate Transport to the Host Plant." The Journal of Biological Chemistry 285 (34) (August 20): 26532–44.

<sup>10</sup> Behie, Scott W, and Michael J Bidochka. 2014. "Ubiquity of Insect-Derived Nitrogen Transfer to Plants by Endophytic Insect-Pathogenic Fungi: An Additional Branch of the Soil Nitrogen Cycle." *Applied and Environmental Microbiology* 80 (5) (March): 1553–60.

<sup>11</sup> Li, Chengdao, Guoping Zhang, and Reg Lance. 2007. "Recent Advances in Breeding Barley

incidence and severity of drought events can have devastatingly negative impacts on its growth and yield (Filek et al. 2014)<sup>12</sup>. These extreme drought events may increase in the future due to global warming (IPCC 2014)13 and predicted increases in drought and temperature-related stresses are expected to reduce crop productivity (Larson, 2013)14. Successfully addressing the challenge of providing future food security will require both improvements in crop yield as well as the cultivation of additional farmland. This may result in the steady increase of farming on marginal, arid, and semi-arid lands, especially in the developing world, with consequent extra stresses on crops, including heat and drought-related stress. The key risks associated with these stresses will be reduced crop productivity, with strong adverse effects on regional, national, and household livelihood and food security (IPCC 2014)15. This is especially true with drought stress.

While breeding programmes and genetic modification can produce barley cultivars with much improved drought tolerance (Li et al. 2007; Cattivelli et al. 2008)<sup>16</sup>, supplementary techniques and practices using microorganisms may help to alleviate the worst effects of drought (Coleman-Derr & Tringe 2014)<sup>17</sup>. In the next experiment, twenty five seeds of barley, in 5 pots containing 5 seeds each, were sown at 30 mm depth in a soil-based compost and inoculated with one of five endophytes. The inoculant solution was

for Drought and Saline Stress Tolerance." In Advances in Molecular Breeding Toward Drought and Salt Tolerant Crops, edited by Matthew A. Jenks, Paul M. Hasegawa, and Shri Mohan Jain, 817. Dordrecht: Springer Science & Business Media.

12 Filek, M., M. Łabanowska, J. Kościelniak, J. Biesaga-Kościelniak, M. Kurdziel, I. Szarejko, and H. Hartikainen. 2014. "Characterization of Barley Leaf Tolerance to Drought Stress by Chlorophyll Fluorescence and Electron Paramagnetic Resonance Studies." Journal of Agronomy and Crop Science. 2014. (April 16): n/a-n/a. doi:10.1111/jac.12063.

13 IPCC. 2014. "Summary for policymakers." In: Climate Change 2014: Impacts, adaptation, and vulnerability. Part A: Global and sectoral aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. 2014. "Biotechnological Potential of Plant-Associated Endophytic Fungi: Hope versus Hype." Trends in Biotechnology (April 3): 1–7.

14 Larson, C. 2013. "Losing arable land, China faces stark choice: adapt or go hungry." Science 339, 644-645.

15 IPCC, "Summary for policymakers", 1-7.

16 Li et al., "Recent Advances in Breeding Barley", 817.

Cattivelli, Luigi, Fulvia Rizza, Franz-W. Badeck, Elisabetta Mazzucotelli, Anna M. Mastrangelo, Enrico Francia, Caterina Marè, Alessandro Tondelli, and A. Michele Stanca. 2008. "Drought Tolerance Improvement in Crop Plants: An Integrated View from Breeding to Genomics." Field Crops Research 105 (1-2) (January): 1–14.

17 Coleman-Derr, Devin, and Susannah G Tringe. 2014. "Building the Crops of Tomorrow: Advantages of Symbiont-Based Approaches to Improving Abiotic Stress Tolerance." Frontiers in Microbiology 5:283. doi:10.3389/fmicb.2014.00283.

prepared by mixing 10 mg of each fungal culture with 5 ml of sterile ultrapure water and stirring with a magnetic bar for 1 hr at 25°C. 250 μl of the solution was directly inoculated onto each seed. For the controls, the seeds were inoculated with 250  $\mu$ l of pure water. Soil moisture was measured daily and soil moisture content at a depth of 50 mm was maintained at  $45\% \pm 10\%$  (representing field capacity) from germination until 14 days after germination by watering with tap water. After this period, half of the plants were given lower water inputs (drought stressed; DS) and half were given higher (no deficit; ND) water input. For the ND treatments, the soil moisture content was maintained at approximately 45% as before; for DS treatments, pots were only watered when the soil moisture content was between 10% and 15% and the plants showed visible signs of stress (colour change, wilting), when the pots were watered until soil moisture content was again at field capacity (~ 45%). Total water input for the ND treatment was 6.39 litres per pot compared to 3.47 for the DS treatment. Results from our experiment showed that all five endophyte strains induced significant improvements in agronomic traits for a severely drought-stressed barley cultivar grown in a controlled environment, including number of tillers (shoots), grain yield and shoot biomass (unpublished, under review). The increase in shoot and grain weights induced by the endophytes were

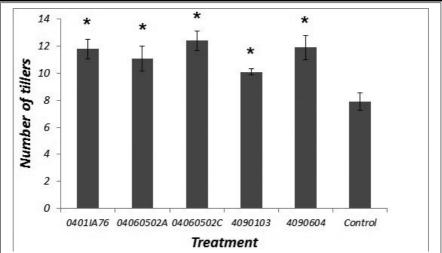


Fig 2. Number of tillers ± S.E. per plant for a drought-stressed (DS) barley cultivar for endophyte and control treatments. Significant differences (P < 0.05) between endophyte and control treatments are indicated with \*.

directly correlated with the number of tillers, suggesting that tillering was the main driver of increases in both grain and shoot yield (Figure 2).

As these growth studies were conducted using soil-based compost the results may translate to the field and suggest that some of these endophytes have potential as barley inoculants in arid growing conditions.

#### Experiment 5. Enhanced survival under multiple stresses

Biotic and abiotic stresses such as extreme temperatures, low water availability, low nutrient availability and pathogenic infections are frequently simultaneously encountered by plants in both natural and agricultural systems (Langridge, Paltridge, and Fincher 2006)<sup>18</sup>. For example, high temperature and water stress are often co-associated with periods of drought. Abiotic stresses alone are estimated to reduce global crop yields by over a half of that possible under optimal growing conditions (Boyer 1982)<sup>19</sup>. Plants activate a specific and unique stress response when subjected to a combination of multiple stresses so current techniques for developing and testing stress-tolerant plants by imposing each stress individually may be inadequate.

While previous studies have examined the effects of one or two simultaneous stresses on barley, our final experiment in this cycle compared the performance of barley when inoculated with five endophytes, either individually or in combination, grown in optimal conditions (OC) and under a combined drought, heat, nutrient and pathogen stress (MS). Fifteen plants for each endophyte treatment, plus a control, were grown for 90 days in a controlled environment at a temperature of 33°C and only watered when the soil moisture content was below 15%. Furthermore, plants were given less than 10% of normal barley crop nutrients and infected with the serious barley pathogen "take-all". We found a greater endophyte-induced improvement in important agronomic traits in the MS plants compared with the OC plants (unpublished, under review). For the MS plants only 13% of the controls survived to the end of the experiment compared with 80% of the endophyte treatments. In MS plants, the

<sup>18</sup> Langridge, Peter, Nick Paltridge, and Geoff Fincher. 2006. "Functional Genomics of Abiotic Stress Tolerance in Cereals." *Briefings in Functional Genomics & Proteomics* 4 (4) (February): 343–54.

<sup>19</sup> Boyer JS. 1982. "Plant productivity and environment." Science 218: 443-448.

endophytes induced increases in the number of tillers (shoots) and root and shoot biomass (Figure 3).

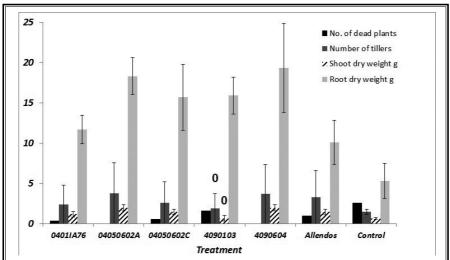


Fig 3. Mean harvest values per plant  $\pm$  S.E. for barley grown under multiple stresses (MS). All values for endophyte treatments, except those marked with '0', are significantly greater (or less for the number of dead plants) (P < 0.05) than the control. 'Allendos' treatment is a co-inoculant of all 5 endophytes.

The combined endophyte inoculant (AllEndos) was the treatment that gave the greatest improvement for all harvest traits (number of dead plants, plant height, number of tillers, shoot dry weight, root dry weight) in the multiply-stressed plants (P < 0.01 for every trait). The results demonstrate potential for these endophytes as barley inoculants in similarly multiply-stressed farming environments. To our knowledge, this is the first experiment which has examined the effect of inoculating endophytes from a congeneric wild relative of barley onto abiotically and biotically stressed barley.

#### Experiment 6. Endophyte identities and diversity

In recent years, genetic studies of endophytic organisms isolated from particular ecosystems and plant systems has led to an increasing level of awareness of the high phylogenetic diversity within fungal endophytes. Investigations focusing on the endophyte communities inhabiting roots are extremely limited and, to our knowledge, no previous studies have examined the genetic diversity of fungal root endophytes isolated from a wild relative of a major cereal crop. An understanding of their genetic diversity is essential in order to fully comprehend the phylogenetic relationships to known taxa. We carried out the first ever ecological and phylogenetic survey of the culturable fungal root endophytes of a wild barley species, some of which have significantly improved agronomic traits in cultivated barley, as detailed in the experiments above (unpublished, under review). DNA was extracted and sequenced from the fungal root endophytes that were isolated from the ten populations of wall barley (Hordeum murinum), and 112 taxa of fungi were identified based on nuclear ribosomal internal transcribed spacer (nrITS) sequences. The mean pairwise similarity in GenBank was only 92%, with 21% of sequences returning no significant match. Only 30% of sequences could be confidently assigned specific rank. For sequences assigned a matching taxon, we found representatives from 8 orders, 18 genera, 12 families and only 12 species (Table 3).

These results suggest a high proportion of novel fungi, with 28% of sequences not assigned to a fungal order. Extrapolating from this, the study highlights the largely unknown, untapped and potentially useful resource of crop wild relatives and endophytes in general.

#### Discussion

The comprehensive cycle of experiments that we have completed clearly demonstrates the great potential of these endophytes for agriculture. Results show that novel symbiotic associations between barley and fungal root endophytes significantly increase yield and biomass in barley grown under nutrient, drought, heat and pathogen stress, and also suppress the development of seed-borne pathogenic infections of barley. If these endophytes can be successfully developed and utilised as crop inoculants, then they may play a significant role in increasing global food production and alleviating environmental damage and biodiversity loss.

The challenge now is to transfer this research from a controlled environment to the field. There are many challenging issues involved in achieving a reliable and sustainable strategy for realising the full potential of endophytic fungi (Kusari, Singh, and Jayabaskaran 2014)20, but curiosity

<sup>20</sup> Kusari, Souvik, Satpal Singh, and Chelliah Jayabaskaran. 2014. "Biotechnological Potential of Plant-Associated Endophytic Fungi: Hope versus Hype." Trends in Biotechnology (April 3): 1-7.

Fungal order	Family	Genus	Species*	Number of species
Capnodiales	Davidiellaceae	Cladosporium	sp.	4
	Leotiomycetidae	Leptodontidium	sp.	2
Chaetothryales	Herpotrichiellaceae	Exophiala	oligosperma	4
			sp.	2
Eurotiales	Trichocomaceae	Paecilomyces	marquandii	2
			sp.	2
	Trichocomaceae	Penicillium	brevicompactum	6
			chrysogenum	1
			glabrum	2
			sp.	18
		Uncertain	sp.	2
Hypocreales	Nectriaceae	Fusarium	avenaceum	1
			tricinctum	3
			sp.	1
	Clavicipitaceae	Metarhizium	anisopliae	1
			sp.	2
Incertae sedis	Incertae sedis	Cyclothyrium	sp.	1
	Pleosporaceae	Epicoccum	nigrum	1
Magnaporthale	Magnaporthaceae	Gaeumannomyce	sp.	1
Pleosporales	Pleosporaceae	Alternaria	tenuissima	1
	Leptosphaeriaceae	Coniothyrium	sp.	1
	Montagnulaceae	Dendrothyrium	sp.	1
	Phaeosphaeriaceae	Ophiosphaerella	sp.	2
	Incertae sedis	Phoma	sp.	1.
	Incertae sedis	Pyrenochaeta	unguis-hominis	3
			sp.	3
	Phaeosphaeriaceae	Vrystaatia	sp.	1.
		Uncertain	sp.	2
Sordariales	Chaetomiaceae	Chaetomium	sp.	1
Xylariales	Incertae sedis	Microdochium	bolleyi	3
			sp.	6
Uncultured			sp.	8
Uncultured – No Match			sp.	23

<sup>\*</sup>Listed as species (sp.) when a sequence could be assigned with confidence to a genus but not to a species within that genus.

Table 3. Taxonomic summary of 112 fungal root endophyte isolates derived from ten Irish populations of *Hordeum murinum*.

driven research may be more effectively developed for biotechnological purposes if we can more closely fit the symbiotic partners to the growing conditions. The endophyte isolates that we have shown to improve important barley traits suggest great promise for several reasons. Firstly, the plants from which the endophytes were isolated were healthy and growing strongly despite the poor growing conditions, and secondly, the endophytes are derived from congeneric plants which may make

them more suited as inoculants in the cultivated relatives of wall barley. But field conditions are very different to a controlled environment. The transient nature and shifting lifestyles of plant-microbe interactions make any extrapolation of results from 'pot to plot' difficult to justify (Nelissen, Moloney, and Inzé 2014)<sup>21</sup>. We still do not know how these endophytes will perform in the 'ecological marketplace', but the field trials that we have planned will provide the answer.

#### **Future directions**

Substantially more research is needed to identify the mechanisms responsible for the endophyte-induced benefits to barley that we observed in our studies. It is unlikely that just one mechanism is involved, and there may be multiple dimensions to the interactions involved. One major question that needs to be addressed is whether the grain yield increase is directly induced by the endophyte or by the induction of endogenous plant mechanisms. The suppression of normally detrimental seed-borne infections by the endophytes may release the plant from pathogen pressure allowing better growth and yield. Much of the work already done with the model endophyte *Piriformospora indica* suggests that induction of plant defences or mechanisms associated with greater nutrient use efficiency may be involved (Sherameti et al. 2005; Sherameti et al. 2008; Waller et al. 2008; Felle et al. 2009)<sup>22</sup>. Identification of the bioactive compounds involved in endophyte competence would also prove fruitful in elucidating the symbiosis.

21 Nelissen, Hilde, Maurice Moloney, and Dirk Inzé. 2014. "Translational Research: From Pot to Plot." *Plant Biotechnology Journal* 12 (3) (April): 277–85.

<sup>22</sup> Sherameti, Irena, Bationa Shahollari, Yvonne Venus, Lothar Altschmied, Ajit Varma, and Ralf Oelmüller. 2005. "The Endophytic Fungus Piriformospora Indica Stimulates the Expression of Nitrate Reductase and the Starch-Degrading Enzyme Glucan-Water Dikinase in Tobacco and Arabidopsis Roots through a Homeodomain Transcription Factor That Binds to a Conserved Motif in." *The Journal of Biological Chemistry* 280 (28) (July 15): 26241–7.

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Immediate areas of research which will be critical in determining the

usefulness of these organisms as inoculants for field barley crops will involve investigations into how best to develop a commercial product, the maintenance or loss of fungal competence over time and the most effective inoculant delivery methods. Perhaps most important of all will be to determine if endophyte inoculants can offer a safe and viable economic alternative or supplement to traditional chemical crop treatments. When the potential of these fascinating organisms has been fully elucidated and with grower and public buy-in, they may make a significant and important contribution to the sustainable cultivation of barely.

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# Governing Traveller Identity Analysing the Irish State's Refusal to Recognise Traveller Ethnicity

by Barry Price

#### **Abstract**

In November 2014, the Minister of State for Equality Aodhán Ó Riordáin said that it was "no longer tenable for this State to deny Traveller ethnicity" and that Traveller ethnicity will be "a reality" in six months (Holland, 2014). This article analyses the rationale on the basis of which the Irish state appears to be coming to acknowledge Traveller ethnicity. It does this by examining the state's hitherto refusal to acknowledge Travellers as an ethnic group, a refusal which has played out in the communications of the state with two of the international human rights bodies to which it reports: the Committee on the Elimination of Racial Discrimination (CERD), and the Advisory Committee on the Framework Convention for the Protection of National Minorities (ACFC). Examining the contents of these communications that pertain to Traveller ethnicity, my analysis reveals three distinct rationales upon the basis of which the state has denied Travellers ethnic group status: what I label (a) 'Ethnic Recognition is Unimportant', (b) 'Traveller Ethnicity is Unproven', and (c) 'Travellers are Divided on the Issue'. The article concludes by examining indications that Traveller ethnicity will soon be recognised in light of these three rationales. I argue that forthcoming ethnic recognition appears to be founded upon a continuation of the state's practice of flouting Traveller self-determination in favour of recourse to 'expertise' and 'objectivity' in the governing of Traveller identity.

## Keywords

ethnicity denial; self-determination; Irish Travellers; identity; categorisation

For too long Travellers have been unaware of the theories that have been constructed about them and have not been in a position to evaluate or judge these theories. Because of this we have been used to some extent by people who have researched our way of life and in the process become established as "experts". It is not good enough that Travellers should be the objects of other people's research<sup>1</sup>.

#### Introduction

In April 2014, an Oireachtas<sup>2</sup> Joint Committee on Justice, Defence and Equality ('Joint Committee') formally endorsed the recognition of Travellers as an ethnic group, encouraging the Irish state to officially recognise Traveller ethnicity<sup>3</sup>. Following the Joint Committee's endorsement, in November 2014 Minister of State for Equality Aodhán Ó Riordáin said that it was "no longer tenable for this State to deny Traveller ethnicity" and that Traveller ethnicity will be "a reality" in six months<sup>4</sup>. That ethnicity can only become 'reality' when recognised officially by the state illustrates both the instability of ethnicity as an aspect of identity, and the centrality of governance to identity on the whole<sup>5</sup>. It is this observation which broadly informs the trajectory of this article, which sets out to examine the Irish state's contemporary governing of Traveller identity. Why has the state refused to recognise Travellers as an ethnic group? And if the state is to recognise Traveller ethnicity in the near future, as Aodhán Ó Riordáin's comments would lead us to believe, what explains this change of disposition?

That Travellers are not recognised as an ethnic group by the state is curious for a number of reasons. Firstly, Travellers appear to satisfy the 'objective' criteria that have previously been characterised as legally definitive of

<sup>1</sup> Martin Collins, 'The Sub-Culture of Poverty – A Response to McCarthy', in *Irish Travellers: Culture & Ethnicity*, ed. May McCann, Séamas Ó Síocháin, and Joseph Ruane (Belfast: The Queen's University of Belfast, 1995), 130.

<sup>2</sup> The Oireachtas is the National Parliament of the Republic of Ireland, consisting of the President, Dáil Éireann (House of Representatives) and Seanad Éireann (the Senate).

<sup>3</sup> Joint Committee on Justice, Defence and Equality, Report on the Recognition of Traveller Ethnicity, 31/JDAE/013 (Dublin: Stationary Office, 2014).

<sup>5</sup> See for example: Julie Ringleheim, 'Ethnic categories and European human rights law', *Ethnic and Racial Studies* 34 (2011), 1685-1686; and Andrew Finlay, 'Ethnic statistics: Ringelheim, reification and the residuary method', *Ethnic and Racial Studies*, 37 (2014), 753-756.

ethnicity and the right to ethnic group status<sup>6</sup>. Such criteria are laid out in the *Mandla v Lee*<sup>7</sup> case which came before the British House of Lords in 1983 to consider the legal definition of an ethnic group for the purpose of Britain's Race Relations Act (1976). Numerous group characteristics ranging from shared history and cultural tradition to common geographical origin, language and literature were cited as that which can be considered legally definitive of ethnic group status<sup>8</sup>. Robbie McVeigh points out that while it is a British case, *Mandla v Lee* has featured consistently in discussions of Traveller ethnicity in Ireland, where he argues "the overwhelming weight of evidence supports the conclusion that Irish Travellers do constitute a separate ethnic group in the Mandla v Lee interpretation of the term"<sup>9</sup>.

The result of this situation is not only that the Irish state denies Traveller ethnicity despite the apparent satisfaction of established legal criteria, but that Travellers are left in the anomalous situation in which they officially are not an ethnic group in the Republic of Ireland but are in the UK and Northern Ireland. Consequently, Travellers are automatically afforded the protections of anti-discrimination legislation as an ethnic group in the UK and Northern Ireland, while in the Republic of Ireland they receive no such automatic protection; they are instead included in such legislation under the separate heading of 'Traveller community' at the discretion of the state<sup>10</sup>.

The mystery surrounding this denial of Traveller ethnicity is compounded by the fact that the Irish state *does* officially enumerate ethnicity for the purpose of official statistics. As Patrick Simon points out, such practice is not a given in continental Europe, where 19 of 41 states do not collect data on ethnicity<sup>11</sup>. The Irish state has however explicitly enumerated ethnicity in Census data since 2006, but here membership of the Traveller community is categorised as a 'cultural' rather than 'ethnic' background<sup>12</sup>.

<sup>6</sup> Equality Authority, Traveller Ethnicity: An Equality Authority Report (Dublin: Equality Authority, 2006).

 $<sup>7\,[1983]\,\</sup>mathring{2}\,AC\,548,$  accessed 15/02/2015 via http://www.bailii.org/uk/cases/UKHL/1982/7. html.

<sup>8</sup> Ian McKenna, 'Racial Discrimination', The Modern Law Review 46 (1983): 759-770

<sup>9</sup> Robbie McVeigh, 'Ethnicity Denial and Racism: The Case of the Government of Ireland Against Irish Travellers', *Translocations* 2 (2007), 95 [original emphasis].

<sup>10</sup> McVeigh, 'Ethnicity Denial and Racism', 95.

<sup>11</sup> Patrick Simon, 'Collecting Ethnic Statistics in Europe: a Review', Ethnic and Racial Studies 35 (2012), 1376.

<sup>12</sup> Rebecca Chiyoko King-O'Riain, 'Counting on the Celtic Tiger: Adding Ethnic Census Categories in the Republic of Ireland', *Ethnicities 7* (2007): 516-542.

This produces what seems to be another anomaly: the state is willing to officially itemise ethnic difference, while at the same time is unwilling to recognise Travellers as an ethnic group. The denial of Traveller ethnicity is not the result of an ideological refusal to recognise ethnic difference, as is the situation in France for example<sup>13</sup>.

Ronit Lentin and Robbie McVeigh make sense of the state's denial of Traveller ethnicity by considering it in context of what they term the state's history of 'Anti-Travellerism'<sup>14</sup>. They argue that the state regards Travellers as a 'problem', the 'satisfactory solution' to which is settlement and assimilation into the settled Irish population<sup>15</sup>. This desire to quell Traveller nomadism has amounted to policies equating to what they term 'cultural genocide'; for example the Housing (Miscellaneous Provisions) Act (No 2), 2002 made trespass a criminal offence, allowing "local authorities to evict Travellers indiscriminately without having to fulfil their responsibilities to provide alternative accommodation"<sup>16</sup>. The desire of the state to assimilate Travellers culminates in the state's refusal to recognise Travellers as ethnically distinct from the settled population. This ethnicity denial encapsulates 'Anti-Travellerism' as the "combination of ideology and practice" that "is about repressing Travellers not for what they do or do not do but rather for what they are"<sup>17</sup>.

If however Travellers are to be granted ethnic group status, as Aodhán Ó Riordáin and the report of the Oireachtas Joint Committee indicate will happen, the endorsement of Traveller ethnicity will frame Traveller culture as a legitimate, state-sanctioned way of life rather than a 'problem' to which assimilation is the 'solution'. Ethnic recognition would appear at first glance to leave Lentin and McVeigh's theorisation of 'Anti-Travellerism' no longer applicable to the state's governing of Travellers. On the contrary, however, I want to suggest that by considering this apparent forthcoming ethnic recognition in light of the state's hitherto denial of Traveller ethnicity, no such end to the logic of 'Anti-Travellerism' is in sight. To this end, I now turn towards an analysis of the state's denial of Traveller ethnicity,

<sup>13</sup> Mathias Möschel, 'Race in Mainland European Legal Analysis: Towards a European Critical Race Theory', *Racial and Ethnic Studies* 34 (2011): 1648-1664.

<sup>14</sup> Ronit Lentin and Robbie McVeigh, *After Optimism? Ireland, Racism and Globalisation* (Dublin: Metro Éireann Publications, 2006), 135.

<sup>15</sup> Lentin and McVeigh, After Optimism?, 128.

<sup>16</sup> Ibid., 127.

<sup>17</sup> Ibid., 135 [original emphasis].

specifically examining the rationale upon the basis of which the state has vindicated this denial.

# Methodology

Michel Foucault advocates a genealogical approach to the study of history, an approach which seeks to account for the constitution of bodies of knowledge without recourse to constructing such knowledge as in some way transcendental or enduring. Genealogy disavows searching for 'origins' to instead "cultivate the details and accidents that accompany every beginning"<sup>18</sup>. Refuting the notion that history unfolds in a linear manner, it embraces historical 'truths' as matters of perspective that are inevitably imbued with substantive partiality. Through a vast accumulation of source material, a genealogical approach can "identify the accidents, the minute deviations - or conversely, the complete reversals - the errors, the false appraisals, and the faulty calculations that gave birth to those things that continue to exist and have value for us"<sup>19</sup>.

While an analysis of a vast array of source material is well beyond the scope of this article, I believe that utilising genealogy as an over-arching methodological orientation can help shed light on the state's governing of Traveller identity<sup>20</sup>. If Traveller ethnicity is to become a governmentally constituted body of knowledge, we must seek to account for the disparate details and deviations which accompany its beginnings as such. So rather than understand ethnic recognition as the linear unfolding of an historical 'truth', I approach the state's governing of Traveller identity as a *process*, the mechanisms of which are the focal point of this article.

To this end, I examine one site in which this case of ethnicity denial has explicitly played out: the state's communications with two of the international human rights bodies to which it reports, the Committee on the Elimination of Racial Discrimination (CERD) and the Advisory Committee on the Framework Convention for the Protection of National Minorities (ACFC)<sup>21</sup>. These bodies seek to address racism and discrimination against

<sup>18</sup> Michel Foucault, 'Nietzsche, Genealogy, History', in Paul Rabinow (ed.), *The Foucault Reader* (New York: Pantheon Books, 1984), 80.

<sup>19</sup> Foucault, 'Nietzsche, Genealogy, History', 81

<sup>20</sup> c.f. Andrew Finlay, Governing Ethnic Conflict: Consociation, Identity and the Price of Peace (London: Routledge, 2010)

<sup>21</sup> The state reports to these bodies because it is party to the treaties they monitor, namely the International Convention on the Elimination of All Forms of Racial Discrimination (ICERD)

minority groups within states party to their treaties, and hence issues concerning Travellers have been central to the state's communication with these bodies<sup>22</sup>. The state's refusal to recognise Travellers as an ethnic group has been a central such issue, as the nature of this refusal has been in direct contradiction to the practice of self-identification endorsed by these bodies (see below). For this reason I use these communications as the data for this study.

Aggregating the state's reports to the CERD and ACFC with the responses of these bodies to each report, I construct a chronological content analysis of the state's governing of Traveller identity in this specific domain<sup>23</sup>. Because these reports and the responses to them are wide reaching in scope, my analysis is limited to the sections of these communications explicitly marked under the rubric of Traveller ethnicity, the contents of which I aggregate to piece together the rationale underpinning the state's denial of Traveller ethnicity.

# The Principle of Self-Identification

The CERD and the ACFC both endorse what is known as the principle of self-identification as the appropriate method by which states should determine the ethnic status of minority groups. General Recommendation VIII of the CERD, which it put forth after its thirty-eight session in 1990, reads:

The Committee on the Elimination of Racial Discrimination, having considered reports from States parties concerning information about the ways in which individuals are identified as being members of a particular racial or ethnic group or groups, is of the opinion that such identification shall, if no justification exists to the contrary, be based upon self-identification by the individual concerned<sup>24</sup>.

#### This recommendation protects an individual's right to choose to identify

and the Framework Convention for the Protection of National Minorities (FCNM).

<sup>22 &#</sup>x27;Communication' here refers to both the state's reports to these bodies, and the responding reports issued by these bodies to the Irish state – I analyse both for the purpose of this study. 23 The state has reported three times to the CERD, in 2005, 2009 and 2014, and three times to the ACFC, in 2001, 2006 and 2011. The 2014 report to the CERD is unavailable for consideration at the time of writing.

<sup>24</sup> Committee on the Elimination of Racial Discrimination, *General Recommendation VIII: Identification with a particular racial or ethnic group (Art.1, par.1 & 4), contained in document A/45/18, Thirty-Eight session* (Geneva: Office of the United Nations High Commissioner for Human Rights, 1990).

or not identify with a particular ethnic or racial group, in the absence of justification for a contrary identification being made. Article 3 (1) of the Framework Convention for the Protection of National Minorities – the treaty monitored by the ACFC - endorses the same principle of self-identification. It states:

Every person belonging to a national minority shall have the right freely to choose to be treated or not to be treated as such and no disadvantage shall result from this choice or from the exercise of the rights which are connected to that choice<sup>25</sup>.

If members of a national minority do or do not wish to be viewed as such by their state, they should have the right to freely choose to be categorised in this way. In this way both the CERD and the ACFC endorse the rights of individuals to self-identify or not identify as members of an ethnic minority group.

### Governing Traveller Identity: Communications between the State, the ACFC and the CERD, 2001-2013

Three distinct rationales can be identified in the state's denial of Traveller ethnicity as it has played out in the state's communications with the ACFC and the CERD. Chronologically, these I refer to as (a) 'Ethnic recognition is unimportant', (b) 'Traveller ethnicity is unproven', and (c) 'Travellers are divided on the issue'.

#### A. Ethnic Recognition is Unimportant

In its first report to the ACFC in 2001, the government stated:

While Travellers are not a Gypsy or Roma people, their long shared history, cultural values, language (Cant), customs and traditions make them a self-defined group, and one which is recognisable and distinct (...) While Travellers do not constitute a distinct group from the population as a whole in terms of religion, language or race, they are, however, an indigenous minority who have been part of Irish society for centuries. The Government fully accepts the right of Travellers to their cultural identity, regardless of whether they may be described as an ethnic group or national minority<sup>26</sup>.

<sup>25</sup> Council of Europe, Framework Convention for the Protection of National Minorities (Strasbourg: Council of Europe, 1995).

<sup>26</sup> Advisory Committee on the Framework Convention for the Protection of National Minorities, Report Submitted By Ireland Pursuant to Article 25, Paragraph 1 of the Framework

Ethnic group status is denied to Travellers on the grounds that they are, according the state, indistinct from the settled population in terms of 'religion, language and race'. However, the state sees Travellers as a 'recognisable and distinct' group, accepting 'the right of Travellers to their cultural identity' regardless of ethnicity. So here ethnicity is framed as unimportant: the state accepts and acknowledges Traveller's cultural identity irrespective of their status in terms of ethnicity.

In 2004, the state submitted its combined first and second report to the CERD:

> [I]t should be noted that some of the bodies representing Travellers claim that members of the Traveller community constitute a distinct ethnic group. The exact basis for this claim is unclear. The Government's view is that Travellers do not constitute a distinct group from the population as a whole in terms of race, colour, descent or national or ethnic origin. However, the Government of Ireland accepts the right of Travellers to their cultural identity, regardless of whether the Traveller community may be properly described as an ethnic group<sup>27</sup>.

Here the state seems to conceptualise ethnicity in terms of race, colour, descent and nation. For this reason the state does not see Travellers as an ethnic group and considers the basis of claims to the contrary 'unclear'. But again, because it is 'regardless' of ethnicity that the state 'accepts the right of Travellers to their cultural identity', the issue is unimportant for the state.

In 2005, the CERD responded to Ireland's 2004 report:

Recalling its general recommendation VIII on the principle of selfidentification, the Committee expresses concern at the State party's position with regard to the recognition of Travellers as an ethnic group ... The Committee is of the view that the recognition of Travellers as an ethnic group has important implications under the Convention (arts. 1 and 5) [and] encourages the State party to work more concretely towards recognizing the Traveller community as an ethnic group<sup>28</sup>.

Convention for the Protection of National Minorities, ACFC/SR(2001)006, Strasbourg, 13 November 2001 (Strasbourg: Council of Europe, 2001).

<sup>27</sup> Committee on the Elimination of Racial Discrimination, Reports Submitted by States Parties Under Article 9 of the Convention, Second periodic reports of States parties due in 2004: IRELAND, CERD/C/460/Add.1, 24 June 2004 (Geneva: Office of the United Nations High Commissioner for Human Rights, 2004).

<sup>28</sup> Committee on the Elimination of Racial Discrimination, Sixty-sixth session, 21 February-11

Despite the state's efforts to frame ethnicity as an unimportant aspect of cultural identity, the CERD suggests that such recognition has 'important implications' with respect to the Convention and calls for the principal of self-identification to be applied in determining ethnic group status.

#### B. Traveller Ethnicity is Unproven

In January 2006, the government submitted its second report to the ACFC, in which it stated that it was "not prepared to conclude that Travellers are ethnically different from the majority of Irish people"<sup>29</sup>. Rather than solely downplaying the importance of the issue, however, the state on this occasion vindicates its position on the basis that "the assertion that Travellers are ethnically different from the majority of the Irish people has not been proven"<sup>30</sup>. The state does not however provide insight as to how ethnicity may be proven or disproven in the future. This is a point the ACFC picks up on its response:

it is regrettable that the authorities have, instead of reserving their position on the matter, at least pending further examination of the issue and consultations with Travellers and others concerned, expressed a view according to which the Travellers "do not constitute a distinct group from the population as a whole in terms of race, colour, descent or national or ethnic origin". Such a conclusion appears to be, at best, premature, bearing in mind, inter alia, that there are no procedures or criteria in place for the authorities to determine the issue and that several Traveller groups and a number of other stakeholders have presented a range of arguments in favour of an opposite conclusion (...) The Irish authorities should refrain from conclusive statements affirming that the Travellers do not constitute an ethnic minority in so far as such a position is not based on clear criteria and does not result from a dialogue with the minority concerned, taking into account the principle of self-identification stemming from Article 3 of the Framework Convention<sup>31</sup>.

March 2005, Consideration of Reports Submitted by States Parties Under Article 9 of the Convention, Concluding observations of the Committee on the Elimination of Racial Discrimination: IRELAND, CERD/C/IRL/CO/2 (Geneva: Office of the United Nations High Commissioner for Human Rights, 2005)

<sup>29</sup> Advisory Committee on the Framework Convention for the Protection of National Minorities, *Second Report Submitted By Ireland Pursuant to Article 25, Paragraph 1 of the Framework Convention for the Protection of National Minorities, ACFC/SR/II(2006)001, Strasbourg, 3 January 2006* (Strasbourg: Council of Europe, 2006).

<sup>30</sup> Advisory Committee, Second Report Submitted By Ireland.

<sup>31</sup> Advisory Committee on the Framework Convention for the Protection of National Minorities, *Second Opinion on Ireland, adopted on 6 October 2006, ACFC/OP/II(2006)007, Strasbourg, 30 October 2006* (Strasbourg: Council of Europe, 2006).

In pointing out that there are no 'procedures or criteria' in place by which to 'determine the issue', the ACFC alludes to the state's continuing obfuscation of ethnic recognition. Why might the state be avoiding the issue? Is it because of the potential implications such recognition might have for the state in terms of its obligations towards Travellers? The Irish Human Rights Council (IHRC) addressed this question thoroughly in a discussion paper prepared for the state in 2004, pointing out that: (a) if Traveller ethnicity remains unrecognised, the government can regard complaints made by Travellers to the CERD on the grounds of racial discrimination as inadmissible, and (b) if ethnic recognition is granted, the state would be bound to the aspects of these treaties which require of it positive action to help Travellers as an ethnic group<sup>32</sup>. Perhaps these obligations help to explain in part the reluctance of the state to determine the issue of ethnic recognition.

#### B. Travellers are Divided on the Issue

Ireland next reported to the CERD in 2009, once more reiterating its view that the basis of Traveller claims for ethnic recognition is 'unclear' and that in its view "Travellers do not constitute a distinct ethnic group from the population as a whole in terms of race, colour, descent or ethnic origin"<sup>33</sup>. More notable a development at this stage, however, was the state's description of the newly formed National Traveller Monitoring and Advisory Committee (NTMAC) as "an independent forum for dialogue" within which "the principle proponents of a recognition by the State of Traveller identity based on ethnicity are represented"<sup>34</sup>. The establishment of the NTMAC by the state appeared to be an effort to adhere to the principal of self-identification by establishing a dialogue with Travellers on the matter. The CERD responded in April 2011 by recommending "the State party continue to engage with the Traveller community and work concretely towards recognizing Travellers as an ethnic group<sup>35</sup>.

<sup>32</sup> Irish Human Rights Council, *Travellers as an ethnic minority under the Convention on the Elimination of Racial Discrimination: A Discussion Paper* (Dublin: Irish Human Rights Council, 2004).

<sup>33</sup> Committee on the Elimination of Racial Discrimination, *Reports Submitted by States Parties Under Article 9 of the Convention, Third and fourth periodic reports due in 2008: Ireland, CERD/C/IRL/3-4* (Geneva: Office of the United Nations High Commissioner for Human Rights, 2009). 34 Committee on the Elimination of Racial Discrimination, *Third and Fourth periodic reports due* 

in 2008: Ireland.

35 Committee on the Elimination of Racial Discrimination, Seventy-eighth session 14 February

– 11 March 2011, Consideration of Reports Submitted by States Parties Under Article 9 of the

#### Ireland then submitted its third report to the ACFC in July 2011:

[T]he Traveller Policy Division of the Department of Justice and Equality has had initial discussions with the five National Traveller Groups about ethnicity. These discussions have shown that there is a divergence of opinion among Irish Travellers as to whether they wish to be recognised as a distinct ethnic group. There is a need for discussions to take place in the Traveller community around this issue and full consideration given to the implications and consequences of any such recognition<sup>36</sup>.

The state refuses to recognise Traveller ethnicity on the grounds of a 'divergence of opinion' it has identified through dialogue with Travellers. Here again the IHRC has questioned the state on its rationalisation of ethnicity denial, raising two concerns with the state's rationale here: (a) there is doubt as to whether any of the national Traveller organisations actually oppose recognition (according to the IRHC, four of the organisations in consultation with the state explicitly endorse ethnic recognition, while the single other organisation has not expressed a view either way), and (b) there is no grounds for the idea that absolute consensus has decisive value with regard to legal recognition in the first place<sup>37</sup>. Like the other rationale preceding it, the state's assertion that Travellers are divided on the issue seems again highly questionable.

#### Discussion

From my analysis, it is apparent that the rationale underpinning the Irish state's governing of Traveller identity has been far from cogent. The state has employed varying rationalisations in its denial of Traveller ethnicity: it first downplayed the significance of ethnic recognition; it then asserted that Traveller ethnicity has not been proven, before finally claiming that Travellers are divided on the issue and for this reason cannot be granted ethnic group status. On the basis of these various rationales the state has

Convention, Concluding observations of the Committee on the Elimination of Racial Discrimination: IRELAND, CERD/C/IRL/CO/3-4 (Geneva: Office of the United Nations High Commissioner for Human Rights, 2011).

<sup>36</sup> Advisory Committee on the Framework Convention for the Protection of National Minorities, *Third Report Submitted By Ireland Pursuant to Article 25, Paragraph 1 of the Framework Convention for the Protection of National Minorities, ACFC/SR/III(2011)004, Strasbourg, 18 July 2011* (Strasbourg: Council of Europe, 2011).

<sup>37</sup> Irish Human Rights Council, *Submission on the Recognition of the Traveller Community as an Ethnic Minority in the State* (Dublin: Irish Human Rights Council, 2013).

consistently refused to abide by the principle of self-identification and recognise Travellers as an ethnic group.

Across these three rationales, the state's denial of Traveller ethnicity is in each case predicated on the problematization of Travellers: *They* don't understand that ethnicity is unimportant; *they* don't understand that their ethnicity is unproven; *they* don't know if they even want to be recognised as an ethnic group. In each case the logic of Anti-Travellerism identified by Lentin and McVeigh holds true: Travellers are the problem to which the state must find a satisfactory solution. Problematized as such, the Irish state and its failure to abide by the principle of self-identification remains causally absent from the governing of Traveller identity.

Can this refusal to endorse Traveller self-identification be reconciled with the apparent forthcoming recognition of Traveller ethnicity as indicated by both the report of the Oireachtas Joint Committee and the comments of Aodhán Ó Riordáin? Recalling Foucault and his emphasis "the details and accidents that accompany every beginning", I want to suggest that an answer to this question resides in the details of the report of the Joint Committee. In the process of drafting their report, the Committee considered written submissions of, and three public hearings with, stakeholders in the matter of Traveller ethnicity<sup>38</sup>. One such stakeholder was the IHRC, which in its submission opposed the state's denial of Traveller ethnicity on the basis that 'travellers are divided on the issue'. It stated that the "Committee is clear that the existence of an ethnic minority in a State requires to be established by objective criteria. This is nothing to do with opinion or consensus"39. The IHRC's rejection of opinion and consensus – while espoused in the name of arguing for ethnic recognition - implicitly endorses the state's flouting of self-identification by asserting the primacy of 'objective criteria'.

The point here is not so much to single the IHRC out for criticism, but rather to bring attention once more to the processes of government at work in governing Traveller identity: 'experts' inciting 'objective criteria' as means for the state to 'prove' Traveller ethnicity. It is not an underlying motive or intent which determines the governing of Traveller identity, but rather it is

<sup>38</sup> The first of these hearings brought representatives of the Irish Traveller Movement and Pavee Point before the committee. The second and third hearings brought academic and legal experts respectively.

<sup>39</sup> Joint Committee, Report on the Recognition of Traveller Ethnicity, 14.

the process of government and its recourse to expert knowledge which *by design* disregards Traveller self-determination through self-identification.

#### Conclusion

In a shadow report issued as a response to the state's 2008 submission to the CERD, national Traveller organisation Pavee Point suggested that Travellers see ethnic recognition as an important symbolic endorsement of the legitimacy of Traveller culture<sup>40</sup>. The importance of ethnic recognition cannot be questioned (especially by a *settled academic*); recognition would be a landmark endorsement by the state of the legitimacy of Traveller culture, and would stand testament to the tireless campaigning of Travellers in this policy domain over the past number of decades. However, the basis upon which it appears ethnic recognition will be bestowed is liable to questioning. By examining this forthcoming recognition in relation to the state's hitherto denial of Traveller ethnicity, I have problematized the idea that ethnic recognition will mark the end of what Lentin and McVeigh call the logic of anti-Travellerism.

This article opened with an epigraph quoting Martin Collins' critique of the relationship between Travellers and those who have studied them as 'objects' of research and in the process become established as 'experts'. While Collins' makes his critique in the academic realm, an extrapolation of his insights into the political realm seems relevant here. On the basis of Aodhán Ó Riordáin's comments, the state seems to be taking the Joint Committee's recommendation to recognise Traveller ethnicity very seriously, which I can only assume is a welcome change for Travellers campaigning for ethnic recognition. The problem is that the Joint Committee's report endorses the IHRC's 'expert' opinion that ethnicity is to be determined objectively, i.e. by methods other than voluntary self-identification. The 'solution' to the Traveller 'problem' may be different – ethnic recognition - but the logic remains the same: Travellers cannot determine the nature of their identity, but authoritative 'expertise' and its incitement to 'objective criteria' can. Martin Collins' concern that Travellers be more than merely the objects of settled 'experts' seems as pressing as ever.

<sup>40</sup> Pavee Point, Irish Travellers and Roma Shadow Report: A Response to Third and Fourth Report On the International Convention on the Elimination of All Forms of Racial Discrimination (CERD) (Dublin: Pavee Point Travellers Centre, 2011), 3.

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# A Narrative of Revision Documents of Performance and the Theatrical Abridgment Theory in Romeo and Juliet

#### by Thomas Roberts

#### **Abstract**

One question lies at the heart of Shakespeare editorial studies: if multiple versions of a play were printed within his lifetime, how can we know what best represents Shakespeare's true vision? This concern is particularly contentious with *Romeo and Juliet*. A wealth of evidence suggests that the traditionally condemned first "bad quarto" of the play (Q1) was in fact an abridgment for the stage, adapted from the second "good quarto" (Q2).

Yet, the theatrical abridgment theory has struggled to gain universal acceptance and the term "bad quarto" remains a popular classification. This is due to the difficulty in identifying Shakespeare's hand in revision; early modern theatre was collaborative in nature and extant playbooks represent not only the playwright's artistry but the accumulation of entire industries of production and printing.

By engaging with recent scholarship on the presence of theatrical documentation in early plays, this essay will identify the narrative of abridgment from Q2 to Q1. The revisions in four of the play's theatrical elements will be analysed within this scholarly context: the extirpation of unessential lines, the careful construction of stage directions, the formulation of locales, and attempts to control the unpredictable extemporising of the company's resident clown William Kemp.

# Keywords

Romeo and Juliet, theatrical abridgment, first quarto, Documents of Performance

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Romeo and Juliet exists in five extant early editions: the first quarto, Q1 (printed in 1597); the second, Q2 (1599); third, Q3 (1609); fourth Q4 (1622); and folio edition, F (1623). The second, third, fourth, and folio editions differ only in minor textual adjustments. Q1, on the other hand, is some 800 lines shorter and contains a number of dramatic peculiarities unusual for Shakespeare that will be addressed later in the essay. Q1 was largely

ignored until the early 20th century when a new wave of bibliographers attempted to explain the existence of such abhorrent, unpoetic, and fundamentally un-Shakespearean texts. Alongside early quarto editions of The Merry Wives of Windsor, Henry V, and Hamlet, Q1 Romeo and Juliet was designated a "bad quarto", a vilification coined by Alfred W. Pollard in 1909 to explain the obvious errors and omissions in these texts. Pollard proposed the most likely scenario for their existence was that an enterprising spectator recorded the play in action using some kindof shorthand. In the following year, W.W. Greg proposed an alternative theory. Noting how the minor parts in the plays had far fewer errors than those of the main characters, he offered the "memorial reconstruction" theory. By far the longest surviving "bad quarto" hypothesis, it supposes that an enterprising actor or actors leased by the Company recalled the play to a publisher by memory, thus explaining the greater number of discrepancies in the bigger roles.<sup>2</sup> Pollard and Greg's theories were not called into question until the end of the 1970s, when theatrical production and the revision process became the new scholarly vogue. Pioneered by Gary Taylor and Michael Warren's revaluation of Q1 King Lear, this new era of editors was entirely sceptical of the bardolatry that underlined the production theories of the "bad quartos". However, whilst editions like Folio King Lear enjoyed revived scholarly appreciation, Q1 Romeo and Juliet struggled to shake its categorisation despite an obvious issue: the length of Q2. At almost 3000 lines, a performance within the 'two hours traffique of our Stage'<sup>3</sup> as indicated in the prologue would be impossible; 2500 lines is considered the absolute maximum for this performance time.<sup>4</sup>

A number of theories have arisen to defend the quarto; David Farley-Hill argues that Q1 is a version redacted for performance by a travelling troupe. The play was edited 'as quickly as possible, with the emphasis on producing a text that is effective onstage' to a less sophisticated audience.<sup>5</sup> Y. S. Bains proposes that Q1 is a first draft of the play, edited into Q2, a text

<sup>1</sup> Lukas Erne, "Introduction" in The First Quarto of Romeo and Juliet, edited by Lukas Erne (Cambridge: CUP, 2007), 5.

<sup>3</sup> William Shakespeare, Romeo and Juliet: A Parallel Text Edition of the First Two Quartos, eds., The New Shakespeare Society (London: John Childs and Sons, 1847), Accessed 10 2014, https://ia600500.us.archive.org/5/items/romeojulietparal00shakuoft/ romeojulietparal00shakuoft.pdf.

<sup>4</sup> Andrew Gurr, The Shakespeare Company, 1594-1642 (Cambridge: CUP, 2010), 123.

<sup>5</sup> Erne, "Introduction", 16.

'superior to the first because [Shakespeare] revised it.'6 The most popular theory is that Q1 is a theatrical abridgment of Q2, itself an early draft of the play that was sold to publisher Cuthbert Burby two years after Q1 was first printed.

In his 2007 edition of Q1, Lukas Erne tentatively concludes that 'much of the difference between Q1 and Q2 is most likely a matter of abridgment.'7 He offers rational deconstructions of alternative arguments. Farley-Hill's theory of a provincial abridgment is fundamentally uneconomic; a professional company in the 1590s performed around 40 plays in a season, of which half would be new. Even the well-trained memory of an early modern player would have found this challenging; having to switch from London to provincial versions would have been both impractical and confusing.8 Bains' theory of Q1 as a first draft is undermined by the greater textual similarity between Q2 and Shakespeare's source material, Arthur Brooke's tragic poem Romeus and Juliet, not to mention the problematic addition of over 800 lines of new material.9

Yet Erne hesitates in providing a conclusive theory for Q1 largely due to the ambiguity of authorship; if Q1 does represent an abridgment, the cumulative world of early modern theatrical production makes it very difficult to identify what revisions came from Shakespeare's hand. This lack of certainty has fostered Q1's continual condemnation. The popularity of the intellectual framework provided by Taylor and Warren means that more recent denigrations of the quarto are often tainted with hypocrisy. Stephen Greenblatt writes in the introduction to A Midsummer Night's Dream in the 2008 edition of The Norton Shakespeare that Q1 - the first of three quartos pre-folio – has been used as the copy text 'in keeping with the Oxford editors' principle of basing their text on the most theatrical early version of each play.'10 Yet in the introduction to Romeo and Juliet, Greenblatt wholeheartedly accepts the memorial reconstruction theory without any reference to the last thirty years of scholarship.<sup>11</sup>

<sup>6</sup> Y.S. Bains, Making Sense of the First Quarto of Shakespeare's Romeo and Juliet, Henry V, The Merry Wives of Windsor, and Hamlet (New Delhi: Indian Institute of Advanced Study, 1995), 25.

<sup>7</sup> Erne, "Introduction", 25.

<sup>8</sup> Ibid, 21.

<sup>9</sup> Ibid. 9.

<sup>10</sup> Stephen Greenblatt, 'Introduction to "A Midsummer Night's Dream" in The Norton Shakespeare, ed. Stephen Greenblatt, Walter Cohen, Jean E. Howard, Katharine Eisaman Maus, 2<sup>nd</sup> Edition (New York: W.W.Norton & Company, Inc., 2008), 847.

<sup>11</sup> Stephen Greenblatt, 'Introduction to "Romeo and Juliet" in The Norton Shakespeare, 903.

In her seminal work Documents of Performance in Early Modern England, Tiffany Stern provides a new narrative for theatrical production by identifying in early playbooks traces of the dramatic documents that informed performance. These documents were often not authorial and Stern's model places great significance on removing the modern obsession with the author from an early modern context where it does not apply. Her work provides a new lens through which Q1 can be analysed so as to identify at what point in the abridgment process specific revisions occurred and who was responsible. The present essay will analyse how the textual presence of performance documents in both quartos informs a narrative of revision in four particularly theatrical elements of Romeo and Juliet: the extirpation of lines unnecessary to the development of the plot; Shakespeare's concern with formulating locales during revision; the unusual stage directions indicative of another editorial hand; and the linguistic manipulation of the unpredictable extemporising of the company's resident clown William Kemp. By identifying a narrative of revision, this essay will secure Q1's status as a theatrical abridgment and as an invaluable artefact of theatre history.

The nature of the early modern stage was such that, from the original rough draft to publication years later, authorial regulation was often minimal. The narrative of a play text from page to stage has been mapped out by Stern. First, either the playwright or a scribe would write the rough draft and edit it into a "fair copy". This would then be delivered to the prompter, a company employee charged with sitting backstage with the playhouse book making sure the players did not miss their cues. He would make extensive additions to the play clearing up direction for his own benefit. Shakespeare, as an actor, could not possibly have performed the prompter's role. After, the play was sent to the Master of the Revels, a government official in charge of censoring theatrical texts. Finally it would be returned to the company and additional documents, such as players' parts, were drawn up.12

Shakespeare's role as actor, principal playwright, and sharer in the company undoubtedly meant that he exercised more control over his work

<sup>12</sup> Tiffany Stern, Making Shakespeare: From Stage to Page (London: Routledge, 2004), 145.

than his contemporary playwrights.<sup>13</sup> It can therefore be safely assumed that he was responsible for significant amendments in the dialogue and as such it is possible to identify the playwright editing the rough draft into the fair copy. Q2 II.ii ends as Romeo exits to tell the Friar of the events at the masque. The Friar enters onstage in the following scene:

Ro. Would I were sleep and peace so sweet to rest The grey eyed morn smiles on the frowning night, Checking the Eastern clouds with streaks of light And darkness flecked like a drunkard reels, From forth day's pathway, made by *Titans* wheels. Hence will I to my ghostly Friars close cells, His help to crave, and my dear hap to tell.

Exit

Enter Friar alone with a basket

*Fri.* The grey-eyed morn smiles on the frowning night Checking the Eastern clouds with streaks of light: And flecked darkness like a drunkard reels, From forth day's path, and *Titans* burning wheels<sup>14</sup>

Shakespeare may have jotted these lines down in his commonplace book with the intention of incorporating them into one of his plays. What is certain is that when writing the rough draft, Shakespeare designated the passage to both characters with the intention of determining who speaks them during revision. Consequently, Q1 shows that the Friar was chosen. Q1's structure displays the playwright's fundamental concern with extirpating lines with an eye to the play's theatricality. The stage direction between Benvolio's entrance into a servant brawl and the Prince's condemnation of the feuding families in I.i provides another fitting example:

They fight, to them enters Tybalt, they fight, to them the Prince, old Mountague, and his wife, old Capulet and his wife, and other Citizens and part them<sup>15</sup> This direction replaces 33 lines of dialogue in Q2, none of which aids the plot's trajectory. Benvolio's attempt to part the servants as he enters onstage and Tybalt's vitriolic verbal and physical assault on Benvolio are cut in Q1, removing the unnecessary character development for Tybalt ('Peace. I hate the word/ As I hate hell, all Montagues and thee'<sup>16</sup>) that is

<sup>13</sup> Ibid, 145.

<sup>14</sup> Shakespeare, Romeo and Juliet, Q2 II.ii.196. – II.iii.4.

<sup>15</sup> Shakespeare, Romeo and Juliet, Q1 I.i.

<sup>16</sup> Shakespeare, Romeo and Juliet, Q2 I.i.63-64.

formulated later in the play in Mercutio's "Prince of Cats" speech.

When the fight has been broken up, the Prince delivers a speech condemning the two families that is edited in Q1 so as to remove all lines surplus to plot requirements:

Rebellious subjects, enemies to peace, Profaners of this neighbor-stained steel— Will they not hear? What, ho! you men, you beasts That quench the fire of your pernicious rage With purple fountains issuing from your veins, On pain of torture, from those bloody hands Throw your mistemper'd weapons to the ground, And hear the sentence of your moved prince. Three civil brawls, bred of an airy word, By thee, old Capulet, and Montague, Have thrice disturb'd the quiet of our streets, And made Verona's ancient citizens Cast by their grave beseeming ornaments, To wield old partisans, in hands as old, Canker'd with peace, to part your canker'd hate; If ever you disturb our streets again, Your lives shall pay the forfeit of the peace. For this time, all the rest depart away: You Capulet; shall go along with me: And, Montague, come you this afternoon, To know our further pleasure in this case, To old Free-town, our common judgment-place. Once more, on pain of death, all men depart.<sup>17</sup>

The prince identifies them as rebellious subjects, orders them to throw down their weapons, tells a short history of the feud, and finally threatens punishment ('your lives will pay the ransom of your fault'<sup>18</sup>). He then indicates who will leave the stage ('Come Capulet'<sup>19</sup>) and who will stay on ('Montague, come you this afternoon'<sup>20</sup>), progressing the plot by smoothly transitioning to a discussion about Romeo's melancholy disposition between the remaining onstage characters.

Although direction can be incorporated to replace unnecessary dialogue, the style of the stage directions in both quartos complicates the narrative of

<sup>17</sup> Shakespeare, Romeo and Juliet, Q1 Li74-96

<sup>18</sup> Ibid, I.i.56.

<sup>19</sup> Ibid, I.i.58.

<sup>20</sup> Ibid, I.i.59.

a theatrical abridgment. Stern shows that where an author is more likely to say 'Enter at the window' or 'Enter soldiers upon the castle walls', a prompter is more likely to write 'Enter above'. A stage direction Q1 III.v reads 'Enter Romeo and Juliet at the window'; in Q2 it reads 'Enter Romeo and Juliet aloft'. Why does Q1 present an authorial stage direction and Q2 a prompter's? Some elements of revision in both quartos must have happened in the printing house.

In Q2 IV.v a stage direction reads 'Enter Will Kemp.'<sup>23</sup> It is possibly a slip of Shakespeare's pen as he was imagining Kemp in the role. Stern argues that the stage direction was inserted into the playhouse book by the prompter, copying the backstage plot in order to elucidate direction.<sup>24</sup> The backstage plot was a piece of paper on a pulp board containing all the entrances in the play. It was produced from the playhouse book and placed within the tiring house, the backstage area, as a point of reference for theatre personnel. The names of prominent actors were often written instead of their characters; the backstage plot for the play the Battle of Alcazar contains the direction reading 'Enter Muly Mahamett mr Ed: Allen', <sup>25</sup> referring to Edward Allen, star of the Lord Admiral's Men.

Stern is correct in identifying 'Enter Will Kemp' as a remnant of the backstage plot, but Q2's length indicates it could not have been a prompter addition in the playhouse book. The backstage plot has often been found within or enclosing extant play manuscripts, and it is likely that printing house correctors referred to the plot to remove textual discrepancies and interpolate missing stage directions. When sending the 'newly corrected, augmented, and amended'26 text off to publisher Cuthbert Burby, other documents of performance would have been included for the purpose of editing.

Why does Q1, copied from the prompter's book, contain stage directions indicative of an early authorial draft? John Jowett believes the answer lies in the printing house. In early 1597, John Danter was tasked with printing sheets A-D of Q1. Another printing house, run by Edward Allde,

<sup>21</sup> Tiffany Stern, Documents of Performance in Early Modern England (Cambridge: CUP, 2009), 213.

<sup>22</sup> Shakespeare, Romeo and Juliet, Q1 III.v and Q2 III.v.

<sup>23</sup> Shakespeare, Romeo and Juliet, Q2 IV.v.

<sup>24</sup> Stern, Documents, 213.

<sup>25</sup> Ibid, 212.

<sup>26</sup> Shakespeare, Romeo and Juliet, Q2 Title-page.

was charged with printing sheets E-K. Jowett argues that the dramatist and pamphleteer Henry Chettle, who in 1597 was working under Danter as a printer, was responsible for the interpolation of some extravagant stage directions.<sup>27</sup> Chettle is referred to in Francis Mere's Palladis Tamia (a directory of contemporary literary figures) as 'one of the best for comedy', something which Jowett suggests allowed him to figure what textual peculiarities could be cleared up through elaborate stage directions.<sup>28</sup> Erne embraces the theory and, whilst it is dangerous to posit obscure persons as the producer of textual specifics, Jowett's argument provides extensive textual evidence to support the claim.<sup>29</sup>

In spite of this, a printing house corrector like Chettle was only tasked with correcting typographical errors. Joseph Moxon's tract the Art of Printing indicates that compositors and correctors focused on formal qualities like spelling and punctuation, necessitating a detailed knowledge of the 'Derivations and Etymologies of Words'. Theatrical and textual discrepancies were the writer's business, and Moxon warns that 'it behoves an Author to examine his Copy very well e're he deliver it to the *Printer*′.<sup>30</sup> It is unlikely that the early modern printing house provided the leisurely environment where Chettle could analyse the text for theatrical irregularities and incorporate modifying stage directions.

When considering Shakespeare's concern with staging during revision, the simple answer would be that direction was interpolated sufficiently during revision so as not to warrant editing by the prompter. Modern editors who insist on Q2 for their copy text adopt the stage directions in Q1 III.v (printed in Allde's shop) as they help clear up the direction by discerning where there has been a shift in locale, a key concern of Shakespeare's when amending the play for performance. Romeo and Juliet converse on the balcony after consummating their marriage. After Romeo states he will descend from the balcony, a stage direction is included that specifies him climbing onto the stage below. The stage now represents an area exterior to the Capulet household from which Romeo continues to converse with Juliet on the balcony above until he exits. The Nurse then 'Enters hastely' onto the balcony and warns Juliet that her 'Mother's coming

<sup>27</sup> Erne, "Introduction", 37.

<sup>28</sup> Ibid, 37.

<sup>29</sup> Ibid, 41.

<sup>30</sup> Sonia Moxon, Shakespeare and the Rise of the Editor (Cambridge: CUP, 2007), 12.

to your chamber'. It is then indicated in Q1 that the Nurse – presumably in an equally hasty manner – 'goeth downe from the window' and enters onto the stage with Lady Capulet. For some unexplainable reason, Erne reads this stage direction as indicating Juliet's descent from the balcony. This would lead to a very awkward and unnecessary exchange if the following dialogue was to take place after Juliet had entered onstage:

> Moth: Where are you daughter? Nur: What Ladie, Lambe, what Iuliet. *Iul*: How now, who calls? *Nur:* It is your mother. Moth: Why how now Juliet?31

In Q1, the stage represents Juliet's chamber and, after this exchange, Juliet enters from backstage. Q2 ignores all of this. The nurse enters the balcony when Romeo is still present and it is not indicated in the stage directions that she leaves until she comes back onstage later in the same scene with Capulet. After Romeo descends and exits, on comes Lady Capulet: 'Enter Mother.' It is unclear where she is entering; the tiny balcony would not have offered a suitable visual space for the scene. Lady Capulet entering onstage and asking 'are you up?'32 only makes theatrical sense if she cannot see Juliet. The change in dialogue when Lady Capulet enters in the respective plays is suggestive of Shakespeare's awareness of the theatrical problem Q2 creates in establishing locale. It would therefore be prudent to find Shakespeare's hands in the theatrical revisions in sheets A-D rather than that of a rogue printing house corrector.

Shakespeare's concern with formulating locales during revision is apparent throughout the text. The shift from outside the masque to inside in Q2 is signalled by Romeo stating 'Direct my suit, on lusty gentlemen' followed by a stage direction reading 'They march about the stage, and servingmen come on with Napkins.'33 It should be assumed that Romeo, Mercutio, and the others march off the stage at this point because the following line reads 'Enter Romeo.'34 After a short comic interlude by Kemp and the other servants - in which Romeo has no lines - Act II begins with 'Enter all the guests and gentlewomen to the maskers.'35 Does this mean Romeo is still onstage

<sup>31</sup> Shakespeare, Romeo and Juliet, Q1 III.v.37-60.

<sup>32</sup> Shakespeare, Romeo and Juliet, Q2 III.v.64.

<sup>33</sup> Ibid, I.iv.105-106.

<sup>34</sup> Ibid, I.v.

<sup>35</sup> Ibid, II.i.

and stays until joined by the guests in the next scene? The incoherence of the direction requires modern editors rectify the confusion by having Romeo and others leave before the servants come on and then join the other partiers onstage in Act II. Q1 offers a simpler and far shorter action: Romeo states 'Direct my suit, on lusty gentlemen' (signalling a move into a new locale) and they are immediately joined onstage by 'Capulet and the Ladies'; <sup>36</sup> the entire scene with Kemp and the servants is removed.

Although it is quite understandable that editors prefer incorporating their own direction rather than cut any of Shakespeare's words, it is clear that this scene in Q1 is not only an abridgment (with the removal of 13 lines unnecessary to the plot) but an amendment. Shakespeare cut these particular lines not only as surplus but because of how Kemp's extemporising could potentially impact on the fluidity of the action.

The early modern clown specialised in extempore comic performance in the vein of the commedia dell'arte Arlecchino character and the vice tradition of medieval morality plays. Extemporal interruptions and merriments were as much a part of the play-going experience as the scripted drama. The famous clown Richard Tarlton was renowned for quipping with a restless crowd; in long tragic speeches he would poke his head around the arras and pull grotesque faces.<sup>37</sup> Whilst the great tragedians Richard Burbage and Edward Alleyn stirred the blood and soothed the intellect, Tarlton and Kemp attracted the crowds. However, despite the commercial pull of the clown, extemporising was problematic. Hamlet chastising fools who 'speak more than is set down for them'38 in Act III.ii reveals the production difficulties that the playwright faces when affronted with uncertainty. The removal of the servant scene before the masque displays an effort to overcome this issue. Rather than interrupt the action with an irrelevant and potentially disruptive scene, Shakespeare extirpates it altogether and has the surrounding scenes merge into each other onstage.

Kemp can be identified as the Capulet serving man in the play for two reasons: first, the Q2 stage direction 'Enter Will Kemp.' Second, in Q1 IV.iv. Capulet orders a servant to gather drier logs for the fire, stating 'Will will

<sup>36</sup> Shakespeare, Romeo and Juliet, Q1 II.i

<sup>37 &</sup>quot;Tarlton, Richard (d. 1588)," Peter Thomson in Oxford Dictionary of National Biography, eee online ed., ed. Lawrence Goldman, Oxford: OUP, http://www.oxforddnb.com/view/article/26971 (accessed March 30, 2015).

<sup>38</sup> William Shakespeare, Hamlet, ed. by G.R. Hibbard (Oxford: OUP, 2008), III.ii.34-7.

tell thee where thou shalt fetch them.'<sup>39</sup> David Wiles, who theorises that Q1 is a 'text based on the play that Shakespeare's and Kemp's company actually performed', argues that this line shows that an 'actor or reporter in a moment's lapse' used Kemp's real name.<sup>40</sup> The interpolation is in fact the product of the prompter. It was common practice for a prompter to insert a line or a name in the text as a reminder to call for a player before his scene.<sup>41</sup> The anonymous play *The Welsh Ambassador* includes the line 'Penda be ready' followed by the aforementioned character's entrance twenty lines later. 'Will will tell thee where to fetch them' is a reminder to call for Kemp to prepare him for his entrance seventy lines later. Whilst this is an extensive warning, this much allowance was not uncommon; the play *Thomas of Woodstock* includes the line 'a bed/ For Woodstock'<sup>42</sup> fifty four lines before it is brought onstage. The scene in Q1 *Romeo and Juliet* is fast-paced, with a collection of characters coming on and off in quick succession, lamenting the apparently deceased Juliet.

The playwright and clown were not irreconcilably antagonistic: instances where extemporal performance was designed to happen are indicated in the stage directions of a number of plays: Thomas Heywood's The Second Part of King Edward the Fourth (1599) includes the direction 'Jockie is led to whipping over the stage, speaking some wordes, but of no importance'; and in the anonymous play The History of the Tryall of Chevalry one direction reads 'Enter Forrester [...] speake anything, and Exit.'43 It might seem peculiar that Shakespeare's plays are devoid of any such freely scripted railing when he worked with the most famous clown of the age. This is purely symptomatic of the playwright's style. Through structural and linguistic manipulation, Shakespeare exercised a great deal of control over the drama in action. He simultaneously curbed and exploited Kemp's extempore performances by imposing tightly structured textual direction that force adherence to his dramatic vision. In I.ii, Q2 has Kemp enter with Capulet and Countie Paris. As he does not speak until 36 lines later, this scene would have been a proposed period for the extempore merriments that would pull crowds. In Q1, Kemp enters at l32 after being called by Capulet, removing any period in which he can speak 'more than is set down for' him. This scene was

<sup>39</sup> Shakespeare, Romeo and Juliet, Q1 IV.iv.16-17.

<sup>40</sup> Wiles, Shakespeare's Clown, 87.

<sup>41</sup> Stern, Documents, 229.

<sup>42</sup> Ibid, 229.

<sup>43</sup> Ibid, 250.

obviously targeted by Shakespeare for abridgment as there is also a slight reduction in Capulet's lines; any that are not crucial to the development of the plot are removed.

Kemp's response to instructions from Capulet to 'Seeke them out:/ Whose names are written'<sup>44</sup> on a list of party guests is adapted by Shakespeare in Q1 in order to create a quick, uninterruptable succession of clauses:

(Q2) Find them out whose names are written. Here it is written that the Shoo-maker should meddle with his yard, and the Taylor with his last, the fisher with his pencil, & the painter With his nets. But I am sent to find those persons whose names Are here writ, and can never find what names the writing person

Hath here writ (I must to the learned) in good time (Q1) Seeke them out whose names are written here And yet I know not who are written here; I must to The learned to learne of them, that's as much to say as The Taylor must meddle with his laste, the Shoomaker With his needle, the Painter with his nets, and the Fisher With his pencil, I must to the learned.<sup>45</sup>

The phrase 'in good time' in Q2 indicates that the clown has seen Romeo and Benvolio entering onstage. However, if the clown recognises Benvolio and Romeo as 'learned', the question 'I pray sir can you read?'<sup>46</sup> and the following confusion is merely surplus. Ending the monologue with 'I must to the learned' helps the shift in locale by instigating the act of seeking onstage; Romeo's interrupted line, 'Whipt and tormented, and Godden good fellow'<sup>47</sup> followed by the servingman's question suggests the characters have just that moment met. Thus, Q1 presents a more theatrically logical version. By restructuring Kemp's speech so that there are no distinct pauses, Shakespeare removes the possibility for mid-speech interruptions and thereby curbs Kemp's anarchic methods through linguistic direction. The twelve lines between Romeo and Benvolio's arrival and the exchange between Romeo and Kemp leaves a brief period in which the clown is left to his own comic devices but is afterwards reined in by the demands of the script: in this case, Romeo noticing him midline.

<sup>44</sup> Shakespeare, Romeo and Juliet, Q1 I.ii.35-36.

<sup>45</sup> Shakespeare, Romeo and Juliet, Q1 I.ii.31-35 and Q2 I.ii.38-42.

<sup>46</sup> Shakespeare, Romeo and Juliet, Q1 Lii.50 and Q2 Lii.57.

<sup>47</sup> Shakespeare, Romeo and Juliet, Q1. I.ii.49 and Q2 I.ii.56.

Wiles identifies a far less restrictive structure to the parts Shakespeare wrote for Kemp and argues that the actor was provided with a monologue of his own 'at the end of a scene [...] within which the clown may extemporise without risk to the rhythm of the play or direction of the narrative.'48 It is an unconvincing argument when analysing Shakespeare's treatment of Kemp's servant character in Q1. The clown has one closing monologue in Romeo and Juliet and, much like his soliloguy in I.ii., the language and clause construction in the quarto show a self-conscious attempt to curb his extemporising:

> Q1) Clowne: Maddam you are cald for, Supper is readie, the Nurce curst in the Pantrie, all things in extreamitie make hast for I must be gone to waite.49

Kemp is governed by the language he is prescribed: 'make hast for I must be gone to waite' forces the end of the scene by exeunting the stage. Lady Capulet and the Nurse's lines are surplus and of no particular literary merit so have been extirpated in Q1. The only other scene in the play where Kemp would have room to extemporise follows exactly the same suit. In IV.v, Peter has a comic confrontation with some Minstrels where he asks them "Why doth music hath a silver sound?" When they cannot answer, he concludes by saying:

> (Q1) Ser: I thinke so, Ile speake for you because you are the Singer. I saye Silver sound, because such Fellowes as you Haue seldom Golde for sounding. Farewell Fidlers, farewell. Exit Exeunt<sup>50</sup> [Minstrel] I. Farewell and be hangd: come lets goe.

The punchline relies on the fact that Kemp would be holding in his hand the gold to pay them, but, as the wedding is cancelled, the musicians will not receive any money. As with his speech in I.ii, the joke requires a speedy delivery and a speedy exit, severely limiting Kemp's opportunity to extemporise.

Writing an early modern play was typically the cumulative effort of a number of hacks. A clear distinction between language and plot existed in

<sup>48</sup> David Wiles, Shakespeare's Clown: Actor and Text in Elizabethan Playhouse (Cambridge: CUP, 2005), 107.

<sup>49</sup> Shakespeare, Romeo and Juliet, Q2 I.iii.87-92 and Q1 I.iii.71-73.

<sup>50</sup> Shakespeare, Romeo and Juliet, Q1 IV.v.133-136.

the period and it was often the case that one writer would be tasked with producing a "plot-scenario", a draft of each act of a new play that would be delivered to potential investors, whilst another or others would be hired to write the dialogue. Thomas Nashe's account of his involvement in writing the seditious play *The Isle of Dogs* (1597) claims responsibility for only the 'induction and the first act of it', and that 'the other foure acts without my consent, or the least guesse of my drift or scope, by the players were supplied.' *The Isle of Dogs*, now lost, most likely contained parodies of the Queen or Lord Cobham. Nashe attempted to redirect the blame by claiming the players had no sense of his 'drift', meaning the play was completed without access to his plot-scenario. The fact that Nashe had already delivered scenes to the company and was required to produce a plot before the play was commissioned makes his excuse entirely disingenuous. 22

Although distributing the workload was common practice in the early modern theatre business, Shakespeare appears to have exercised an unusual degree of artistic control over his plays due to his position within the company. The Hispanist and minor poet Leonard Digges (whose stepfather Thomas Russell was one of two overseers of Shakespeare's will) pays the playwright the unusual compliment that 'all that he doth write, Is pure his owne, plot, language, exquisite.'53 No plot-scenarios exist for any of Shakespeare's plays; however, a comparison of V.iii in both quartos highlights an issue with characterisation which can be explained by Shakespeare's interaction with a plot-scenario. Whilst "Peter" is the name given to Romeo's man in the play's main source material, Arthur Brooke's narrative poem The Tragical History of Romeus and Juliet, all editions of the play identify the Capulet servingman by this name. However, during a brief interaction between Romeo and his servant in V.iii, Q2 refers to the servant as "Peter" rather than "Balthasar", the name provided in Q1 and F. This confuses the narrative. How can two feuding families have the same servant? The mistake is indicative of the characters' literary journey from plot-scenario to "fair copy".

<sup>51</sup> Stern, Documents, 31

<sup>52</sup> Thomas Nashe, *Nashe's Lenten Stuffe* (London: Printed by N.L and C.B, 1599), 2, Accessed 15 January, 2015. http://eebo.chadwyck.com.elib.tcd.ie/search/full\_rec?SOURCE=pgthumbs.cfg&ACTION=ByID&ID=99848338&FILE=../session/1428757903\_23122&SEARCHSCREEN=CITATIONS&SEARCHCONFIG=var\_spell.cfg&DISPLAY=AUTHOR/.53 Stern, *Documents*, 31.

Wiles's insightful analysis of Q2 V.iii shows how Shakespeare wrote scenes out of order and intended Kemp to play Romeo's man when he was first drafting the play.54 When Romeo tells Peter to leave in a speech of hyperbolic violence, Peter answers with a comical line:

> *Rom:* I will tear thee joint by joint... my intents are savage and wild... More fierce and more inexorable far than empty tigers or the roaring sea Peter: I will be gone sir and not trouble ye<sup>55</sup>

The bathos provided by Peter's cheeky reply is absent from Q1, where the lines are changed so as to remove the comic couplet. When ordered to leave before Romeo prises open Juliet's tomb, he hides behind a yew tree (presumably one of the pillars). Peter's gaping mouth is visible to the audience as Romeo opens the trap door:

> Thou detestable maw, thou womb of death... Thus I enforce thy rotten jaws to open, And in despite I'll cram thee with more food<sup>56</sup>

As Romeo continues his hyperbolic speech, Peter is downstage of him, ideally placed to engage in some visual play with the audience. Wiles continues his analysis, noting how the final comic touch comes later in the scene when the Friar trips over the sleeping Peter:

> St Francis be my speed, how oft tonight Have my old feet stumbled at graves? Who's there?<sup>57</sup>

Yet the punchline never comes; instead, an entirely new character, "Man", replies to the Friar, delivering a solemn report of how 'my maister and [Paris] fought,/ And my maister slew him.'58 Wiles's condemnation of Q1 has him overlook the implications of his research on securing the theatrical abridgment theory. Shakespeare's use of Peter as Romeo's servant in this scene shows him working in accordance to a plot-scenario that was produced from Brooke's poem. Peter's comic responses to Romeo's melodramatic tirade in V.iii were drafted early on in the play's lifetime and, finding Kemp put to better use in the play as the Capulet servant, Shakespeare wrote the remainder of Q2 as such. When revising Q2 into Q1, he created a wholly new servant for Romeo, Balthasar, and stripped

<sup>54</sup> Wiles, Shakespeare's Clown, 90-92.

<sup>55</sup> Ibid, V.iii.35-40.

<sup>56</sup> Ibid, V.iii.45-48.

<sup>57</sup> Ibid, V.iii.125-126.

<sup>58</sup> Ibid, V.iii.145-146

his dialogue of any comic potential.<sup>59</sup>

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Vital to deconstructing the nature of an early modern play text are the many documents that inform its performance. The remnants of these documents found in both quartos provide a clear production narrative for *Romeo and Juliet*. The present essay allows many of the authorial ambiguities in Q1 to be positively asserted as revisions by Shakespeare, the prompter, or even the printing house corrector. The two quartos are invaluable artefacts in the history of English theatre, illustrating the life of a play from its conception in the mind of the playwright to its performance and eventual publication.

Yet uncovering the abridgment narrative in the quartos poses a profoundly complex question: how are future editions of *Romeo and Juliet* to be published? Q1 can no longer be overlooked due to its dubious authorship and sacrificial line reduction; Q2 cannot be the copy text due to its glaring irregularities and theatrically confusing structure. The hangover from New Bibliography began to subside when Gary Taylor and Michael Warren argued against conflating the two extant editions of King Lear into a single text. Their thesis, arguing that Q1 represents Shakespeare's rough draft and F the play in performance, would eventually lead to the standardisation of publishing both the first quarto and folio editions side-by-side. Where a vastly different text with theatrical, literary, or historical value is extant, this model provides an editorial solution.

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<sup>59</sup> Wiles, Shakespeare's Clown, 91.

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# Religious Education and Islamic Religious Education in Europe Reflections for Ireland

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#### **Abstract**

Debate about the place of religion in public education, both in Europe and worldwide, has increased in the twenty-first century. The role of faith-based schools in secular societies and the need for provision of religious education [RE] have increasingly become topics of controversy. In Europe, RE is a multi-layered term meaning different things in different contexts. Some have argued for its continued provision, while others have contested the need for it in an age that could seem increasingly 'post-religious'. This paper examines various forms of RE and explores some arguments that might support its retention and call for its abolition in Europe with a particular focus on Ireland. The so-called rise of Islamophobia, in particular, makes these questions more acute. Therefore, after an initial exploration of background debates on RE and faith-based schooling, I introduce issues concerning the specific context and forms of principles in debates on Islamic religious education [IRE] in various European countries.

Empirical research on Islamic education in Ireland is currently very limited, thus (in order to add to the theoretical discussion and understanding of how Islamic religious knowledge is formulated) the paper draws and extrapolates on existing ethnographic research conducted on how Islam is taught in public schools, similar in context to Ireland, elsewhere in Europe. The overall aim is to make a tentative attempt at contributing to our understanding of current debate on the legitimacy of IRE in pluralist societies (understood to mean those that advocate values such as personal autonomy, tolerance, diversity, critical openness and rational morality).

#### Introduction

Debate about the place of various religions in public education both in Europe and worldwide has seen an unprecedented increase in the twenty-first century. Justification for religious education has raised debate at European level, among religious leaders, RE specialists and more generally. Jackson argues that this new interest in religious education is "partly due to the global attention given to religion as a result of the events

of 11 September 2001 in the US, their causes, on-going consequences and associated incidents that have affected people in many parts of the world".¹ In addition, in some European countries, there have been claims that the challenge of transcultural diversities and racism, much of it directed at Muslims, has also intensified debate surrounding religious education in schools.² Before exploring this debate and its pertinence to modern European Islamic faith schools, I will discuss the definitions and various understandings of RE, including major recent research conducted on RE in Europe.

# RE in Europe

Perspectives on the role of religion in public education are always context-specific, and the differences in approaches to religious education reflect historical and cultural factors. RE is a contested term meaning different things in different countries. The Council of Europe recommends teaching about religions in public education. This recommendation is motivated by the need to express and strengthen respect for human rights as well as the need to foster social cohesion.<sup>3</sup> A large-scale European empirical research effort on RE in schools in Europe was conducted by REDCo.<sup>4</sup> It included qualitative and quantitative surveys comparing views of young European people (aged 14 to 16) towards religion and religious diversity. It also explored possibilities for dialogue, classroom interaction and teaching strategies.

Weisse notes some of the significant results that emerged from the REDCo research. Firstly, students believed "the most important source [of knowledge] about religions and worldviews is generally the family, followed by the school". In addition, it emerged that most students

<sup>1</sup> Robert Jackson, "European Developments," in *Debates in Religious Education*, ed. Philip Barnes (Oxford: Routledge, 2012), 168.

<sup>2</sup> Taras, Raymond. "Islamophobia never stands still: race, religion, and culture", Ethnic and Racial Studies, 36, 3, 2013.

<sup>3</sup> Hans-Guenter Heimbrock, Peter Schreiner, and Christoph Sheilke, *Towards Religious Competence: Diversity as a Challenge for Education in Europe*, ed. Eds (Hamburg: Lit Verlag, 2001) 4 REDCo stands for Religion in Education: A Contribution to Dialogue or a Factor of Conflict in Transforming Societies of European Countries. The project was included in the section Values and Religions in Europe' of the EU-programme 'Citizens and Governance in a Knowledge-Based Society'. REDCo (*Education, Dialogue and Conflict*), a project funded by the EU Commission Framework 6 Initiative. It was a three-year project (2006-2009) involving universities from eight European countries (England, Germany, the Netherlands, Norway, Russia, Estonia, France, and Spain).

asserted, with regard to promoting peaceful co-existence with people of other faiths, that RE could play an important role. Third, most agreed that: "there should be a place for [teaching about] religion in school" but its role should be to inform, not preach. The study further revealed that many students were discriminatory towards other religions. However, they were "prepared to enter into dialogue with others whom they consider interesting as persons". Finally, the majority of pupils also viewed "teaching an interreligious understanding at both the personal and the societal level as necessary and possible".5

The REDCo study was limited to eight countries, making it difficult to generalise the findings worldwide. Across Europe however, some interesting findings emerge. Firstly, it was revealed that young Europeans' views on religion and religious education were far from homogenous. Given the diversity and heterogeneity of religions throughout Europe, it is dangerous to oversimplify by categorising religious people and nonreligious people into easily identifiable groups. The sense of needing to understand and depict religion in all its complexity is echoed by the Council of Europe's recommendation on 'Education and Religion' which expresses the view that the media have the potential to play a positive role in society but that news stories, "especially among those aimed at the wider public, very often display a regrettable ignorance of religions, as shown for instance by the frequent unwarranted parallels drawn between Islam and certain fundamentalist and radical movements".6

The provision of RE in Europe is as diverse as its nationalities, each state taking a different approach. One of the most common ways to make sense of the various approaches is to distinguish between confessional (teaching in a particular faith) and non-confessional (teaching about various faiths) models of RE. The differences between them depend on who is organising RE - whether it comes from religious communities, the state, or both in cooperation, and whether it is denominational or non-denominational. Confessional and denominational systems can be found, for example, in Ireland, Germany, and Belgium and in Southern and Eastern European countries. Non-confessional and non-denominational are typical in

<sup>5</sup> Wolfram Weisse, "REDCo: A European Research Project on Religion in Education," Religion & Education 37, no. 3 (2010): 198.

<sup>6</sup> Council of Europe, White Paper on Intercultural Dialogue: 'Living Together as Equals with Dignity' (Strasbourg: Council of Europe Publishing, 2008).

protestant Nordic countries and in England, Wales and Scotland. The exception is France where there is no specific religious education but the study of religious matters is integrated into other school subjects. Hence, France will be excluded from this discussion. Across Europe RE is taught as a subject in schools on a voluntary or compulsory basis, further complicating the picture.

Furthermore, approaches to teaching RE can be broadly categorised by considering whether the purpose is to have pupils learn religion, learn from religion or learn about religion, a distinction originally devised by Michael Grimmitt in 1987.7 The first of these categories refers to teaching and learning religion from the inside, with a view towards strengthening commitment to a particular tradition.<sup>8</sup> This form of RE is often practised in confessional approaches that pursue enculturation to beliefs and values of a religious tradition. In pluralist societies this approach has been challenged and learning about religions is seen as a more legitimate option than faithbased learning. This entails learning about religions from outside, with an historical and descriptive focus without the student's life world considered. The third approach includes the personal experiences of students and helps them to reflect on religious questions without socialising them into any particular faith. Although the categorisation has been widely used, there have been different understandings of meaning of these concepts and based on the choice of approach this will tend to influence views on the matter of having or allowing faith-based schools.<sup>9</sup> In the next section, I explore contemporary arguments for and against faith-based schools in Europe which have also influenced the debate.

#### Faith-Based Schools Debate in Europe

The role of faith schools in modern Europe is controversial. The term 'faith school', according to Halstead, aims to describe schools that are "catering primarily for the children of a faith community...and [seek] to provide an education with a religious ethos... [which is] based on religious values". <sup>10</sup>

<sup>7</sup> Michael Grimmitt, Religious Education and Human Development: The Relationship between Studying Religions and Personal, Social and Moral Education (Great Wakering: McCrimmons, 1987).

<sup>8</sup> Grimmitt, Religious Education and Human Development.

<sup>9</sup> Andrew Wright, "Freedom, Equality, Fraternity? Towards a Liberal Defence of Faith Community Schools," *British Journal of Religious Education* 25 (2003).

<sup>10</sup> Mark Halstead, "Faith Schools," in Debates in Religious Education, ed. Philip Barnes (Oxford:

However, he goes on to say that faith schools are far from homogenous and there exists a wide diversity of provision. Among their distinctive features are their links to various denominations/communities, policies related to admission, the time spent on RE and the type of RE on offer. Halstead also points out that faith schools vary in their "employment of teachers not belonging to the faith, [and] their compatibility with liberal democratic values.<sup>11</sup> The goal of faith communities' schools is to provide schooling founded on particular religious values. This supposed right to avail of this type of schooling has been given support by the wider European community. Article 2 of Protocol 1 of the European Convention on Human Rights states that:

> In the exercise of any functions which it assumes in relation to education and to teaching, the State shall respect the right of parents to ensure such education and teaching in conformity with their own religions and philosophical convictions

Furthermore, the Council of Europe also acknowledges the common values taught in faith-based schools, by asserting that:

> [The] three monotheistic religions of the Book have common origins (Abraham) and share many values with other religions, and... the values upheld by the Council of Europe stem from these values. 12

Much of the polemical debate on faith schools has tended to draw on dated historical images of faith schooling. Issues such as ideological advocacy (both for and against), effects of faith- based schooling and how they can have an impact on personal and intellectual autonomy as well as social issues related to co-existence and the promotion of common values in society are often raised.<sup>13</sup> However, since 2001, there have been a number of academic contributions to the debate of faith schools which have been less clichéd. Some have advocated allowing faith schools,14 some have opposed their expansion<sup>15</sup> and some have been against their funding, but

Routledge, 2012).

<sup>11</sup> Halstead, Faith Schools, 99.

<sup>12</sup> Council of Europe, White Paper on Intercultural Dialogue: 'Living Together as Equals with Dignity', 10673.

<sup>13</sup> Gerald Grace, "Educational Studies and Faith-Based Schooling: Moving from Prejudice to Evidence-Based Argument," British Journal of Educational Studies 51, no. 2 (2003): 151.

<sup>14</sup> Wright, "Freedom, Equality, Fraternity? Towards a Liberal Defence of Faith Community Schools; Geoffrey Short, "Faith Schools and Social Cohesion: Opening up the Debate," ibid. 15 Human Philosophers' Group, Religious Schools: The Case Against (London: British Humanist Association, 2001); Frank Harris, "Do We Really Want More Faith Schools?", Educational Review 15(2002).

not against them in principle.16

Halstead categorises the positions adopted on faith schools into four main types and has attempted "to disentangle these in order to avoid confusion and arguing at cross purposes". 17 Firstly, he states that there is a debate "between those who think that religion and education should be kept separate since the process of religious nurture and the process of education are conceptually different ... [and] others [who] see religion as a concept that affects every aspect of life". 18 Secondly, advocates of faith schools believe that they provide "a high quality education" and are "in demand", whereas others see this as a kind of discrimination that involves "privilege[ing] certain sectors of society over others". 19 Thirdly, some see faith schools as meeting a right on the part of minority faiths in a country, whereas for others they increase the unnecessary "social costs" caused by "the non-integration of minorities". <sup>20</sup> Fourthly, some question the "right to expect public funding for their choice of schooling" as currently exercised by members of religious communities which others defend this as a basic human right. 21 Having said that, Halstead sets out four aspects of the debate around the very existence of faith-based or religious school. I take these to be as follows.

- A) Religion and education: Should the two be separate or mixed?
- B) Religious schools: Are they better or worse than secular schools?
- C) Faith schools: Do they aid or isolate minority communities?
- D) Faith schools: Do they have a right to state funding?

In the next paragraph, I will discuss each one of these questions.

# A) Religion and Education: Separate or Mixed?

It is important to clarify what is meant by the secular world and highlight

<sup>16</sup> Harry Judge, "Faith-Based Schools and State Funding: A Partial Argument," Oxford Review of Education 27, no. 4 (2001); Laura UnderKuffler, "Public Funding for Religious Schools: Difficulties and Dangers in a Pluralistic Society," Oxford Review of Education 27(2001).

<sup>17</sup> Halstead, "Faith Schools," 102.

<sup>18</sup> Ibid.

<sup>19</sup> Ibid, 103.

<sup>20</sup> Ibid.

<sup>21</sup> Ibid.

the distinct socio-political forms of secularism that exist. Those who advocate the former position (separation) see it as in society's best interest and, where it (RE) is conceded at all, education about religion is optional. Felderhof notes that there are three basic secular worldviews. The first type refers to a form of life in which religious organisations are allowed to apply their rules to themselves only if they live in conjunction with the state's civic law. Another view is that people ought to live their lives free from religions, but those of religious faith do have the option to express it in the public sphere. The third grants the state the right to impinge on religious life and restricts individuals and institutions from expressing/performing their particular values and devotions in public.<sup>22</sup>

In the first and second worldviews a relationship between religion and education is plausible, in that these allow for what Tuohy refers to as a "theology within [emphasis in original]" the educational system and, to a certain extent, "a theology of [emphasis in original] education" in the form of faith based schooling.<sup>23</sup> However, the third form challenges the truth claims of religion more severely, as these are considered unscientific. Therefore, it is inappropriate "to seek to instil [in children] unprovable knowledge such as religious beliefs". Furthermore, as faith schools may have the potential to teach views that are not shared by the society as a whole, such as the unacceptability of homosexuality or same sex marriages, it has been argued that faith schools have the potential to indoctrinate and negatively portray people who do not share certain beliefs or who have certain forms of life. Thus, in this most radical of secularist worldviews, faith schooling becomes, as it were, a problem to be solved, not an essentially harmless 'niche view' to be tolerated. However, Tuohy argues that attempts "to replace one world view ([the] theocentric) with another (atheistic humanism) is a politics that curtails values such as liberty and diversity". 24 In addition, it could also be argued that this particular worldview ignores the diversity of beliefs and infringes on people's freedom and right to choose how they wish their children to be educated. Moreover, those who advocate faith-based schooling essentially see their faith as a way of life and thus do not accept that learning about

<sup>22</sup> Marius Felderhof, "Secular Humanism," in *Debates in Religious Education*, ed. Philip Barnes (Oxford: Routledge, 2012).

<sup>23</sup> David Tuohy, "Catholic Schools: Schools for Catholics," Studies: An Irish Quarterly Review 97, no. 386 (2008): 126.

<sup>24</sup> Tuohy, Catholic Schools: Schools for Catholics, 127.

their religion is a private affair. Rather, *religion is life* and this should be emphasised in school and society.

# B) Religious Schools: Better or Worse than Secular Schools?

School performance and measurable academic success tend to be considerations often used to defend faith schools.25 Questions are sometimes asked as to whether faith schools' seemingly better results are due to the fact of their being faith schools, or other considerations. It has been argued that faith schools are better academically than secular schools, based on empirical evidence. In particular, Roman Catholic and Church of England primary schools in the UK may sometimes make "more progress with their pupils than non-faith schools". 26 At secondary level similar success has been documented. For example "in 2008, 71.3 per cent of secondary students at faith schools got five or more good G[eneral] C[certificate of] S[econdary] E[ducation award]s in comparison to 65.6 per cent of students at non-religious schools".27 Although a Runnymede Trust report in 2008 endorsed faith schools and described them as playing an important role in the education system, it was also critical of them, noting: "they educate a disproportionately small number of young people at the lowest end of the socio-economic scale", with some "more keen in their public announcements to discuss statistical validity than...serve the disadvantaged".28 Jackson points out that the argument used that faithbased school provide high quality education is a weak one. He argues that the Office for Standards in Education [Ofsted], a non-ministerial department in the UK, showed that results in schools were ambiguous. Ofsted's evidence suggests that high performance is not intrinsic to faithbased schooling.<sup>29</sup>

<sup>25</sup> David Marley, "Muslim Schools Prove Stars of the Higher-Performing Faith Family," *Times Educational Supplement* 2008.

<sup>26</sup> Tilaye Yeshanew, Ian Schagen, and Suzanne Evans, "Faith Schools and Pupils' Progress through Primary Education," *Educational Studies* 34, no. 5 (2009): 511.

<sup>27</sup> Halstead, "Faith Schools," 104.

<sup>28</sup> Rob Berkeley, Right to Divide? Faith Schools and Community Cohesion (London: Runnymede Trust, 2008), 5.

<sup>29</sup> Robert Jackson, "Should the State Fund Faith Based Schools? A Review of the Arguments," *British Journal of Religious Education* 25, no. 2 (2003): 97.

# C) Faith Schools: Aid or Isolate Minority Communities?

The dangers of religious/cultural isolation, confrontation and the exploitation of religion for political purposes are significant. However, research carried out by Professor David Jesson of York University cast faith schools in a positive light in this regard. His research involved the analysis of Ofsted reports on 400 secondary and 700 primary schools from various faith and secular traditions. He concluded that at primary level, faith schools were no different to non-religious schools, however secondary schools run by faith groups were better than non-religious schools at building community relations.<sup>30</sup> Critics of faith schools strongly argue that the schools intensify social exclusion, community division, cultural isolation and religious prejudice. The legitimacy of faith schools is sometimes questioned when any social unrest occurs among ethnic minorities. One such example is the claim that some ethnic minority groups were involved in most of Britain's worst social disturbances, such as "the Brixton and Liverpool riots of 1981, the Oldham, Burnley, and Bradford riots of 2001, and the Birmingham riots of 2005".31 However, others interpret these social disturbances differently. It may be misleading to link disturbances with faith schools as there is strong correlation of these incidents with low income and high-crime areas. In other words, having many faith schools in an area associated with riots may only be a symptom of the problem of social isolation, not the cause. According to an investigation conducted in 2002 by the International Bureau of Education (a branch of the United Nations Educational, Scientific and Cultural Organisation) divisiveness was due to "structural reasons within societies... fuelled by injustice and fear not by differences of faith".32 Furthermore, the Council of Europe attempted to find a middle ground in the debate, stressing that such conflicts are not caused solely by faith schools, but admitted:

There is a religious aspect to many of the problems that contemporary society faces, such as intolerant fundamentalist movements and terrorist acts, racism and xenophobia, and ethnic conflicts (Parliamentary Assembly of the Council of Europe, 2005, Recommendation 1396).

<sup>30</sup> David Jesson, "A Study of Recent Ofsted Data Assessing School's Progress on the Duty of to Promote Community Cohesion and Tackle Inequality". Church of England Archbishops' Council Education Division. November 2009.

<sup>31</sup> Carolyn King, "Faith Schools in Pluralistic Britain: Debate, Discussion, and Considerations," *Journal of Contemporary Religion* 25, no. 2 (2010): 289.

<sup>32</sup> King, Faith Schools in Pluralistic Britain, 290.

In the end, Muslim schools, like other faith schools, may be a curse or a blessing when it comes to the issue of integration of minorities into the wider community. It likely depends on how they are run, by whom their IRE curricula are designed and how issues, which directly affect minorities are dealt with in the classroom. However, evidence on such issues is limited and research to date has been inconclusive.

# D) Faith Schools: A Right to State Funding?

According to Jackson, supporters of funding contend that faith schools: "provide a positive response to racism; promote justice and fairness for children, parents and religious communities; offer education of a high quality and promote social cohesion and the integration of minority communities into the democratic life of the state". On the other hand, some believe that it is not right to fund faith schools. They claim faith schools: "limit the personal autonomy of pupils; erode social cohesion through separating young people; impose on pupils a restricted view of religion...disadvantage other schools through selection procedures that cream off the most able students". Furthermore, from the point of view of taxpayers, and more specifically as far as non-believing taxpayers are concerned, funding for faith schools may be an "unjustifiable violation of conscience" though taxpayers who are believers could express similar opposition to their taxes going to promote secular schools.

More broadly, the various arguments put forward on both sides ultimately concern how secular societies perceive the role of religion in life. Some people may find religion unacceptable and, therefore, deem religious schools to be unacceptable by default. People who prefer social cohesion, even at the expense of cultural preservation, may think it reasonable to say that there are satisfactory reasons to deny parents the right to send their children to state-funded faith schools. Religious principles have the potential to serve as the foundation for a peaceful coexistence of various faiths and increase respect for the human dignity of others, regardless of their religious or political beliefs, but this is not guaranteed simply by having faith schools in a society.<sup>36</sup>

<sup>33</sup> Jackson, "Should the State Fund Faith Based Schools? A Review of the Arguments," 90.

<sup>34</sup> Ibid., 93.

<sup>35</sup> Halstead, "Faith Schools," 107.

<sup>36</sup> Weisse, "Redco: A European Research Project on Religion in Education," 188.

Indeed, it is worth stressing that there are clear deficiencies in some faith schools. As far as Muslim schools were concerned the Runnymede Trust report suggested a way of encouraging them to be more inclusive of all segments in society. However, in order to relate this to the operation of Muslim schools and IRE an understanding of Islamic educational ideals is required. In the next section, I explore those ideals, in light of liberal educational values, as well as the contemporary challenges and the debates faced by Muslim schools in the West.

# Discussion on Islamic Educational Ideals, Challenges and Debates

Educational systems are an expression of deeply rooted political, economic and cultural factors that are distinctive to a particular society.<sup>37</sup> It has been argued that "every system of education embodies a particular philosophy which emanates from a particular concept, from which it cannot be isolated".<sup>38</sup> Thus, in order to understand the complexity of life in modern secular countries as it is experienced by Muslims, Günther advocates understanding cultures, civilisations and religions other than 'our own', contending that there is a vital need for "critical, unbiased, and systematic study in the West of Islam's diverse values, concepts, and beliefs- especially those related to educational theories and philosophies developed by Muslim scholars".<sup>39</sup>

From an Islamic perspective, "knowledge claims can only be predicated on the understanding that acquired knowledge is not likely to conflict with revealed knowledge as given in the Quran and the Sunna". However, as far as Islamic philosophy of education is concerned its aims have been largely defined by scholars outside of Europe. 41

Merry contends that Muslims can be divided into two camps, one that is

<sup>37</sup> Sebastian Günther, "Be Masters in That You Teach and Continue to Learn: Medieval Muslim Thinkers on Educational Theory," in *Islam and Education Myths and Truths*, ed. Wadad Kadi Billeh and Victor (Chicago: University of Chicago Press, 2007).

<sup>38</sup> Syed Muhammad al-Naguib al-Attas, Aims and Objectives of Islamic Education (London: Hodder and Stoughton, 1979), vi.

<sup>39</sup> Günther, "Be Masters in That You Teach and Continue to Learn, 61.

<sup>40</sup> Michael S. Merry, *Culture, Identity, and Islamic Schooling: A Philosophical Approach* (London: Palgrave Macmillan, 2007), 68, the Sunna being sayings and actions of Islam's Prophet, Muhammad.

<sup>41</sup> Merry, Culture, Identity, and Islamic Schooling: A Philosophical Approach, 66.

"inclined to accommodate Western cultural and political norms and one that is not". 42 Some have attempted to bridge the gap by seeking evidence of compatibility of the Quran's word and the natural sciences. This might be referred to as the Islamisation of knowledge and involves "making all acquired knowledge conformable to an acceptable understanding of Islam".43 This process, when carried out in the "the complete formal, non-formal, and informal educational system", is often referred to as the "Islamisation of Education". 44 Views on Islamisation are divided. There are those, among some Muslims, who advocate its importance in education, while others, especially among non-Muslims, see Islamisation as a threat and believe that Islam and the West are mutually incompatible.<sup>45</sup> Other Muslims have gone to further extremes and described "western-style education as a plot against Islam" and, in some cases, have violently threatened teachers who import western practices.<sup>46</sup>

According to Merry, Islamic education centres on "the complete submission to the will of God...and this is what it means to be a Muslim". 47 However, others have argued that "the objective of Islamic education in Europe should be the promotion of religious maturity." That is, "for Muslims to be capable of defining their own religiosity and justifying it before God" which, in turn, "provides Muslims with the autonomy to confess their own religiosity without being patronized".48

Furthermore, Merry also asserts that Islamic education is concerned primarily with the person as a whole, both the spiritual and intellectual being. 49 Hewer affirms this view and asserts that this cannot be implemented if Muslim schools continue to teach the religion of Islam in isolation from other subjects. Rather, the ideal is that IRE permeates the whole structure of education which is he refers to as a "faith-centred integrated system".50

<sup>42</sup> Ibid., 71.

<sup>43</sup> Ibid., 62.

<sup>44</sup> Anne Sofie Roald, Tarbiya: Education and Politics in Islamic Movements in Jordan and Malaysia (Stockholm: Almqvist & Wiksell International, 1994), 57.

<sup>45</sup> Lewis Bernard, Islam and the West (New York: Oxford University Press, 1993); Samuel Huntington, The Clash of Civilisations and the Remaking of the World Order (New York: Simon & Schuster, 1996).

<sup>46</sup> Monica Mark, "Boko Haram Leader Calls for More School Attacks after Dorm Killings," Guardian 2013.

<sup>47</sup> Merry, Culture, Identity, and Islamic Schooling: A Philosophical Approach, 49.

<sup>48</sup> Ednan Aslan, Islamic Textbooks and Curricula in Europe (Frankfurt: Peter Lang, 2011), 33.

<sup>49</sup> Merry, Culture, Identity, and Islamic Schooling: A Philosophical Approach, 49-50.

<sup>50</sup> Chris Hewer, "Schools for Muslims," Oxford Review of Education 27, no. 4 (2001): 523.

When it comes to the role of Muslim schools in western pluralist societies, Mandaville contends that "it is vitally important to understand the purpose of Muslim education and how Islamic schools of various types fit into the debates of isolationism, the social integration and citizenship".<sup>51</sup> This cannot be achieved unless there is knowledge of how these issues are handled in classroom settings that actively seek to combine multiple traditions of learning and cultures of pupils.<sup>52</sup> Similarly, understanding the roles of Islamic schools and the contours of Muslim knowledge in the classroom and how it seeks to reorient students' intellectual orientation to Islam are important research areas.<sup>53</sup>

One of the main challenges faced by Muslim educators in the West, given the heterogeneous nature of Muslims and Islamic schools, is to produce an Islamic philosophy of education that reconciles diverse views on the nature of Islam "with the on-the-ground needs of Muslim children socialized in a non-Islamic society".54 Furthermore, Mandaville highlights the role of Muslim schools, through their engagement with and participation in mainstream pluralist society, in ensuring that "issues of tolerance, coexistence and relations with non-Muslims [are properly] handled in the classroom"55. According to Merry, there exists a "disjuncture between Islamic educational ideals (as expressed by Muslim philosophers of education), the aspirations of school administrators, and the manner in which Islamic schools operate in practice".56 There is thus a dire need to define the contours of a more comprehensive and fastidious approach to religious education in Muslim schools, which needs to be relevant to the daily concerns and issues that arise from living as a minority in a multifarious, pluralistic society in the twenty-first century.

However, it may already be that "those who manage Islamic schools, unlike most Muslim philosophers of education, recognize the importance of training children to simultaneously identify them both as Muslims and

<sup>51</sup> Peter Mandaville, "Islamic Education in Britain: Approaches to Religious Knowledge in a Pluralistic Society," in *Schooling Islam: The Culture and Politics of Modern Muslim Education* (Princeton, NJ: Princeton University Press, 2007), 225.

<sup>52</sup> Ibid.

<sup>53</sup> Ibid.

<sup>54</sup> Merry, Culture, Identity, and Islamic Schooling: A Philosophical Approach, 67.

<sup>55</sup> Mandaville, Islamic Education in Britain: Approaches to Religious Knowledge in a Pluralistic Society, 225.

<sup>56</sup> Ibid; 47.

citizens of the West".<sup>57</sup> This could be seen as vital because Islamic schools may significantly influence how Muslims living in the West choose to shape their own identities in ways that are true not only to their individual or collective beliefs, but also to the societies of which they are an integral part.

According to Mandaville, Muslim youths in pluralist European society report feelings of being "strongly alienated from what they perceive as mosque leaderships out of touch with the issues they face and unwilling to engage in discussions about Islam".58 Therefore, Islamic education in schools has the potential to fill this lacuna by addressing an "important terrain in the negotiation of identity, citizenship, and co-existence". Zibakalam-Mofrad maintains that "serious questions have been raised in recent decades about the Islamic philosophy of education: its goals [and] its value system". 59 She has called for a generation of Islamic philosophers willing to offer creative approaches to Islamic education rather than relying on "cultural and social borrowings from the West".60 However, Driessen and Merry contend that the boards of management and parents of some Muslim schools "are orientated towards the religious aspects [of the schools] and the teaching staff more towards improving student achievement".61 The fundamental clash between what we might call the progressive or accommodationist approach of the teachers and the conservative or traditionalist approach of some parents could seem to be at the heart of many conflicts in and around Muslim schools (here understood to mean both schools under some kind of direct Muslim management or control and schools where Muslim pupils happen to be in the majority). In the next section, I briefly discuss important contemporary research conducted specifically on IRE in Muslims schools in Europe.

<sup>57</sup> Merry, Culture, Identity, and Islamic Schooling: A Philosophical Approach, 60.

<sup>58</sup> Mandaville, Islamic Education in Britain, 228.

<sup>59</sup> Fatemah Zibakalam-Mofrad, "Ibn Sina's Philosophy of Education and Its Application to Modern Muslim Educational Systems," *Muslim Education Quarterly* 17, no. 1 (1999): 65.

<sup>60</sup> Zibakalam-Mofrad, "Ibn Sina's Philosophy of Education", 65.

<sup>61</sup> Geert Driessen and Michael S. Merry, "Islamic Schools in the Netherlands: Expansion or Marginalization," *Interchange* 37, no. 3 (2006): 217.

# Contemporary Research on Formal Islamic Religious Education in Europe

Islamic education in Europe occurs in both formal and informal environments. The latter usually takes place in local mosques or rented prayer rooms, organised by individual members of the Muslim community. This form of education may take place after school hours or at the weekend, with emphasis on memorisation of the Quran. The former takes place in formal settings, either through state schools or recognised institutions. The term IRE, Berglund says, is appropriate as it draws a distinction between informal Islamic education in what are often labelled as 'Quran madrasahs' and something that is a specifically Islamic version of the school subject RE, signalling that IRE concerns Islam but is aligned with the more general education in primary and secondary schools.<sup>62</sup>

Not all European countries provide formal IRE but where it does exist it may be organised either by religious communities, the state, or both in cooperation. Currently, there is a lack of academic research concerning Islamic education in Europe and what is available often comes from atomised analyses of specific European countries. 63 However, Veinguer, Dietz, Jozsa and Knauth<sup>64</sup> empirical findings on how IRE is represented pedagogically and managed in schools, highlighted the diverse forms in which Islamic education is manifested in Europe. Their results indicated that Islamic schools in European countries varied considerably in management, structure, size, and teachers' forms/levels of training and pupils' academic results as well as pedagogical positions adopted. Such schools are new phenomena in the educational landscape, often with little support at the national and supranational levels. Furthermore, the complex situations Muslim schools find themselves in vary, depending on the structures of the educational system in which they exist and the political relationship between religious communities and the state in question, as well as integration policies in each country.

For example, Jenny Berglund concluded that Muslims schools in Sweden

<sup>62</sup> Jenny Berglund, Teaching Islam: Islamic Religious Education in Sweden (Munster: Waxmann, 2010), 25.

<sup>63</sup> Aslan, Islamic Textbooks and Curricula in Europe.

<sup>64</sup> Veinguer et al., "Introduction," in Religious Diversity and Education in Europe: Islam in Education in European Countries: Pedagogical Concepts and Empirical Findings, ed. Cok Bakkar, et al. (Munster: Waxman, 2009).

were diverse in the teaching of IRE. In her book Teaching Islam: Islamic Religious Education in Sweden, she offers a detailed qualitative comparative case study across three Swedish Muslim schools. In the absence of published ethnographic studies of Muslim schools in Ireland and its neighbours (England/Wales, Scotland and Northern Ireland), Berglund's research offers an important point of reference. According to Berglund, one IRE teacher viewed the teaching of "ethics, morality and thereby [proper] behaviour" as more beneficial for pupils than memorisation, given the short time allocated to IRE. This in her view, should be conducted at the weekend supplementary Quranic schools.<sup>65</sup> Berglund also found some teachers who believed that teaching the meaning of the Quran in Swedish increased the possibility of the pupils reaching the fundamental goal of IRE: "to instil a sense of taqwa (God-consciousness) within the heart and mind of the pupil" and this is achieved by first learning "the five pillars, [articles] of faith and *Ihsan* [perfection of character]". 66 Berglund's research not only addresses the much under-researched matter of how faith formation occurs in Muslim schools, but also refutes the claim that Muslim schools are homogeneous and the associated claims that faith schools are concerned with indoctrination.

### Conclusion

From a Western, liberal perspective Islamic educational principles are dubious. The unquestionable certainty of 'revealed knowledge' which excludes the possibility of subjecting a belief system to criticism is problematic. Therefore, if Islamic education is to be true to its self, as Halstead argues "skills within education, such as questioning, verifying, criticizing, evaluating and making judgments... [are subordinate] to uncritical acceptance of authority".67 In other words, the Islamic view could seem to demand that reason be subordinated or restricted to the boundaries of faith, including in education. Furthermore, some orthodox or traditionalist views might seem to be the main stumbling blocks in constructing an Islamic theory and practice of education compatible with western modernity. However, for others, there is scope for skills such as evaluation and critical analysis of interpretations to be developed within

<sup>65</sup> Berglund, Teaching Islam: Islamic Religious Education in Sweden, 71.

<sup>67</sup> Mark Halstead, "An Islamic Concept of Education," Comparative Education 40, no. 4 (2004): 526.

a defined Islamic framework, which are important areas of enquiry if radicalised views are to be curtailed.

The various external challenges faced by Muslim schools, such as societal attitudes towards religious education, as well as internal struggles that may occur within those schools, makes life challenging for Muslims living in Western democracies, as they search for an appropriate form of education. In order to face those challenges, further empirical research needs to be conducted on Muslim education and schools in Europe to contribute productively to the debate on their legitimacy in pluralist societies and to find practical solutions to organising the kind[s] of education that could be considered acceptable by different interest groups in modern multicultural societies.

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# Enlightenment and the Republic of Letters at the Dublin Medico-Philosophical Society, 1756-1784

#### by Rachael Scally

#### **Abstract**

The Dublin Medico-Philosophical Society was established by John Rutty, Charles Smith and others in 1756. It was a small, self-funded and self-selecting learned society, which met on a bi-monthly basis to present and discuss medical and scientific papers on new and improving subjects. This article examines the society and its connection to an Enlightenment and a cosmopolitan Republic of Letters. It investigates the society's inauguration, membership, ideology and aims and considers how information was collected, produced and disseminated by its members. It proposes that the society was an improvement society, that wanted to improve Ireland by advancing organized learning and harnessing practical knowledge for the betterment of the nation. It contends that the society was a band of *virtuosi*, a talented and influential group of surgeons, physicians, apothecaries and clerics, who utilized the methodological and empirical approaches of the Enlightenment. It concludes that the Enlightenment was not only in Ireland but that Ireland, or more correctly Dublin, in the form of the Dublin Medico-Philosophical Society and its Irish scientific Republic of Letters, was also participating in the Enlightenment.

# Keywords

The Dublin Medico-Philosophical Society, Enlightenment, the Republic of Letters, science, medicine.

#### **Abbreviations**

Bibliothéque des Sciences: Bibliothéque des Sciences et des Beaux Arts.

Medical and Philosophical Commentaries: Medical and Philosophical Commentaries. By a Society in Edinburgh.

Medical Observations and Inquiries: Medical Observations and Inquiries. By a Society of Physicians in London.

Philosophical Transactions: Philosophical Transactions of the Royal Society of London.

RCPI: The Royal College of Physicians Ireland.

RIA: The Royal Irish Academy.

#### Introduction

While Ireland's more prestigious learned societies, such as the Royal Dublin Society have received a considerable amount of scholarly attention, the literature on its smaller and seemingly less consequential societies is sparse. Similarly, few scholars have considered Ireland's connection to an Enlightenment. This article examines the academically neglected Dublin Medico-Philosophical Society (1756-1784) and its relationship to an Enlightenment and a scientific Republic of Letters. Sections 2-3 investigate the origins of the society, its membership and objectives. Sections 4-5 consider the society's commitment to Bacon's empirical and experimental method and examine how knowledge was acquired, produced and disseminated by its members.

# The Inauguration of the Dublin Medico-Philosophical Society and its Preliminary Discourse

The first recorded meeting of the Dublin Medico-Philosophical Society took place on 8 April 1756. Present at this inaugural meeting were John Rutty, Charles Smith, Henry Downing and the Rev. Nathaniel Caldwell.<sup>2</sup> This small and self-funded society met on a bi-monthly basis at the homes of its members to read and discuss papers on scientific, medical and improving subjects. Membership was regulated by a system of nomination and ballot. Papers delivered before the society were to consist of 'such cases, facts, and experiments as may tend to confirm and explain what was before but imperfectly understood' or 'something new and useful'.<sup>3</sup> These papers were to suppress 'all hypothetical disquisitions, controversial points' and 'everything that c(ould) only contribute to display the parts and erudition of the writer'.<sup>4</sup> Hence, their style emulated the *Philosophical Transactions* and other famous publications, such as the *Medical Observations and Inquiries*, which stressed the limited value of words, theories, and hypotheses and adhered to the Royal Society's policy of not raising socially

<sup>1</sup> The Republic of Letters is generally understood as an international community of cultural exchange involving the communication of enlightened ideas via correspondence and publication networks.

<sup>2</sup> Royal College of Physicians Ireland, Medical and Philosophical Memoirs of the Dublin Medico-Philosophical Society, MPS, 8 April 1756; Royal Irish Academy, Minutes of the Medico-Philosophical Society, MS.24.K.31, 8 April 1756.

<sup>3</sup> RCPI, MPS, 16 June 1757.

<sup>4</sup> Ibid.

tendentious subjects.<sup>5</sup> The members were urged to be, as the minutes state, 'disinterested', or in other words, objective observers.<sup>6</sup>

Prefixed to the first volume of the society's minutes, entitled Medical and Philosophical Memoirs, is a Preliminary Discourse written by founding member, Charles Smith in 1757, which outlines the scope and intentions of the society. The Discourse states that the society was established in order to carry out 'medical, natural and philosophical inquiries' of an 'improving and entertaining' nature. However, it also laments that Ireland had 'made but few attempts' to join the list of illustrious philosophical societies which flourished throughout Europe in the later half of the seventeenth-century. These bodies, Smith declares, strove to 'improve themselves and to instruct all Europe'. They succeeded, through 'truth and a sound method of reasoning, first introduced by Lord Bacon...to triumph over the errors of former ages and the dark subtleties of the schoolmen'. The Discourse hopes that the Medico-Philosophical Society, 'might serve as a spark to kindle some such design' in Ireland.<sup>7</sup> Hence, we see how the society was intentionally modelled on the Royal Society and other improving societies, such as the Society of Physicians in London, which adhered to the Baconian programme for the reform of natural inquiry.

However, the Discourse is less than optimistic that such an 'agreeable prospect' will ever be realized. The present times, Smith maintains, are not congenial for fostering such a group of 'capable and ingenious persons who might mutually agree to support each other' in carrying out a scheme of this kind. In the place of true public spirit existed men who display a 'contempt and disregard of every one whose industry or abilities appear superior to their own', while those in power were occupied 'with every method of aggrandizing their families and supporting luxury', which Smith adds, had 'now grown to an immoderate height...even at the expense of all that is dear to the well wishers of his country'.<sup>8</sup>

Improvement, at least in the form of material gain, had brought with it greed, apathy and jealousy. Yet, this was not due to any inherent fault in

<sup>5</sup> Palmira Da Costa, 'The Culture of Curiosity at the Royal Society in the First Half of the Eighteenth-Century', in *Notes and Records of the Royal Society of London*, lvi, no.2, (2002), 155; Susan Lawrence, *Charitable Knowledge: Hospital Pupils and Practitioners in Eighteenth-Century London*, (Cambridge: Cambridge University Press, 1996), 229. 6 *Ibid*.

<sup>7</sup> RCPI, MPS, 16 June 1757.

<sup>8</sup> RCPI, MPS, 16 June 1757.

the notion of improvement itself. Rather, the problem resided in how the fruits of improvement had been abused by the wealthy and powerful. The Discourse reveals a deep sense of national insecurity. There is an acute awareness that although Ireland was, in material terms, significantly improved compared with the previous century, that much more needed to be done if Ireland was to be an equal footing with her European neighbours. What was needed, according to Smith and the Discourse, was to guard against the perils of luxury and complacency and to rouse public spirit for the purpose of further national improvement. The key to such improvement lay in fostering organized learning and the implementation of the Baconian programme of practical learning by, as Smith terms them, Ireland's 'men of genius'. In other words, Smith and the Medico-Philosophical Society wanted to harness natural and practical knowledge for the betterment of the nation and help foster the Enlightenment in Ireland.

#### The Members

The society contained a number of eminent and powerful individuals. Many were educated at Trinity College Dublin and no less than eight were appointed as lecturers or professors at the university: Nathaniel Barry, George Cleghorn, John Charles Fleury, Edward Hill, Robert Scott, James Span, Robert Perceval and the Rev. Matthew Young. Additionally, Samuel Clossy, David MacBride and Clement Archer all held academic posts at other institutions. Hence we can see that the society was strongly affiliated with academia and Trinity College Dublin in particular. Yet, this does not exhaust the list of influential positions held by the members of the Dublin Medico-philosophical Society. Both Croker-King and Frederick Jebb were elected president of the Royal College of Surgeons and an impressive six members became president of the Royal College of

<sup>9</sup> Nathaniel Barry was elected Professor of Chirurgery and Midwifery in 1749; George Cleghorn Professor of Anatomy in 1761; John Charles Fleury the first systematic Lecturer in Midwifery and Diseases of Women in 1762; Edward Hill Lecturer in Botany in 1773, Professor of Botany in 1785 and Regius Professor of Physic in 1811; Robert Scott succeeded Hill as Professor of Botany in 1800; James Span was appointed as Lecturer in Botany and Chair of Chemistry simultaneously in 1763 and The Rev. Matthew Young became Donegal Lecturer in 1782. 10 Following his move to New York, Samuel Clossy was elected Professor of Anatomy and Natural Philosophy at King's College, which is now the University of Colombia in 1762; David MacBride was appointed as Lecturer on the Diseases of Women and Children at the Rotunda Hospital in 1770 and Clement Archer held the Chair of Surgical Pharmacy at the Royal College of Surgeons Ireland from 1789-1803.

Physicians: Barry, Archer, Hill, Saunders, Harvey and Perceval. 11 Clement Archer also occupied the post of State Surgeon from 1791-1806. 12

Besides practicing as physicians, surgeons, clerics, professors, lecturers, man-midwives and apothecaries, some members held posts at hospitals and charitable institutions. Croker-King began his career as assistant surgeon at Steevens' Hospital and later held the post of surgeon at the Foundling Hospital in Dublin. In addition, Archer and Clossy held surgical posts at Steevens', In Daniel Rainy at the House of Industry and George Doyle at the Lock Hospital. Furthermore, members held posts as physicians at various hospitals. For example, Archibald Hamilton was visiting physician at St. Nicholas' Hospital in Francis Street, Nathaniel Barry at the Lock Hospital and both Charles Fleury and Daniel Cooke were attending physicians at the Meath Hospital. Holding hospital positions such as the above meant that members had the opportunity to observe and treat many diverse illnesses and also, in the case of surgeons, to perform dissections.

Many members of the society had studied abroad, either on the continent or in London and Edinburgh. For example, Frederick Jebb studied in Paris, Rutty graduated from Leiden University, where he studied under the renowned physician and botanist Herman Boerhaave and Nathaniel Barry qualified from Rheims. <sup>17</sup> David MacBride also studied anatomy in London with William Hunter, the Scottish physician, anatomist and leading obstetrician and Clossy studied anatomy under Hunter's brother, John, the distinguished and pioneering surgeon. <sup>18</sup> The society had an especially strong connection with Scotland. George Cleghorn, Robert Perceval, and

<sup>11</sup> John Widdess, *A History of the Royal College of Physicians Ireland*, 1654-1963, (Edinburgh: Livingstone, 1963), 240; John Lyons, *Brief Lives of Irish Doctors*, (Dublin: Blackwater, 1978), 19; Eoin O'Brien, Anne Crookshank and Gordon Wolstenholme (eds.), *A Portrait of Irish Medicine: An Illustrated History of Medicine in Ireland*, (Dublin: Ward River Press, 1984), 94.

<sup>12</sup> John Fleetwood, The History of Medicine in Ireland, (Dublin: Skellig Press, 1983), 56-57.

<sup>13</sup> RCPI, MPS, 4 February 1773.

<sup>14</sup> Thomas Kirkpatrick, *The History of Doctor Steevens' Hospital, Dublin, 1720-1920,* (Dublin: University College Dublin Press, 1924), 117, 124; Widdess, *College of Physicians*, 108.

<sup>15</sup> RCPI, MPS, 7 December 1775; Samuel Watson, *The Gentleman and Citizen's Almanack*, (Dublin: John Watson, 1772), 74.

<sup>16</sup> Watson, Citizen's Almanack, 74-75.

<sup>17</sup> Widdess, College of Physicians, 73; John Lyons, A Pride of Professors: the Professors of Medicine at the Royal College of Surgeons in Ireland 1813, (Dublin: A. & A. Farmer, 1999), 6; Fleetwood, Medicine in Ireland, p.38, 118.

<sup>18</sup> Widdess, College of Physicians, 108; Davis Coakley, Irish Masters of Medicine, (Dublin: Town House, 1992), 35.

Edward Foster all qualified M.D from the University of Edinburgh and MacBride studied under both Alexander Monro (primus), founder of the Edinburgh Medical School and William Smellie, the famous obstetrician and inventor of the forceps. <sup>19</sup> They were, therefore, exposed to many different influences and cultures and would certainly have encountered enlightenment ideals and practices.

The society also had a strong connection to the British Army. Both William Harvey and Nathaniel Barry served as Physician Generals to the army in Ireland and Cleghorn had served as surgeon to the 22<sup>nd</sup> Regiment of Foot, in Minorca in 1736.<sup>20</sup> Additionally, both Thomas Witherell and David MacBride served as surgeons in the army and navy.<sup>21</sup> The armed forces, like hospitals, presented opportunities for the mass observation and treatment of illness and disease.<sup>22</sup>

A number of the members were, or would later become, members of other learned societies. George Cleghorn, Harvey, Hill, Perceval, and Purcell are all listed as members of the Medical Society of London and an impressive twelve members of the society are listed as ordinary members, as opposed to corresponding members, of the Medical Society of Edinburgh between 1750 and 1782.<sup>23</sup> This suggests that these men had studied in Edinburgh for a time and reveals an even stronger connection with Edinburgh than first supposed. In addition, Cleghorn was nominated as a Fellow of the Royal Medical Society of Paris in 1772 and James Span is listed as a European member of the American Philosophical Society.<sup>24</sup>

Although other medical associations existed contemporaneously with the Medico-Philosophical Society, such as the College of Physicians and various trade guilds for apothecaries and surgeons, the society was unique in that

<sup>19</sup> Fleetwood, Medicine in Ireland, 41, 86; O'Brien and Crookshank, Irish Medicine, 79; Fleetwood, Medicine in Ireland, 39; Margaret Preston, Gender and Medicine in Ireland, 1700-1950, (New York: Syracuse University Press, 2012), 133.

<sup>20</sup> Fleetwood, Medicine in Ireland, 39; Widdess, College of Physicians, 79, 119.

<sup>21</sup> Aquila Smith, 'Illustrious Physicians and Surgeons in Ireland, No.III, David McBride M.D', in *Dublin Quarterly Journal of Medical Science*, iii, no.2, (1847), 281; RCPI, MPS, 22 July 1756.

<sup>22</sup> Ulrich Tröhler, To Improve the Evidence of Medicine: The Eighteenth-Century British Origins of a Critical Approach, (Edinburgh: Royal College of Physicians Edinburgh, 2000), 19.

<sup>23</sup> The Medical Society of London, A List of the Members of the Medical Society of London for the Year MDCCLXXXIX, (London: Cicero Press, 1789); The Royal Medical Society of Edinburgh, A List of the Members of the Medical Society of Edinburgh, Instituted 1737 – Incorporated by Royal Charter 1778, (Edinburgh: 1796).

<sup>24</sup> Jan Hallenbeck and Benjamin Franklin (eds.), *Transactions of the American Philosophical Society, Held at Philadelphia for Promoting Useful Knowledge*, i, (1789), 8; Coakley, Masters of Medicine, 37.

it was, in theory at least, open to all suitably qualified professionals from any of the three branches of medicine. Moreover, it helped to strengthen the professional bonds and networks between these medical men. For example, the minutes reveal that it was common practice for members to call on the expertise of other members when faced with a crisis or a case of particular difficulty.<sup>25</sup>

The society was also a sphere of intellectual sociability and a space where likeminded medical men could meet on a regular basis to share their expertise, discuss problematic or uncommon cases and communicate new improvements and theories from Ireland and the wider world.

Like the Royal Society and other medical societies such as the Philosophical Society of Edinburgh and the Society of Physicians in London, the Medico-Philosophical Society encouraged the exchange of ideas, information and skills. It was a place where men learned how to communicate their work to a wider audience, how to select unusual or interesting cases, how to prepare experiments, how to formulate their observations and how to successfully present them to their peers. The members, as we will presently discuss, read widely, published on a variety of medical and other subjects and had extensive correspondence networks. Hence, the society was a place into which new knowledge flowed, was discussed, criticised, filtered and then disseminated back out into the wider world via the members' letters, publications, lectures, and wider circles of sociability.

#### The Commitment to Baconianism

The society was truly Baconian.<sup>26</sup> In short, Bacon was the driving force behind experimental science and argued that all scientific truth originated from the real world, as 'neither the naked hand nor the understanding left to itself, c(ould) do much'.<sup>27</sup> He advocated the philosophy of continuous inquiry into and observation of natural phenomena. The natural world was to be tested by experimentation, which would yield practical benefits for mankind. Bacon's new science, or natural philosophy, as it was then more

<sup>25</sup> RCPI, MPS, 2 February 1775, 1 February 1776.

John Helibron (ed.), *The Oxford Companion to the History of Modern Science*, (Oxford: Oxford University Press, 2003), p.75.

<sup>27</sup> Francis Bacon, *Collected Works of Francis Bacon*, Volume 7, Part 1, Robert Ellis (ed.), (London: Routledge Press, 1996), 47.

commonly known, was easily incorporated into enlightened discourse and the two came to form an alliance. Baconianism quickly became a vital enlightenment resource, which opposed both scholasticism and superstition.<sup>28</sup> The society was devoted to Baconian practical learning and wanted to employ Bacon's empirical and experimental method to further practical knowledge for the improvement of Ireland. They were concerned with the collection of 'matters of fact' and gathering observations from direct experience and experiment, rather than relying on the knowledge of received wisdom.<sup>29</sup> Experience, observation, and experiment were the watchwords of the society.

Cleghorn, for example, clearly believed that observation was the key to medical improvement. In a paper delivered to the society in 1758 he lamented that it was 'alleged that Ireland contributes to promote medical knowledge less than her neighbours'.30 Cleghorn, stressed the need for the dissemination of knowledge and therefore, proposed to affect 'a Reformation' of the society which would enable its members 'to furnish (their) quota to the Republic of Letters'. 31 A large part of this reformation concerned the need for observation. What was required, according to Cleghorn, was (i) greater access to clinical cases and (ii) the detailed recording of clinical observations. He argued that hospitals and large practices were 'inexhaustible fund(s) of valuable observation' and as such needed to be utilized.<sup>32</sup> Therefore, he recommended that medical men 'who ha(d) the care of hospitals' or who 'ha(d) an extensive practice were to be preferred to others as members.<sup>33</sup> The message is clear and thoroughly Baconian: the improvement of medicine necessitated the detailed recording of multiple observations; this came from experience and the treatment of the sick, not textbooks.

In a subsequent article, which appears to have been written by Rutty, instructions are given to the members on how best to keep a medical

<sup>28</sup> Roy Porter, Enlightenment: Britain and the Creation of the Modern World, (London: Penguin Books, 2001), 132.

<sup>29</sup> For a discussion of 'matters of fact' as a category of natural philosophical knowledge at the Royal Society see, Steven Shapin and Simon Shaffer, Leviathan and the Air-Pump: Hobbes, Boyle and the Experimental Life, (Princeton: Princeton University Press, 1985), 22-30.

<sup>30</sup> RCPI, MPS, 6 July 1758.

<sup>31</sup> *Ibid*.

<sup>32</sup> Ibid.

<sup>33</sup> Ibid.

journal.34 The great Boerhaave, Rutty's former Professor at Leiden, is criticized for claiming that the writing of medical observations was 'a thing very trifling'. By contrast, Rutty believed that it was 'to the advantage of the publick' that the good physician would observe and carefully record everything material that occurred in the course of his practice. Rutty urged that medical observations should be written down 'upon the spot', hence avoiding any distortion by memory, and 'arranged so as to afford an easy opportunity of tracing its progress from day to day'.35 He believed that if a man formed a habit of recording 'what ha(d) happened, he w(ould) soon find himself able to give a pretty sure guess at what w(ould) happen'.36 Hence, consistent observation would enable the improvement of medicine by allowing a physician to better trace the progress of an illness and save lives. Furthermore, the case history featured strongly in the minutes of the society. The case history was an important medical genre as it 'provided a way to encapsulate a diverse range of experiences and insights' and hence celebrated 'the primacy of...direct clinical observation'.37

The society was highly experimental. However, by far the most experimental members were Rutty and MacBride. Rutty performed numerous experiments on minerals, mineral waters and plants in order to determine their chemical properties and medicinal or economic value.<sup>38</sup> Additionally, he maintained a monthly record of the weather and diseases in Dublin, which he reported to the society. MacBride likewise performed a plethora of experiments on fixed air, putrefaction, quick lime and fermentation.<sup>39</sup> Besides chemical experiments, members such as the Rev. Jones performed magnetical experiments before the society and exhibited the results of his experiments on various saline solutions using a microscope.<sup>40</sup>

There was a strong visual element to the society's experiments and its proceedings in general. Experiments were not only performed before the members but their results displayed. Specimens exhibited include the volatile salt of vinegar, refined nitre, a separation of lime and water and some bottles of water impregnated with fixed air in the manner

<sup>34</sup> RCPI, MPS, 4 Jan 1759.

<sup>35</sup> Ibid.

<sup>36</sup> Ibid.

<sup>37</sup> Lawrence, Charitable Knowledge, 276.

<sup>38</sup> RCPI, MPS, 21 February 1765.

<sup>39</sup> RCPI, MPS, 21 April 1762, 4 August, 18 August 1763, 1 March 1764, 15 September 1763.

<sup>40</sup> RCPI, MPS, 18 January 1759.

directed by the chemist Joseph Priestly.<sup>41</sup> Experiments and the exhibition of experimental specimens functioned, like natural curiosities, not only to educate but also entertain the members.<sup>42</sup> They may also have aided group sociability as the exhibition of experiments and specimens could be visually appreciated by all without necessitating, like some of the more specialized medical papers, any theoretical or specialized knowledge. Furthermore, the strong visual element to the society's proceedings demonstrated its adherence to enlightened vitalism. Vitalism attempted to view nature from within and saw it as an animated and autonomous creating agency. It rejected the mental and theoretical approach to learning advocated by the ancients and instead emphasised the importance of the visual and physical. During the Enlightenment the explosion in experimental science stressed the importance of sight and touch and the need for actual physical experimentation, rather than purely speculative theory.<sup>43</sup>

The society was also a keen proponent of both self-experimentation and experimentation on patients. Rutty, for example, not only tasted and smelled many of his mineral water and botanical samples but also tasted his own urine and, on at least one occasion, the urine of a patient, a diabetic man, noting its sugary smell and sweet taste. Hatients were often used for experimental purposes, especially for the trial of new medicines. For example, on one occasion Rutty and Caldwell reported that an unspecified type of powder sent to the society by a correspondent had 'been given by them to two different persons separately but had had little or no effect'. It is then recommended that the powder should 'be again given in a larger dose'. Croker-King also trialled hemlock pills on one of his patients at Steevens' Hospital and in one paper Rutty urged members who held hospital posts to trial wort, a malt preparation, as a cure for ulcers. Wort, which had originally been proposed by member David MacBride as a cure for sea scurvy or explorers sickness, was itself trialled successfully by the

<sup>41</sup> RCPI, MPS, 16 April 1767.

<sup>42</sup> Palmira Da Costa, The Singular and the Making of Knowledge at the Royal Society of London in the Eighteenth-Century, (Cambridge: Cambridge Scholars Publishing, 2009), 49; Patricia Fara, Sympathetic Attractions: Magnetic Practices, Beliefs, and Symbolism in Eighteenth-Century England, (Princeton; Princeton University Press, 1996), 46-65.

<sup>43</sup> Laurence Brockliss, Calvet's Web: Enlightenment and the Republic of Letters in Eighteenth-Century France, (Oxford: Oxford University Press, 2002), 11; Barbara Stafford, Body Criticism: Imaging the Unseen in Enlightenment Art and Medicine, (Massachusetts: The MIT Press, 1991), 43.

<sup>44</sup> RCPI, MPS, 18 April 1765.

<sup>45</sup> RCPI, MPS, 5 May 1757.

<sup>46</sup> RCPI, MPS, 6 August 1761, 7 January 1773.

British Navy on board Captain Cook's ship the Endeavour in 1768 and Resolution in 1775.<sup>47</sup>

Yet, it is important to note that experimentation on patients was common in this era. Practitioners in fact believed that it was their moral and professional duty to discover new treatments.<sup>48</sup> As John Aiken, a dissenter and surgeon at Chester commented in 1771, the 'vulgar' may protest about medical experimentation but the 'improvement of medical knowledge (was) greatly indebted to hospitals for the opportunities they afford for experimental practice'.<sup>49</sup> Therefore, we can see how improvement and experiment were intimately connected during this period.

# The Diffusion of Knowledge

Communication across national borders 'effectively closed geography' and helped to shape the Enlightenment's public sphere.<sup>50</sup> One of the Medico-Philosophical Society's strengths was its extensive correspondence network. The society received, collected and recorded natural knowledge or 'matters of fact' from their correspondents and disseminated this knowledge back out into the world, via their letters, books, and articles.<sup>51</sup>

Like the meetings of the Royal Society of London, the communication and discussion of correspondence formed a significant part of the society's business.<sup>52</sup> From the minutes we can tell that the society elected a number of corresponding members.<sup>53</sup> However, these names were rarely recorded and it is often impossible to tell whether the letters read came from elected correspondents or belonged to the personal correspondence of the members themselves. The correspondence often contained information from other letters sent to the correspondent. Hence, even a letter from an

<sup>47</sup> Peter Elmer, *The Healing Arts: Health, Disease and Society in Europe, 1500-1800,* (Manchester: Manchester University Press, 2004), 276; RCPI, MPS, 7 September 1775.

<sup>48</sup> Gunter Risse, New Medical Challenges During the Scottish Enlightenment, (New York: Rodopi, 2005), 48-49.

<sup>49</sup> John Aikin, Thoughts on Hospitals; With a Letter to the Author by Thomas Percival, (London: Joseph Johnson, 1771), 76.

<sup>50</sup> Charles Withers, *Placing the Enlightenment: Thinking Geographically About the Age of Reason*, (Chicago: University of Chicago Press, 2007), 43.

<sup>51</sup> Marie Hall, 'The Royal Society's Role in the Diffusion of Information in the Seventeenth-Century (1)', in *Notes and Records of the Royal Society of London*, xxix, no.2, (1975), 175.

<sup>52</sup> Andrea Rusnock, 'Correspondence Networks and the Royal Society, 1700-1750', in *British Journal for the History of Science*, xxxii, no.2, (1999), 156. 53 RCPI, MPS, 1 August 1761.

Irish correspondent could contain news from much further afield. What is evident is that this correspondence was the lifeblood of the society. They connected the society to a cosmopolitan republic of scholars which kept them informed about medical and scientific developments in the rest of the world.

The society received a vast amount of correspondence from within Ireland itself and had numerous contacts throughout Scotland and England.54 Letters read before the members came from as far afield as Leiden, Bombay, New York and the Southern Ocean.<sup>55</sup> Correspondence came mainly from physicians and surgeons and hence dealt overwhelmingly with matters of a medical nature. As 'what travelled was a reputation' the epistemic value of knowledge or personal testimony depended to a large extent on the social standing of the correspondent.<sup>56</sup> Social status was regarded as a guarantor of credibility and as the society's correspondence came overwhelmingly from eminent medical men their testimony was deemed to be reliable.<sup>57</sup> Letters typically relayed news of new medical books and treatise, new treatments and procedures and often described uncommon, remarkable or unusually difficult cases. Some correspondence also communicated scientific news and discoveries, such as the letter received by the Rev. Jones, describing the appearance of a comet in Bombay and the letter to Dr. Deane from Mr Walker, Lecturer in Natural Philosophy at Eton, giving an account of Mr. Herschel's improvement of the telescope.<sup>58</sup> However, improvements in agriculture, manufacturing and trade were rarely reported.

The society had a number of important Scottish correspondents.<sup>59</sup> Letters received by Cleghorn, Rutty and Span kept the society informed about medical progress in Enlightenment Edinburgh.<sup>60</sup> The most common type of development communicated was news of new treatments. For example, the society received up to date reports regarding the success of medical

<sup>54</sup> RCPI, MPS, 7 May 1761, 16 October 1760, 7 July 1774, 3 February 1763.

<sup>55</sup> RCPI, MPS, 2 April 1761, 20 May 1762, 7 September 1775, RCPI, MPS, Accompanying Folder, Letter to Mr. Cleghorn from New York, 1 August 1764.

<sup>56</sup> Withers, *Placing Enlightenment*, 44, 47. 57 Shapin and Schaffer, *Leviathan and the Air-Pump*, 39, 58-59; Steven Shapin, 'The Man of Science', in The Cambridge History of Science, vol. 3, R. Porter, K. Park and L. Daston (eds.), (Cambridge: Cambridge University Press, 2006), 187.

<sup>58</sup> RCPI, MPS, 20 May 1762, 2 Jan 1783.

<sup>59</sup> These included Dr. Donald Monro, Dr. Robert Whytt, Dr. Cullen and Sir John Pringle.

<sup>60</sup> RCPI, MPS, 6 May 1762, 5 August 1762, 16 October 1760, 7 July 1774, 3 October 1765.

trials in Edinburgh with new drugs such as Uva Ursi, which was used to treat calculus disorders, and Cicuta, which was believed to be effective against tumours.<sup>61</sup> The society also had several correspondents in the British army. Letters received from correspondents in the military discussed subjects ranging from the outbreak of fevers and venereal diseases within the armed forces in Ireland, to the trial of wort as a cure for sea scurvy on board Captain Cooke's ship, HMS Resolution, in the Southern Ocean.<sup>62</sup>

However, the society not only gathered and reported natural knowledge, they also disseminated it. On numerous occasions the letters received by the society thanked the members for their correspondence. Cleghorn especially, as we discussed, stressed the need for the dissemination of knowledge and frequently urged the members to keep detailed records of all their medical cases so that new and useful medical knowledge could be disseminated to the wider medical and scientific community. In 1761 he proposed the publication of a medical journal which was to contain not only papers written by the members but also those of medical men from 'the numerous hospitals lately erected not only in Dublin, but diverse other parts of the kingdom'. However, this plan never came to fruition and the minutes leave no record of why.

The society's work on the subject of smallpox is an excellent example of how correspondence networks could play a vital role in the dissemination of medical knowledge. In February 1761 the society received a letter from Dr. William Hunter in London inquiring about the present state of inoculation in Ireland. Hunter was writing on behalf of the Society of Physicians who wished to publish an account of the subject in their next volume of *Medical Observations and Inquiries*. In order to answer Hunter's inquiry Cleghorn wrote to a number of physicians from within his network of correspondents and replies were sent to the society from all over Ireland. Letters describing the practice of inoculation in Ireland were received from Cork, Coleraine, Downpatrick, Londonderry, Waterford and Armagh. The replies were then sent by the society to Hunter and the Society of

<sup>61</sup> RCPI, MPS, 5 August 1762, 16 October 1760.

<sup>62</sup> RCPI, MPS, 5 September 1782, 7 September 1775, 15 December 1763, 5 July 1756.

<sup>63</sup> RCPI, MPS, 15 December 1767.

<sup>64</sup> RCPI, MPS, 4 June 1761.

<sup>65</sup> RCPI, MPS, 7 May 1761.

<sup>66</sup> *Ibid*. Extended extracts from Hunter's letter and the replies gathered by the society from around Ireland are included in a lengthy entry in the minutes for the 7 May 1761.

Physicians in London. Therefore, we can see that besides gathering and recording information from their correspondents, the society also diffused this knowledge.

The members also obtained information from a plentiful supply of newspapers, which carried news from Ireland and the rest of the world. By 1760 over 160 different newspapers had begun publication in Dublin, with over a third continuing after the first year.<sup>67</sup> The society, particularly in the early years of its existence, was an avid collector of curious and improving articles from the national papers. In May of 1756 the society issued a directive stating that 'every member who (met) with anything in the public papers, monthly productions or other periodical works relative to natural history, natural philosophy, medicine, or anything curious or useful in nature or art sh(ould) transcribe or preserve the same in order to communicate them to other members'.<sup>68</sup>

The members obliged and numerous newspaper and periodical articles were collected and in some instances pasted into the minutes themselves. The articles typically came from the *Universal Advertiser* and *Faulkner's Dublin Journal*, but the members had access to many other titles.<sup>69</sup> While these publications did occasionally carry medical news from Ireland and Europe, the articles collected by the society focused overwhelmingly on improving topics, such as reports of new inventions and accounts of extraordinary natural phenomena, like the Lisbon earthquake.<sup>70</sup> However, the society did have access to medical and scientific journals and the list of publications mentioned in the minutes is extensive. Perhaps the best well know titles are the *Philosophical Transactions*, *Memoirs of the Royal Academy of Surgery at Paris*, *Medical Observations and Inquiries*, *Medical Essays and Observations*, *Biblioth*èque *des Sciences* and *Memoirs of the Royal Academy of Sciences at Paris*.<sup>71</sup>

Like the Dublin Society, the Medico-Philosophical Society utilized

<sup>67</sup> Robert Munter, *The History of the Irish Newspaper* 1685-1760, (Cambridge: Cambridge University Press, 1967); Robert McDowell, 'Irish Newspapers in the Eighteenth-Century', in *The Crane Bag*, viii, no.2, (1984), 40-43.

<sup>68</sup> RCPI, MPS, 13 May 1756.

<sup>69</sup> RIA, MS, 24.K.31, 5 April 1756, 22 July 1756, 7 April 1760.

<sup>70</sup> Graham Gargett and Geraldine Sheridan, Ireland and the French Enlightenment, 1700-1800, (Basingstoke: Macmillan, 1999), 33.

<sup>71</sup> RIA, MS, 24.K.31, 17 June 1766; Royal Irish Academy, Repository of the Dublin Medico-Philosophical Society, MS, 24.E.5, no.93; RCPI, MPS, 15 November 1759, 3 June 1762.

newspapers papers and journals to actively promote the work of its members. For example, Rutty wrote an article for the *Annual Register* in 1764 recommending that MacBride's discovery of the effectiveness of wort in the treatment of sea scurvy be trialled. Rutty stated that 'the humanity, the importance, and usefulness' of the treatment merited its communication to the public.<sup>72</sup> Smith's *Ancient and Present State of the County of Kerry*, published in 1756 was also publicized by the society. The article, which appeared in Dublin's *Universal Advertiser*, applauded Smith's book for its valuable contribution towards the improvement of Ireland.<sup>73</sup>

Rutty, MacBride, Cleghorn, Croker-King, and Purcell all made valuable contributions to the famous London *Medical Observations and Inquiries* and the *Philosophical Transactions*, which, with its international readership, remained for men of science in the eighteenth-century *the* place to publish their research. <sup>74</sup> Cases by Purcell, Cleghorn, MacBride and Croker-King are also discussed in the Edinburgh *Medical and Philosophical Commentaries*. <sup>75</sup> Furthermore, the society proposed to publish the fruits of their work in a literary journal. The journal, unlike the medical journal proposed in 1761, was to contain essays not only on medical topics, but also essays discussing new and useful discoveries in natural history and natural philosophy. In 1781 a committee was organized to review the society's papers and 'report such as they judge(d) fit for publication'. <sup>76</sup> In 1783 the committee determined that a large number of the papers 'would be very proper to

76 RCPI, MPS, 4 October 1781.

<sup>72</sup> Robert Dodsley, The Annual Register, or a View of the History, Politics, and Literature, for the Year 1764, (London: 1764), 128-130.

<sup>73</sup> RIA, MS, 24.K.31, 22 July 1756.

<sup>74</sup> See for example: John Rutty, 'An Account of the Copper-Springs Lately Discovered in Pennsylvania. By John Rutty M.D. of Dublin. Communicated by Mr. Collinson, F.R.S', in Philosophical Transactions, il, (1755-1756), 648-651; David MacBride, 'An Improved Method of Tanning Leather. By David MacBride, M.D. Communicated by Sir John Pringle, Bart, P.R.S', in Philosophical Transactions, lxviii, (1778), 111-130; John Purcell, 'Description of a Double Uterus and Vagina. By John Purcell, M.D, Professor of Anatomy in the College of Dublin. Communicated by Dr. Morton, in *Philosophical Transactions*, liv, (1774), 478-480; David MacBride, 'History of an Angina Pectoris, Successfully Treated by Dr. David MacBride. Communicated by Dr. John Fothergill', in Medical Observations and Inquiries, vi, (1784), 9-18; George Cleghorn, 'The Case of an Aneurysm Varix, Related and Described in Two Letters From George Cleghorn, M.D Lecturer of Anatomy, in Dublin, to Dr. William Hunter', in Medical Observations and Inquiries, iii, (1764), 110-117; John Rutty, 'Some Observations Concerning the Various Success of the Circuta in Ireland', in Medical Observations and Inquiries, iii, (1764), 229-240; Samuel Crocker-King, 'Case of a Feather or Pen, Twelve Inches Long, Which was Fortunately Extracted from the Oesophagus of a Man who had put it Into his Throat to Excite Vomiting, and had let it Slip Down', in Medical Observations and Inquiries, vi, (1784), 231-235. 75 Medical and Philosophical Commentaries, (Edinburgh: J. Murray, 1774), 171, (1775), 444, (1777), 114, (1779), 350.

communicate to the public'.77 In May of that year the society ruled that the selected papers were to 'be given to be transcribed for printing' and Purcell was appointed to write a preface for the journal.<sup>78</sup> Hence, we see that the society's ambitious project was not merely to produce an Irish version of the London Medical Observations and Inquiries or the Edinburgh Medical and Philosophical Commentaries but to produce an Irish version of the *Philosophical Transactions*. This was a truly historic undertaking which, if successful, would have realized Smith's dream stated in the Discourse of 1757, namely to create an Irish learned society with its own Transactions and place Ireland on an equal footing with the rest of the learned world.<sup>79</sup>

Unfortunately, Smith's dream was never realized and shortly after Purcell had written the preface the society came to an abrupt and unexplained end on October 7, 1784. The reason for the society's demise has never been adequately accounted for and the minutes leave no record of why the society disbanded. However, it has been suggested that Robert Perceval, who became a member in October 1783, joined the society with the specific intention of bringing its business to an end. 80 Perceval, who was Lecturer in Chemistry at Trinity College Dublin, established his own society, the Neosophers, just a few weeks after joining the Medico-Philosophical Society.81 The Neosophers were concerned with the study of science and literature and had suspiciously similar interests to those of the Medico-Philosophical Society.82 Perceval's Neosophers subsequently united with another society at Trinity College, the Paleosophers, in 1785 to form the Irish Academy, which would receive its Royal Charter just a few months later.

This may seem far too conspiratorial and cunning but from the little we know about Perceval the man, such a hypothesis is not entirely improbable. Perceval was not only a brilliant academic but was also ambitious and calculating.83 Perhaps Perceval saw how close the Medico-Philosophical

<sup>77</sup> RCPI, MPS, 6 February 1783.

<sup>78</sup> RCPI, MPS, 1 May 1783.

<sup>79</sup> RCPI, MPS, 16 June 1757.

<sup>80</sup> Darcy Power, British Medical Societies, (London: Medical Press and Circular, 1939), 199.

<sup>81</sup> RCPI, MPS, 2 October 1783.

<sup>82</sup> Widdess, College of Physicians, 87; Thomas Kirkpatrick, 'The Periodical Publications of Science in Ireland', in The Bibliographical Society of Ireland, ii, no.4, (1922), 40.

<sup>83</sup> See Widdess, College of Physicians, 91. However, an alternative explanation for the society's abrupt end is that 1784 was a period of great change for Irish medicine. At this time surgery was striving to establish itself as a respectable branch of medicine and in 1784 the surgeons of Dublin were incorporated and formed into a College by the Kings Charter, of which Croker-

was to becoming the first scientific society in Ireland to publish its own transactions and wanted to claim this honour for himself. If this was his plan he was indeed successful as the Royal Irish Academy, with Perceval as secretary, published its own *Transactions* in 1786.84 These *Transactions* became Ireland's first ever scientific periodical publication. Yet, if this version of events is correct, it would appear that Perceval was soon forgiven for his actions, as when the Royal Irish Academy was established in 1785, just under a sixth of the original members were former members of the Medico-Philosophical Society: Cleghorn, Deane, Hamilton, Perceval, Purcell and Young.85

The society was also exposed to enlightenment ideas through books. The review of new books on medical and natural philosophical topics was a large part of the society's work. Every month the society drew up a list of lately published titles, many of which were reviewed and critiqued by the members.<sup>86</sup> They also occasionally issued a 'most wanted' list, ordering 'that as many of the said books as may fall into the hands of any of the members, some account may be delivered in of them'. 87 The minute book itself served as a useful source of knowledge for the members. Many papers were supplemented by further papers and previous articles were frequently cited in newly delivered ones.88 It was not until the 1780s that specialist medical bookshops began to appear in Ireland and medical publications by medical experts were not easily accessible in the mideighteenth century.89 Therefore, being part of a society was an excellent way to either acquire books or to acquire knowledge of new books and their ideas. By availing of their numerous contacts and pooling their knowledge, the society was able to keep its members up to date with all

King was named the first President. This could have led to an internal dispute between the surgeons and physicians of the society, some of whom may not have welcomed the surgeons rise in status.

<sup>84</sup> Kirkpatrick, 'Science in Ireland', 40.

<sup>85</sup> The Royal Irish Academy, The Transactions of the Royal Irish Academy: Index, (London: W. Bulmer, 1813), 96-97.

<sup>86</sup> See for example, RCPI, MPS, 6 October 1757, which contains Cleghorn's account of a treatise published by Alexander Monroe on the lymphatic veins.

<sup>87</sup> RCPI, MPS, 5 May 1757.

<sup>88</sup> RCPI, MPS, 2 November 1758.

<sup>89</sup> Tony Farmar, Patients, Potions and Physicians: A Social History of Medicine in Ireland, (Dublin: A. & A. Farmar, 2004), 53; James Kelly, 'Print and the Provision of Medical Knowledge in Eighteenth-Century Ireland', in Irish Provincial Cultures in the Long Eighteenth-Century: Making the Middle Sort: Essays for Toby Barnard, R. Gillespie and R. Foster (eds.), (Dublin: Four Courts Press, 2012), 34.

new developments in medicine, natural philosophy and natural history.

Many of the members were authors of significant literary publications. Rutty was by far the most productive writer, penning over twenty books and pamphlets on a wide variety of subjects, ranging from mineral waters, to the history of weather and diseases, to the natural history of Dublin and the history of Quakerism. 90 By contrast Cleghorn only wrote one book, Observations on the Epidemical Diseases in Minorca, which, however, was widely acclaimed.<sup>91</sup> MacBride wrote a number of books and pamphlets on different subjects. Yet, the work that brought MacBride and his ideas to the attention of the world was his celebrated Experimental Essays on Medical and Philosophical Subjects.92 This work was first published in London in 1764, with a second edition following in 1767. It contained his chemical research into fixed air, which extended the work of Joseph Black and made him the most famous Irish scientist since Robert Boyle. 93 In 1772 MacBride published A Methodological Introduction to the Theory and Practice of Physics in London, with a second edition following in 1777. In 1774 this work was published in Utrecht in Latin translation. 94 Smith also produced four pioneering books on the county histories of Cork, Waterford, Kerry and Down. 95 Furthermore, Clossy's Observations on Some Diseases of the Parts of the Human Body, which was published in London in 1763, was one of the first attempts to systematically review pathology in the English language.<sup>96</sup>

<sup>90</sup> See for example, John Rutty, A Methodological Synopsis of Mineral Waters Comprehending the Most Celebrated Medicinal Waters, Both Hot and Cold, (London: William Johnson, 1757); John Rutty, An Essay Towards a Natural History of the County of Dublin, Accommodated to the Noble Designs of the Dublin Society, (Dublin: W. Sleater, 1772); John Rutty, A Chronological History of the Weather and Seasons, and of the Prevailing Diseases in Dublin, (London: Robinson and Roberts, 1770).

<sup>91</sup> George Cleghorn, Observations on the Epidemical Diseases in Minorca From the Year 1744 to 1749, (London: D. Wilson, 1751).

<sup>92</sup> David MacBride, Experimental Essays on Medical and Philosophical Subjects, (London: A. Millar and T. Cadell, 1767); David MacBride, A Methodological Introduction to the Theory and Practice of Physic, (London: W. Strahan, 1772).

<sup>93</sup> Jan Golinski, Science as Public Culture: Chemistry and Enlightenment in Britain, 1760-1820, (Cambridge: Cambridge University Press, 1999), 107; Farmar, Patients and Physicians, 53.

<sup>94</sup> Smith, 'David MacBride', 287.

<sup>95</sup> Charles Smith, The Ancient and Present State of the County and City of Cork, in Four Books, (Dublin: A. Reilly, 1750); Charles Smith, The Ancient and Present State of the County and City of Waterford: Being a Natural, Civil, Ecclesiastical, Historical and Topographical Description Thereof, (Dublin: A. Reilly, 1746); Charles Smith, The Ancient and Present State of the County of Kerry: Being a Natural, Civil, Ecclesiastical, Historical and Topographical Description Thereof, (Dublin: C. Smith, 1756); Charles Smith, The Ancient and Present State of the County Down. Containing a Chorographical Description, With the Natural and Civil History of the Same, (Dublin: A. Reilly, 1744).

<sup>96</sup> Samuel Clossy, Observations on Some of the Diseases of the Parts of the Human Body. Chiefly Taken from the Dissections of Morbid Bodies, (London: G. Kearsly, 1763); Coakley, Irish Masters, 41.

The society was a valuable space for potential authors as it allowed them to present their research to and receive criticism from their likeminded peers prior to publication. Rutty, for example, presented the prologue to his work on materia medica to the society before publication and also presented monthly accounts of the weather and diseases in Dublin, which would later be incorporated into his Chronological History. 97 Moreover, it was to the members of the Medico-Philosophical Society that MacBride first communicated his ideas on the likes of fermentation, scurvy, quick lime, putrefaction and fixed air, which would later be published in his Experimental Essays. 98 Hence, the society was a vehicle by which members could establish themselves as the authors of new and practical knowledge.

However, it was not merely Enlightenment ideas and texts that travelled across national borders - it was Enlightenment artefacts and objects as well. The display of curiosities from around the globe was a significant part of the society's work and the list of exotic natural curiosities exhibited at the society is long. For example, the Rev. Jones exhibited a dried hummingbird and scorpion from North America, a selection of Indian scalps from Quebec and a sea-horse from the West Indies and Dr. Span exhibited a large dried bat from the East Indies and a specimen of gorgonian from the Mediterranean. 99 Hence, the specimens displayed at the society shared the rare and exotic qualities of the objects typically found in a cabinet of curiosities and revealed the world in miniature. 100 On occasion, man-made artefacts were also displayed, such as Jones's Indian instruments of war and tribal clothing sent from Quebec. 101

In addition to being educational, natural curiosities could also be potentially useful. MacBride, for example, exhibited a specimen of gum resin from Cuba, which 'was different from any known in the shops', specimens of aloes from the Cape of Good Hope, and cinnamon from the

<sup>97</sup> RIA, MS, 24.K.31, 6 January 1757; John Rutty, Materia Medica, Antique & Nova, Repurgata & Ilustrate; Sive de Medicamentorum Simplicium Officinalim Facultatibus Tractus (Londini: Rotterdami, 1772); Rutty, Chronological.

<sup>98</sup> MacBride, Experimental Essays.

<sup>99</sup> RCPI, MPS, 2 February 1764, 7 February 1765, 7 November 1765, 24 April 1763, 8 November 1759, 5 December 1768, 6 November 1766, 6 April 1767.

<sup>100</sup> Da Costa, The Singular, 48; Lorraine Daston and Katherine Park, Wonders and the Order of Nature, 1150-1750, (New York: Zone Books, 1998), 255-290; Paula Findlen, Possessing Nature: Museums, Collections and Scientific Culture in Early Modern Italy, (Berkeley: University of California Press, 1996); Krzysztof Pomian, Collectors and Curiosities: Paris and Venice, 1500-1800, E. Wiles-Portier (trans.), (Cambridge: Polity Press, 2005), 45-64. 101 RCPI, MPS, 7 February 1765.

Island of Guadalupe. 102 Other practical, as well as curious, items displayed before the society included rare nuts from America and a coca or chocolate pod from South America. 103 Furthermore, some exotic rarities could also be medicinally valuable. For example, MacBride presented a specimen of oil, known natively as bombalolu from the Coast of Guinea, which was believed to be internally and externally useful 'in almost any disease' and Nathaniel Barry displayed a specimen of the leaves of a plant known as solanum americanum, which was native to America and had been 'used in New York with success for the cure of cancers'. 104 Some specimens exhibited by the society were propagated in Ireland, such as the American yam, Indian Pink and the tobacco plant. However, it is unclear if these samples were in fact grown by the members themselves. 105

The specimens were often described in detail, mentioning specifics such as the samples size, height, weight and genus. In an attempt to naturalize these rare and unusual specimens, curiosities were often compared to familiar ones. For example, the cocoa nut tree is described as being like the 'European Walnut Tree' and its smallest size pods as being of a similar size and weight 'to our largest melons'. 106 Furthermore, in keeping with the society's Baconianism, specimens were also sometimes smelled and tasted. <sup>107</sup> Scholars such as Barnard, Hoppen and Magennis have been typically scathing about the display of curiosities within Irish learned societies. 108 Yet, as we have seen, these curiosities were a significant part of the society's work and far more than mere items of wonder and distraction. It was through the report and display of these curiosities that its members gained new knowledge of the world's diversity and otherness. This new knowledge, which was brought back to Europe from far away countries and disseminated by societies such as the Medico-Philosophical Society, also encouraged new ways of thinking about god, nature and the development

<sup>102</sup> RCPI, MPS, 24 April 1763, 15 July 1765, 4 September 1760.

<sup>103</sup> RIA, MS, 24.E.6, no.223; RCPI, MPS, 15 May 1766

<sup>104</sup> RCPI, MPS, 1 December 1757, 5 June 1769.

<sup>105</sup> RCPI, MPS, 20 October, 6 September 1781.

<sup>106</sup> RIA, MS, 24.E.6, no.223.

<sup>107</sup> RCPI, MPS, 24 April 1763, 5 January 1769.

<sup>108</sup> Theodore Hoppen, The Common Scientist in the Seventeenth-Century: A Study of the Dublin Philosophical Society, 1683-1709, (London: Routledge & K. Paul, 1970), 31; Eoin Magennis, 'A Land of Milk and Honey: The Physico-Historical Society, Improvement and the Surveys of Mid-Eighteenth-Century Ireland, in Proceedings of the Royal Irish Academy, vol.ciic, (2002), 211; Toby Barnard, 'The Dublin Society and Other Improving Societies, 1731-1785', in Clubs and Societies in Eighteenth-Century Ireland, J. Kelly and M. Powell (eds.), (Dublin: Four Courts Press, 2010), 74.

of human civilization. 109

#### **Conclusions**

The Dublin Medico-Philosophical Society was an improvement society, which emulated the Royal Society of London and wanted to improve Ireland by advancing organized learning and harnessing practical knowledge for the betterment of the nation. The society was a band of *virtuosi*, a talented and influential group of surgeons, physicians, apothecaries, professors and clerics, who had encountered the ideals and practices of the Enlightenment during their education in enlightened capitals such as Leiden, Paris, and Edinburgh. Its members were privileged as many held hospital posts which provided them with valuable opportunities for the mass observation and treatment of sickness and disease, as well as the rare chance to perform dissections.

The society utilized the methodological and empirical approaches of the Enlightenment and adhered to both vitalism and Baconianism. It was concerned with fact gathering, observation and experiment. The members rejected the speculative approach advocated by the scholastics and instead emphasised the importance of the physical, visual and practical. The Medico-Philosophical Society was in no way parochial. Not only did it gather knowledge, it also disseminated it via correspondence, newspapers, journal articles and books. The society was connected to a cosmopolitan scientific and medical community and was home to an Irish Republic of Letters. Hence, it acted as a filter through which new discoveries and improvements in medicine, science and natural history were diffused to a wider intellectual community. It was precisely this need for the dissemination of knowledge from Ireland to the wider world that the society, and Cleghorn in particular, stressed.

This flow of information included not only letters, articles and books but also exotic curiosities from around the globe. These curiosities were not mere novelties or items of wonder, which distracted the members from the more serious business of academic inquiry. The exotic curiosities exhibited at the society could be medicinally and economically valuable. Furthermore, they contributed to the dissemination of knowledge about other cultures and helped to promote new ways of thinking about the

<sup>109</sup> Withers, Enlightenment, 8, 57.

world.

The Dublin Medico-Philosophical Society was an institutional manifestation of Enlightenment ideals and practices and was a site of Enlightenment in Ireland. However, the society was not only proof that the ideas and ideals of the Enlightenment had reached Ireland, but that Ireland, or more correctly Dublin, in the form of the Dublin Medico-Philosophical Society and its Irish scientific Republic of Letters, was also participating in the Enlightenment.

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# "It's Always the Same, and It's Always Different" Mythologisation and the Serial Killer in Henry: Portrait of a Serial Killer.

by David A. Smyth

#### **Abstract**

Serial killers are important in American horror because of their ability to exist between 'myth' and 'reality'. The serial killer is one of the most important American myths, but it is one firmly rooted in real life: unlike Paul Bunyan or Superman, serial killers do exist. This essay examines the relationship between the 'myth' and the 'reality' of serial killers, and the complex relationship between the American public and the serial killer, using *Henry: Portrait of a Serial Killer* as a guide.

Firstly, the essay will discuss the creation and importance of American myths, before moving on to examine how the serial killer fits into the American myth mould. It will demonstrate that the serial killer is a mythologised figure in American culture, and that, as a result of this mythologisation, the serial killer as a figure in 'reality' is destabilised and made 'safe'.

Following this, the essay assesses John McNaughton's *Henry: Portrait of a Serial Killer* as a reaction against the mythologisation of the serial killer in popular culture. By utilising McNaughton's film, the essay will deconstruct the 'myth' of the serial killer as presented in American popular culture. The essay also focuses on how McNaughton's film reiterates the myth of the serial killer in its final moments, and how this reflects on the place of the serial killer in American myth.

## Keywords

serial killers, myth, reality, America, popular culture

The story of the hook-handed man (an escaped killer, with a hook for a hand, attacks a teenaged couple in their car one night as they listen to the news of his escape on their radio) is "the most basic horror story I know [...] it offers no characterisation, no theme, no particular artifice; it does not aspire to symbolic beauty or try to summarise the times, the mind, or the human spirit [...] the story of The Hook exists for one reason and one

reason alone: to scare the shit out of little kids after the sun goes down".1 The hook-handed man story is serial killer as classic myth: it is basic, formative, and primal. "Myth [...] formulates answers to fundamental human hopes and fears".2 American myth, because of its constructed nature, always has a footing in 'reality'. Created by lumberjacks in the late nineteenth century, Paul Bunyan is one of America's defining myths. "The original Paul Bunyan could only have been satirical"3 before transforming into a myth that resonates into the present day. Bunyan is just one example of the constructed, performative nature of American myth. America defines itself as the 'land of opportunity' built around the ideals of the 'American way', a construct that promotes the idea that dreams can become reality: "America is neither dream nor reality",4 it is a combination of both. The serial killer myth flourishes in America because it highlights and exploits the blurred line between 'myth' and 'reality'. The serial killer is one of the most important modern American myths, but it is one firmly rooted in 'real' life: unlike Paul Bunyan or Pecos Bill, serial killers do exist. The serial killer is popular in American horror because, despite its frightening realism and the fact that it is not a monster exclusive to the movies or myth, it is still a figure largely defined in the public consciousness by those same movies and myths. The serial killer exists between myth and reality, and it is this tension that the present essay will address, using John McNaughton's Henry: Portrait of a Serial Killer as a guide.

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Firstly, the serial killer must be understood as a mythical figure. Jack the Ripper is perhaps the world's most mythologised serial killer, appearing in dozens of films, television programmes, and novels since he first came to prominence in 1888: "most of us have grown up in the shadow of Jack the Ripper [...] Over the past hundred years, the Ripper murders have achieved the status of a modern myth." Jack the Ripper is a figure that has become so mythologised as to appear 'unreal'. In fact, the Ripper murders were almost immediately reappropriated from 'reality' into 'myth', as the

<sup>1</sup> Stephen King, Danse Macabre (London: Warner Books, 1991), 33-5.

<sup>2</sup> Deborah Madsen, Allegory in American: From Puritanism to Postmodernism (London: Macmillan, 1996), 128.

<sup>3</sup> Max Gartenberg, "Paul Bunyan and Little John," *The Journal of American Folklore* 62.426 (1949), 418.

<sup>4</sup> Jean Baudrillard, America (London: Verso, 1989), 28.

<sup>5</sup> Judith R. Walkowitz, "Jack the Ripper and the Myth of Male Violence," Feminist Studies 8.3 (1982), 541-4.

public turned to popular culture in an effort to understand the seemingly unsolvable case. David Schmid's study of the period outlines that "[i]n the Ripper case, the public was denied the catharsis represented by the trial and sentence, and so they had all the more reason to seek that catharsis by turning to popular culture."6 From the beginning of the modern era the public has constantly attempted to familiarise and deconstruct the actions of the serial killer by turning to popular culture in an effort to mythologise their gruesome reality. As the Ripper case grew in popularity and notoriety, entrepreneurial types took to "[c]harging people to view murder scenes."<sup>7</sup> Popular culture becomes a lens through which the horrors of the serial killer are made 'safe': "The presence of women at these [Jack the Ripper] shows suggest they may have used these exhibits to distance themselves from the Ripper's victims".8 By embracing the Ripper murders as myth, they become less dangerous, and take on the moralistic message that the city is unsafe for women alone at night. The actual fact of serial murder is blurred, and familiarised, as the Ripper murders are turned into a myth. Alan Moore and Eddie Campbell deal with the phenomenon in From Hell, their graphic novel about the mythical nature of the Ripper murders, highlighting the power of myth in the shaping of the Ripper 'story': "Our story's written [...] inked in blood long dry [...] engraved in stone."9 These words, spoken by William Gull (Moore and Campbell's Ripper), directly reference the legacy of the Ripper murders, as the violent acts perpetrated by the killer ensure his survival in popular culture. As the graphic novel continues, Gull finds himself floating through history, encountering various serial killers and events that reiterate the Ripper's ever-lasting 'popularity'.

With the Ripper case, the serial killer is reduced to a piece of popular culture that can be readily deconstructed and understood. In attempts to 'understand' the serial killer, the killer usually becomes further mythologised. In 1988 (the centenary of the Ripper murders) the FBI released a profile of the killer, revealing him to be "an asocial white male [...] a quiet, shy loner [...] probably with a heavy-drinking promiscuous mother."10 This information is irrelevant: the crimes happened a century

<sup>6</sup> David Schmid, Natural Born Celebrities (Chicago: University of Chicago Press, 2006), 34.

<sup>7</sup> Ibid., 34.

<sup>8</sup> Schmid, Celebrities, 35.

<sup>9</sup> Alan Moore and Eddie Campbell, From Hell (London: Knockabout Comics, 1989), 4.37-8. 10 Schmid, Celebrities, 66.

ago, and the psychological profile (compiled by John Douglas, head of the FBI Investigative Support unit) is merely another 'twist in the tale' being sold to the general public. "The 'profile' is meant to underscore the radical otherness of the killer"11: the actions of the serial killer are only further mythologised by attempting to place an 'understanding' on them. The accuracy of Douglas's findings do not matter. What matters is entertainment, and a furthering of the Jack the Ripper mythology.

The longevity of the Ripper mythology and the instantly mythological nature of the entire case both lead to a mythologisation of the serial killer in popular culture. Popular culture "makes, or attempts to make, meanings that serve the dominant interest in society,"12 acting, like myth, to reinforce societal ideals. For example, in "'Material Girl': The Effacements of Postmodern Culture", Susan Bordo writes on the idea of a 'cultural plastic' that society controls, and can mould to whatever means necessary: "In place of God the watchmaker, we now have ourselves, the master sculptors of the plastic."13 Society uses popular culture to reflect and distort reality. Despite the Ripper's British origins, he is instantly reestablished as having connections to America: "there is a long tradition, beginning during the murders themselves, of associating Americans with Jack the Ripper [...] few commentators in the United States rejected such theories."14 There is an immediate understanding that the serial killer is a decidedly American figure, as evidenced in Linnie Blake's work on 'wound culture': "[T]he violent murderer has been a recurrent figure in the mass cultural imagination of the United States since the earliest days of the republic."15 The serial killer represents "the enemy of social cohesiveness,"16 a figure who questions the ideals of America. They operate outside the law and do not appear to value the lives or liberties of other citizens. As a result, they effectively subvert the promise of the American constitution, which offers the 'unalienable rights' of 'life, liberty, and the pursuit of happiness.' Alongside the broader ideological disruptions, the serial killer would become associated with violent crime in the imagination of the

<sup>11</sup> Deborah Cameron, "St-i-i-i-il Going... The Quest for Jack the Ripper", Social Text 40 (1994), 152. 12 John Fiske, "Television Culture" in Literary Theory: An Anthology, ed. Julie Rivkin and Michael Ryan (Oxford: Blackwell Publishing, 2004), 1087.

<sup>13</sup> Susan Bordo, "'Material Girl': The Effacements of Postmodern Culture" in Literary Theory: An Anthology, ed. Julie Rivkin and Michael Ryan (Oxford: Blackwell Publishing, 2004), 1099. 14 Schmid, Celebrities, 32.

<sup>15</sup> Linnie Blake, The Wounds of Nations (Manchester: Manchester University Press, 2008), 102. 16 Ibid., 108.

public due to the fact that it "dovetailed neatly with broader patterns of thinking about crime and violence"17 in the United States. As the serial killer becomes utilised as a representative system, "we can speak of serial murder as a whole mythological system."18

Despite the position of the serial killer as a destabilising figure in American society, the myth surrounding the figure gradually overtakes 'reality'. John Wayne Gacy and Ted Bundy are two serial killers who contribute to the mythical nature of the 'real' killer: "The lethal clown face came to symbolise the multiple murder threat just as effectively as the handsome talking head of Ted Bundy."19 Gacy and Bundy become mythical figures, because of their recognisable traits: Gacy's charitable activities as Pogo the Clown formed his persona as the 'killer clown', while Bundy's good looks create the handsome and charismatic killer ("Nobody would have known that the handsome young man behind the wheel was actually transporting a helpless victim who would soon die"20). Serial killers begin to exist outside 'reality', as they become celebrity figures:

> the serial killer makes a particularly appropriate (even emblematic) celebrity because both figures inspire feelings of attraction and repulsion, admiration and condemnation. Even though the 'normal' celebrity (for example, the film star) seems to be a wholly loved and admired figure, in fact the public's relation to the celebrity is also characterised by resentment, even violent hatred.21

Schmid's casting of the serial killer as celebrity furthers the idea that the serial killer operates outside 'reality'.

In *The Wounds of Nations*, Blake states that "the figure of the serial killer has come to occupy an increasingly prominent and problematic position at the heart of popular culture". 22 Films like Halloween, A Nightmare on Elm Street, and *Friday the 13th* all feature serial killer figures that exist outside 'reality'. They are the monstrous Other, sharing traits with the figure of the hookhanded man. While these films are often referred to as slasher/spree killer films, Michael, Freddy, and Jason all fit the template of a serial killer: the

<sup>17</sup> Schmid, Celebrities, 83.

<sup>18</sup> Jenkins, Nightmares, 143.

<sup>19</sup> Ibid., 146.

<sup>20</sup> Robert Keppel, The Riverman: Ted Bundy and I Hunt for the Green River Killer (New York: Pocket Books, 1995), 20.

<sup>21</sup> Schmid, Celebrities, 6.

<sup>22</sup> Blake, Wounds, 105.

sequels that follow the initial films make this clear, as the murderers return after a period of time to kill a new set of victims. In this way, the killers in these films become serial mass murderers. Sequels are relevant to the desensitisation of the serial killer figure. The more times a figure appears on screen, the less impactful it becomes, the easier to accept as 'unreal'. While Michael and Freddy (not so much Jason, who began his career as a jump-scare, and seems to only ever have existed in that realm) begin their filmic lives as characters imbued with meaning (Michael as 'pure evil', Freddy as fears surrounding child murder), they quickly become the stars of their own franchises: serial killers as protagonists. As their "quasi-comic crimes dominated multiplexes across the 1980s,"23 they become bloated parodies of themselves — Michael is revealed to be controlled by druids in Halloween: The Curse of Michael Meyers, Freddy collaborated with The Fat Boys on a rap song for the fourth instalment of his franchise, Jason *X* is set in space — reflecting the over-simplification of the serial killer they promote. The serial killer is a victim of sequelisation: the more the character is exposed and explained, the less 'real' it becomes. "The almost inescapable failure of sequels results from the fact that, at the same time a sequel calls to mind the charismatic original, it also recalls its absence". 24 The sequelisation of the serial killer results in a hollowing out of the figure, as it becomes an empty referent of its past self, "a lavish display of the mere surface of the prior work". 25 In this way, the sequelisation of the horror movie serial killer reflects and enhances the initial simplification of the figure as 'myth', as it strengthens the audience's perception that the serial killer adheres to consistent tropes and regular patterns.

The serial killer is "validated by the American culture industry" 26 as a mythical figure that can be appropriated for entertainment purposes: the audience can "derive a certain scopophiliac delight" from watching these figures. Each character is attributed a simple explanation for their murders: "They are studies of pure evil, not psychiatric disorder". 28 This soft focus on the motives of the killer, the 'easy' explanation, is just one example of the transformation of the serial killer myth into an easily exploited trope,

<sup>23</sup> Blake, Wounds, 102.

<sup>24</sup> Todd Berliner, "The Pleasures of Disappointment: Sequels and The Godfather, Part II," Journal of Film and Video 53.2/3 (2001), 109.

<sup>25</sup> Ibid., 110.

<sup>26</sup> Blake, Wounds, 112.

<sup>27</sup> Ibid., 112.

<sup>28</sup> Jenkins, Nightmares, 147.

an entity that the audience expects, accepts and understands as part of the horror movie landscape. The slasher set-up is easily recognisable and rarely diverted from: a deranged killer murders a multitude of teens over a brief period of time. As a result, it breeds familiarity. John Fiske states that "[a] code is a rule-governed system of signs, whose rules and conventions are shared amongst members of a culture, and which is used to generate and circulate meanings in and for that culture."29 If a narrative adheres to previously established 'rules and conventions' then the audience accepts that narrative. As a result of this acceptance of tropes, the tropes become ways by which the culture is defined, and a 'cultural shorthand' is agreed upon. The serial killer of 'reality' becomes encoded with the same tropes as the serial killer of 'myth', until there is very little distinction left between the two. The serial killer as presented in myth and film becomes the "dominant ideology", 30 one in which the audience willingly partakes. "In the serial killer ... action and identity are fused"31: this connection between the actions of the serial killer and their self is furthered by the depictions of the figure in popular culture, as the figure becomes defined by the myth performed by the movies. The existence of the serial killer as a trope and a myth abstracts the serial killer as a figure in reality, as the audience begins to exclusively perceive the serial killer of 'reality' as the serial killer of 'myth'.

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The mythologisation of the serial killer is what director John McNaughton attempts to tackle in Henry: Portrait of a Serial Killer. McNaughton redirects the serial killer narrative away from myth and into reality. McNaughton's film is a reaction to the filmic mythologisation of and desensitisation to the serial killer that occurred as a result of the popularity of the figure.

The true myth of the serial killer is that there is an easily identified reason behind what they do: myths are designed to offer fundamental answers to unquantifiable ideas. The public wishes to understand who Jack the Ripper was because that will offer closure, and supposedly give reason to his actions:

Perhaps there is a reason here for the endless quest of the Ripperologists

<sup>29</sup> Fiske, "Television Culture," 1088.

<sup>30</sup> Ibid., 1094.

<sup>31</sup> Schmid, Celebrities, 15.

to give Jack an identity, a history, and a name. Individualised, he can be sorted into the usual boxes: the 'abused child' box, the 'weak mother' box, the 'cheating wife' box, the 'too much testosterone' box, the 'congenital psychopath' box, the 'addiction' box. Lacking individuality, Jack has been able to speak to us *only* about his culture, and about ours.<sup>32</sup>

By 'understanding' Jack the Ripper, or any serial killer, the criminal can be bested: "Once a monster has been identified, he can be defeated and captured." In response to this, Henry (Michael Rooker), based on real-life serial killer and compulsive confessor Henry Lee Lucas, is presented to the audience as an uncomfortably real, motiveless character, who understands and plays with the tropes of the serial killer.

The first trope is the trope of the motive. Becky (Tracy Arnold) attempts to furnish Henry with a reason for his mother's murder: "She must have treated you real bad." As a result of this, she highlights the complex relationship between the serial killer and his 'audience'; she points out the need for the audience to understand Henry's motives, in an effort to excuse his behaviour on some level. If Henry gives an answer that plays into established serial killer tropes, then the audience will be satisfied, and can continue on. Despite Becky's efforts, Henry's answer feels overly fabricated:

She was a whore. My mama was a whore. But I don't fault her for that. It ain't what she done, but how she done it. Long as I can remember, she'd be bringin' men up to the house ... She'd make me watch ... She'd beat me too. A lot. ... And sometimes she'd beat me, and make me wear a dress, and watch her doin' it. Then they'd laugh at me. <sup>35</sup>

Henry's answer(s) combine to form a jumbled myriad of serial killer tropes (a promiscuous mother, child abuse, cross-dressing, bullying) that create the impression that Henry is lying. The real Henry Lee Lucas is so associated with lies that his "death sentence was commuted to a life sentence due to concerns over the veracity of his confessions." Lucas's 'confessions' lead to an "ambiguous relationship among truth, memory,

<sup>32</sup> Cameron, "St-i-i-i-ll Going", 153.

<sup>33</sup> Jenkins, Nightmares, 148.

<sup>34</sup> Henry: Portrait of a Serial Killer, directed by John McNaughton (1986; Orland Park, IL: Dark Sky Films, 2009), Blu-Ray.

<sup>35</sup> Ibid.

<sup>36</sup> Shaun Kimber, "Merging Fact and Fiction: Cult Celebrity, Film Narrative, and the Henry Lee Lucas Story," in *Real Lives, Celebrity Stories: Narratives of Ordinary and Extraordinary People Across Media*, ed. Bronwen Thomas and Julia Round (New York: Bloomsbury, 2014), 151.

and lies"<sup>37</sup> in his story that is reflected in the fictive Henry's 'confession'. He does not have *any* true motive, and, as a result, is unquantifiable. This scene further highlights Henry's lack of motive by revealing that he cannot remember how he killed his mother:

HENRY: Yeah, I killed my mama. One night ... I shot her. I shot her dead.

BECKY: I thought you said you stabbed her? HENRY: Oh yeah, that's right. I stabbed her.<sup>38</sup>

Henry is unable to correctly recall the details of his mother's murder, as evidenced in Becky's assertion that "Otis said you hit her with a baseball bat." This reiterates the idea that Henry is 'real': none of the murders he commits are pivotal to his nature. He is an unknowable force, not easily explained away by the tropes of standard serial killer narratives.

Henry further demonstrates his awareness of the tropes of the serial killer by offering Otis (Tom Towles) the following advice: "If you shoot someone in the head with a .45 every time you kill somebody, it becomes like your fingerprint, see? But if you strangle one, stab another, and one you cut up, and one you don't, then the police don't know what to do."<sup>40</sup> In a direct reaction to the overly familiar serial killers of the screen and myth, Henry's mode of serial killing is devoid of specific characteristics, allowing McNaughton to deconstruct his second trope. Henry destabilises the idea that serial killers are in any way recognisable, or knowable, by refusing to brandish a signature weapon, or adhere to a previously established template. He defies simple categorization. Henry is completely self-aware, seemingly understanding of the performative nature of serial killing, and how that relates to the level of notoriety a serial killer will acquire.

Henry further debunks the serial killer narrative by ignoring the trope of victim as sympathetic audience surrogate: "[Horror] is notorious for confronting its target audience [...] with cinematic images of themselves in various states of danger." Becky and Otis aside, Henry's victims rarely speak, and get more screen time as corpses. At the beginning of the film,

<sup>37</sup> Ibid., 152.

<sup>38</sup> McNaughton, Henry.

<sup>39</sup> Ibid.

<sup>40</sup> Ibid.

<sup>41</sup> Aviva Briefel, "Monster Pains: Masochism, Menustration, and Identification in the Horror Film," Film Quarterly 58.3 (2005), 19.

McNaughton provides a series of highly stylised establishing shots of victims in tableau, coupled with the sounds of their murder playing over the images. This creates a distancing effect between the audience and the victim. Becky is the closest the film has to a sympathetic, identifiable character, and she essentially co-operates with the one murder she witnesses Henry commit. Henry is the focus of the film, not the victims. This awareness of serial killer tropes — specifically in relation to establishing a clear motive and following a 'personal style' of killing — furthers the idea that this story takes place in 'reality', distanced from movie-style serial killers. Henry demonstrates "the inhabiting of the popular understanding of the serial killer as a self-understanding"42: his knowledge of the serial killer myth propagated by the media and film allows him to remain mysterious to Becky, while encouraging her to believe that she 'understands' him. Henry plays with the tropes of the serial killer, highlighting the constructed, fabricated nature of those tropes.

McNaughton further distances Henry from his mythical counterparts by establishing Henry's world as analogous with the audience's 'reality'. It is a story "told in [...] flat, unforgiving realism [...] a docudrama of chilling horror."43 McNaughton "views all the happenings with a level of clinical detachment"44 that highlights the horrifying acts contained within the film. The realism of McNaughton's film may be seen to continue the reaction against the unrealistic myth of the slasher-film serial killer. *Henry*'s realism is rooted in its depiction of violence. "Strong violence [...] acts on the mind by refusing it glib comfort and immediate resolutions."45 Henry features acts of violence less elaborate than the violence the serial killer myth in popular culture usually promotes. "This does not square with the conventions of movie violence, where the cataclysm of death constitutes no more than a momentary lull ending with a cutaway to the next scene."46 Instead, the violence appears real and Henry's and, more importantly, Otis's desensitisation becomes all the more problematic.

Throughout the film, McNaughton plays with the disassociation between

<sup>42</sup> Mark Seltzer, "The Serial Killer as a Type of Person," in The Horror Reader, ed. Ken Gelder (London: Routledge, 2000), 105.

<sup>43</sup> Roger Ebert, review of Henry: Portrait of a Serial Killer, dir. John McNaughton, Sept. 14 1990, http://www.rogerebert.com/reviews/henry-portrait-of-a-serial-killer-1990

<sup>44</sup> John Kenneth Muir, Horror Films of the 1980s (Jefferson: McFarland Publishing, 2007), 740.

<sup>45</sup> Devin McKinney, "Violence: The Strong and the Weak," Film Quarterly 46.4 (1993), 17. 46 Ibid., 17.

violence and the viewer once it has been filtered through a camera lens, and made 'safe'. Freddy Krueger murders thirty-three people over the course of the original seven films (a total oddly shared by John Wayne Gacy), and each kill becomes less consequential than the last, as the audience expects and accepts Freddy's actions. *Henry* reflects this, as Henry calmly eats a burger while Otis films a fight between two homeless men, and both men happily re-watch the footage of their home invasion back on their television. Television and movies (represented here by Otis and Henry's stolen camera), with their constant true-crime shows and serial killer flicks, reinforce the myth of the serial killer as safe, and of violence as inconsequential and ridiculous. As McNaughton says in an interview with Clark Collis of Empire Magazine:

That's the scene where the whole picture turns inside out. You think you're seeing the murders as they happen. But then the camera pulls back and you realise you're watching it with them on the couch later. If you use your mind at all you're forced to ask: 'What am I doing here?' $^{47}$ 

Henry shows the effect of the watering-down associated with mythologisation, as incredibly realistic violence becomes 'watchable'. Otis is so immediately swayed by Henry's ways that he becomes representative of the power of the myth of the serial killer: he becomes the audience, re-watching his own violent acts to the point of desensitization. The T.V. shop/warehouse scene, in which Otis and Henry murder an unpleasant salesman and steal a camera and television set, is most important in this reading. It reveals McNaughton's feelings on the attitude towards violence that Otis represents. The insistence that "We want colour" 48 reflects the human insistence on 'understanding' the serial killer in its most technicolor format. This is why the only repulsive victim of Henry and Otis is the man selling television sets, because he facilitates Otis's idea of Henry and himself as killers from the screen: "You can make your own movies with that?"49 The character receives the most theatrical death, as Henry and Otis crush his head with one of his own television sets. The murder is coupled with a 'zinger', as Henry says "Otis: plug it in." 50 It is in this moment that

<sup>47</sup> John McNaughton *in* Clark Collis, "Empire Essay: *Henry: Portrait of a Serial Killer,*" review of *Henry: Portrait of a Serial Killer*, dir. John McNaughton, http://www.empireonline.com/reviews/reviewcomplete.asp?FID=132662

<sup>48</sup> McNaughton, Henry.

<sup>49</sup> Ibid.

<sup>50</sup> Ibid.

Henry and Otis come closest to the serial killer as represented in film.

The most horrifying act in the film is shown entirely via the medium of a videotape playing on Otis and Henry's television set. In the scene, Henry and Otis invade the home of a suburban family, murdering them all. McNaughton highlights the desensitising nature of the televisual/filmic lens as Otis re-watches the attack, frame-by-frame: "I wanna see it again." <sup>51</sup> By portraying these acts of violence through a televisual lens, McNaughton is questioning the "coherent, unified sense" <sup>52</sup> of the serial killer as myth figure, pointing out the ideological practice the audience is engaging in, as he attempts to deconstruct the dominant ideology of the slasher film.

However, there is a sense in McNaughton's film that the mythologisation of the serial killer is inescapable, and that the dominant ideology he is attempting to deconstruct is impossible to take down. The serial killer narrative is constantly reaffirmed in *Henry*, something that McNaughton seems to understand and struggle with.

Becky's relationship with Henry reflects the relationship the audience has with serial killers. She strives to understand Henry, and, following a brief conversation, declares that "I feel like I know you. Like I've known you a long time. I feel like I've known you forever and ever."53 This can be viewed as both an indictment of the myth of the serial killer, and as a testament to its power. Becky is a figure that needs myth, in much the same way that society does. Having been abused by her father and husband (and eventually her brother), Becky reaches for a narrative straight from popular culture to reassemble her life, as she travels to the city to "get a job, make some money,"54 reflecting the American Dream of upward mobility. While there, she meets Henry, a thoroughly American figure: he drives an American muscle car, dresses in white t-shirts like Marlon Brando, smokes cigarettes, eats at diners and listens to American pop music on the radio. He even carries a guitar (taken from a victim), evoking Elvis Presley and Johnny Cash, when they first meet. He is polite, offering Becky his room, and then has to "get going. I have some work to do today."55 Henry embodies seemingly positive aspects of the American myth that Becky

<sup>51</sup> Ibid.

<sup>52</sup> Fiske, "Television Culture," 1094.

<sup>53</sup> McNaughton, Henry.

<sup>54</sup> Ibid.

<sup>55</sup> Ibid.

recognises as lacking in her life with Leroy, and in her brother. Ironically, he becomes her saviour figure.

In one of the film's pivotal scenes, Becky and Henry discuss (and bond over) Henry's murder of his mother. Becky instigates the whole conversation by proving incapable of adhering to Otis's request that she not mention Henry's killer tendencies (obviously, Otis is also implicated in this, by telling her in the first place):

BECKY: What was he in for?

OTIS: You don't wanna know.

BECKY: What'd he do, kill his mama?

OTIS: You don't wanna know.56

Becky has a fundamental need to ask Henry, to understand his motives and reasoning. He is her American myth figure, even before she realises he is also a murderer. As soon as this is revealed she attempts to reassess him in the mythic mould, unwilling to let him go. As Henry reveals his varied reasons for murdering his mother, Becky's responses are bland, bordering on inappropriate: upon learning that Henry was forced to watch his mother have sex, she responds by telling him that "That's creepy." 57 She only picks up on the more sensationalist parts of Henry's story: "She made you wear a dress?"58 She is pacified once she 'understands'. The fact that Henry is possibly lying, or manipulating tropes of the serial killer, does not register with Becky: the myth is created the moment she accepts Henry's story. Following the kitchen table conversation about Henry's mother, Otis arrives and asks "Hey. Anything good on T.V?" 59: there is no response, because Becky does not need 'T.V', she has all the entertainment she requires in Henry. With this scene, McNaughton and Becky cede power to the myth of the serial killer, a power that returns in the final moments of the film. As Becky and Henry drive away from the city, having murdered Otis, they have the following exchange:

BECKY: I love you, Henry.

HENRY: I guess I love you too.

<sup>56</sup> Ibid.

<sup>57</sup> Ibid.

<sup>58</sup> Ibid.

<sup>59</sup> Ibid.

BECKY: Where're we gonna go now?

HENRY: We'll find a place. (pause) You wanna listen to the radio?

BECKY: Okay.60

As Henry turns on the radio, a song — attributed to Lynn and the Lizards — containing the lyrics "loving you was my mistake, my mistake was loving you" plays the scene to a close. Thanks to popular culture, the audience understands that Becky is doomed. In the same way that Becky reduced Henry to a non-threat, to a myth, as soon as she 'understood' him, the radio reduces Becky's fate to a lyric in a pop song. She believed in the myth of Henry, as all-American man, and in the myth of the serial killer. Becky's dependency on myth results in her eventual demise.

The film finally dips into true mythologisation in its final moments. Instead of offering some sort of closure to the story, the film instead ends with Henry dumping Becky's body (in a suitcase) and driving away from the crime. While the resistance of closure could be argued as an attempt at furthering the realism of the film, the fact that the film becomes a circular narrative debunks that theory. As Henry pulls off from the side of the road, the scene is directly reminiscent of the opening shots of Henry driving between murders, and most specifically to the very first shot of a female body discarded in what appears to be a grassy lay-by. There is no worldshattering climax, no justice wrought on Henry, as he just moves on to the next town. In the final shots, "reality and fantasy have changed places,"61 as the film concludes with Henry becoming the mythical figure the film is resisting. He becomes eternal, his reign of violence never coming to an end: "It's always the same. And it's always different."62 The fact that the real Henry Lee Lucas was captured and incarcerated, and that this iteration of Henry does not face that same fate, ties directly into the mythologisation of the serial killer. The fictionalised, mythologised version of Henry becomes more powerful than the 'real' killer.

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With these final scenes, McNaughton accepts the inescapable nature of the serial killer myth. He understands that the figure is important because of

<sup>60</sup> Ibid.

<sup>61</sup> Seltzer, "Type of Person," 104.

<sup>62</sup> McNaughton, Henry.

its position as a myth. Presenting the serial killer as 'myth' is a popular idea due to its ability to reduce the serial killer to a figure from the movies. By accepting the serial killer as a mythical figure, the reality of the killer is reduced dramatically. This is most evident in Henry, in the figures of Becky and Otis. As these characters reduce Henry's actions in their minds, they become more relaxed, more willing to accept his murderous traits. As he becomes more mythical, he becomes less frightening. What Henry's 'unflinchingly real' portrayal of the serial killer does is interrogate that mythologisation. The serial killer is important because it reveals American attitudes towards violent crime: it pushes back against accepting the reality of the situation, instead offering up an 'understandable' bogeyman. By destabilising the mythical narrative associated with the serial killer, McNaughton reveals the dangers associated with the American public's ability to desensitise itself to serial violence. In the final scene, as McNaughton allows the 'myth' to emerge victorious, he again reiterates his point: if the myth of violence — particularly serial violence — is continually perpetrated in the media, and in society, then Henry will continue forever. He will remain undefeated and eternal.

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