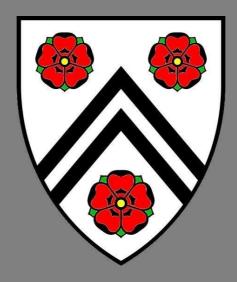
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The New Collection



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The New Collection

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Editorial Welcome

On behalf of the editorial board, welcome to the fifth volume of the New Collection!

The New Collection was founded five years ago in order to showcase the variety of academic interests and talents among members of the New College MCR. Since then, the journal has become an established part of the range of activities and institutions that make our MCR unique.

We have an amazing spread of articles this year and are proud to present them to you in this volume. We accept articles that display high-quality academic rigour in research and writing, aiming for a good balance of subject areas and approaches. Short articles briefly illuminate a topic for a wider audience, while long articles delve into greater detail on a topic of interest, striving all the while for accessibility. All articles have been considered through an extensive review process by SCR members and by fellow postgraduate students. We hope that this edition of the journal highlights the fertile nature of the interdisciplinary environment in the New College MCR.

We would like to thank all of the authors and editors for their hard work, as well as to recognize a wider circle of people who have made this journal possible. The previous committee handed over the journal in an excellent state. We have enjoyed the support of the Tutor for Graduates, William Poole, as well as the New College Development Office. The generous support of the Warden and Fellows provided us with the financial means necessary for production. We are particularly grateful to those SCR members who have reviewed each of our articles. We also make a special note to thank our two scrupulous typesetters and printers, without whom this poignantly physical publication, in the present sea of electronic media, would not have been possible.

We hope that the entire MCR and all other readers are delighted with the journal. Thank you for picking up your copy, and please enjoy!

Sarah H. Miller, Editor-in-chief Rachel Bayefsky, Publisher

MCR President's Foreword

This is the fifth edition of the New Collection to be published, and as always it includes a wide range of subject matter from various members of the New College MCR. The New Collection provides a fantastic opportunity for our members to have their research work reviewed by senior members of college, who are experts in their own field, as well as a chance for members to share their work with each other.

The style of the articles is approachable to all readers, and not limited to specialists within a given field. That the authors have managed this so well demonstrates their ability to present their findings in unique and innovative ways.

The wide range of articles in this edition clearly show the strength and depth of research being carried out by our members. It is vital for the MCR community to provide a platform where this research can be shared. With this in mind, I wish to thank Sarah Miller for all her hard work as editor-in-chief. Sarah has also had the support of an excellent team of editors who have worked very hard during the reviewing and editing process. Their efforts have paid off, and the high overall quality of this publication proves that we have a thriving and engaged graduate community.

Alex Dickens MCR President 2010

The Warden's Foreword



The appearance of the fifth volume of The New Collection is a welcome affirmation of the strength and vision of the New College MCR. Not only does it underscore the importance of research in the College across many disciplines, but it also affords our graduate students an opportunity to publish the results of their research at the beginning of their careers in a journal whose contents are reviewed by leading scholars and scientists, carefully edited and beautifully produced. It's nice to think that not

everything has to be published on-line these days. Somehow, this feels more permanent.

Many of the articles in this issue are their authors' first born and, though in no way compromising the rigor of their various disciplines, are written to be accessible to the wider academic community. The New Collection serves the further purpose of building a young researcher's confidence and will help establish the good habit of publishing one's work when it's ready for the critical world.

This journal is a manifestation in print of the efforts of the Tutor for Graduates, Dr William Poole, to bring together members of the MCR and SCR on High Table for guest nights. The Fellows and I have found it a pleasure and a revelation to dine with an ever-changing rota of graduates, to hear about their work and, on occasion, to be able to offer support and advice from outside the usual discipline channels. Leavened by contributions from our current roster of brilliant Junior Research Fellows, these evenings must be some of the most elevated anywhere in academe.

It would be hard to imagine a journal with more diverse contents. The threads holding it all together are excellence and New College's commitment to graduate study and research. Reading this issue from cover to cover may challenge even a polymath but will nevertheless give one an idea of the breadth and quality of the work of our current graduate students.

Curtis Price Warden For further information on New College's *Vision for Graduate Students*, please contact:

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New Opinions

New Opinions is a selection of short commentaries by members of the New College MCR on current events and topical debates related to their subjects. The views expressed in these articles are those of the authors.

Evolution of university governance and governance types in England & Scotland

Andrew M. Boggs*

Department of Education

Understanding the process of evolution of university governance types, and the links between them, is important for appreciating current debates over university accountability and management. Shattock (2006) observed that there are four models of university governance in the United Kingdom: Oxbridge, ancient Scottish, civic university and higher education corporation. These four types, or species, of university governance structures came to exist after centuries of evolution. Each type grew out of earlier models and yet all of these models continue to operate in the twenty-first century.

Introduction

Recently there has been considerable debate over the governance of universities in the UK. The high profile governance reviews of Oxford and Cambridge in the mid 2000s have been followed by accusations of gross mismanagement at other institutions (Griffiths, 2009; Labi, 2007; *Joint Statement on London Metropolitan University*, 2009; Hodges and Garner, 2009; Newman, 2007; MacLeod, 2009). The underlying concern in these cases is the question: are the structures of governance at these institutions appropriate for universities? Institutional governance has an impact on the management of an university as well as its real and perceived accountability to an university's many stakeholders.

Universities in the western tradition are complex organizations. They evolve over time. They respond to environmental and internal challenges. If universities did not adapt to changing situations they would not represent some of the oldest,

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continuously operating organizations in the world. In a very real way, universities are living organisms. They can grow and thrive. They may even reproduce, creating new campuses or begetting new institutions in a process akin to cellular division. They may also be starved and die.

Given this view of universities as living, dynamic organisms, it is understandable that not all universities are alike. In particular, one may note differences in how universities are governed, both in terms of governance structures and the profile of those individuals serving as governors. Individual universities are very much like individual organisms – each one is unique. Since the medieval inception of what we refer to as universities, there have been different institutional governance types. One may even describe these governance types as *species*. The history of universities in England and Scotland provides a useful illustration of this institutional evolution, not the least because of the profound influence these two university systems have had on the rest of the world (Fallis, 2007; Flexner, 1968). This brief paper will examine the lineage of these university species in Britain in terms of institutional governance.

Medieval European Origins (1100s-1500s) – masters versus students

In order to understand university governance types in Scotland and England, one must appreciate their continental roots. The university tradition in Europe may be traced to two key cities: Paris and Bologna. As the two oldest universities in Europe in continuous operation, Bologna (founded 1088) and Paris (founded 1090), offered the template for establishing universities elsewhere in Europe. Consequently, Paris and Bologna have come to represent the Adam and Eve of universities in the English-speaking world.

Although both Paris and Bologna are both referred to as universities, their organizing principles were quite different. Founded at the end of the eleventh century, the University of Paris was established by scholars, also referred to as masters. The purpose of the university was to give these learned men a guild for mutual benefit and to provide a place for them to pursue their scholarship. The masters permitted younger scholars, or students, to learn from them at the university. The students paid for the privilege of the masters' instruction and had little or no voice in the governance of the university (Nardi, 1992).

The University of Bologna had a very different starting point. While Paris was the domain of the masters to which students were admitted, Bologna was established and run by the students themselves (Schwinges, 1992). Teachers of renown (or at least competence) were brought to educate the students in disciplines of the students' choosing. These teachers served the institution at the students' pleasure, inverting the student-teacher relationship found at Paris.

Paris's governance model proved to be the more resilient of the two, acting as a model for Oxford, the first English university. The University of Paris's governance model influenced Oxford following the 1167 expulsion of English students from France by Henry II. The Paris-Oxford model was duplicated at Cambridge in 1209 when a number of Oxford scholars escaped to East Anglia following riots in Oxford. The Paris-Oxford model remained the only university governance type in England for four hundred years.

The principle of student involvement in university governance did not completely disappear. Two echoes of the student-led Bologna model could be found in the Scottish universities of Glasgow (founded 1431) and Aberdeen (founded 1495). Each of these institutions' governance structures included a student-elected Rector, who was empowered to act on behalf of, and advocate for, students. Although the Rector was typically not a student, this unique position reflected the assumption that the masters were not the only individuals with a legitimate interest in the operations of the university.

The University of Edinburgh (1600s-1800s) – lay versus ecclesiastical

The sixteenth century brought about a new university organizational type in Britain. The University of Edinburgh, founded in 1582, introduced the concept of local community involvement with university governance. Oxford and Cambridge, and the older Scottish institutions (St. Andrew's and Glasgow Universities), were predominantly ecclesiastical institutions. They had been established for the education of clergy. Although enjoying royal patronage, the ancient English universities were essentially organs of the Church, entirely overseen and governed by the masters who were also churchmen.

Edinburgh represented a university that still had religious connections but was also formally tied to the lay community. Where Oxford and Cambridge were entirely governed by their own masters, all of whom had taken holy orders ¹, Edinburgh included laymen in its governance drawn from outside the walls of the university. The university was no longer a special, protected part of society. It was an integral part of the local community. Edinburgh marked the start of an ascendency of secular governance of universities (please see *Figure 1*).

The Scottish universities introduced the concept of the university "Court". A university's Court oversaw the operations of the university. Its membership included a preponderance of local community leaders rather than masters of the university (Shattock, 2006; Ruegg, 1996). The university Court was designed to ensure that the university considered itself, and was considered to be, part of the

¹This situation remained until the Royal Commissions of Oxford and Cambridge in the 1850s and 1870s.

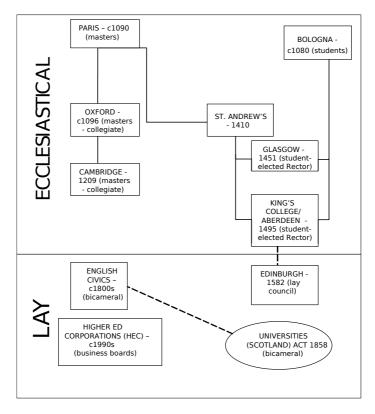


Figure 1: Evolution of university governance in England & Scotland (including date founded & notable aspect of governance)

local community as opposed to a cloistered, segregated community. The Scottish university Court provided the template for the university governing boards which were to come.

The Victorians (1800s-1900s) - expansion & bicameralism

The 1800s brought about considerable social and economic change in Britain. The nineteenth century also saw the rise of a new vision of universities as centers of research, borrowed from the new University of Berlin established by Prussian Minister of Education, Wilhelm von Humboldt (Lubenow, 2000). New educational disciplines and a desire to broaden access to university education

were met with resistance at Oxford and Cambridge (Halsey, 1995). Industry and government began seeing universities as tools through which to spur the economy and meet emerging challenges in scientific development. Although some opposed this reconfiguration of universities (Newman, 1960; Rothblatt, 1997) change was underway.

Many universities were founded in Britain in the latter half of the nineteenth century. These new institutions, such as the universities of Sheffield, Manchester and Birmingham, were founded partly to meet the growing middle class's demand for higher education but also to increase the nation's research capacity. The "civic" universities², so called because of the important role local leaders played in founding them, adopted a bicameral governance structure. Bicameralism included two key governing bodies overseeing and guiding the operations of the university; a board, responsible for the budget, finances and capital assets of the university, and an academic council or senate, responsible for curriculum, academic planning and student discipline. Equally important, the respective membership of these two bodies reflected the separation in responsibilities. The board was composed of individuals external to the university, also known as "lay members", while the academic council was drawn from the academic staff of the university. Scotland's Universities Act (1858) helped codify the principles of bicameralism in university governance.

The new institutions, and reformed Scottish institutions, impacted university development on the other side of the Atlantic. The late nineteenth century represented a period of significant higher education expansion in the United States and Canada as these countries raced to exploit their seemingly boundless natural resources and extend their influence across the continent. Through the 1800s and early 1900s, both countries created new institutions and renewed the missions of their older universities (Rudolf, 1990; Thelin, 2004; McKillop, 1994; Boggs, 2007). The principles of bicameralism and lay governance informed this expansion and became the norm in university governance across North America.

Twentieth Century (1900s-2000s) - corporatization & accountability

With the exceptions of Oxford and Cambridge, bicameralism remained the prevailing model of university governance in Britain through most of the twentieth century. However, new policy pressures arose from the creation of a dual higher education system in the 1960s-70s. Introduced in the 1960s, England's vocationally-focused polytechnic institutes were reclassified as full-fledged universities in 1992 (Doern, 2008). The reclassification of these institutions created a new university governance type overnight; the so-called higher education

²Also known as "red brick" universities owing to their distinctive architecture.

corporation (Shattock, 2006). The addition of these new institutions, including the universities of Kingston, London Metropolitan and Teesside, dramatically increased the number of universities in the UK. As a group, they also significantly outnumber the combined number of red brick and ancient universities.

Unlike their predecessors, the higher education corporations did not extend governance responsibilities to the academic staff of the institution. Intended principally as places of training and education (versus research and scholarship), the former polytechnics did not have a tradition of collegial governance as it was understood at the civic and earlier universities (Pratt, 1997). While they have externally-dominated boards, they do not necessarily have an academic council or senate with governance responsibilities found in the bicameralism. Although advisory academic boards comprised of academic staff may provide guidance, final and absolute authority for all university matters rests with the lay boards.

Conclusion

The development of university governance types in Britain over the last nine hundred years has not been a linear process. New types of governance structures co-exist with earlier species (as illustrated by *Figure 1*). One cannot help but compare the youngest governance structure, dominated by external interests overseeing the operations of the university, and the earliest, dominated by internal, academic interests. Some authors have signaled that the late twentieth century marked a breakdown in the academic-led collegial governance tradition of Paris, Oxford and Cambridge (Halsey, 1995; Tapper and Palfreyman, 2000, 2002). However, history has suggested that it is possible for multiple university governance species to peacefully co-exist as new institutions' governance reflect political and social expectations of their time.

Recent governance debates at Oxford and Cambridge have considered the inclusion of more lay members at the highest levels of their institutional governance (Evans, 2007, 2009; Beesemyer, 2006; University of Oxford, 2005, 2006). It begs the question: does this signal the beginning of the end of a university governance type? Will the academically-led governance structure become extinct after nine hundred years? The answer to this question has yet to be answered. Furthermore, the answer may be more complex than a simple affirmative or negative. As conservative as they are, Oxford and Cambridge, like all universities, have evolved over time. The roles and responsibilities their governing bodies now have are different than those of the twelfth, sixteenth or nineteen centuries. Although different species of university governance may continue to coexist, they must also continue to evolve. Their success, and survival, depends upon it.

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Keeping perspective: the mathematics behind the response to an epidemic

Ciara Dangerfield*

The Computing Laboratory

The potential threat to the global population from a deadly pandemic has received much attention in the last year due to the recent outbreak of the H1N1 virus, more commonly known as swine flu. But as governments are left with excess vaccine for H1N1 due to the number of reported swine flu cases falling short of those originally expected, questions are being asked as to the authenticity of original claims. In this paper we show how mathematical models can be used not only to predict the course of an epidemic but also the effect that control mechanisms will have on the containment of an infection outbreak. Mathematical models therefore provide a powerful and useful tool that can help inform governments and organizational bodies such as the World Health Organisation (WHO) on appropriate and effective control mechanisms to reduce the effects and even prevent a fatal pandemic.

Introduction

In June 2009 the world was gripped by a global pandemic. As swine flu fever swept the globe, governments began to stockpile vaccine and anti-virals in preparation. But with the onset of a new decade swine flu has become a distant memory and questions began to be asked about the legitimacy of the initial reports that the swine flu virus posed a serious worldwide threat.

If the spread of an infectious disease, such as swine flu, could be predicted at the beginning of the outbreak then appropriate action could be taken to try to minimise the spread. This paper will show how mathematical modelling can be used to predict the possible dynamics of an influenza epidemic as well as the effect of control mechanisms.

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The SIR Model

The first mathematical model that described the spread of an infectious disease through a population was developed by Kermack and McKendrick, [6]. It is known as the Susceptible-Infectious-Removed (SIR) model and is still considered a fundamental epidemiological model. In the model the population is compartmentalised into three distinct classes (susceptible, infected and removed) with two possible transitions between these classes: infection (movement from the susceptible to the infected class) and recovery (movement from the infected to the recovered class), (see Figure 1).



Figure 1: The flow of individuals as described by the SIR model. S denotes individuals capable of contracting the infection (susceptibles), I those who are capable of transmitting infection (infectives) and R those who have recovered or died due to the infection.

In the simplest case demographic processes (such as births and deaths) are ignored. The population is assumed to mix homogeneously and each infected individual transmits the infection to a susceptible individual they encounter with probability β . Infected individuals recover at a constant rate γ . Infection increases the infected class and decreases the susceptible class while recovery reduces the infected class and increases the recovered class. The change in the proportion of individuals in each class over time can therefore be described by three Ordinary Differential Equations (ODEs),

$$\frac{dS}{dt} = -\beta S I,\tag{1}$$

$$\frac{dI}{dt} = \beta S I - \gamma I,\tag{2}$$

$$\frac{dR}{dt} = \gamma I,\tag{3}$$

where d/dt denotes the rate of change of the variable with respect to time and S, I and R denote the fraction of individuals in the susceptible, infectious and recovered classes respectively at time t. The behaviour of an epidemic depends upon the value of the Basic Reproduction Ratio, R_0 (for a derivation of this see Appendix). This is defined to be the average number of secondary cases produced by a single infectious individual in a totally susceptible population [1]. If $R_0 < 1$ then transmission of the infection cannot be maintained and so the infection

rapidly dies out. For values of $R_0 > 1$ then each infected individual generates more than 1 secondary case and so an epidemic is possible (for a derivation of this see Appendix). The value of R_0 for the H1N1 virus, commonly known as swine flu, was estimated to be ~ 1.4 for the UK, [4], [3].

Control Mechanisms

Vaccination is one of the main methods for controlling an epidemic. The principle is to reduce the proportion of the individuals in the susceptible class sufficiently so that the infection cannot spread throughout the population. Importantly it is not necessary to vaccinate the whole population to prevent an epidemic. Only a proportion of individuals need to be vaccinated to confer a certain amount of protection on the entire the population. Providing that $1 - 1/R_0$ of the population is successfully vaccinated then the model predicts that an epidemic can be averted [1] (for a derivation of this see Appendix). In the case of the H1N1 virus approximately 29% of the UK population would need to be immunised to prevent an epidemic.

Treating infected individuals with anti-virals to speed up recovery is another

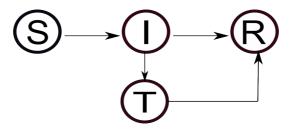


Figure 2: The flow of individuals when treatment of infected individuals is incorporated into the SIR model. T denotes infected individuals receiving treatment.

control mechanism employed by governments. The SIR model can be extended to include treatment by splitting the infected class into two subclasses; infected individuals and infected individuals undergoing treatment (see Figure 2). An infected individual can proceed directly to the recovered class, or they can first progress to the treatment class at a rate that will depend on the strength of the control mechanism. The Reproduction Control Number (R_C) , defined as the average number of new infections that one case generates in an entirely susceptible population when an intervention is in place, [3], can then be determined. R_C will depend on the severity of the epidemic (R_0) and the rate at which individuals

receive treatment. To prevent an epidemic enough infected individuals must receive treatment so that $R_C < 1$. Otherwise the only effect treatment will have will be to reduce the severity of the disease outbreak.

Extensions

There are many ways in which the SIR model can be extended to make it more realistic. We briefly present one of these here (for a comprehensive overview see [5]).

Stochasticity

The SIR model is deterministic, meaning that given the same initial conditions the same sequence of events will be observed. However, in reality, if the epidemic could be 'rerun', we would not expect to see the same sequence of events unfold. That is because *stochastic* (random) forces play an important role in the transmission of infection. One effect of incorporating this stochasticity into the model is that the success of the epidemic is not guaranteed even if $R_0 > 1$, as random events early on can lead to the disease dying out. This is shown by the trajectory of points in Figure 3. The probability of extinction following a single introduction of infection is $1/R_0$ [2], so for the H1N1 virus the probability of failure from a single introduction is approximately 71%.

Conclusion

Although the models I have presented are very simple, they show how important mathematical models are to understanding the dynamics of an epidemic as well as the control strategies used to contain such events. Mathematical models have already been employed by the UK government to help formulate a contingency plan for dealing with a foot and mouth outbreak in the UK after the devastating consequences of the 2001 epidemic, [5].

One of the major future challenges for epidemic modelling is the successful parameterisation (i.e. estimation of β and γ) of the models with data that is often poor and incomplete. It is of no use developing a highly complex and realistic model that cannot be accurately parameterised since the predictions given will be fundamentally flawed. This was the challenge faced by those modelling the swine flu epidemic (further discussed in [4]).

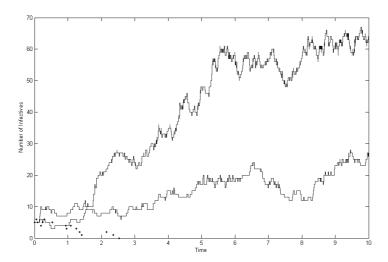


Figure 3: Realisations from 3 simulations of the stochastic SIR model with parameters $\beta = 1$, $\gamma = 0.7143$ (so $R_0 = 1.4$) and initial conditions S(0) = 1000, I(0) = 5 and R(0) = 0. The trajectory of points is an example of a realisation of this process where the disease dies out immediately.

Although we have misjudged this latest virus, infectious diseases continue to pose a major threat to the world population. Mathematical models provide an important and powerful tool that if utilised correctly can not only provide insight into the mechanisms behind the spread of infection but can also be used to predict and instruct appropriate control mechanisms to avert a worldwide pandemic.

Appendix: Derivation of R_0 and the Vaccination Number

 R_0 is defined to be the average number of secondary cases produced by a single infectious individual in a totally susceptible population. The average lifetime of an infected individual is $1/\gamma$ and the probability that an infected individual will infect a susceptible individual in an entirely susceptible population is $\beta S = \beta \times 1$. Therefore

$$R_0 = \beta \times \frac{1}{\gamma} = \frac{\beta}{\gamma}.\tag{4}$$

Equations (1) to (3) have a steady state at S=1 I=0 R=0. This steady state has a dominant eigenvalue $\Lambda = \beta - \gamma = \gamma (R_0 - 1)$. Therefore the disease free state

is stable providing $R_0 < 1$ otherwise it is unstable. If initially the population is entirely susceptible to infection, i.e. we start near the steady state S = 1 I = 0 R = 0, and $R_0 < 1$ then we will stay close to the disease free state, since it is stable, and so the infection will die out. Otherwise we will move away from the disease free state, since it is unstable when $R_0 > 1$ and so there will be an epidemic.

To calculate the number of susceptibles that need to be vaccinated to prevent an epidemic consider the dynamics of equation (2) at time t = 0. There are two possible cases:

case one
$$S(0) < \frac{\gamma}{\beta} \Rightarrow \left[\frac{dI}{dt}\right]_{t=0} = I(0)(\beta S(0) - \gamma) < 0,$$
 (5)

case two
$$S(0) > \frac{\gamma}{\beta} \Rightarrow \left[\frac{dI}{dt}\right]_{t=0} = I(0)(\beta S(0) - \gamma) > 0.$$
 (6)

It is clear that in the first case the infection will die out while in the second case it will spread. Therefore enough susceptible individuals must be vaccinated so that the initial number of susceptibles, S(0), satisfies

$$S(0) < \frac{\gamma}{\beta} = \frac{1}{R_0}.\tag{7}$$

It is assumed that infection is introduced to an entirely susceptible population so $S(0) \approx 1$. Setting V_{min} to be the minimum number of susceptible individuals that must be vaccinated to prevent an epidemic it follows that

$$V_{min} = S(0) - S_{max} = 1 - \frac{1}{R_0},$$
(8)

where S_{max} is the maximum number of susceptible individuals before there is an epidemic.

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21st-century pharmacovigilance

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Pharmacovigilance involves the investigation, detection and prevention of adverse drug reactions, by the monitoring of data from patient populations on a national and international scale. Globally, the task is coordinated by the WHO Programme for International Drug Monitoring, based at the Uppsala Monitoring Centre in Sweden. The success of the process is dependent on effective collaboration between pharmacovigilantes worldwide and a careful statistical analysis of the huge quantities of data being generated, to identify possibly significant new 'signals'. This article reviews the background of pharmacovigilance, the challenges that we face in the $21^{\rm st}$ century and areas that will stimulate future research.

In the late 1950s, thousands of babies were born worldwide with severe limb deformities. The scale was unprecedented. The tragedy was traced to the widespread prescription of thalidomide, a hypnotic drug used for morning sickness. This iatrogenic disaster drew attention to the need for drug safety to be meticulously monitored on an international basis, a process now known as pharmacovigilance. In this article I shall review the background of pharmacovigilance, the challenges that we face in the 21st century and areas that will stimulate future research.

Pharmacovigilance: the background

The word pharmacovigilance, derived from the Greek *pharmakon*, meaning drug or medicine, and the Latin *vigilans*, meaning watchful or careful, has been defined by the World Health Organization (WHO) as the "science and activities relating to the detection, assessment, understanding and prevention of adverse effects or any other possible drug-related problems".¹ A drug is defined as any "substance

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¹Stephens' Detection of New Adverse Drug Reactions. John Talbot (Editor), Patrick Waller (Editor). Wiley-Blackwell. 5th Edition edition (22 Dec 2003). ISBN-10: 047084552X

in a pharmaceutical product used to modify or explore physiological systems or pathological states for the benefit of the recipient".²

All drugs pose risks of unwanted effects, which should be outweighed by the potential benefits to the individual taking the drug. Common adverse effects are normally identified during the pre-clinical phases of drug development, before the drug is marketed. These are documented in the "patient information leaflet", provided with all prescription medications, and also in the "Summary of Product Characteristics", intended for health-care professionals.³ The individual "balance of benefit to harm" is assessed by the practitioner, who judges whether it would be safe and appropriate to prescribe the drug or not. However, rare adverse drug reactions (ADRs) may only be identified after the drug has been introduced into common clinical use. Monitoring of drug safety must therefore continue at this point; this is known as 'post-marketing surveillance'.

As mentioned above, the thalidomide tragedy was one of the most influential driving factors for the practice of pharmacovigilance worldwide. This led to the formation of the WHO Pilot Research Project for International Drug Monitoring in 1968. Today, the WHO Programme for International Drug Monitoring is coordinated at the Uppsala Monitoring Centre (UMC) in Sweden.⁴ The aims include assuring the safety of medicines, promoting the exchange of information on drug safety and promoting pharmacovigilance activities.

What does pharmacovigilance entail?

In practice, pharmacovigilance primarily involves spontaneous reporting systems, which allow health-care professionals to report suspected ADRs to a central authority.⁵ Most countries employ voluntary reporting systems, in which the responsibility for reporting lies with the practitioner. The UK uses the well-established Yellow Card Scheme, in which ADRs can be reported either by patients or their carers, or by health-care practitioners (including doctors, dentists, nurses, and pharmacists), drug companies or coroners.⁶ The information is monitored by the Medicines and Healthcare products Regulatory Agency, which also supplies information to the UMC in Sweden, contributing to international pharmacovigilance efforts. Ultimately, pharmacovigilance practice aims to detect

²WHO 2002. The Importance of Pharmacovigilance. Safety Monitoring of Medicinal Products.

³Talbot JCC, Nilsson BS. Pharmacovigilance in the pharmaceutical industry. Br J Clin Pharmacol. 1998 May; 45(5): 427–431.

⁴http://www.who-umc.org/

⁵Hasford J, Goettler M, Munter KH, Mller-Oerlinghausen B. Physicians' knowledge and attitudes regarding the spontaneous reporting system for adverse drug reactions. J Clin Epidemiol. 2002 Sep;55(9):945-50.

⁶http://yellowcard.mhra.gov.uk/

new ADRs, with a view to preventing them (when possible), withdrawing drugs (if the ADR is unacceptably dangerous) or adjusting drug safety information to allow both the consumer and practitioners access to accurate details of the available evidence.

The information content is increasingly complex, as more countries contribute to the WHO international monitoring programme. In order to handle such vast quantities of data, the centre employs modern statistical methods, including Bayesian networks, to sift through the data sets in a process of 'data mining'. This analysis aims to detect 'signals', defined by Hauben and Aronson as [abbreviated] "information that suggests a new potentially causal association between an intervention and an event, which is judged to be of sufficient likelihood to prompt verificatory and remedial actions". Signal detection lies at the core of pharmacovigilance practice, providing information about possible novel ADRs, and thus directing new lines of investigation.

What are the current challenges to pharmacovigilance?

There are many obstacles to the process of pharmacovigilance, which range from failure by uninformed practitioners to report ADRs, to the difficulty in proving causality between a drug and a suspected ADR. Furthermore, evolving issues, such as clarifying the safety of online drug purchasing, medical devices and herbal medicines, pose new problems to pharmacovigilance. Communication of pharmacovigilance information also presents a challenge, but the development of the Internet has facilitated both the global flow of information and the creation of databases to store the huge quantities of drug-safety information.

Pharmacovigilance websites: a crucial means of communication

The success of international pharmacovigilance depends critically on high quality communication. National pharmacovigilance websites are particularly important, serving as widely accessible tools which provide a portal for disseminating up-to-date information; educating practitioners, patients and pharmaceutical companies; and collating ADR information on a national level. Given the critical role of such websites, further research into their effectiveness is essential. I therefore

 $^{^7} Mann\ RD$ (Editor), Andrews EB (Editor). Pharmacovigilance. Chapter 22. Wiley; 1st edition. ISBN-10: 0471494410.

⁸Hauben M, Aronson JK. Defining 'signal' and its subtypes in pharmacovigilance based on a systematic review of previous definitions. Drug Saf. 2009;32(2):99-110.

⁹Pannick S, and Plant GT. Doctors with a problem drug. StudentBMJ 2007;15:213-256.

 $^{^{10}\}mbox{Barnes}$ J. Pharmacovigilance of herbal medicines : a UK perspective. Drug Saf. 2003;26(12):829-51.

decided to analyse ten national pharmacovigilance websites during my clinical pharmacology research project. This research formed part of my medical degree and was supervised by Dr Jeffrey Aronson, President of the British Pharmacological Society (2007-09), based in the Oxford University Department of Primary Health Care. The study subjected websites to a qualitative, comparative analysis to identify essential components, through assessment of the content, the ADR reporting systems used and the accessibility of the information to the target audience. The findings pinpointed key features, such as national guidelines, ADR reporting instructions and up-to-date safety information. Further, the results highlighted the crucial importance of clear definitions. The findings may contribute to improving pharmacovigilance communication nationally and internationally, and potentially to the development of a 'gold standard' template for pharmacovigilance websites. This would enhance national pharmacovigilance programmes, by helping to optimise the flow of information between the public, practitioners and pharmacovigilantes.

The future?

21st-century pharmacovigilance will continue to demand international collaboration, education; and rigorous scientific investigation of the complex signals identified. The role of the Internet will remain pivotal. With an ever-growing repertoire of pharmaceutical products, pharmacovigilance will become increasingly challenging and will stimulate innovative research. Rationalised, carefully orchestrated international cooperation will help preclude a repeat disaster akin to the devastating thalidomide tragedy.

Web resources

The following urls will direct you to further reading on drug safety and pharmacovigilance:

- www.who.int
- www.who-umc.org
- apps.who.int/medicinedocs/collect/medicinedocs/pdf/s4893e/s4893e.pdf
- www.mhra.gov.uk/Howweregulate/Medicines/Inspectionandstandards
- www.fda.gov/Drugs/DrugSafety/PostmarketDrugSafetyInformation
- www.pharmacovigilance.org.uk
- www.ema.europa.eu

Living with malaria: a bird's eye view

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Avian malaria is a vector-transmitted parasitic disease that affects many species of bird across the globe. In some regions it is very prevalent, and birds often live with malarial infections. It does, however, have a serious impact in isolated areas where birds do not have resistance to the parasite; several bird species are now threatened by the recent introduction of avian malaria and its vectors.

Malaria is an infectious disease that affects hundreds of millions of people each year. It is caused by *Plasmodium* parasites with one species, *P. falciparum*, responsible for the most serious forms of the disease. Avian malaria also affects birds across the globe, and is caused by parasites in two genera, *Plasmodium* and *Haemoproteus*. These species are related to, but distinct from, the human parasites. There are many more types of avian malaria than human malaria, since birds, of which there are thousands of species, have been around a lot longer than humans, giving their malarial parasites more time to differentiate. Birds have also had longer to evolve strategies to cope with malarial infections and most can live with avian malaria in some bird populations, prevalence can be higher than 90%.

However, life-threatening infections do occur in domestic fowl and isolated bird populations such as those on Hawaii, which are nave to avian malaria and have little resistance to it. Mortality can be as high as 93% in chickens,² and the accidental introduction of vectors carrying avian malaria to Hawaii has contributed to the decline and possible extinction of several endemic bird species.³ Some endangered bird species which remain have retreated to higher elevations in Hawaii, where lower temperatures prevent effective malarial development. Some of these birds have also developed tolerance to avian malaria which reduces mortality but is now adding to a reservoir of malaria at higher elevations, spreading the disease further.⁴

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Malarial parasites are transmitted between hosts by biting insect vectors such as mosquitoes and black flies. Since insects are sensitive to climatic conditions, there is a strong environmental component to the distribution and patterns in prevalence of avian malaria. The disease is widespread in both the tropics and temperate regions, with marked seasonal fluctuations in avian malaria prevalence in temperate areas. The migration of bird hosts further adds to the complexity of patterns in avian malaria.

The many species of avian malaria parasites make up a diverse group, with a wide range of potential bird hosts and insect vectors. This diversity has led to a range of host-specificity patterns. Some species of avian malaria are generalists, able to colonize several different types of host, while others are specialists only parasitizing a single species of host bird. Traditionally, avian malaria infections were detected and identified using microscope-based examinations of host blood smears. Modern molecular tools are much more sensitive than the traditional methods and are able to detect minute quantities of malarial parasite in host blood. These PCR-based methods also allow genetic identification of avian malaria and have led to the discovery of many new lineages of malarial parasites.

More recently developed molecular techniques now make possible the quantification of parasitaemia in blood samples, giving a measure of the level of infection in a host. This allows us to tackle many more questions about the effects of malarial parasites on their hosts. For example: 'do parasites have a significant effect on host fitness[†] in areas where birds are commonly infected with avian malaria?' Most studies of malaria in birds have been observational which makes it difficult to detect fitness effects, especially since parasitaemia tends to vary over the course of infection. It was previously thought that the acute stage of malarial infection increases bird mortality but that the long-term chronic stage, when birds acquire some immunity to malaria and carry low densities of parasites, does not affect bird survival or fitness. However, a recent study tested the effects of avian malaria experimentally with anti-malarial medication¹⁰ and chronic malaria infections were shown to reduce the fitness of blue tits, which breed across the UK.

Avian malaria has serious consequences for the birds around us today, but there is no reason to panic! The disease is unlikely to make the jump to humans and become the 'next bird flu' by causing a pandemic. Most emerging infectious diseases such as West Nile virus and avian influenza are caused by viruses which can mutate quickly, allowing them to adapt to different hosts in a relatively short space of time. A much greater concern about avian malaria is with its ecological

^{*}Polymerase chain reaction (PCR) methods work by targeting and amplifying specific known regions of the parasite's genome. The product of the PCR reaction (amplification) can then be detected and identified.

[†]Biological fitness is an individual's ability to reproduce.

impact in places where it has been accidentally introduced and is endangering endemic species of bird.

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The New Collection

These feature articles represent a cross-section of the academic work being undertaken by members of the New College MCR. They have been extensively reviewed by fellows and friends of New College.

Between brain and soul: Virginia Woolf's view of Russian literature

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I want to give the slipperiness of the soul. Virginia Woolf, *Diary*, 4 June 1923

This article explores how Virginia Woolf's discussion of Russian literature throws light on her attitude towards Christianity and the possibility of religious or moral messages in fiction. Woolf was familiar with Dostoevsky's theological use of the word 'soul', as well as with frequent descriptions of Russian Orthodox practices in Russian nineteenth-century novels. Yet, when she discussed the spirituality of Russian literature, she was actually referring to its focus on deep, but morally neutral, human emotions. Nevertheless, Woolf's interest in the metaphysical searchings of Tolstoy and Dostoevsky should not be underestimated. Justifying her 'philosophy' in *Night and Day*, she wrote: 'Yet, if one is to deal with people on a large scale & say what one thinks, how can one avoid melancholy?'. It is this melancholy and sadness that she praised in the writings of Chekhov, Dostoevsky, and Tolstoy. As she explained in 'The Russian Point of View', those two characteristics stemmed from the Russians' repeated attempts to answer the question: 'Why live?'.

Scholars are becoming increasingly interested in Virginia Woolf's attitude towards Christianity, and towards religion in general.¹ The most common conclusion is that Woolf's view of institutionalised beliefs was complicated, if not openly hostile. Some critics, by contrast, advocate the importance of religion to

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¹Pericles Lewis, 'Virginia Woolf and the Disenchantment of the World', in Idem., *Religious Experience and the Modernist Novel* (Cambridge: Cambridge UP, 2010), pp. 142-69; Mark Gaipa, 'An Agnostic's Daughter's Apology: Materialism, Spiritualism, and Ancestry in Woolf's *To the Lighthouse'*, *Journal of Modern Literature*, 26.2 (Winter 2002-2003), 1-41.

Woolf. For example, Mark Gaipa argues that Woolf's To the Lighthouse 'draws upon both spiritualism and materialism, in equal measures, and does so in the name of a hard-won balance that reflects her triumphant inheritance of an agnostic view of the world'. Whether Woolf campaigned for or against the centrality of religion to humanity remains an open question. What is certain is that among her favourite novelists were some of the most passionate religious thinkers humanity had known; namely, Tolstoy and Dostoevsky. While Woolf was not remotely interested in the ethical and metaphysical issues that Russian writers explored in their non-fiction, she often discussed the ability of Tolstoy, Dostoevsky and other Russians to combine spirituality with almost scientifically crafted realism. The subject of the soul, which Woolf raised in her essays on Dostoevsky, throws light on what was important to her in the art of fiction. In this paper I am going to explore whether she believed that fiction must contain a philosophical or moral message, or whether her credo was closer to the conviction that form, i.e., the way in which words re-create reality, is more important than the moral outcome of the story. The question whether, to Woolf, exquisite form was more vital than uplifting the reader morally, is slippery, hence the epigraph to this paper. To say that she was a staunch supporter of 'l'art pour l'art' theory would simplify her position. Woolf was always undecided about the prevalence of form over moral content. An example is her unpublished essay 'Tchekhov on Pope' (1925), where she praises the exquisite form of Pope's 'The Rape of the Lock':

<U>until we recollect ourselves, the clarity, the exactitude of these lines<,> the economy of others <these>

The Peer now spreads the glitt'ring Forfex wide,

T'inclose the Lock; now joins it, to divide

the poetry of these

To draw fresh Colours from the vernal Flow'rs;

To steal from Rainbows ere they drop in show'rs

A brighter Wash

work us into the belief that there is something final in this art.³

She interrupts her praise with a rhetorical counterstatement, typical of her essays. She reminds the reader that Russian literature is currently popular among

²Gaipa, 3.

³ 'Tchekhov on Pope', 1925. Typescript. M121. The Berg Collection at the New York Public Library. This unpublished piece has been transcribed by Roberta Rubenstein in Idem., *Virginia Woolf and the Russian Point of View* (Basingstoke: Palgrave Macmillan, 2009), pp. 187-92. I quote from its original, reproduced in: *Major Authors on CD-ROM: Virginia Woolf*, ed. by Mark Hussey (Woodbridge, CT: Primary Source Media, 1996). Strikethroughs and <> indicate Woolf's eliminations and insertions; [] indicate my omissions and insertions.

British cognoscenti, who inevitably read Pope 'by the light of Dostoevsky, the Russians':

And when chance [...] throws the Rape of the Lock in our way, probably we shall be shutting Tchekhoves Letters, or just be seeing The Cherry Orchard.⁴

The Russian influence, she continues, led to the establishment of 'certain doctrines' among British novelists:

We should be democratic in our art; loving the poor rather than the rich [...] should be doubtful, distrustful of ourselves, and easelessly investigate the turbulent underworld of the soul.⁵

Here she is referring to the social and religious doctrines discussed in the novels of Dostoevsky and Tolstoy, as well as to moral struggles described in Chekhov's plays. The experience of reading the Russians, Woolf continues, might make the reader realise that Pope wrote about insignificant, 'frivolous' things, neglecting the 'souls' of his characters:

How can we reconcile it to our cons[c]i[e]nces to spend an hour over the Rape of the Lock which [...] deals with locks of hair, ladies [sic] dressing tables, and the aristocracy?⁶

'[A]re we eternally damned', Woolf asks, for liking Pope as much as 'all the books of all the Russians'? Her question is ironic, but her answer represents her earnest conviction. She concludes that there is 'balm for the soul' in Pope's poetry, and the name of this balm is 'the wily devil, beauty'. In other words, it is beauty that makes a work of literature immortal, and it does not matter whether the subject is the soul or 'locks of hair'. Woolf's essays, letters and diaries demonstrate that she constantly fluctuated in her praise for two virtues in art: truth and beauty. For example, in her 1918 essay on Meredith she tries to rehabilitate Meredith for her anti-Victorian contemporaries. To Woolf, Meredith is a master of metaphors and epigrams. She argues that by reading his novels, we 'have gained moments of astonishing intensity; we have gained a high level of sustained beauty'. But, she interrupts, 'perhaps the beauty [in Meredith's novels]

⁴ 'Tchekhov on Pope'.

⁵Ibid.

⁶Ibid.

⁷ Ibid.

⁸ 'On Re-reading Meredith' (1918), in *The Essays of Virginia Woolf*, ed. by Andrew McNeillie, vol. 2 (London: The Hogarth Press, 1987), p. 275.

is lacking in some quality that makes it a satisfying beauty?'. The qualities that Woolf finds missing in Meredith are all related to morality. He lacks 'sympathy', he 'avoids ugliness', the world of his novels is 'a little hard-hearted, and not to be entered by the poor, the vulgar, the stupid'. Woolf contrasts Meredith with Russian novelists who 'accept ugliness', who 'seek to understand', who 'penetrate further and further into the human soul [...] with their undeviating reverence for truth'. Again, she does not make a choice in favour of either the Russians or Meredith. But she makes it clear that if beauty means untruthful exclusion of ugliness in life, then it is not 'a satisfying beauty'.⁹

Eleven years after this defence of ugliness and sympathy in literature, Woolf would attack Dostoevsky in her 1929 essay 'Phases of Fiction'. Discussing his novel *The Possessed*, she famously observes: 'To brush aside civilisation and plunge into the depths of the soul is not really to enrich'.¹⁰ Her new model novelist at the time was no longer Dostoevsky, but Proust. Woolf's attack on the soul in Dostoevsky in this essay is often interpreted as her final conclusion about the prevalence of form over philosophy, of 'skill and artifice' over the struggle to 'reveal the soul's difficulties and confusions'.¹¹ But it is important to remember that Woolf's final words in 'Phases of Fiction' are again equivocal: '[W]e desire synthesis'.¹² Here she means synthesis between psychology and selection, truth and symbolism, the beauty of poetry and the philosophy of 'love, or death, or nature'.¹³ She discussed the same synthesis in 'Character in Fiction', a.k.a. the second version of 'Mr Bennett and Mrs Brown' (1924):

If [...] you think of the novels which seem to you great novels - *War and Peace, Vanity Fair, Tristram Shandy, Madame Bovary, Pride and Prejudice* [...] - if you think of these books, you do at once think of some character who has seemed to you so real (I do not by that mean so lifelike) that it has the power to make you think not merely of it itself, but of all sorts of things through its eyes - of religion, of love, of war, of peace, of family life, of balls in county towns, of sunsets, moonrises, the immortality of the soul.¹⁴

It is possible to assume that throughout her life Woolf believed in the equal importance of truth and beauty, the soul and the form in which the soul is

⁹Essays, II, pp. 274-5.

¹⁰ 'Phases of Fiction' (1929), in *The Essays of Virginia Woolf*, ed. by Stuart N. Clarke, vol. 5 (London: The Hogarth Press, 2009), p. 70.

¹¹Essays, V, p. 69. See, for example, Peter Kaye, *Dostoevsky and English Modernism*, 1900 - 1930 (Cambridge: Cambridge UP, 1999), p. 83.

¹²Essays, V, p. 84.

¹³Essays, V, p. 80.

¹⁴ 'Character in Fiction' (1924), in Essays, III, p. 426.

discussed. But there was a period in her life - roughly between the mid-1910s and the mid-1920s - when she emphasised the importance of deep philosophical searching in fiction, as part of her attack on what she defined as 'materialism' of English writers. It was at that time that she argued in her famous essay 'Modern Novels' (1919):

The most inconclusive remarks upon modern English fiction can hardly avoid some mention of the Russian influence [...]. If we want understanding of the soul and heart where else shall we find it of comparable profundity? If we are sick of our own materialism the least considerable of their novelists has by right of birth a natural reverence for the human spirit. [...] It is the saint in them which confounds us with a feeling of our own irreligious triviality.¹⁵

So far Woolf's references to the 'soul' have seemed free from religious connotations, but here she appears to be using the word 'soul' in its sacred meaning, since it is surrounded by theologically marked terms such as 'saint' and 'irreligious triviality'. Is Woolf advocating here the necessity of devout spirituality in fiction? Is she summoning English novelists to fill their prose with theological arguments, in the manner of Dostoevsky and Tolstoy? The answer is evident from the next passage in the same essay. Echoing her 'Tchekhov on Pope' essay, where she argues that the soul and 'locks of hair' are equally valid literary subjects, here Woolf concludes that 'everything is the proper stuff of fiction'. 16 It is clear that Woolf emphasised the spirituality of Russian literature as a contrast to the 'materialism' of H.G. Wells, John Galsworthy and other Edwardian novelists. But what she truly had in mind were the aesthetic differences between English and Russian writers, and not their religious or philosophical doctrines. The question is: why did Woolf repeatedly discuss the 'soul' in her literary essays and reviews of the late 1910s and early 1920s? As evident from 'Modern Novels', the word did not appear exclusively in her essays on Russian literature, but it is in her writings on the Russians that she used it most frequently. In her first essay on Dostoevsky, she praises his ability to 'read the most inscrutable writing at the depths of the darkest souls'. ¹⁷ In her 1919 essay on Chekhov, she describes the subject of his story 'The Steppe' as 'the journey of the Russian soul'. 18 The climax of her praise for the soul is in 'The Russian Point of View':

[T]he soul [...] is the chief character in Russian fiction. Delicate and subtle in Tchehov, it is of greater depth and volume in Dostoevsky.

¹⁵ 'Modern Novels' (1919), in *Essays*, III, pp. 35-6.

¹⁶Essays, III, p. 36.

¹⁷ 'More Dostoevsky' (1917), in Essays, II, p. 86.

¹⁸ 'The Russian Background' (1919), in Essays, III, p. 85.

[...] The novels of Dostoevsky [...] are composed purely and wholly of the stuff of the soul.¹⁹

Did Woolf mean by this that she liked Russian writers for their preoccupation with religious subjects, that Dostoevsky was an example to follow because of his portrayal of people as sinners and saints? If not in the religious sense, in what other way was Woolf referring to the 'soul' when advocating its importance in fiction? As her essay on Meredith shows, Woolf emphasised the importance of portraying life as it is, including its ugly sides. She criticised the Edwardians for having 'laid an enormous stress upon the fabric of things'.²⁰ She attacked the Victorians for giving artificially tidy endings to their novels, because from the modern point of view, '[n]othing is solved [...] nothing is rightly held together'.²¹ She was being, of course, deliberately simplistic in her attacks on the Edwardians and the Victorians, giving exaggeratedly unattractive summaries of their novels in her essays. At the time, she was searching for what was important to her in fiction. Caricatures of Galsworthy or of an imaginary Victorian novelist served as convenient tools in her self-understanding and self-explaining. She tried to name her priorities directly in a diary entry of 27 March 1919:

In my opinion N. & D. is a much more mature & finished & satisfactory book than The Voyage Out. [...] L. finds the philosophy very melancholy. [...] Yet, if one is to deal with people on a large scale & say what one thinks, how can one avoid melancholy? I don't admit to being hopeless though - only the spectacle is a profoundly strange one; & as the current answers don't do, one has to grope for a new one; & the process of discarding the old, when one is by no means certain what to put in their place, is a sad one. Still, if you think of it, what answers do Arnold Bennett or Thackeray, for instance, suggest? Happy ones - satisfactory solutions - answers [sic] one would accept, if one had the least respect for one's soul?²²

The last sentence is unstructured and ends with a symbolic question mark, revealing Woolf's confusion. This passage shows that she found it difficult to express her idea of the metaphysical element in fiction in direct statements. Thus, when it came to explaining herself in her literary reviews, she resorted to the help of examples, hyperbolised for rhetorical purposes. One example that she favoured was Russian literature in general and Dostoevsky in particular. The

¹⁹ 'The Russian Point of View' (1925), in Essays, IV, pp. 185-6.

²⁰Essays, III, p. 432.

²¹Essays, IV, p. 185.

²²The Diary of Virginia Woolf, ed. by Anne Olivier Bell, vol. 1 (London: The Hogarth Press, 1983), p. 259.

reason why Woolf wrote frequently and enthusiastically on Russian novelists in the late 1910s and early 1920s was because Russian literature, which started being popular in Britain at the time, was associated with exactly the kind of melancholy that Leonard Woolf detected in *Night and Day*. Chekhov in particular was famous for ending his stories on an interrogatory note, 'groping' for new answers. In 'Modern Novels' Woolf praises the inconclusiveness of Chekhov's prose and of 'the Russian mind' in general. In her 1918 essay 'The Russian View' she observes that Russian literature is characteristically sad, precisely because Russian writers tend to 'deal with people on a large scale': '[The Russians] have been driven to write by their deep sense of human suffering and their unwavering sympathy with it. [...] [T]hey believe so passionately in the existence of the soul'.²³ So, although in her diary entry about *Night and Day* there is no reference to Russian novelists, it closely echoes what Woolf herself wrote about Russian literature and what she read about the Russians in British criticism of the time.

British critics initially did not associate the 'soul' with Dostoevsky alone. But in 1910 Dostoevsky's definition of 'the Russian soul' became famous in Britain, after it had been quoted in Maurice Baring's influential book *Landmarks in Russian Literature*. Baring cited Dostoevsky's 1880 speech in memory of the Russian poet Aleksandr Pushkin. The so-called 'Pushkin speech' illustrates Dostoevsky's religious nationalism:

I am convinced that [...] the future generations of the Russian people [...] understand that to be a real Russian must signify simply this: [...] to show to Europe a way of escape from its anguish in the Russian soul, which is universal and all-embracing; to instill into her a brotherly love for all men's brothers, and in the end perhaps to utter the great and final word of universal harmony, the fraternal and lasting concord of all peoples according to the gospel of Christ.²⁴

Dostoevsky's speech was also reproduced in its entirety in an English translation by Samuel Koteliansky and John Middleton Murry in 1916.²⁵ Woolf became friends with Murry and Koteliansky in the late 1910s. Thus, at the time when she started reviewing the Russians, she knew both about her contemporaries' fascination with Russian spirituality and about Dostoevsky's use of the word 'soul' in its specific Christian meaning. Soon after Baring had publicised the image of Dostoevsky the believer and Constance Garnett's

²³ 'The Russian View' (1918), in *Essays*, II, pp. 341-3.

²⁴Fyodor Dostoevsky, the 'Pushkin speech', 1880. Quoted in Maurice Baring, *Landmarks in Russian Literature* [1910], 3rd edn (London: Methuen, 1916), p. 259.

²⁵Pages from the Journal of an Author, trans. by Samuel Koteliansky and John Middleton Murry (Dublin; London: Maunsel, 1916).

translation of *The Brothers Karamazov* had initiated the 'Dostoevsky cult' in 1912, the majority of critics in Britain interpreted him as a profoundly Christian writer. In his *Fyodor Dostoevsky: A Critical Study* (1916), Murry described his own experience of reading Dostoevsky in overtly mystical terms:

There are times, when thinking about the spirits which [Dostoevsky] has conjured up[,] [...] I am seized by a suprasensual terror. For one awful moment I seem to see things with the eye of eternity, and have a vision of suns grown cold, and hear the echo of voices calling without sound across the waste and frozen universe.²⁶

Woolf was familiar with Dostoevsky's Christianity through her collaboration with Koteliansky on the Hogarth Press edition of materials related to *The Possessed*.²⁷ She knew about Murry's approach through her acquaintance with Katherine Mansfield. Does that mean that by arguing, in 'The Russian Point of View', that 'the soul dominates Dostoevsky', she was presenting him as a Christian novelist? The answer is evident from her letter to Gerald Brenan:

As for Murry, I can no longer follow him even with amusement, much less with dislike. [...] One might as well listen to a half starved clerk spouting religious revival on a tub at Hyde Park Corner. [...] He is one of those Dostoevsky relics. He sees himself pulled asunder by the angels of darkness and light.²⁸

Unlike Murry, she was interested in Dostoevsky the novelist, and not Dostoevsky the visionary. Excessive religious element in Dostoevsky's novels was, in fact, the reason of her occasional outbursts against him and his British admirers, such as Murry. Why, then, did Woolf use religiously marked terminology in her propaganda of new ways for fiction writing? Why are there references to sinners and saints in her praise of Dostoevsky? The answer is that, in order to promote her own values in literature, Woolf often used popular images and stereotypes that would allow her to convince and tease her audience at the same time. The most obvious example is *The Common Reader* where she adopts a persona of a hesitating, limited book lover. *The Common Reader* is full of controversial statements that simultaneously have a touch of truth about them: 'The Elizabethans bore us because they suffocate our imaginations'.²⁹ Or: 'To

²⁶John Middleton Murry, Fyodor Dostoevsky: A Critical Study (London: Martin Secker, 1916), p. 33.

²⁷Fyodor Dostoevsky, *Stavrogin's Confession and The Plan of The Life of a Great Sinner, with Introductory and Explanatory Notes*, trans. by Samuel Koteliansky and Virginia Woolf (London: The Hogarth Press, 1922).

²⁸Woolf, letter to Gerald Brenan, 1 December 1923, in *The Letters of Virginia Woolf*, ed. by Nigel Nicolson, vol. 3 (London: The Hogarth Press, 1977), p. 80.

²⁹ 'Notes on an Elizabethan Play', in *Essays*, IV, p. 63.

call Addison on the strength of his essays a great poet [...] is to confuse him with the drums and trumpets'. 30 Her praise for Dostoevsky's obsession with the soul is similar to these statements in its epigrammatic provocativeness. Her image of the soul in 'The Russian Point of View' may echo theological interpretations of Dostoevsky and even Dostoevsky's own propaganda of Christianity. Sometimes in her writings Woolf referred to the 'soul' in the religious sense.³¹ But in her essays on literature, and Dostoevsky in particular, she used the word 'soul' as a synonym for 'mind'. Her understanding of Dostoevsky's preoccupation with the inner world of his characters is close to T.S. Eliot's idea that 'Dostoevsky's point of departure is always a human brain in a human environment'. 32 In 'The Russian Point of View', Woolf would have expressed herself equally well by saying that the brain is 'the chief character in Russian fiction', but she needed a term that was less physiological and more in tune with contemporary interpretations of the Russians. In 'The Russian View', she wrote about the Russians 'produc[ing] [...] the most spiritual of modern books'. 33 In 1925, she defined her understanding of the spiritual element in literature when applying the term to Joyce: 'Mr Joyce is spiritual; he is concerned at all costs to reveal the flickerings of that innermost flame which flashes its messages through the brain'. 34 In her early writings on Dostoevsky and in 'The Russian Point of View', Woolf discusses Dostoevsky's preoccupation with the soul, in order to emphasize his 'modern' neglect of social boundaries and moral divisions:

It is all the same to [Dostoevsky] whether you are noble or simple, a tramp or a lady. Whoever you are, you are the vessel of this perplexed liquid, this cloudy, yeasty, precious stuff, the soul. The soul is not restrained by barriers. It overflows, it floods, it mingles with the souls of others. ³⁵

In the same essay she also argues that Dostoevsky's attention to the 'soul' stood behind his erratic narrative method: 'It is the soul that matters, its passion, its tumult, its astonishing medley of beauty and vileness'. ³⁶ To Woolf, the 'soul' was a term for human consciousness, as when she talks of her plans for *Mrs*

³⁰ 'Addison', in *Essays*, IV, p. 113.

³¹See, for example, her letter to Jacques Raverat of 30 March 1923: 'There is a great deal of mystic religion about. I wish one had the cruelty of youth. I've been asked to advise a woman [Brett] as to the souls of the dead - can they come back? As I'm never quite sure which is which - spirit, matter, truth, falsehood and so on - I can't speak out as roundly as a Darwin should'. *Letters*, III, p. 24.

³²T.S. Eliot, 'Beyle and Balzac', Athenaeum, 30 May 1919, p. 392.

³³Essays, II, p. 343.

³⁴ 'Modern Fiction', a.k.a. the second version of 'Modern Novels' (1925), in *Essays*, IV, p. 161.

³⁵Essays, IV, p. 187.

³⁶Essays, IV, p. 186.

Dalloway: 'I want to give the slipperiness of the soul'.³⁷ In other words, when she praised Dostoevsky's preoccupation with the soul she meant his interest in human psychology. But psychology at the time was associated with psychoanalysis, and Woolf did not always approve of psychoanalytical method in literature:

[T]he question how far they [novelists] should allow themselves to be influenced by the discoveries of the psychologists is by no means simple.³⁸

For Woolf, the soul stood for the elusive subject of 'Character in Fiction' - 'human nature', or 'the spirit we live by, life itself'.³⁹ This is confirmed by her letter to Gerald Brenan of Christmas Day 1922:

The human soul, it seems to me, orientates itself afresh every now and then. It is doing so now. No one can see it whole, therefore. The best of us catch a glimpse of a nose, a shoulder, something turning away, always in movement. Still, it seems better to me to catch this glimpse, than to sit down with Hugh Walpole, Wells, etc. etc. and make large oil paintings of fabulous fleshy monsters complete from top to toe. ⁴⁰

In this letter we see the gestation of 'Mr Bennett and Mrs Brown'. The letter confirms that the word 'soul' in Woolf's literary essays meant character. It also testifies that, by praising sympathy and compassion in Russian literature, she expressed her approval of how Dostoevsky, Chekhov and other Russian writers had explored hidden sides of human nature. Her first essay on Dostoevsky confirms the absence of any religious connotations in her discussion of the soul in his novels. Before referring to Dostoevsky's ability to read 'the depths of the darkest souls', she explains what it is that attracts her in his novels:

Alone among writers Dostoevsky has the power of reconstructing those most swift and complicated states of mind, of rethinking the whole train of thought in all its speed, now as it flashes into light, now as it lapses into darkness; for he is able to follow not only the vivid streak of achieved thought, but to suggest *the dim and populous*

³⁷Diary, II, p. 244.

³⁸ 'Freudian Fiction' (1920), in *Essays*, III, p. 196. At the same time, as Makiko Minow-Pinkney observes, in 1924 'the Hogarth Press became the official publisher of the entire International Psycho-Analytical Library, (which means all the writings of Freud and his followers)'. Makiko Minow-Pinkney, 'Psychoanalytic Approaches', in *Virginia Woolf Studies*, ed. by Anna Snaith (London: Palgrave Macmillan, 2007), p. 60.

³⁹ Essays, III, pp. 430, 436.

⁴⁰Letters, II, p. 598.

underworld of the mind's consciousness [my italics] where desires and impulses are moving blindly beneath the sod.⁴¹

To conclude, Woolf used the word 'soul' as a convenient synonym of the 'underworld of the mind's consciousness', the synonym unmarred by the association with psychoanalysis. This explains her attack on Dostoevsky in 1929 when she said that to 'plunge into the depths of the soul is not really to enrich'. Here she protests against the conscious prophetic manner for which Murry, by contrast, praised Dostoevsky. Woolf disliked those passages in the novels of Tolstoy and Dostoevsky that sound like philosophical or social treatises. ⁴² But she never stopped admiring Dostoevsky's skill in exploring and portraying human psychology. In 'Phases of Fiction' she classifies him, together with Proust, as a psychologist, paying tribute to the revolutionary influence his novels had on English writers. She observes that, after the Victorian world of 'shrubberies and lawns', 'we have been led on with Dostoevski [sic] to descend miles and miles into deep and yeasty surges of the soul'. ⁴³

⁴¹Essays, II, p. 85.

⁴²When reading a French translation of *Anna Karenina* for the first time in 1909, Woolf complained that 'there is a great deal of the political tract in the book'. Holograph reading notes, January 1909 - March 1911. 36 pages. The Berg Collection. Reproduced in: *Major Authors on CD-ROM: Virginia Woolf.*

⁴³Essays, V, p. 80.

Where have all the big animals gone? Understanding the causes of Late Quaternary megafaunal extinctions.

Graham Prescott*

Integrative Bioscience

"We live in a zoologically impoverished world, from which all the hugest, and fiercest and strangest forms have recently disappeared."
- Alfred Russell Wallace [1]

The majority of large, terrestrial animal species present 100,000 years ago are now extinct. Opinion has been divided as to whether these extinctions were caused by humans, rapid climate change, or a combination of the two. The arguments have generally been qualitative; we performed a quantitative analysis to determine which factors best correlated with the pattern of extinctions. We found the pattern of global megafaunal extinctions to be best explained by models containing both human and climatic factors. Understanding how human impacts and rapid climate change interacted to cause extinctions in the past may be crucial to preventing extinctions in the near future.

The majority of the large animal (megafauna) species that were present 100,000 years ago are now extinct. Europe, including Britain, was host to mammoths, rhinos, and hippopotamuses. The wildlife of the Americas included mastodons, giant sloths and armoured glyptodonts, relatives of armadillos the size of a small car. Australia had a wide range of large marsupials including giant kangaroos, marsupial lions and the rhinoceros-sized diprotodon. Extinctions have happened throughout the history of life on Earth, but relative to the average rate of extinctions these ones, which mainly occurred between 50,000 and 5,000 years ago, were unusually severe and selective, in that they disproportionately affected large, slow-breeding animals [2].

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These extinctions occurred in the backdrop of dramatic climate change. During the Quaternary (the past million years), the Earth's climate has been subject to periodic cycles of warmth and cooling, known as Milankovitch cycles, caused by changes in the parameters of the Earth's orbit around the sun. These cycles include changes such as the distance from the sun that the Earth travels and the direction of the Earth's tilt. These parameters affect both the amount of solar radiation received by the Earth (a function of its distance from the sun) and the relative amount of radiation received by the northern and southern hemispheres in a given year (a function of the Earth's tilt). These cycles have led to large fluctuations in global temperatures, ice sheet sizes and sea levels [3].

Another feature distinguishing the Late Quaternary (the last 100,000 years) was the global dispersal of modern humans out of Africa, starting in Eurasia and Australia 60-30 kyr BP (thousand years before present), before moving into the Americas 30-10 kyr BP, and into more remote islands, such as Madagascar and New Zealand, only within the last three thousand years [4-7]. It should be noted that the exact dates of both human arrival and the extinctions are uncertain because dating techniques are prone to error; for example, samples may be contaminated with younger material. Furthermore archaeological and paleontological data is selective - only a small fraction of evidence is preserved, and not all preserved evidence has been found [5]. The dates used in this essay represent the range of current best estimates.

Information about prehistoric events is incomplete, which makes it difficult to be certain about what caused these extinctions. We have a better idea however, of what happened in more recent extinctions on islands around the world. The dodo, the flagship of extinction, disappeared shortly after human arrival in Mauritius in the 17th century. The dodo's ancestors were probably pigeons who reached Mauritius many thousands of years ago. Evolution on an island without terrestrial predators had left them with weakened wings, and its inability to fly is commonly cited as the reason for its demise. This evolution in isolation of predators also left the dodo with a behavioural disadvantage when humans arrived - lack of fear. While many continental animals will run away from approaching humans (or other predators, such as introduced pigs and monkeys), dodos did not, making them much easier to catch. This phenomenon, known as ecological naïvety, has been reported widely amongst animals living on islands that have only recently been discovered by humans; it still applies, for example, to many of the endemic species inhabiting the Galàpagos Islands [8].

This naïvety may well have contributed to two relatively recent cases of large animal extinctions. Madagascar and New Zealand are thought to have been settled 1,500 and 700 years ago respectively [9,10]. Before human arrival, both had a collection of large animals, especially giant birds. New Zealand had no

mammals (apart from three bat species), but had several species of moas, flightless birds ranging in size from 12 to 250 kg [11]. Madagascar had elephant birds, the largest birds ever to live, sometimes considered the inspiration for the *roc* (a giant bird able to carry elephants in its talons) in Arabian Nights [12], as well as hippopotamuses and gorilla-sized lemurs [10]. After human arrival, all large animals (using the conventional, if arbitrary, threshold of 100 pounds or 44kg [4]) in Madagascar and New Zealand became extinct. There is extensive archaeological evidence in both places showing that humans hunted these animals for food, ultimately driving them to extinction [10,13].

This recorded extinction pattern, of human hunters driving large, naïve species to extinction after arriving in new territory, has been extrapolated to explain the disappearance of the megafauna elsewhere. Paul Martin put forward the 'overkill' hypothesis in 1973 to explain the wave of extinctions that happened between 15-10 kyr BP in the Americas [14]. He suggested that the first human settlers hunted naïve megafauna into extinction in as little as a few thousand years as they spread from Alaska to Tierra del Fuego. This has also been suggested to explain the extinction of Australia's megafauna [15].

Three main lines of argument support this theory. Firstly, the extinctions happened at different times in different places, but apparently always after human arrival (see table 1). Secondly, the extinctions were least severe in Africa (see table 1), where megafauna had more time to co-evolve with humans (and were therefore less naïve and vulnerable to human hunting). Thirdly, the fact that it was mainly large animals that went extinct suggests a role for selection by human hunters. An analysis by Chris Johnson [16] suggested that slow-breeding animals (independent of size, although most large animals breed slowly) were the most likely to become extinct. Exceptions to the pattern were generally found in closed environments (e.g. forests), lived in tree canopies, or were nocturnal. These are all life-history traits which would have reduced their exposure to human hunting, and this pattern has supported a role for humans in the extinctions.

Hypotheses blaming humans for the extinctions have met considerable opposition however. Uncertainty over dating megafaunal remains and human arrival has led some to question the assertion that the extinctions always closely followed human arrival. This has been especially controversial in Australia where the conventional interpretation (human arrival around 50 kyr BP, extinctions 50-45 kyr BP [15]) has been challenged. Some researchers have dated sediments in close association to megafaunal remains to 40-32 kyr BP at Cuddie Springs, suggesting prolonged coexistence of humans and megafauna, but evidence of sediment disturbance has led many to reject the reliability of these dates [5]. Genetic data have also suggested that human arrival may have occurred later (40-30 kyr BP) [6]. If humans arrived after the extinctions occurred (i.e. if we accept

globally extinct, by region. Table 1: Percentage of megafaunal genera (> 44 kg) present 100 kyr BP (thousand years before present) that became regionally or

greater than 44kg (100 pounds) and Oriental Eurasia to estimate	imals) of a mean adult body mass ne timing of extinctions in Africa	the same genus. The criterion for megafauna (large animals) of a mean adult body mass greater than 44kg (100 pounds) follows Martin [4]. There are insufficient data about the timing of extinctions in Africa and Oriental Eurasia to estimate	the same genus. The follows Martin [4].
are different species belonging to	ra leo) and tigers (anthera tigris) :	classification above species - for example lions (Panthera leo) and tigers (anthera tigris) are different species belonging to	classification above
plural genera) is the next level of	quite different species. A genus (rest of the continent) - because the two regions contain quite different species. A genus (plural genera) is the next level of	rest of the continent
t of the Indus) and Palearctic (the	ntal (south of the Yangtze and eas	Notes on table 1: Eurasia is split into two regions - Oriental (south of the Yangtze and east of the Indus) and Palearctic (the	Notes on table 1: Eu
2.3	2.3-0.5	100	Madagascar
0.7	0.7-0.6	100	New Zealand
50-40 or 40-30	50-45 or 35-30	84	Australia
30-10	15-5	81	South America
30-10	15-10	70	North America
60-50	50-5	c) 32	Eurasia (Palearctic)
60-50	-	1) 21	Eurasia (Oriental)
Pre-100	-	18	Africa
	present)	100,000 years	
years before present)	animal genera lost in the last (thousands of years before years before present)	animal genera lost in the last	
Human arrival (thousands of	Percentage of large (> 44kg) Timing of most extinctions	Percentage of large (> 44kg)	Region

when they occurred. Data on megafaunal loss calculated from our own data except: Africa [17], Madagascar [10] and are from: [4-7, 10, 13, 17]. represent the suggestions of two rival schools of thought on the matter. Data on the timing of extinctions and human arrival Oriental Eurasia [18,19]). There is some debate as to when the Australian extinctions happened - the two figures presented

the most recent suggested dates for human arrival but the earliest ones for the extinctions) then we can rule out humans as a cause of the extinctions.

If humans arrived many thousands of years before the extinctions (if we accept the earliest estimates for human arrival, and the validity of the most recent Cuddie Springs dates) - then they might still be responsible for the extinctions. While the earliest theories on the topic assumed that humans might have caused megafaunal extinctions within a few thousand years of their arrival in a new region, humans could still have been involved in the extinctions - there is no reason to assume that overkill must have been rapid.

Issues have also been raised over whether humans would have been numerous enough, and possessed sufficient technology, to wipe out so many large animals. It is widely accepted that hunters in Eurasia and North America successfully hunted megafauna [20], but the importance of such hunting has been contested in Australia, where the extinctions occurred before the use of stone-tipped spears and dogs in hunting [21]. The paucity of archaeological sites containing megafaunal remains (unambiguously killed by humans) has been used to criticise overkill hypotheses, but its proponents have argued that if overkill occurred very rapidly, few archaeological sites would contain megafaunal remains [22]. Overkill models do not necessarily rely on hunters having been highly numerous and successful - slow-breeding species may have been vulnerable to even small increases in mortality [23]. The assumption of naïvety has also been questioned, with some researchers doubting that inferences made from the extinctions of island birds with no terrestrial predators can be applied to large animals living on continents with many predators [21].

The default alternative to human based hypotheses has generally been to attribute the extinctions to climate change [23], although other causes such as disease and meteor strikes have been suggested [24,25]. Changes in climate have been implicated in pre-human extinctions, and the dramatic changes at the beginning and end of ice ages would clearly have had strong impacts on animal populations. A problem for climate based hypotheses has been in explaining why extinctions happened at different times in different places - for example floral change seems to have been as marked in regions that did not suffer megafaunal losses at the end of the last ice age around 12,000 years ago (e.g. Southeast Asia and New Zealand) as in places that did (e.g. North America), suggesting that environmental changes might not account for this pattern [23]. While vegetational change did coincide with many of the extinctions, it is not clear that it was any more marked than in previous glacial-interglacial cycles, and evidence for complete habitat loss is also lacking. Furthermore it is unclear why climate change would have affected large animals more than others.

Our analysis

Arguments about the causes of the late Quaternary megafaunal extinctions have generally been qualitative. In an undergraduate project I worked on last year (with David Williams, Andrew Balmford and Rhys Green) we tested whether the global extinction pattern correlated with human arrival and climate change quantitatively. We compiled a comprehensive list of human arrival and megafaunal extinction dates for the regions we studied and climate records for the corresponding time period. This enabled us to test whether the spatio-temporal pattern of extinctions was predicted by the timing of human arrival, severity of climate change, or a combination of the two.

The analysis consisted of binary logistic regression - seeing how well the proportion of megafauna (defined as animals with an average mass of greater than 44kg) becoming extinct in different time periods (blocks of 10,000 years) correlated with climate change variables and human arrival. We tested different models (combinations of climate variables and/or human arrival) to see which ones best explained the extinction pattern (whilst favouring models with fewer explanatory variables). The results, which will be submitted for publication, suggest that the models which best fit the observed extinction pattern of global megafaunal extinctions consisted of both human arrival and climate variables.

The animals that went extinct had previously survived several bouts of climate change, similar in severity to that at the end of the last ice age, without becoming extinct. What was different about the final bout of rapid climate change they experienced was the presence of early human hunters. Climate change and human arrival are not necessarily independent of each other - for example human arrival in North America (overland via Alaska) was only made possible by receding ice caps.

Our study has shown correlation, not causation - research is still needed into the mechanisms that led to extinctions, which will involve research into archaeology, genetics, ecology and modelling. Another caveat is that the conclusions are dependent on the reliability of the dates used, and these may change as dating technology is updated and new fossil finds are made. We believe however that the framework we have employed - large-scale, quantitative analysis - is the correct one to use, whatever dates are accepted as reliable.

Lessons for conservationists

As well as being an interesting question to solve in its own right (Lloyd, in his popular history of the world [26], described it as one of the top ten unsolved mysteries), understanding prehistoric extinctions will offer insights into understanding and preventing current extinctions. We are often said to be in the

midst of one of the six biggest extinction crises in the history of life on Earth, and large animals are more likely to be threatened than smaller ones. Although animals today face new threats (e.g. conversion of wild habitats for agriculture) they face some of the same ones that seem to have contributed to prehistoric extinctions. Overkill - be it illegal poaching of tigers and rhinos, or (still legal) unsustainable fishing of bluefin tuna - is still a major threat for many populations. Climate change, this time man-made, is also threatening many species, large and small. Some, like polar bears and corals (two of the most popularly cited examples), are directly threatened by climate change - but climate change may threaten species indirectly by making their habitat unsuitable. Understanding how these two threats combined to cause past extinctions may help us prevent it happening again.

Striking a more optimistic note, some researchers have suggested that as well as guarding against future losses, conservationists should seek to reverse some of these losses where possible. This has led to the reintroduction of some species to known historic ranges - in Britain for example, beavers, and boar have already been reintroduced (and there are proposals to do the same with other species, including wolves). This is only possible where the species has not become globally extinct. Josh Donlan and colleagues (including Paul Martin) [27] have suggested that conservationists should think more broadly than this - although the American elephants, lions and cheetahs are extinct, their African counterparts are not - and they have argued for these species to be reintroduced to North America as ecological proxies for their extinct American counterparts. This proposal has naturally raised concerns from locals fearful of future human-wildlife conflicts, and worries from ecologists [28] that this may threaten local species, and distract money and attention from other conservation priorities (such as protection of these animals in their home continent). While the practicalities of this proposal may prove unworkable for these reasons, it does raise the interesting question of what exactly it is that conservationists should be trying to conserve and recreate.

It may one day be possible to resurrect some of the extinct animals themselves. Proposals have been made for the 'Jurassic park' style cloning of woolly mammoths from frozen DNA. This possibility however, remains unlikely (the frozen DNA may be too damaged to allow cloning), will not be possible for most extinct species, and there are some worries that it may undermine one of the most powerful messages of conservation - 'extinction is forever' [29].

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Civil disobedience and political obligation: why are we obliged to obey the law, and when are we justified in breaking it?

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This paper investigates the nature and function of civil disobedience, with particular attention to the relationship between civil disobedience and political obligation, or the obligation to obey the laws of one's own country. Two influential efforts to make sense of the relationship between civil disobedience and political obligation are examined: an account presented by political philosopher John Rawls, and traditional 'consent theory.' These efforts, it is argued, are ultimately unsuccessful. Rawls's account does not acknowledge the radical nature of the views put forward by many of those involved in civil disobedience, and traditional consent theory does not provide enough room for civil disobedience as a unique category of political action. A third thesis about the relationship between civil disobedience and political action is then presented; this thesis draws in part on the work of political theorist Michael Walzer. According to the thesis of this paper, civil disobedience is not a breach of our ordinarily absolute political obligation to the state; rather, it arises from conflicts among our obligations towards various social bodies, including the state.

In March 1965, American civil rights activists attempted to march from Selma, Alabama, and were attacked by state troopers. Animal rights activists have recently protested animal testing at the University of Oxford using methods ranging from picketing to arson. In 2008, the head of Australia's Green Party supported the illegal blocking of woodcutting in forest areas. These incidents have all been cited as examples of 'civil disobedience.'

But what is civil disobedience? How does it differ from criminal behaviour or rebellion? These questions have plagued political theorists, and political actors,

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in their efforts to come to terms with this kind of political resistance. The effort to understand the concept of civil disobedience is not merely an academic exercise. Applying the label of 'civil disobedience,' as opposed to 'criminal behaviour' or 'rebellion,' to a political movement has real consequences. Such a label can affect the movement's sense of legitimacy, its success, and the respect afforded by the general public and the government.

This paper investigates the nature and function of civil disobedience. First, it provides a general overview of attempts to define civil disobedience. A particularly significant feature of such attempts is that they presuppose a general obligation to obey the law; they presuppose, that is, some kind of political obligation. The second part of the paper looks at two influential efforts to make sense of the relationship between civil disobedience and political obligation: an account presented by political philosopher John Rawls, and traditional 'consent theory.' These efforts, despite their insights, are ultimately unsuccessful. Rawls's account does not acknowledge the radical nature of the views put forward by many of those involved in civil disobedience, and traditional consent theory does not provide enough room for civil disobedience as a unique category of political action. The final part of the paper presents a third thesis about the relationship between civil disobedience and political action; it draws in part on the work of political theorist Michael Walzer. According to the thesis of this paper, civil disobedience is not a breach of our ordinarily absolute political obligation to the state; rather, it arises from conflicts among our obligations towards various social bodies, including the state.

This paper focuses on civil disobedience in states of a certain kind: those that respect majority rule while protecting minority rights. Such states are sometimes called 'liberal democracies,' but the precise definition of a liberal democracy is not the main issue here. The reason for this restriction is that very different issues arise when one considers the nature of disobedience to law in a dictatorship, for instance, and disobedience to law in a state that allows citizens to voice their disagreement through established channels such as elections and that protects basic rights. In the latter case, the challenge for those supporting any form of civil disobedience is to show how citizens can be justified in 'going around the system' when there are outlets for them to express their grievances within the political process.

I. Defining Civil Disobedeince

Civil disobedience is generally thought to violate a law in the statute books.¹ It is a very widespread notion in liberal democracies, however, that citizens ought

¹Hugh Bedau, 'Introduction' to Civil Disobedience in Focus (New York: Routledge, 1991), p. 4.

to obey the law - that they have some kind of political obligation.² An account of civil disobedience that leaves any room for its potential moral justifiability, therefore, must address the relationship between civil disobedience and political obligation.

In fact, there have been numerous historical instances in which lawbreaking in the form of civil disobedience was seen as morally justified. Of course, there are arguments over which historical movements deserve the title of civil disobedience, but some of the most widely cited are the American civil rights movement, the struggle for Indian independence led by Gandhi, and the tax resistance of Henry David Thoreau in 1846.³ So another criterion for an account of civil disobedience is that it be responsive to historical examples. The 'responsiveness to history' criterion will be used later in the paper in the discussion of Rawls.

Given that historical instances of civil disobedience are often considered to be morally justified, political theorists face the task of differentiating civil disobedience from other kinds of lawbreaking activity that are not equally justifiable. An account of civil disobedience should explain the difference, for instance, between this type of political action and ordinary criminal behaviour. Why should we treat those engaged in civil disobedience any differently than we would treat other arsonists or tax evaders or disturbers of the peace? Political theorists have suggested that civil disobedience is marked by certain distinctive features: first, conscientiousness: the illegal act is based on moral principle instead of narrowly selfish considerations,⁴ and second, publicity: the illegal act is carried out in the public eye to draw the attention of the public to what is perceived as a moral wrong.⁵ In other words, civil disobedience, as opposed to ordinary criminality, has to involve some kind of 'moral seriousness.'⁶

Finally, another criterion for an adequate account of civil disobedience emerges from the requirement to differentiate civil disobedience from outright rebellion. If people engaged in civil disobedience are challenging the authority of the state, why should they not be treated as dangerous rebels who should be forcibly put down? The response among many political theorists is to argue that civil disobedience is 'limited' in its goals; it apparently seeks to change particular laws without overturning the entire political system. The fact that people engaged in civil disobedience are often willing to accept the legal punishment for their

²David Lyons, 'Moral Judgment, Historical Reality, and Civil Disobedience,' *Philosophy and Public Affairs* 27:1 (Winter, 1998), p. 34.

³Lyons, 'Moral Judgment, Historical Reality, and Civil Disobedience,' pp. 31-49.

⁴Lyons, 'Moral Judgment, Historical Reality, and Civil Disobedience,' p. 7.

⁵Lyons, 'Moral Judgment, Historical Reality, and Civil Disobedience,' p. 7.

⁶Michael Walzer, *Obligations: Essays on Disobedience, War, and Citizenship* (Cambridge: Harvard University Press, 1970), p. 20.

actions is often taken as proof that they are expressing limited opposition to particular laws rather than to the entire legal edifice. Moreover, nonviolence is often cited as an important limitation on the kind of protest that counts as civil disobedience, although not without controversy.⁷

Overall, political theorists tend to characterize civil disobedience in a way that highlights its potential moral justifiability, differentiating civil disobedience from criminality and revolution, and making room for an exception to the general moral obligation to obey the law. The question, at this point, is which accounts of political obligation are able to accommodate a plausible account of civil disobedience. The second part of the paper will consider two responses to the problem of political obligation - Rawls's 'natural duty of justice' and traditional consent theory - and consider their implications for the role of civil disobedience.

II. Civil Disobedience and Political Obligation: Two Influential Accounts

A. Rawls's Natural Duty of Justice

Political thinker John Rawls, in his well-known 1971 book *A Theory of Justice*, presented an influential account of the relationship between civil disobedience and political obligation. For Rawls, political obligation to liberal states is grounded in a 'natural duty of justice,⁸ or the fact that citizens have a duty to support just institutions. Under Rawls's conception of political obligation, civil disobedience actually becomes a means of fulfilling our political obligations, instead of a means of overriding them. Rawls's account of civil disobedience is limited to a 'nearly just' society - as he puts it: 'one that is well-ordered for the most part but in which some serious violations of justice nevertheless do occur.' In such a society, civil disobedience consists in an attempt to address the majority's 'common sense of justice' by appealing to the principles of justice that the public generally accepts, and pointing out that society has not applied these principles properly in a given case. Thus civil disobedience, when carried out under the right conditions, is in fact a stabilizing mechanism for a nearly just regime, for it 'helps to maintain and strengthen just institutions.' 11

Rawls's account of civil disobedience, if it is accepted, provides a way to differentiate civil disobedience from ordinary criminality and outright rebellion. The criterion would be the idea of keeping one's society true to publicly accepted

⁷Bedau, 'Introduction' to Civil Disobedience in Focus, p. 8.

⁸Rawls, 'Definition and justification of civil disobedience,' in *Civil Disobedience in Focus*, p. 113; *A Theory of Justice* (Cambridge, MA: Harvard University Press, 1971), p. 381.

⁹ 'Definition and justification of civil disobedience,' p. 103; A Theory of Justice, p. 363.

¹⁰ Definition and justification of civil disobedience, pp. 105-6; A Theory of Justice, p. 366.

¹¹ 'Definition and justification of civil disobedience,' p. 114; A Theory of Justice, p. 383.

principles of justice; those engaged in civil disobedience would meet the criterion, while criminals and rebels would not. The use of this criterion or a similar one, however, would jeopardize the ability of Rawls's account to reflect the historical reality of protest movements in liberal democracies. As David Lyons points out, people who are often considered exemplars of civil disobedience - Thoreau, Gandhi, and Martin Luther King, Jr. - were not really engaged in a limited effort to correct the unjust elements of a reasonably just political system. ¹² In their cases, civil disobedience was a radical action: its participants sought to overturn political orders that they considered fundamentally unjust. Limits to their disobedience, such as nonviolence, were pragmatic attempts to win the favour of the majority instead of evidence for a principled allegiance to the law.

A supporter of Rawls's account might accept that the Rawlsian model of civil disobedience does not apply to historical cases such as that of Martin Luther King Jr. This is because Rawls's account is designed to show that civil disobedience can be justified in the case of a nearly just state, when there is sufficient consensus on just principles for those engaging in civil disobedience to appeal to underlying societal values; the conditions for this kind of state did not apply in the Jim Crow South. It is not clear, however, why citizens of such a 'nearly just' state would need to resort to civil disobedience in order to redress their grievances. If a society really is animated by a publicly recognized shared sense of justice, and citizens have recourse to legal mechanisms designed to address serious injustices, then why is it necessary for people to break the law in order to remind their fellow citizens of the true meaning of justice? There may be circumstances in which such a necessity arises, but they are likely to be extremely limited and not to take place on the scale of the civil rights movement.

Rather, when citizens turn to extralegal means of making their voices heard, they are likely to feel not that they are appealing to a basically intact societal sense of justice, but that their society has badly misconstrued the requirements of justice and needs significant reform. The point of civil disobedience - as in the case of Martin Luther King Jr.'s activism - is not to keep society true to 'publicly recognized' principles; it is to keep society true to the right principles, in the eyes of those breaking the law. By folding civil disobedience into political obligation, Rawls fails to recognize the extent of the frustration expressed through civil disobedience. Rawls account, therefore, cannot provide a full picture of the claims that those actually engaged in civil disobedience are making against liberal states.

¹²David Lyons, 'Moral Judgment, Historical Reality, and Civil Disobedience.'

B. Civil Disobedience and Traditional Consent Theory

Another framework in which to view the relationship between civil disobedience and political obligation in liberal states is the classic doctrine of the 'consent of the governed.' Consent theory holds that citizens can only acquire political obligations if they voluntarily consent to the authority of a given set of political and social institutions.¹³ One of the most common versions of consent theory is the idea of the 'social contract': that the state has been created by the mutual agreement of citizens who submit to its authority in return for protection, the establishment of a legal system, and/or other goods.

There are problems with consent theory, such as the question of whether citizens living in modern liberal democracies actually have a choice to give or not to give consent. Nevertheless, the doctrine of consent still carries a great deal of moral weight, and it reflects deep intuitions about the source of political obligation: what better way to acquire obligations than to agree to acquire them? Given that there is something valuable about consent theory, the question is: can consent theory help to generate a plausible understanding of civil disobedience?

In fact, the concept of civil disobedience fits quite uneasily within the traditional doctrine of consent. If all citizens have consented to be governed by a set of political institutions, then the outcome of these procedures can be seen, in a certain sense, as a result of each citizen's exercise of his or her free will. How, in this case, could citizens be justified in breaking laws of which they are collectively the authors?

Consent theory does not, however, require unconditional obedience. It has traditionally incorporated some kind of 'right to resistance.' ¹⁴ Thomas Jefferson, borrowing from John Locke, writes in the American Declaration of Independence:

'We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness. That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed, That whenever any Form of Government becomes destructive of these ends, it is the Right of the People to alter or to abolish it, and to institute new Government, laying its foundation on such principles and organizing its powers in such form, as to them shall seem most likely to effect their Safety and Happiness.' 15

¹³John Simmons, *Moral Principles and Political Obligations* (Princeton: Princeton University Press, 1979), p. 57.

¹⁴Pateman, *The Problem of Political Obligation*, pp. 55-60, 77-80.

¹⁵United States Declaration of Independence, adopted July 4, 1776.

In other words, when the government ceases to protect the rights that it was instituted to defend, the citizens' consent no longer applies. A right collectively to dissolve the government, however, is not equivalent to 'civil disobedience' by individuals or groups. Under the traditional consent model, if citizens are justified in claiming that the government has ceases to protect their rights, then the government seems to have forfeited its legitimacy - because governmental authority was originally based on the premise that the government would protect people's rights. But then citizens engaged in civil disobedience are making a claim against the fundamental basis of government authority. Citizens might still want to obey the law for pragmatic reasons, but they would lack a reason for principled allegiance to the government. In other words, the theory does not seem to have the conceptual resources to separate civil disobedience from all-out rebellion.¹⁶

Consent theory can try to adopt more nuanced views of 'consent' in order to justify a claim against the political system that does not amount to a rejection of the system's normative basis. But these views still run into a basic problem: consent theory has trouble recognizing that those engaged in civil disobedience want to maintain the social framework in a changed condition, rather than to dissolve it. In the case of Martin Luther King Jr., for instance, the goal of protest was not the disintegration of American society and its characteristic institutions, but the construction of more just arrangements, especially with respect to race relations. This commitment to constructing an altered future together with fellow citizens within a common institutional framework marks civil disobedience as an action distinct from rebellion.

Such an account of civil disobedience does not merely amount to an endorsement of Rawls's view of civil disobedience as a corrective in 'nearly just' institutions. Rawls's view still fails to account for the radical nature of civil disobedience - its fundamental opposition, that is, to publicly accepted principles of justice. The point is that a challenge to the state can be radical, in the sense that it aims to change social relations in a far-reaching way, without aiming fully to dissolve the social framework. Lawbreaking environmental activism, for instance, is often carried out with a view towards creating a society whose relationship with nature is radically re-configured, but still governed within a society whose governing framework is recognizably continuous with the current one.

In order to take into account the complex relationship between civil disobedience, rebellion, and stability, it may be more fruitful to view civil disobedience as an expression of competing obligations between various groups, which generates

¹⁶Pateman, The Problem of Political Obligation., p. 77.

tension through mutually exclusive claims of loyalty and solidarity. Such an account can, it will be argued, can be found in the notion of 'modified consent theory.'

III. Modified Consent Theory and Civil Disobedience

The theories of political obligation discussed thus far - Rawls's natural duty of justice and traditional consent theory - have difficulty accommodating a plausible account of civil disobedience. One of the reasons for this difficulty, this section of the paper will suggest, is the overly monolithic notion of obligation employed in both accounts. In both accounts, obligation is largely seen as a direct and vertical relationship between the individual and the state. A more complex account of obligation, which will be called 'modified consent theory,' can give rise to a more adequate explanation of civil disobedience.

The idea that governments derive their authority from the 'consent of the governed' is a powerful moral ideal. To jettison consent as the basis of political obligation, then, would be hasty. But it is not necessary to see consent solely in the context of obligation to political institutions, nor is it necessary to see consent as a one-time action. As political theorist Michael Walzer notes, one might see consent as given over time in a variety of different directions, to various friends, parties, religious sects, unions, and movements.¹⁷ People give promises over the course of their lifetimes, as the ends of these groups become their ends, and as people become unable to imagine themselves without these groups' influence. The view that consent generates obligation to multiple social bodies through a gradual process can be called 'modified consent theory.' Political obligation, on the 'modified consent' view, is not separate from obligations to other social bodies; in fact, it can be characterized as an extension of these obligations. Secondary associations do have common lives of their own, but they are still grounded in official state structures. The state regulates the relations among groups, providing the framework within which individuals can acquire and relinquish voluntary commitments of various strengths. People cannot adequately describe their lives within families, unions, cultural associations, religious sects, and so on without referring to the background institutions that make these associations possible. Consenting to secondary associations, then, can be taken to express at least some allegiance to the governing framework of the state. One might object that those who consent to smaller groups may have no intention of making any commitment whatsoever to the state. The point, however, is that those who consent to secondary associations should intend to make some kind of commitment to the state. Responsible reflection about the terms of participation in a secondary

¹⁷Walzer, Obligations, xv.

association should include reflection on the governing structure within which the association operates. Though such reflection will not ground any kind of absolute commitment to state law - the commitment will be mediated through allegiance to smaller groups - it should ground the voluntary assumption of an attitude of respect for the state's proceedings, and this can serve as a basis for political obligation.

What are the implications of 'modified consent theory' for civil disobedience? As Walzer notes, people's consent-based obligations to groups that are smaller than the state, or 'secondary associations,' can conflict with their political obligations. Such situations create great tension for individuals who are members both of society at large and of smaller groups. When activists in the environmental movement illegally try to block development in a certain area, for instance, they are acting out a conflict between their obligation to the movement and their obligation to the laws of their state. When Quakers refused to take oaths, they faced tension between their commitments to the state and their religious commitments. Groups insisting that their members disobey state law in response to such conflicts are not necessarily revolutionary; members are not necessarily called upon to attack the very existence of the larger society. Many secondary associations make partial claims; that is, they demand primacy only in a particular area of social and political life. Civil disobedience occurs, then, when secondary associations act out a partial claim against the state. 19

Does this account of political obligation meet the criteria that were used at the beginning of the paper to characterize an adequate theory of civil disobedience? First, modified consent theory provides a reason why civil disobedience might be justifiable given the default position that citizens possess a moral obligation to obey the law. Simply because citizens are obliged to recognize the fact that their attachments to secondary associations are made possible in part by the existence of the state does not mean that their political obligation must overwhelm all other obligations. When the state engages in actions that endanger the integrity of secondary associations, the state has less of a claim to its citizens' obligations, and citizens may be able justifiably to disobey the law. Modified consent theory itself contains the ground of moral obligations to disobey state law: it is people's consent to secondary associations that gives rise to moral conflict, which may sometimes be resolved in favour of breaking the law.

Secondly, modified consent theory reflects historical usages of civil disobedience more adequately than Rawls's natural duty of justice and traditional consent theory. The advantages of modified consent theory over the traditional version, in terms of its 'realism,' stem from the modified account's ability to acknowledge

¹⁸Walzer, Obligations, p. 11.

¹⁹Walzer, Obligations, p. 11.

a form of disobedience different from rebellion; this will be discussed presently. The advantage of modified consent theory over Rawls's account, in terms of the theory's realism, is that modified consent theory recognizes the tension involved in disobeying state law by appealing to a more important moral goal. Far from folding civil disobedience into our ordinary political obligations, modified consent theory holds that civil disobedience becomes necessary when citizens' obligations to groups within the state conflict with their political obligations. In such situations, citizens will have to draw on principles of justice that have arisen from the common life of the group and not of the wider society. Modified consent theory therefore provides a way to account for the strained gap between the ideals of those engaged in civil disobedience and the conventional sense of justice.

To take an example, Martin Luther King, Jr. had an obligation to the African-American community, for instance, which conflicted with his obligation to follow the laws of his state. In carrying out civil disobedience, he appealed not to the conventional sense of justice, but to principles of justice that were considered radical by many people living in white society. These principles had emerged from the experience of marginalized African-Americans and other marginalized social groups throughout history, as well as from Christian sources.

Finally, modified consent theory is able to differentiate civil disobedience from ordinary criminality and outright rebellion more plausibly than traditional versions of consent theory. Traditional consent theory tends to conceive of consent as either present or absent, and it tends to focus on the specific consent relationship that gives rise to state institutions and laws. This makes it difficult for traditional consent theory to explain why citizens can personally decide when they are morally permitted to break the law without calling into question the entire consensual edifice, given that they have seem to have consented to follow the judgment of state institutions or at least to have been bound by some form of implied consent.

According to the modified conception of consent, however, individuals can acquire consent-based obligations to a variety of different groups, and the strength of each of our obligations can vary over time. Citizens can sharply disagree over certain societal principles and engage in civil disobedience accordingly, while agreeing to other guiding norms, such as the requirement, as Walzer puts it, not to 'threaten the very existence of the larger society or endanger the lives of its citizens.' Other such requirements, which can differentiate civil disobedience from ordinary criminality, might well include the norm that people engaged in civil disobedience must be morally serious, as evidenced by the fact that they break the law publicly and offer reasons for doing so, and by the fact that their

²⁰Walzer, Obligations, p. 17.

groups have a 'continued awareness, a kind of shared self-consciousness' about the kind of purposes and actions that membership entails.²¹

Modified consent theory can also provide a principled basis for the notion of a limited challenge to consent-based state authority, thereby differentiating civil disobedience from outright rebellion. A secondary association makes claims in a particular area of social and political life and does not try to control all of its members' political actions. Put differently, a secondary association does not have to challenge the entire basis for state authority in order to express the core values at the heart of its common life.

The general point is that the modified consent theory of political obligation is better able to explain how those engaged in civil disobedience can seek radical change without demolishing the basis for any commitment to the social framework that has given rise to existing institutions. It is true that modified consent theory does not give us any solid criteria by which individuals can decide whether or not to disobey state law. It may not be possible to delineate civil disobedience with precision in a way that can be applied to every concrete case. Nevertheless, an account of the contextual and multifaceted nature of consent can explain why the question of exactly when citizens are justified in disobeying state law cannot be answered in the abstract - or even in the third person. Discussions of civil disobedience should not assume a monolithic picture of political obligation, but should consider the differentiated and gradual nature of citizens' commitment to a variety of different groups. In this way, it is possible to clarify the kind of claim that those engaged in civil disobedience are making - and can be justified in making - against the states in which they live.

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'I'll make love like a platoon': warfare, effeminacy and the disarming of anxiety in George Farquhar's *The Recruiting Officer*

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Recent literature on George Farquhar's *The Recruiting Officer* (1706) has emphasised its status as a piece of political polemic, intended to disarm civilian anxieties about military conscription and the place of the unfamiliar standing army in contemporary society. This article suggests that Farquhar also intended his play to disarm the fears of his fellow military officers, upon whom changes in warfare had imposed a disordered gender identity, verging into effeminacy. By demonstrating that duty could be reconciled with matrimony, and that military qualities such as discipline were integral to success in courtship, Farquhar offered an alternative masculine identity intended to allay the concerns of other officers.

Introduction

Midway through *The Recruiting Officer*, the Restoration comedy written by George Farquhar (1676/6 – 1707) in 1706, Captain Plume advises his friend Worthy that 'I'll make love like a platoon' (III.ii). The moment is comic, akin to Worthy's earlier description of his *amour* in military terms: 'the frigate is called the Melinda, a first-rate I can assure you' (III.ii). As such the play is an entirely typical Restoration comedy, mixing high wit with low morals in the best traditions of post-1660 English playwrights such as Etherege, Wycherley, Vanbrugh, and Congreve. Plume and his assistant, Sergeant Kite, have come to Shropshire to recruit men for their regiment, currently serving in Flanders under the Duke of Marlborough. Plume is already engaged to marry Sylvia, the daughter of Justice

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Balance, while his civilian friend Worthy pursues Melinda; both face competition from Captain Brazen, Plume's fellow officer, who has also come to Shropshire to recruit. By way of a convoluted plot that involves Sylvia disguising herself as a man and being recruited by both Plume and Brazen, as well as various underhand efforts by Plume and Kite to recruit other men for the army, Plume is finally matched with Sylvia, Worthy with Melinda, and Brazen goes off to war with the recruits raised by Plume.

However recent analysis has emphasised the political, even polemical, messages underlying Plume's statement. In a 2001 article entitled 'Warfare, Conscription and the Disarming of Anxiety', Kevin Gardner argued that Farquhar's comedy was intended to reassure contemporary audiences, and convince them that the professional soldiery and standing armies which warfare now required were to be trusted, even welcomed. The brutish side of warfare is skilfully turned away through humour, and even the licentiousness and trickery of Plume and his sergeant Kite are shown to be excusable, since they secure further recruits for the Queen's service. The comparison of love and warfare is used for comic effect, and to 'make drill and warfare seem as natural as sex'. The play is therefore seen as a message to the wider civilian population of early modern Britain, still uneasy about the consequences of military change and anxious about the place of the standing army within society. Britain had been at war for thirteen of the past eighteen years, as part of a European alliance against Louis XIV and the danger he posed to the balance of power in Europe. There was even the risk that the French king would restore the Jacobite pretender James III, the 'Old Pretender', to the English throne, and thus unleash the forces of Catholicism and absolutism upon Protestant Englishmen, their liberties, and their property. However there were also deep worries that the military, administrative and financial changes needed to defeat France were already destroying these English rights, through excessive taxation and political corruption, and that Marlborough's army was a direct cause of both. As a military officer himself, Farquhar was anxious to allay these fears.²

Warfare and Effeminacy

Drawing its inspiration from Gardner's article, this essay will go further, and suggest that Farquhar encoded multiple messages in his play. In particular, he used it as an opportunity to address and disarm the parallel anxieties of his fellow officers. Undoubtedly these existed. The new methods of warfare had

¹K. J. Gardner, 'George Farquhar's *The Recruiting Officer*: warfare, conscription, and the disarming of anxiety', *Eighteenth Century Life*, 25 (2001) p. 51. See also K. J. Gardner, '*Theatrum Belli*: Late-Restoration Comedy and the Rise of the Standing Army', *Theatre Survey*, 36 (1995)

²Robert John Jordan, 'George Farquhar's military career', *Huntington Library Quarterly*, 37 (1974)

accentuated the importance of discipline, both in the sense of mastering martial skills such as drill and volley fire and in the control of inner emotions such as fear. Contemporary military manuals emphasised that only discipline or experience could generate courage, which was often assigned a subordinate place to those qualities. One pamphleteer wrote in 1691 that:

without experience [courage] frequently does hurt ... but joined with experience and kept within bounds, it wants but opportunity to make [a man] eminent.³

Although this reflected the increasingly 'scientific' nature of warfare, and the premium that it placed upon mathematical or professional knowledge, these developments threatened the cultural paradigm of aristocratic martial honour through which most officers viewed their conduct. This was an older set of values that stressed the pre-eminence of honour and individual bravery, but one that was increasingly at odds with modern warfare. Military duty now required the suppression of honour, and thus the opportunity to display personal courage in forums such as the duel. One pamphlet printed in 1680 asked rhetorically what reward an officer might expect from the king by 'hazard[ing] their lives in a quarrel, destructive to his service'. The paradox of a soldier, that exemplar of courage and honour, being required by duty to turn down opportunities to display both is vividly displayed by Farquhar in *The Recruiting Officer*: Plume refuses to duel with his fellow officer Brazen over Melinda, causing him to exclaim in surprise 'Oons, sir, not to fight for her!' (III.ii). As Gardner emphasises, Plume has chosen duty, but he has done as at the cost of his personal honour.

The play therefore speaks to a corrosion of old standards of military conduct that has left military officers such as Brazen – a representative of the old order – stunned and even disheartened. However, given the close links between concepts of courage and contemporary portraits of masculinity, the unwillingness of new officers such as Plume to fight for their honour pointed to an even more disquieting erosion of gender identities. Writing in 1698, Captain Thomas Orme hoped his plans to reform the militia would show that 'the English heart is not so effeminate, sluggish, cowardly, or indispos'd to military affairs as they have been characterised'. In the 1750s, the failure of Admiral Byng to press home

³The perfection of military discipline, ... or, The industrious souldiers golden treasury of knowledge, (London, 1691)

⁴Roger B. Manning, Swordsmen: the martial ethos in the three kingdoms (Oxford, 2003)

⁵Advice to a souldier in two letters, written to an officer in the late English army, (London, 1680) p. 4

⁶Gardner, 'The Recruiting Officer', p. 47

 $^{^7} Thomas \ Orme, \ The late prints for a standing army and in vindication of the militia consider'd (London, 1698) p. 16$

his attack on the French fleet at Minorca led to accusations of cowardice and effeminacy. In the eighteenth century, the manliness of the militia, composed of native Englishmen, was contrasted with the effeminacy of professional German mercenaries, most notably in the public debates surrounding the Maidstone Affair in 1756. It was argued that their subservience to orders, and lack of personal independence, had nullified their masculine status and virtues. Modern warfare therefore imposed un-masculine identities upon its practitioners.

The play therefore hints at a set of anxieties shared by contemporary officers over the cultural emasculation required by discipline and duty. Although Plume refuses to duel over Melinda, when Sylvia, diguised as a man, then offers herself as a recruit he declares that although he will never fight for lady 'for a man I'll fight knee deep' (III.ii). This disordered gender identity is reinforced by Plume's later offer to her, still disguised as Jack Wilful, that 'you shall lie with me, you young rogue' (III.ii). When Kite tries to embrace her, he tells her that soldiers 'live together like man or wife, either kissing or fighting' (III.ii). In the same scene, Melinda earlier notes that 'no sooner a captain comes to town, but all the young fellows flock about him, and we can't keep a man to ourselves' (III.ii). The strong hints of same-sex attraction are not restricted to Farquhar's play: a contemporary broadside accused English soldiers of risking the gallows 'for money to compass a punk'. At its height, the play therefore suggests that the demands of duty have compelled officers to abandon their masculinity entirely, and to embrace effeminate and unmanly conduct both in love and in war.

Similar anxieties over disordered sexual conduct and gender identity are expressed in other parts of the play. The essential paradigm of civilian gender relations during this period remained rooted in the idea of marriage, as evidenced by the fact that Plume eventually marries Sylvia and resigns his commission. In the *Constant Couple*, another of Farquhar's plays, Colonel Standard similarly resolves to settle down with Lady Lurewell and resign his commission. However, both Plume and Kite display wildly licentious behaviour during their efforts at recruitment, conduct which challenges societal norms. In the opening scene, Plume is confronted with the prostitute Molly who has just borne his bastard. He tells Kite that 'you must father the child' and marry her: Kite protests that he is already married, but to how many 'I can't tell readily – I have set them

⁸Robert McGregor, 'The popular press and the creation of military masculinities in Georgian Britain', in Paul R. Higate (ed.), *Military masculinities: identity and the state* (London, 2003) pp. 143-54

⁹Matthew McCormack, 'Citizenship, nationhood, and masculinity in the affair of the Hanoverian soldier, 1756', *Historical Journal*, 49 (2006). For a wider discussion of these issues, see Matthew McCormack, 'The New Militia: war, politics and gender in 1750s Britain', *Gender & History*, 19 (2007)

¹⁰The Dutch-Gards farewell to England, (1699). The OED defines a punk as a prostitute, or a 'catamite, sexual partner by another man, esp. by force or coercion'

down here upon the back of the muster-roll' (I.i). After this display of sexual incontinence, bastardy and bigamy, Plume consoles Kite by telling him that he will corruptly secure a man's pay for him, and recommends that he 'go comfort the wench in the straw' (I.i). Things move rapidly downhill from there. Plume cynically propositions the country maid Rose in order to recruit her brother, and then just as cynically passes her to Sylvia – still disguised as Jack Wilful – in order to secure her enlistment. Well might Melinda say that soldiers 'do the nation more harm by debauching us at home, than they do good by defending us abroad' (III.ii).

The play also casts further aspersions directly upon the institution of marriage. Justice Balance, Sylvia's father, tells Plume that 'you're engaged already, wedded to the war - war is your mistress' (II.i), presumably leaving no opportunity for proper sexual conduct. Other incidents suggest that marriage is frequently a cynical sham: the poacher's wife says that they agreed to pretend to be married, so that he would not be enlisted and she would not be arrested as a whore (V.v). Asked by Balance to explain how Rose has been married to her 'by the Articles of War', Sylvia - still in disguise - says that 'marriage is so odd a thing ... some make it a sacrament, others make it a convenience, others make it a jest' (V.iii). She claims that it is sacred in the military, but then describes a farcical imitation of a common-law marriage where the groom and his bride jump over a sword and retire directly to bed. The play therefore represents the dislocative effects of discipline and military duty, which have forced officers to abandon honourable sexual conduct and masculine gender qualities in favour of deceit, licentiousness, cowardice and effeminacy. In this respect, it undoubtedly speaks to wider anxieties felt by military men in similar, although obviously not such extreme, situations.

Gardner suggests that part of Farquhar's polemical strategy is to stress the positive outcomes of this profoundly ambiguous gender conduct. Plume's refusal to duel over anyone but a man secures Sylvia's recruitment, as does his offer to let her lie with Rose, a situation that forces Sylvia into a further experience of disordered sexual conduct. Similarly, his pursuit of Rose ultimately brings rewards: she tells Balance that Plume is 'to have my brother for a soldier, and two or three sweethearts that I have in the country' (III.i). Perhaps more importantly, unbridled sexual conduct is shown to provide recruits through procreation. Worthy notes that Plume has been 'serving the country with your best blood' (I.i), while Plume himself jokes that recruiting officers should leave as many recruits in the country as they take out. Balance worries that if all adopted Plume's methods 'they might come in time to be the fathers as well as captains of their companies' (III.i). Finally, Plume even suggests that such conduct is a necessary counter to the fatigues of recruiting: 'unless we could make ourselves

some pleasure amidst the pain, no mortal man would be able to bear it' (IV.i). Officers might therefore take comfort in their disordered gender identity with thoughts that it was necessary for the fulfilment of their duty.

Indeed, Balance thinks such conduct a manifestation of the qualities needed not just for recruitment but for actual warfare:

the gentlemen are vigorous and warm, and may they continue so; the same heat that stirs them up to love, spurs them on to battle. You never knew a great general in your life that did not love a whore. (V.ii)

However Balance possesses an outdated and outmoded view of warfare: he judges martial success by injuries gained and flags captured, and accuses Plume of 'providing nothing for our millions but newspapers not worth a-reading' (II.i). Plume's only response to this is world-weary cynicism. Asked to describe Marlborough's decisive engagement at the Battle of Hochstadt or Blenheim in 1704, the most glorious victory of one of Britain's greatest generals, he only replies that although undoubtedly it was a fine battle, he and the other soldiers were so intent on winning it that they took no notice of anything else.

Furthermore Farquhar hints that even this disordered sexual conduct is not worth the cost. Inviting Sylvia rather than Rose to share his bed, Plume confesses in an unguarded moment that 'I am not that rake that the world imagines; I have got an air of freedom, which people mistake for lewdness in me' (IV.i). He almost appears uncomfortable at the part which he has to play, comforting himself that his hypocrisy hurts no-one but himself. Most notably, in the closing stanzas of the play Plume declares that he will gladly abandon the fatigue of recruiting, 'with my fair spouse to stay / And raise recruits the matrimonial way' (V.vii). Farquhar therefore ends the play with the thought that Plume's disordered sexual conduct has ultimately been for naught: he is fully capable of contributing to the needs of the country within the traditional paradigm of masculine gender behaviour. In this he undoubtedly captures the concerns of many fellow officers, equally concerned at the loss of their traditional masculine identity, and unconvinced that the effeminacy forced upon them by their duty and military discipline was necessarily worth the cost.

The disarming of anxiety

The remainder of this article will consider how Farquhar contrived to disarm the anxiety suffered by this officers, as he did the concerns displayed by civilians, using similar tropes but for different reasons. The extensive analogies drawn between warfare and gender – most specifically the act of courting – will be shown

to be much more than Gardner's comedic mechanism to address the foreign nature of modern warfare. Such metaphors are ubiquitous throughout the play. In the same scene, Plume declares that to court Sylvia he'll 'make love like a platoon ... I'll stoop, kneel and stand', mirroring the mechanical actions integral to the contemporary practice of warfare. Similarly, Brazen declares of Melinda that 'I'll draw up all my compliments into one grand platoon, and fire upon her all at once' (III.ii). In the light of the concerns described above these cannot be regarded as throwaway remarks; it is worth noting that these military exercises were so important that when the local constable offers to display to Kite his expertise as sergeant of the militia, Kite strikes him across the head for placing his musket on the wrong shoulder (V.v).

However, by far the most powerful metaphor is that of siege and conquest. In the first scene Worthy compares to Plume his courtship of Melinda with that of a siege: after holding out for a while, 'the town was relieved and I was forced to turn my siege into a blockade ... I did make one general assault ... [but was] vigorously repulsed' (I.i). Similarly, in the *Constant Couple*, Lady Lurewell declares that Colonel Standard 'has besieged me as close as our army did at Namur' (IV.ii), while she describes Sir Harry Wildair's letters to her as 'a whole packet of love's artillery' (I.ii). The metaphor was even seen outside Farquhar's works: a broadside of 1670 encouraged the soldier to 'be valiant still ... I'll make you Captain of a Fort / And shew you how to lay the siege / ... And if you'll venture to scale the wall / I'll make you General of all'. 11

Farquhar was therefore drawing upon a wider literary trope, but with particular polemical intent. Gardner has written that his purpose was to demonstrate that Plume's attitude to love and courting is 'out-of-date', and to show how he modernises his behaviour towards more effective methods of 'platooning'. Certainly Farquhar shows that modern drill is a suitable model, as described below, but Gardner's argument appears to have been based upon a misunderstanding of early modern warfare, derived from secondary literature that is itself outdated. In many ways the siege was the defining characteristic of modern warfare, and the summit of the changing military realities with which Farquhar was engaging. The historian Geoffrey Parker has suggested that the increased use of gunpowder artillery in Europe in the early modern period caused a 'Military Revolution' through the creation of the 'artillery fortress' in response, a bastion whose capture could only be effected with professional knowledge of mathematics, ballistics, engineering and logistics. Especially in conflict zones such as the

¹¹Anon, Be valiant still, &c. A new song, much in request. Being the advice of an experienced lady in martial affairs, to her lover a young soldier (London, 1670)

¹²Gardner, 'The Recruiting Officer', p. 51

¹³Geoffrey Parker, *The Military Revolution: Military Innovation and the Rise of the West, 1500-1800* (Cambridge, 1988)

Spanish Netherlands (modern-day Belgium) that were studded with fortresses, true military success derived from the discipline and attention to duty necessary to capture such fortifications. In this respect, the 'decisive' battles such as Blenheim in 1704 and Ramillies in 1706 upon which Marlborough built his reputation were, to an extent, historical chimeras. ¹⁴ A field battle could only be decisive if the necessary logistical groundwork had been laid: discipline and professional knowledge was a necessary precondition for military success.

This is supported by evidence from contemporary military manuals and literature. Pamphlets produced in the 1690s emphasised that the nature of war had changed: Daniel Defoe wrote that since the British civil wars of the 1640s

the manner of making war differs perhaps as much as any thing in the world... the defensive art always follows the offensive, and tho' the latter has extremely got the start of the former in this age, yet the other is mightily improving also.¹⁵

He also pointed to the 'new ways of mines, fougades, entrenchments, attacks, elodgements, and a long et cetera of inventions that want names, practised in sieges and encampments'. 16 When he came to design a military academy for aspiring soldiers, among the most important skills he intended they should be taught were gunnery, fortification, mining, surveying and fireworking.¹⁷ Even those pamphleteers who thought that the standing army should be replaced by a militia thought that 'persons of quality or estate should likewise be instructed in fortification, gunnery, and all things belonging to the duty of an engineer'. 18 Sieges – and the mastery of the mechanical and intellectual skills necessary to operate the new equipment used in them - were therefore seen as crucial to military success. Admittedly neither Defoe nor most pamphleteers had any direct experience, although he at least was open about that fact that 'I am no soldier, nor ever was'. 19 However, most contemporary military manuals written by soldiers agree with him. The author of Fortification and Military Discipline – perhaps with one eye on increased sales - said that military change had invalidated previous books, and that soldiers should now know mathematics and fortification.²⁰ The veteran soldier Sir James Turner wrote that although officers could leave the

¹⁴Jamel Ostwald, 'The "decisive" Battle of Ramillies, 1706: prerequisites for decisiveness in early modern warfare', *Journal of Military History*, 64 (2000)

¹⁵Daniel Defoe, An Essay Upon Projects (London, 1697) p. 255

¹⁶Ibid. p. 3

¹⁷Ibid. p. 274

¹⁸ Andrew Fletcher, *A Discourse concerning militia's and standing armies* (London, 1697) pp. 14, 51-60; John Toland, *The Militia Reform'd* (London, 1699) pp. 40, 59

¹⁹Daniel Defoe, Some reflections on a pamphlet lately published entituled An argument shewing that a standing army is inconsistent with a free government (London, 1697) p. 21

²⁰Capt J.S., Fortification and military discipline in two parts (2 vols., London, 1688) vol. I, sig. A2

intricacies of artillery and engineering to 'those ingenious persons who profess it', a basic knowledge of both was unavoidable, and he certainly had no doubt of their importance.²¹ Both primary and secondary literature therefore supports the contention that successful siege was not an 'out-of-date' skill, as Gardner argued, but rather the centrepiece or summit of the new style of warfare that had emerged in Europe by 1700.

This allows what remains of Gardner's argument to be reversed: alongside disarming civilian anxiety by comparing war to sex or courting, Farquhar can be seen to be disarming military anxieties – over courage, masculinity and effeminacy – by comparing courting to war. The same skills, he appears to be saying, that lead to success in warfare can lead to the successful conclusion of normative sexual behaviour for military officers. Thus, discipline – involving the suppression of cultural traits such as courage or personal honour – was not a block to masculinity, but rather its culmination. Two key passages suggest that Farquhar was anxious to hammer this message home. When Worthy discusses the failure of his siege of Melinda, we learn that her aunt left her a bequest of £20,000, and Plume explains that

by the rules of war now, Worthy, your blockade was foolish. After such a convoy of provisions was entered the place, you could have no thought of reducing it by famine. You should have redoubled your attacks, taken the town by storm, or else died upon the breach (I.i).

Worthy explains that he made one 'general assault, and pushed it with all my forces', but was repulsed and abandoned the effort. Soldiers such as Farquhar would have known that often multiple attacks were necessary to dislodge an enemy, while Worthy's civilian credentials raise doubts over whether he had – by analogy – the martial skills necessary for a successful courtship. Perhaps the same is implied by Lady Lurewell returning Sir Harry Wildair's 'packet of love's artillery': although Wildair had served in Flanders he did so 'for the same reason that I wore a red coat – because 'twas fashionable' (III.iv), suggesting that his failure with Lurewell is also linked with his amateurish military behaviour. However, perhaps the most explicit statement of this approach is found in Plume's comment to Worthy noted at the start of this essay, that he would 'make love like a platoon... faith, most ladies are gained by platooning' (III.ii). Farquhar therefore draws an explicit parallel between success in courtship and triumph in warfare: moreover, it is success that is achieved through discipline and attention to duty rather than traditional masculine or martial behaviour.

²¹James Turner, Pallas armata, Military essayes of the ancient Grecian, Roman, and modern art of war written in the years 1670 and 1671 (1683) p. 188

Similar conclusions apply to Worthy's description of Melinda, and how she rejected Brazen: 'the frigate is called the Melinda, a first-rate I can assure you; she sheered off with him just now' (III.ii). Admittedly Plume later compares a privateer – a privately-owned commerce raider – to a playhouse, and finds little difference (V.iv), but in this case the metaphor is clearly of courtship. Naval battles required just as much professionalism and discipline as those on land. Indeed, the service had been dogged since the 1660s with conflicts between 'gentlemen' and 'tarpaulins' over this very issue.²² The former were naval officers drawn from the social elite, who were therefore politically reliable but lacked military skills; the latter were experienced sailors promoted from the lower deck, whose origins made them politically suspect. Even those inclined to prefer officers drawn from the elite acknowledged that naval warfare was simply too complex, and too reliant upon professional knowledge and conduct, to be left to amateurs. The Marquis of Halifax thought that

gentlemen shall not be capable of bearing office at sea, except they be tarpaulins too; that is to say, except they are so trained up by a continued habit of living at sea.²³

This is entirely consistent with the situation in *The Recruiting Officer*, where Brazen is defeated in his courtship of Melinda. Clearly his courage and personal honour are of as little use in courting as they are upon the modern battlefield, whether upon land or at sea.

Conclusion

The *Recruiting Officer* therefore possesses multiple meanings, apparent only to their applicable audiences. As well as a commercial, dramatic and literary exercise, and a political polemic aimed at allaying civilian fears over the new standing army, it was also piece of internal dialogue aimed by Farquhar at his fellow officers, men for whom the new nature of warfare posed manifold threats to their cultural and gender identity. As courage and personal honour, the badges of the old 'aristocratic martial ethic', were increasingly superseded by notions of professionalism, duty and self-discipline, such officers were faced with the devaluation, even inversion, of their traditional forms of identity. Sexual behaviour that had been regarded as masculine and normative was increasingly impossible: behaviour that was disordered, ambiguous and even transgressive was increasingly demanded by the circumstances in which they found themselves.

²²J. D. Davies, Gentlemen and Tarpaulins: The officers and men of the Restoration Navy (Oxford, 1991)

²³Marquis of Halifax, A rough draught of a new model at sea (London, 1694) p. 24

Issues of masculinity and effeminacy, as displayed and measured in arenas such as the duel, therefore bulked large in their concerns.

Farquhar, above all with his statement that 'most ladies are gained by platooning', offers an approach to courtship that seeks to address these problems by reconciling the two contradictory elements. He first shows that that procreation for the purposes of recruitment need not necessarily take place outside marriage, and that even officers who seemingly abandon their duty by taking wives and resigning their commissions continue to contribute to the service of their country. Secondly, he suggests that success in courtship is not dependent upon bravery. Indeed, it is Brazen – the courageous braggart prepared to duel over Melinda – who would have left Shropshire empty-handed but for the twenty recruits provided by Plume. Just as success in warfare and recruitment now depends upon discipline and ruthless attention to duty, Farquhar now suggests that those same skills are decisive in the courtship of women and the establishment of normative patterns of gender behaviour.

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Representation of rural space in Tacita Dean's *Michael Hamburger*

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Tacita Dean's *Michael Hamburger* (2007) was commissioned as part of *Waterlog* (2007), a series of artistic works that seek to investigate the East Anglian landscape and inspired by writer W.G. Sebald's writing about the area. Shot at Michael Hamburger's East Anglian farmhouse, Dean's 28 minute film portrait concentrates on Hamburger the eminent poet, critic and translator as a grower of apples and on the orchard he planted in his Suffolk garden. The nature of the imagined rural space that Michael Hamburger creates has an aliveness and present focused quality, which includes themes of immigration, translation and innovation as well as themes of loss and memory. Instead of looking at rural space as an imaginative space between past and present, Michael Hamburger reveals a sense of rural space as a live space, an ever-becoming imaginative space that lives alongside urban realities.

The apple tree branch moves in the wind, light dappling its branches, clouds travel across the sky, the sun comes out from behind a cloud and the wind gradually increases, moving the apple branch more vigorously. Thus begins Tacita Dean's *Michael Hamburger* (2007), commissioned as part of *Waterlog* (2007), a series of artistic works that seek to investigate the East Anglian landscape, drawing 'upon the profound sense of place of East Anglia' and inspired by writer and academic W.G. Sebald's writing about the area. Shot at Michael Hamburger's East Anglian farmhouse, Dean's 28 minute film portrait concentrates on German born Hamburger, the eminent poet, critic and translator as a grower of apples and on the orchard he planted in his Suffolk garden. Dean had encountered the character of Hamburger in Sebald's *The Rings of Saturn* (1999). Sebald came from Germany to live and work in the UK in the seventies and his written work is largely concerned with the impact of the atrocities of the Second World War on the

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German people and others. *Rings of Saturn* (1999) is a part fiction, part memoir literary meander starting and ending in Norwich. Sebald visits Hamburger at his home as part of his journey. In a slim volume entitled *WG Sebald* (2002) Dean writes of sitting in a bus shelter in Fuji reading *The Rings of Saturn* and whilst she doesn't write about Michael Hamburger in *WG Sebald*, she does recount various personal connections and creative inspirations that have arisen through reading *The Rings of Saturn*. Whilst the works in *Waterlog* do not directly refer to *The Rings of Saturn*, they share a similar sensibility and set of interests including journeying and evocation of memory. The nature of the imagined rural space that Michael Hamburger creates has an aliveness and present focused quality, which includes themes of immigration, translation and innovation as well as themes of loss and memory. In various ways this challenges a historically common use of land and the rural world. This essay will look at how *Michael Hamburger* does this through a discussion structured to follow of the outline of the film.

Michael Hamburger observes the rural surroundings and activities of Hamburger in his apple orchard and house over the course of one day. Moving from the apple orchard to the interior of his home, the film comprises 'a mixture of facts about types of apples and then meandering off into biography – visually...'. Dean has made several works inspired by specific rural locations and natural subject matter. With Disappearance at Sea (1996) a lighthouse optic rotates as the sun sets in a work that pays homage to sailor Donald Crowhurst, lost at sea. Dean is on a quest to capture an unusual facet of the sun's rays in Green Ray on Madagascar (2001). In Banewl (1999) Dean attempts to capture the reaction on a Dairy Farm to an eclipse of the sun. With these and other film works a central interest is demonstrated in time, particularly the non-linearity of time. 'Challenging the linearity of time is a leitmotiv in all Dean's work.' Central to her approach is an experience of time occurring in the temporality of the 'eternal present', a similar assertion as to JG Ballard's description of Dean choosing subject matter that 'lies outside time'.

In *Michael Hamburger* the first shot focuses upon apple tree branches in close-up, shot from below and framed by a background of moving clouds overhead, the shot held as light plays on the branches, the sky gets cloudier and the wind begins to swirl. Recording the change in light as the sun pierces clouds, the camera next moves across the orchard. This 'establishing sequence indicates the preoccupation of the film with the observation of visual form in time, its holding and its passing. 'Dean brings forward this scene with minimal camera movement, where the audience is asked to really take in the images. The lingering shots provide 'time for the image to soak our mind, time for the image to give all it has got.' There is a still, present eye to the camera. Moving image whose subject centres on land may lend itself to cartography of a strengthening

of what philosopher Deleuze defines as "time-image" over "movement-image" where by 'the camera begins to travel on its own, autonomously, without respect to the point of view of the stories of the lives of the characters it recounts.' Here camera motivation isn't driven by what the main character may be looking at or doing, instead the "time image" allows room for the director to create a camera movement and editing approach motivated by alternative themes, ideas and interests. In this way for example, one could use filmic tools such as camera movement and framing to emphasize the notion of cyclical time in rural and agricultural communities.

In *Michael Hamburger* the time rhythms of nature are revealed. Perpetually shifting weather makes for an animated environment. A continuous movement of light becomes dramatically evident when a cloud opens and sunlight strikes the grass. In rural space, as in Michael Hamburger, there is a palpable sense of the Bergson and Deleuze notion of 'dure', 'the dynamic movement of continuing yet passing time' that comes forward being just as it is, with no beginning or end. This comes out of several factors including a greater sense of expanse, a unified vision, a greater sense of diurnal motion and the occurrence of natural objects that are understood to have existed for many years. Temporality in the city tends not be as influenced by the seasons or everyday natural rhythms. A different time sense occurs, driven by the demands of work and movement of a city, which Lefebvre calls constrained time. Within 'the dynamic movement of continuing yet passing time' Michael Hamburger evidences different lengths of time cycles in the natural world of sky, apple trees, wind and rainbows. Whilst the sound of the wind is threaded throughout the whole film, the changing effects of light on the tree branches highlights the moment to moment reality of this space. In a context not directly related to the landscape in question, Michel de Certeau distinguishes between "places" and "spaces". He considers a place as the order 'on accord with which elements are distributed in relationships of coexistence.' Space though exists when 'one takes into consideration vectors of direction, velocities, and time variables... in short space is a practiced place.' In this way space is an ever-becoming entity, including rural space. Places become spaces among those beings who are living and working in them. Hamburger lived in his East Anglian house, cultivating his apple orchard for over twenty-five years. All places are ever becoming spaces and in this way the rural world or landscape is never static.

Surrounded by vibrantly coloured apples laid out on every available surface [see Figure 1], the camera rests upon Hamburger's face as he begins to talk factually, and somewhat formally, about the varieties of apple he grows. In *The Rings of Saturn* Dean would have read of Hamburger as a British arrival from Germany before the Second World War and as an exiled teenage translator of German poet Hlderlin thus beginning his distinguished literary career. Dean did

not expect that Hamburger would be so unforthcoming about his life and work as a poet. 'I hoped the apples and apple store would trigger some kind of narrative, some metaphors or poetry, but this didn't work.' Being open to the moment, Dean instead appears to engage with him through the metaphors of apples. Whilst working with the actuality of place Dean also leaves room for coincidence and the unexpected. Dean 'constantly brings before us the coincidence of our encounter with her work as part of the larger coincidence of her existence intersecting with the temporal phenomena that are her subjects.' 'Coincidence preserves experiences and knowledges from the ephemerally of time passing, making them, by their intersection, cohere as events and phenomena of significance... There is a detached and yet immediate now to the event of coincidence — a punctum, a point or marker where reality is pierced by insight that is often a matter of imaginative transposition... the retrospection involved in noting coincidence is closer to awe... In Dean's work, nature is full of surprises...'. There is an openness to the moment, a working it out, as Dean creates her films.

The rural space depicted in Michael Hamburger might occur as a reality that could seem obsolete or becoming that way but Dean's filmic approach is not nostalgic. Historically rural communities have been portrayed with the temporality of the past. Positively as having simple, profound relationships with and knowledge of the land, full of morally good people, close-knit community and an opportunity to escape the modern world. Negative portrayals could include marginalization, exploitation, repression and stagnation. What both aspects have in common is a representation within the context of a simpler pre-modern culture, a step back in time. The temporality of the past carries with it the use of land as image or memory along with assumptions of nostalgia. A cinematic image that does attempt 'nostalgia is a double exposure, or a superimposition of two images...past and present, dream and everyday life. The moment we try to force it into a single image, it breaks the frame or burns the surface.' The definition of nostalgia has changed since it's inception and 'today is more often imagined in temporal terms...than in the spatial or geographical terms'. Nostalgia could broadly be considered to be 'a longing for a home that no longer exists or has never existed...a romance with one's own fantasy...'. In this way the 'danger of nostalgia is that it tends to confuse the actual... and the imaginary...'. Recent scholars have sought to question the prejudice against all forms of nostalgia and have attempted to reassess the range and uses within the complexity of nostalgia's contemporary meanings. This includes meanings which co-exist with modernity, not seeking to return one to an idealized past. Restorative nostalgia proposes to 'rebuild the lost home' whilst 'reflective nostalgia' dwells in remembrance without seeking to return to the past. Reflective nostalgia 'temporalizes space'. 'It reveals that longing and critical thinking are not opposed to one another, as

affective memories do not absolve one from compassion, judgement or critical reflection.' Dean's approach shows that there can be a form of 'remembering that serves to illuminate and transform the present.'

Hamburger reads whilst smoking a pipe or holds an apple carefully in his hands then reads a poem that he wrote. On a wooden desk sit a jar of pencils, letters and a stack of old glasses cases [see Figure 2]. In the apple storeroom various richly coloured apples sit on every available work surface. Dean's descriptive portrait of Hamburger focuses on the quotidian aspects of rural life. Detailed, scrupulous images created from a combination of close ups and long shots. Her 'visual scrutiny of the minutiae of Hamburger's environment – a blend of shifting perspectives, penetrating close-ups, long steady shots – creates a slowly evolving narrative.' A celebration of place 'having the 'common theme of 'personal geography', of an eloquent appreciation and defense of place in its most personal terms.' Dean allows us to see Hamburger's private world of idiosyncratic, disordered action as a poet and grower and farmer of apples. As such Michael Hamburger offers 'a potential leap from aesthetic appreciation of landscape to a sensory engagement with land'. The sound of the wind threads throughout the film, extending beyond the visual frame, encouraging one to imagine the flat, windy East Anglian landscape that Michael's house and orchard are set within. Michael Hamburger shows that 'rural spaces are actual, identifiable locations. They contain economies of living, rural-spatial politics and dramas of embodiment... distinguished from the literary word pastoral which refers very often to a fantastical or non-identifiable literary idyll.' 'As nourished land, the rural is represented instead as a specific place, a live presence and a contested present.' In contrast a typical picturesque landscape style image can be considered somewhat universal. It is not located in a specific time and place and is often devoid of persons. It involves framing, holding still and long shots. This creates more the point of view of an observer watching at a distance. The pathetic fallacy operates where landscape, devoid of people and specific place is represented to hold the perspective of the observer. In this case the landscape can act as an expressionistic framework for human feelings and desires. 'As exoticized, picturesque landscape, the rural becomes a universal space to which one might escape, as well as an image in which to invest or an idealized memory to be evoked. This universal landscape can be considered as a product of cultural framing, particularly the rural idyll fueled by the urban imagination. Filmmakers like Robert Flaherty created such mythic documentaries as Man of Aran (1934), which purported to show daily life for a family of farmers and fishermen on the Aran Islands off the coast of Ireland. Only in later years was it revealed the extent to which Mr Flaherty manipulated his subjects and subject matter in the creation of his mythology as documentary. At the same time the work of a diverse set of film and video practitioners preceding Dean have challenged historically common notions of universal landscape. In late 60s and 70s avante-garde filmmaker Stan Brakhage used techniques that made the audience aware of his presence as an observer of landscape. Chris Welsby in the UK and Canadian Michael Snow found ways to use technology to intercede between nature and man. Each in different ways sought to make evident the presence of mediating forces between an individual and their perceptions of landscape. This allowed the viewer to be more fully aware of the subjective point of view being brought to the depiction of landscape.

The opening shot sequences of the orchard occurs without the physical presence of Hamburger. When he does appear, Hamburger is framed in the middle distance and whilst he shifts into focus, he is obscured by apple tree branches or even at the edge of the frame. This establishes a unified vision of man and rural environment, as much weight given to the presence of rural space as the human subject. The anamorphic format supports this, allows a scale that shows the totality of the environment including the orchard, house and Hamburger. Using these techniques of framing, Hamburger's surroundings are represented as 'an extension of the person' [see figure 3]. His relationship with the land and the apples seems a direct expression of himself and his own nature, 'Hamburger's old house is porous, inside and out; entropy, certainly, but more a sense of nature encroaching and taking over the house of the nature poet.' Whilst as noted earlier Hamburger appeared to refuse to speak either directly or in metaphor about his life and work, Dean realized while editing later that in fact he had talked about everything but had done so through the metaphor of apples. She chose then to create a portrait that 'unfolds primarily in metaphors of apples.' One of the functions of the apples is as an additional metaphor of time. A natural artifact exemplifying time's transience, including the inevitability of death, 'the apples age upon the ground, shrunken and yet somehow becoming more intensely themselves.'

Hamburger puts three dark red apples on a table. The camera looks directly at his face in close up as he talks about how he was taken by these Devonshire apples in poet Ted Hughes garden. He talks about their friendship and how, taking pips from Hughes's apples he planted them here in his Suffolk garden, a place where they shouldn't grow easily. Like the apples, the film shows a poet deeply linked to a place and yet not a native of East Anglia. Although originally from Germany, Hamburger came to love East Anglia and feel a deep connection to the place. Hamburger 'is very insistent that he is an English, not a German poet.' He is also equally if not better known in England as a translator of poetry. 'Unwilling, perhaps unable to talk of his troubled past and his migrations, most especially fleeing Nazism in 1933, he talks poignantly instead of the apple trees

in his garden, of where they have come from, and their careful cross breeding. Purity is dismissed, and one senses with an awkward pathos that the poet is translating himself'. The film feels 'very much rooted, after the home-hugging truths of the exhibition's title, Wandermude - tired of wandering.' Yet the film also highlights the relationship between rural rootedness and openness to outside influences, including the forces of nature. Dean's filmic approach allows us to see this. The 'film is a composite, as if the lens were simply collecting views, not wanting to choose between dramatic and more placid ones.' Weaving together pieces in this way creates a sense of rural space as both rooted and ever becoming. The sense that physically you are rooted to a space but that visually there are many different views and vistas available within this web of interconnectedness. It is quite different from the voyeur relationship to landscape where certain visual features are highlighted and privileged above all others and framed in a more fixed way.

Images of the orchard, apple branches and trees are held in the direct gaze of the camera, whilst Hamburger is frequently obscured from full view. Dean's choice of framing emphasizes him as somewhat at a distance, hidden behind layers. In one shot Hamburger stands in the orchard in the middle distance, obscured by a branch of apples. Inside in another shot the camera comes up from behind, looking over his shoulder, as we are left to guess what he is reading. Through curtains his wife is seen putting out the evening meal, through a window or doorframe or wall we see Hamburger inhabit his home. There are also extreme close ups of Hamburger's face, hands, body; indeed once or twice he directly faces the camera. Even here, though, he looks slightly away whilst talking. At one point in the film he does talk directly as a poet, reading one of his poems written on the death of Ted Hughes. Later, though, Hamburger exits the darkness of an open door, walking through the frame and ignoring the presence of the camera. Even when Hamburger is not physically present, framing of the interior creates a sense of distance. Seen through a doorway, a chair is set at an open window, the sun streaming in. Most 'of what is encountered in Tacita Dean's art is stirringly elusive...Dean is consumed by mystery. She demonstrates lasting delight in traces, apparitions...'. Dean allows us to meditate on the complexity and layers of privacy of this rural space and it's inhabitant, including the time it might take to move through these layers.

A few months after the film was completed Hamburger died. Recalling the film, one wonders what may now be changed by time and death and what endures in his rural space? Would the wind still blow, the apple trees still stand? If so who is harvesting them now? In the film a chair, empty of it's occupant, faces an open window, in another shot a room is filled with books. Would the configuration of these objects remain now as in Michael Hamburger? Dean's *Disappearance at*

Sea (1996) is brought to mind, the echo of Donald Crowhurst, lost at sea, almost tangible as the lighthouse optic turns repeatedly, underlying the timelessness of the ocean in which Crowhurst died. Michael Hamburger ends with shots of the exterior, and finally, a shot of a rainbow. A fleeting phenomenon, tenderly marking the passage of time.

Instead of looking at rural space as an imaginative space between past and present, Michael Hamburger reveals a sense of rural space as live, ever-becoming imaginative space. The film demonstrates complexity within rural space where 'the land or landscape becomes itself a layered set of discourses...a text in its own right...not subordinated to character and plot development but a discursive terrain with the same weight and requiring the same attention as the other discourses that structure and move the text'. Within this the film shows that rural space has certain distinguishing features including intimate relationships between individuals and land and habits and knowledge that come from this connection. Using an approach that shows an appreciation and use of coincidence and uncertainty Dean views Hamburger's rural space through the present still eye of the camera. Looking in detail at the everyday habits and private actions of Hamburger as a rural resident, farmer and poet. Dean exposes varying time rhythms in the rural space, combining cyclical, non-linear time with sequential time and narrative development. Michael Hamburger shows how rural rhythms can be exposed in subtle, mutable ways. For as solid and unified as the rural world seems it also open to change and transformation, including death. In all of this change, one seems pointed back to the land itself for a sense of 'dure'. The ever-present East Anglian sky, the diurnal forms that govern apple growing and the wind that blows across the flat Suffolk landscape.

'Michael Hamburger' was commissioned as part of 'Waterlog'. 'Waterlog' has been conceived and developed by Film and Video Umbrella, with the collaboration of Norwich Castle Museum and Art Gallery; The Collection, Lincoln; and the Sainsbury Centre for Visual Arts, University of East Anglia. Courtesy the artist, Frith Street Gallery, London and Marian Goodman Gallery, New York/Paris ©Tacita Dean. Courtesy Film and Video Umbrella.



Figure 1: Tacita Dean, Michael Hamburger (2007), film still, 16mm colour



Figure 2: Tacita Dean, Michael Hamburger (2007), film still, 16mm colour



Figure 3: Tacita Dean, Michael Hamburger (2007), film still, 16mm colour

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