SPARK
Stirling International Journal of Postgraduate Research

Quality of Life
Issue 3 (2017)

For submissions please email spark@stir.ac.uk

About the Issue

Issue 3 of Spark is focussed on issues and themes on the topic of quality of life. It concerns the role of Twenty-First century global technology and communication in shaping the definition and status of quality of life in two papers: 'Linguistic Imprints of Deception in Financial Text: A Corpus Linguistics Based Approach' by Saliha Minhas, and 'Society Must Be Defended: Online Quality of Life, a Foucauldian Case Study of Gamergate', by Stuart Lindsay. The former article seeks to provide a framework for technological apparatus measuring deceptive content in financial texts, and explores the impact of the results of such financial subterfuge on economic quality of life at a national and personal level. The latter analyses the online, cultural videogame phenomenon known as Gamergate from a theoretical perspective based on the writings of French philosopher, Michel Foucault, to measure the impact on gamers' individual identities against the collective gaming identity established by the Gamergate movement. Intergenerational concerns regarding differences between quality of life and its perception between this generation of scholars and the preceding one are explored in Susie Peacock's paper: 'The Quality of Innovative Academic Lives: Influences Past, Present – and Future?' Kari Vezke investigates care and support options for older people in Scotland, and the impact of these choices on their quality of life, in her article 'What Influences Older People's Decisions about Care and Support?' Soha El-Batrawy reviews the collection Communication and "The Good Life", edited by Hua Wang.

Contents

What Influences Older People's Decisions about Care and Support?

Kari Velzke[1]
University of Stirling, **k.d.velzke@stir.ac.uk**

Abstract: There are many factors that influence older people's decision making about care and support they want or need in their daily lives. This paper investigates choices and decisions of people age 65 and older who receive paid and/or unpaid care on a daily basis with a focus in Scotland, drawing on a grounded theory framework. The literature review considered what is important to older people about care, support and resource utilisation and examined how decisions are made in relation to these applications. The review identified the ability and opportunity to make choices as a central theme. The key issues important to older people included control, independence and quality of life. Other factors that were found to influence how people make decisions included unmet needs, relationships and availability of informal care. The review found that older people wanted to stay in their homes for as long as possible. Findings suggest that additional research is required about what influences older people in care decisions.

Keywords: aging, choice, decision making, formal (paid) care, informal (unpaid) care, quality of life, grounded theory

Introduction

There are many factors that can influence older people's decision making regarding formal (paid) and informal (unpaid) care and resource utilisation. Older people for the purpose of this article refers to people that are ages 65 and older who need care and support on a daily basis. This paper investigates perspectives on older people's decisions about care and support with a Scottish focus utilising a grounded theory framework. A grounded theory approach was used and is one of the most influential theoretical frameworks for organizing and analysing information (Shipman 1997). Grounded theory included organizing data and analysis with early data guiding how the review progressed (Charmaz 2006). The questions asked of the literature included: What is important to older people about care, support and resource utilisation? How do older people make decisions about care, support and resource utilisation?

There is confusion from professionals about vulnerable adults' choices and rights regarding capacity (ability to make independent decisions), levels of control, citizenship rights (with a focus in Scotland for this paper), independence, and human rights versus harm and abuse (Stewart 2011). The wider goals of older people include continued independence, psychological sense of independence or autonomy, and maintaining choice and control (Craig 2004). These wider goals can be in conflict with professionals if perceived to cause harm or puts the person at risk and/or if capacity is in question. However, older people acknowledge that social care and health services are only part of the broader picture that affects quality of life (QoL) (Thornton 2000). As a result, this review investigates both what are important to older people and how they make decisions about care, support and resource utilisation.

This article reports on the methods used in this exploratory literature review. Next, results are discussed. The first question is detailed, *What is important to older people about care, support and resource utilization?* Key findings included choice, control, independence and QoL. Then, the second question was detailed, *How do older people make decisions about care, support and resource utilization?* Key findings included unmet need, meaningful relationships and informal care.

Methods

Grounded theory uses a discovery approach to identify patterns, themes or categories which lead to a working theory based on findings (Rubin & Babbie 2008). This review took a similar approach.

The basis of inclusion of sources followed a problem formulation (Rubin & Babbie 2008) that led to the proposed research questions and supported the process used in this review. The problem formation (Rubin & Babbie 2008) included: narrowing research questions to a feasible topic, consulting with colleagues, conducting the review "in light of" previous work (p.134), using suggested databases, strategies of checking bibliographies and utilising the reference library. A detailed review of the literature review process is listed as Appendix A.

This resulted in 114 relevant sources, with a selected range represented in this paper. Searches were conducted using a standard set of search terms. Advice was sought from reference librarians and colleagues

who suggested specific search engines and sources. Searches were also made of article reference lists and bibliographies to find pertinent articles. Only articles in English were reviewed and included, all other languages were excluded.

The exploratory search started with a set of search terms (see Appendix A) that related to older people's views of care, support and resource utilisation. ProQuest, Web of Knowledge and the Joseph Rowntree Foundation research website were searched initially and 23 relevant sources were identified and abstracts reviewed that led to QoL findings. Searches within Social Care Online, Social Services Knowledge Scotland, Web of Knowledge, Google Scholar, and Sociological abstracts led to a further 34 sources being identified. This led to informal care as an important finding. Then, Applied Social Sciences Index and Abstracts (ASSIA) were searched along with online searches for specific statistics and demographics for Scotland. Colleagues and reference librarians as well as article bibliographies, reference lists, and literature linked to prior readings were utilised and another 30 articles were identified. Reference librarians were consulted and updated online searches for statistics and government reports and legislation were utilised for 27 total sources utilized for formal care. No new relevant formal care data was found when additional inquiry yielded no new additional information when searched (saturation).

There were challenges when deciding which articles to include and exclude. Inclusion was determined by relevance to research questions, driven by emerging data and followed the problem formulation process. Some research and reports such as Vestri (2007) were not peer reviewed and findings needed to be viewed with caution. There were issues with variations of terminology and differing, subjective meanings for identical terminology. For example, QoL, health and wellbeing did not have universal meanings nor did person centred definitions or active aging. This was also found to be problematic when distinguishing decisions, choice and individual views in the literature. Categorizing concepts using a comprehensive approach for these ideas and concepts assisted in separating these topics that overlap. For example, the use of mind mapping assisted this process and specific definitions were adopted, narrowing the focus of definitions. Although, topics such as QoL, are subjective and multifaceted and would vary per individual perspective, as expected.
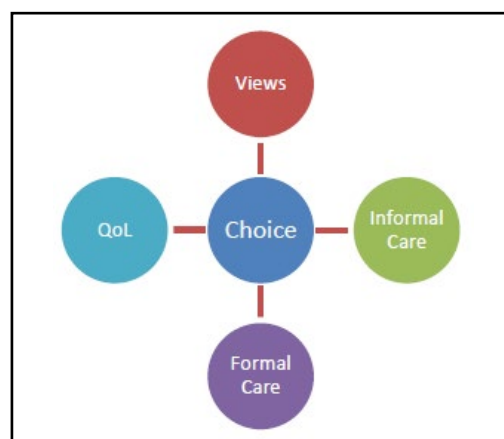

Figure 1. Illustration of Decision Making for Care and Resource Utilisation

A preliminary diagram seen in Figure 1 illustrates key topics that emerged on decision making for care

and resource utilisation, and as additional data became available changes were updated accordingly. This is consistent with the discovery approach (Rudestam & Newton 2007) in grounded theory based on literature findings as the review progressed; categories were restructured and reorganized as additional data emerged. The use of a visual diagram throughout the process was an asset in exploring topics in the literature.

Four initial broad topics areas emerged at the start of the review shown in figure 1, choice being a common factor found throughout which will be discussed in the following sections. Additional topics emerged as more literature was reviewed. The four areas included: views of older people about what is important to them in care and support, QoL, formal and informal care. As more data became available, other topics became prevalent. The collective results of the review are explored in additional detail.

Decision Making

Findings revealed that how older people make decisions about formal and informal care and resource utilisation is complex. The Economic Theory of Decision Making (Edwards 1954; Sanfrey et al 2003) otherwise known as choice theory indicates human behaviour is purposeful and originates from within the individual rather than external forces, with behaviours aimed at fulfilling basic needs (Glasser 1975; Howatt 2001). Choice theory (Glasser 1975) indicates behaviour results from requiring meeting basic needs. These needs include love, power, fun, freedom, recognition, and survival (Howatt 2001). Although, Ware et al (2003) researched basic personal care experiences of older people, reporting quality of care was satisfactory and, '…there was recognition that the quality of life is not always addressed… there is so much more to life than being washed and dressed' (p. 425). This infers people need more than just partial, minimal needs met. Also, numerous things need to happen to facilitate decision making, involving complicated issues.

Several things need to happen prior to decision making and a number of issues come into play. Literature suggests one issue is opportunity. People need the chance to actively engage in the decision making process. Another issue is information to make informed decisions. Reed (2008) found opportunity to make decisions was not sufficient, people must be able to actively participate, 'When decisions are highly technical, this may involve educating participants, developing the knowledge and confidence that is necessary for them to meaningfully engage in the process' (p. 2422). Furthermore, older people and staff reported that accessible information was needed to make informed choices (Glynn et al 2008). Carers and older people reported wanting additional information that is easy to find in a format easily understood (Leadbeater & Lownsbrough 2005). Information also influences how people make decisions and the outcome: having the information to make an informed decision rather than having no, partial or incorrect information or information that is not understood (includes receiving information in a font that is too small to read) affects choice.

Choice (Glynn et al 2008; Ware et al 2003) was a central theme linking both research questions and key findings as people valued the fundamental choice to have a good life. There are specific things that are important to older people with higher care needs to have a good life (Bowers et al 2009). A good life included personal authority, meaningful relationships, personalised care and support, meaningful daily and community life, and home and personal surroundings (Bowers et al 2009). The literature reported other

things people valued including: control (Bowers et al 2009; Craig 2004), personal autonomy (Bowers et al 2009), personal identity and self-esteem (Bowers et al 2009), social participation, feeling part of a wider community, and maintaining identity and independence to uphold dignity are also known to be important to older people (Craig 2004). These will be explored in additional detail.

The key questions are addressed sequentially: 1. What is important to older people about care, support and resource utilization? 2. How do older people make decisions about care, support and resource utilization?

What is Important to Older People about Care, Support and Resource Utilization?

Many considerations influence decisions regarding what is important to people because of resources that may or may not be available to people. This could influence the individual's life, needs, goals, values, and happiness linked to what is available to them, which may constrain or expand their choices.

Opportunities to make preferences known are important to older people. This includes situations when there are no choices; older people still prefer to be asked their preferences as people retain a sense of personal authority and dignity and people want to remain empowered. One example is when an older person cannot complete a task; a decision needs to be made about what to do about fulfilling that need. Older people still prefer to be asked about what should be done, regardless of options which can be seen in programs such as Self Directed Support (Age UK n.d.) where older people can exercise personal choice. This enables individuals to be informed, participate in decisions, even when there may only be one option of allocating physical care of themselves to someone else.

Other considerations in making decisions are reported to depend on a number of influences. Older people identified personal characteristics (gender, ethnicity and cultural background) and personal qualities (patience, compassion, sensitivity and empathy) as important in receiving positive care (Innes et al 2006). Older people also reported they expect the following in care delivery: valued and treated with respect, treated as a person, having a say in services, receiving value for money, a good fit with existing care giving/ receiving within the family and a good fit with cultural and religious preferences (Qureshi et al 1999). Although, making decisions is reported to be an unpredictable process.

Decision making is not a linear process (Brown 2011). It is not a systematic, step by step process that can be calculated. Research suggests emotions strongly influence decision making (Brown 2011; Sanfey et al 2003). Most decisions also have a status quo alternative-to make no action or maintain the current/previous decision. One example illustrated a status quo bias in decisions on choices in choosing retirement and health plans (Samuelson & Zeckhauser 1988). The review also revealed what is important to older people.

The things revealed to be important to older people included choice (Craig 2004; Glynn et al 2008; Ware et al 2003), control (Bowers et al 2009; Craig 2004), independence (Bell et al 2006) and QoL (Fernandez-Ballesteros 2011).

Choice

Choice (Glynn et al 2008; Ware et al 2003) was important and overlapped into all key areas. Some programs support choice such as, 'Self-directed support (SDS) allows people needing social care services to exercise greater choice and control over how they receive services and support' (Rummery et al 2012, p.1). Individuals have charge of their SDS budgets (or individuals give control back to the council) to meet prior agreed outcomes of the individual, which demonstrate the opportunity for informed choices and opportunity of individual control in care options (Scottish Government 2010). This opportunity of choice and control demonstrates other influences, including: 'inclusion, dignity, and equality… with core values of respect, fairness, independence, freedom and safety' (Scottish Government 2010, p. 7-8). These things are consistent with what is valued and important to older people, support choice and meet some basic needs although this program is reportedly not utilised by all people eligible.

Options related to available choice involve influencing factors such as: the range of services available, opportunities through informal care and support networks, and other formal care resources or privately paying for care so people can get the exact services they want. Sometimes there is only one option; yet people still want to be consulted about what they think. For example, Ware et al (2003) reviewed care choices offered to older people in residential and nursing care services and found sometimes no choices were offered, limited choices of only staying at home or moving into residential care were the only options offered, and in some cases-care decisions occurred without consulting older people or carers.

The literature also suggests no choice is offered (Bland 1999; Phillips 2007; Ware et al 2003). Some reasons for limited choices may include the lack of service availability, cost and speed of receiving appropriate funding to cover the cost of services (Ware et al 2003). People getting their care needs met through informal care or other service providers are sometimes restricted access to formal care (Vestri 2007). There are multiple reasons why choice could be restricted or not offered, affecting decisions.

When it came to choice of formal services, the services that people need and the areas where services are offered are sometimes two different things (Clough et al 2007; Ware et al 2003). Research does not provide evidence that services people want are the services they receive. Age UK (n.d.) reports 'However, people may find there is no choice of local services to buy with their direct payments' (p. 16). Carers and older people's wishes are to receive help in the areas of needed services (Leadbeater & Lownsbrough 2005). Other reported barriers to services include lack of information, inflexibility of services that do not change due to traditions, lack of money and resources, policy variation on paying for services and lack of communication (Glynn et al 2008).

Limitations of social care services extend to both older people and informal carers involved in service utilisation. Carers were concerned about the lack of choice and personal input into care plans for services (Vestri 2007). Older people and carers both stated concerns that people should be able to try services without being locked into processes that are difficult to change (Leadbeater & Lownsbrough 2005). There is a lack of information reported to allow people to make informed choices on contracting services (Bowers et al 2009; Vestri 2007; Ware et al 2003). Older people expressed having little choice in choosing care services,

being uneducated in options available, and insufficient information on services to make informed choices (Ware et al 2003). Having opportunities and options empower people to employ control and independence.

Control and Independence

Control (Bowers et al 2009; Craig 2004) and independence (Bell et al 2006) to uphold dignity are important to older people (Craig 2004). Bowers et al (2009) refers to control as, "focusing on those aspects that promote independent living" (p. 11). This can be evidenced by individual choice of services available (Innes et al 2006). For example, Siding and Aronson (2003) report ways social ties shrink over time with increased social isolation affecting older people, citing an example of a participant utilising support to hire someone to come in and do laundry and watch television with her for her evening activity. This is personalised service which promotes independent living through control. It includes personal autonomy (Bowers et al 2009) and independence to remain in her home. This situation could promote social interaction and feeling part of the community by keeping current on outside events through care staff interactions. The participant also maintains dignity (Craig 2004) and increased self-esteem (Bowers et al 2009) by receiving assistance with personalized support she cannot complete herself.

Sometimes people pay privately out of their own finances for care services that are free, particularly in Scottish Local Authority (LA) systems (Bell 2010). Some reasons older people do not utilize eligible services include prior negative experiences with quality of services, stigma labels (such as disabled, gender or class influences), limitations of services to meet needs, facade of self-reliance, and fear of being a burden to friends and family members (Cordingly et al 2001). One example of this was an older woman reluctant to invite others into her house as she viewed her home as dirty due to lack of cleaning support services (unable to complete tasks herself) and stigma in getting housekeeping assistance that clashed with her gender/class beliefs (Cordingly et al 2001). In contrast, Clough et al (2007) reports, 'Many older people have a practical attitude towards help (as opposed to direct care) and will accept what is available when they need it' (p. 69). The literature also reported sometimes choice was only an option in situations when personal resources were used to fund services (Bowers et al 2009). These contrasting views indicate multiple sides of the issue, supporting the complexities of the issues involved, and merit additional research. Decisions can also be controlled by professionals deciding to offer choice or not dependent on how they view situations, and strongly influences individual situations.

At times, it was reported older people in specific circumstances were not capable of undertaking more direct control of care choices. Bowers et al (2009) reported people wanted more direct control of care and in some cases may be unable to undertake additional responsibilities without the assistance of additional supports. However, in most situations as previous discussion revealed, specific reasons for professionals not allowing older people any choice, did not involve the inability of individuals to undertake control of their care. Bowers et al (2009) reported that staff at times thought older people, 'they would really not be interested… are too tired…it is too taxing for them' when in fact it was found to be the opposite when older people were directly asked (p.32). A variety of reasons offered for the lack of choice and opportunity

in care decision making was reported.

Although it is reported that choice is not being offered to older persons due to those perceived persons limitations to undertake additional control in care choices (such as in direct payment situations), it is suggested that staff and professionals move from the mind set of 'looking after' or 'caring for' people that have higher care needs to roles that promote more 'inclusion... and citizenship' (Bowers et al 2009 p. 32). This has resulted in some cases such as self-directed support to implement additional supports and resources for older people and caregivers to support care choices (Scottish Government, nd). Professionals' motivations for offering (or not offering) client choices may vary per individual. However, with the influence of additional resources this allows the chance of added opportunity for personal involvement in the decision making process for care choices by older people.

There is confusion when an older person has the right to make a bad decision and when they do not. Brown (2011) discusses the role of capacity and professional's responsibility when people are entitled to make unwise decisions. These unwise decisions are allowable under the law (when people have capacity), as long as the decision is made in reference to all the facts, often causing controversy that requires judgement in the legal court system (Brown 2011). Older people have the right to make decisions for themselves, although the opportunities may not always be offered to them. It is reported people want to remain at home for as long as possible, this may cause issue in specific situations if at risk of physically falling or near the end of life. It is personal perceptions that also influence QoL, both from the older person's perspective and professionals.

Quality of Life

The World Health Organization Quality of Life (WHOQOL) Group (1995) define QoL as, 'individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns' (p. 1405). Older people want to remain at home for as long as possible, and when they do receive care they want it to accommodate their needs. Older people want home and personal surroundings (Bowers et al 2009) and prefer to receive dignified care and support at home, which is flexible and personal to their needs (Centre for Policy on Ageing 2011). The UK policy approach to long term care is to preserve individuals' independence, enabling them to live at home for as long as possible (Phillips 2007). However, QoL is multi-dimensional (Fernandez-Ballesteros 2011) and is not limited exclusively to where people live but influences many areas of people's lives such as their values, culture, social connections, and meaningful daily and community life.

QoL is affected by meaningful daily and community life (Bowers et al 2009) seen in both support and the lack of support. For example, human behaviour is purposeful in fulfilling basic needs (Glasser 1975; Howatt 2001). People had a holistic perspective when personal needs were assessed to raise QoL to acceptable levels which included: meeting of basic physical needs, personal safety and security, being able to live in a clean and tidy environment, keeping alert and active, access to social contact and company and being in control of your life (Qureshi et al 1999). The holistic principle of QoL is a key consideration in

decision making processes in both what is important to people and how they make decisions.

How do Older People Make Decisions about Care, Support and Resource Utilization?

Decision making can be made on an individual level (Samuelson & Zeckhauser 1998; Sanfey et al 2003) or be collective, shared decision-making (Bowes et al 1997; Charles et al 1997) as an interactive process with several people (Bowes et al 1997) or on a societal level (Sanfey et al 2003). Bowes et al (1997) reports examples of decisions made mutually between husband and wife, by the head of the household or influenced by other household members.

Family and personal connections, resources and personal values all influence older people remaining in the home for as long as possible; although, older people do not want to become a burden to friends and family members (Cordingly et al 2001). However, older people prefer to stay in their own home and community care is one example of support allowing that to happen (Bernabei et al 1998; Ware et al 2003) complementing informal care and may reduce stress on informal carers. Older people have voiced the opinion they value the help they receive promoting health, wellbeing and QoL through practical supports allowing them to continue living in their own homes (Centre for Policy on Ageing 2011).

In the context of increasing longevity, it is essential that research is critical of perspectives that construct older people negatively, and starts to contribute to understanding positive ways in which older people can influence their own choices about their care and support. Some researchers have started to identify ways in which existing care services can breach older people's human rights as they fail to acknowledge them as contributing citizens which undermines self-determination (Kelly & Innes 2012). Researchers report when home care is needed as QoL decreases in end of life situations; this may increase feelings of failure as an independent citizen (Siding & Aronson 2003). There is a gap in the evidence base in how older people make decisions based on actual behaviours, particularly as they become more vulnerable. What is understood is that choice (and the lack of) is a central part of the decision making process of older people. Key findings revealed in the search for decision making included unmet need, meaningful relationships and informal care (Bowers et al 2009).

Unmet Needs

The services people need are not always the services they receive and sometimes they go without, due to no options. Similarly, people do not make decisions to meet all their needs, as would be expected. There are multiple reasons for unmet needs. Bell et al (2006) reveals a lack of service utilisation with unmet needs as there appears to be 'indirect evidence that certain groups do not seek service support despite need…' (p. 2). Glynn et al (2008) reveals that service recipients are worried about LA charges, and this can stop people from asking for services and encourages people to ask for less as a result of paying for care. Similar findings (Reid 2009) in health care revealed when payment was required for services it deterred individuals from

seeking care which decreased service utilization rates (Couffinhal & Paris 2001; Reid 2009).

People often lack choice and can be excluded from services. Bell et al (2006) reveals a lack of service utilisation with unmet needs as there appears to be 'indirect evidence that certain groups … face exclusionary processes which means their needs are not met' (p. 2). One example, where people live can determine if they qualify for services or not, depending on how the LA interprets policy in Scotland. There are variations and expenditure differences between LAs in Scotland (Bell et al 2007; Bell et al 2006) as services that are covered in one LA can be excluded in others. Similarly, once people start receiving services they may develop unmet needs, as needs change over time. Both service recipients and carers stated they should be asked about needs with follow up inquires (Leadbeater & Lownsbrough 2005). Also, Ware et al (2003) reveals poor recording of unmet needs that could be used to modify services. Likewise, people find out about additional services in different ways.

People make decisions about care based on what friends and family tell them, the media and prior experiences. This may leave gaps in services and available resources, incorrect information could be relayed, and people do not always know where to go for answers. Social networking influences behaviours as older people are, 'ill-informed about services and benefits and often rely on family and friends for information' (Ware et al 2003, p. 417). Other reasons people decide on care (or not) is previous experience (Qureshi et al 1999) including prior negative experiences and stigma (Cordingly et al 2001). Media also affects decisions as older people had read about a care policy in the paper but were unsure if they qualified for services, and had confusion about which services were free and which services had fees (Audit Scotland 2008). Difficulties and confusion are not just experienced by older people but also extend to carers.

Older people and their carers are reluctant to express opinions when things go wrong, and have difficulties expressing concerns or complaints (Ware et al 2003). For instance, service recipients and carers were confused about roles and professional boundaries as, '"No one explains who is doing what and why: it is assumed people understand"' (Leadbeater & Lownsbrough 2005, p. 24). In another case, some comments included, '"you get fed up of fighting…I don't want to get anybody in trouble…I accept what I am given… don't want to make a fuss"' (Ware et al 2003, p. 419). Service recipients feel they are not being heard, and reported that staff think they know what service recipients need (Bowers et al 2009; Glynn et al 2008).

It was reported older people seem to lack of follow through on filing complaints if services or staff does not meet expectations such as missed or delayed visits, staff attitudes and tasks not getting completed, '…[new workers should] shadow existing workers to learn the ropes. Users had to explain how to do things… mentioned problems with attitudes of paid carers' (Ware et al 2003, p. 418). Sinding and Aronson (2003) report that people receiving end-of-life care were committed to 'making do' and also refraining from complaints. A service recipient stated, 'I wouldn't tell anyone if I was depressed-just get on with it-which happens quite a lot' (Bowers et al 2009, p. 32). Additional research is warranted as older people and carers appear reluctant to complain, which could relate to many areas including relationships.

Meaningful Relationships

Decision making appears to be influenced by meaningful relationships (Bowers et al 2009). Older people and carers both stated the relationship with the individual professional was most important (Vestri 2007). Ware et al (2003) revealed the establishment of long-term personal relationships and continued continuity of care is important to older people. The preference of long-term relationships leads to better working relationships, and a desire to see more time allocated to match staff with individual's care needs (Leadbeater & Lownsbrough 2005). Relationships between older people, managers and staff was reported as important (Bowers et al 2009; Glynn et al 2008). A well-developed relationship is reciprocal to professionals, informal carers and older people and may influence care decisions.

Environmental factors may influence older people's decisions. Relationships of those involved with care can be complex, and often informal care is used in addition to formal care to meet older people's needs. Nolan et al (2003) reports the complexities in relationships between informal caregivers, older people and formal caregivers and discussed barriers and approaches to building effective partnerships. Some barriers were previously mentioned when older people were reluctant to complain and could also be applicable here. Ware et al (2003) reports the importance of building relationships so, 'older people can be treated as active whole people, not simply as passive service recipients' (p. 426). Service collaboration with transparent relationships could be more effective to meet needs.

Family dynamics can be complex when family is involved in providing care, creating complex relationships with possible changes in family roles (Nolan et al 2003). For example, when an adult daughter/son provides care to an aging parent, the daughter/son takes on more of a maternal or paternal role that their parent previously held. The reasons people provide care are also complex, and they decide to provide care for many reasons with multiple motivators. There are many family changes that affect intergenerational relationships and care such as divorce, step families, same gender couples (and LGBTQ households) that all affect the changing of traditional beliefs of duty and obligation (Phillips 2007). This could be seen differently from the view of the carer versus the view of the older person based on values, lifespan and other factors. These factors can be intricate and additional research is warranted to explore the significance of how relationships affect decisions about care and resources.

Care recipients have stated they do not wish to impose on family and friends, but value the care, support and other people's time in caregiving that allows them control in life and to get out and about to stay physically active (Katz et al 2011). Informal care can allow older people with disability or illness to remain in their own homes as a result of the care provided to them (Nolan et al 2003). Without the established relationships there would be no possibility for informal care and support received. Relationships influence the opportunity and choices available in decisions and the role that informal care allows older people.

Informal Care

Older people influence decisions about other people's care by offering informal care (can be given to people who are of a similar age). Informal care is care given with no fees involved typically by a spouse, family member or friend. This usually allows additional options and choice in decision making by allowing people control over how their needs may be taken care of or not. Leontaridi and Bell (2002) determined 7.5 percent of the adult's in Scotland were involved with informal care for people age 65 or older with the largest group being retired people providing care in the home setting.

Older people's views and preferences on people caring for them depended on a person's gender, race or ethnicity (Cordingly et al 2001). For example, one woman living with her two brothers reported, "I don't want to be in bed and an invalid. I wouldn't like my brothers to look after me. You need a woman" (Cordingly et al 2001, p. 10). Many older people offer care to others and receive care. Informal care is one of many ways support is received.

There are opportunities to remain in the home for as long as possible without becoming a burden, if some ongoing supports are known about and utilised prior to becoming stressed or carers become burned out (Age UK n.d.). Paid care opportunities such as respite care for caregivers (Nolan et al 2003) allows a break for informal or family carers. For example, programs such as the adult day care can also be a form of respite for a short time or also an ongoing support while an informal carer maintains a full-time job. This can often be the case if a family carer is an adult son or daughter taking care of aging parent and needs daily care while attending employment, then the adult son or daughter are able to attend to caregiving of the aging parent in the evenings, overnights and weekends. Other options to be found is a carer benefit and also carer support groups (Age UK n.d.). These supports can allow older people and carers additional options and opportunities in influencing care and support.

Conclusion

Exploration utilising the grounded theory approach revealed choice was important to older people and influenced decision making about care, support and resource utilisation. Older people prefer being asked their preferences on options and care decisions and being actively involved in the decision making process; this was evidenced by being informed and educated about options and resources, although this was reported to not always occur. Having a say was preferred even when only one choice was available, taking the time to communicate and build relationships was the preference.

Older people wanted to stay in the home setting for as long as possible, without becoming a burden. There are many supports and programs available to older people to supplement informal care such as SDS supporting choice to make staying in the home possible without becoming a burden if people know about them. Additional care options are available for older people and carers to reduce stress and burnout such as adult daycare for respite care, offering choices for both the older person and carer. Where people decided to live had influences on many other areas in life, and QoL was found to be multidimensional with implications

in most key findings along with choice. This related to overall control and independence which were found to be very important to older people to promote independent living.

The way older people decide on specific care derived from previous experience, family and friend recommendations and media. Relationships and informal care networks also influenced decision making which has implications on the structures and the types of decision making utilised such as family decision making models or shared decision making. Those involved also voiced they preferred well established, long term relationships in both formal and informal care settings. The review also revealed that sometimes older people and carers were reluctant to complain in examples when care had already been established further affecting the outcomes of decision making processes. This suggests meaningful relationships had multiple influencing factors on decisions.

Whilst some preferences are known, and decision making, choice and QoL are key considerations in these, how the process of negotiating care occurs, how people make choices - although often constrained choices - how they expend or conserve their resources, including their financial resources, remains poorly understood. Additional inquiry is needed particularly for older people with higher care needs based on actual behaviours and preferences. Additional research is also needed that portrays older people with daily care needs in positive roles as active participants in care decisions.

References

Age UK n.d., *Invisible but invaluable campaigning for greater support for older carers.* Available from: <http://www.ageuk.org.uk/Documents/EN-GB/Campaigns/ID9494%20Invisible%20But%20Invaluable%20Report.pdf?dtrk=true>. [19 April 2012].

Audit Scotland 2008, *A review of free personal and nursing care.* Available from: <http://www.auditscotland.gov.uk/docs/health/2007/nr_080201_free_personal_care_km.pdf>. [22 March 2012].

Bell, D 2010, *The impact of devolution long term care provision in the UK.* Available from: <http://www.jrf.org.uk/sites/files/jrf/impact-of-devolution-long-term-care.pdf>. [22 March 2012].

Bell, D, Bowes, A & Dawson, A 2007, *Free personal care in Scotland: Recent developments.* Available from: <http://www.jrf.org.uk/system/files/2075-scotland-care-older-people.pdf>. [22 March 2012].

Bell, D, Bowes, A, Dawson, A & Roberts, E 2006, *Establishing the evidence base for an evaluation of free personal care in Scotland.* Available from: <http://www.scotland.gov.uk/Resource/Doc/133358/0031763.pdf>. [22 March 2012].

Bernabei, R, Landi, F, Gambassi, G, Sgadari, A, Zuccala, G, Mor, V, …Carbonin, P 1998, Randomized trial of impact of model of integrated care and case management for older people living in the community. *BMJ,* vol. 316, pp. 1348-1351.

Bland, R 1999, Independence, privacy and risk: Two contrasting approaches to residential care for older people. *Ageing & Society,* vol. 19, pp. 539-560.

Bowers, H, Clark, A, Crosby, G, Easterbrook, L, Macadam, A, MacDonald, R, … Smith, C 2009, *Older peoples vision for long-term care.* Available from <http://www.jrf.org.uk/sites/files/jrf/older-people-vision-for-care-full.pdf>. [14 October 2011].

Bowes, A, Dar, N & Sim, D 1997, Life histories in housing research: The case of Pakistanis in Glasgow. *Quality & Quantity,* vol. 31, pp. 109-125.

Brown, H 2011, The role of emotion in decision-making. *The Journal of Adult Protection,* vol. 13, no. 4, pp. 194-202. doi: 10.1108/14668201111177932

Centre for Policy on Ageing 2011, *How can local authorities with less money support better outcomes for older people?* Available from: <http://www.jrf.org.uk/sites/files/jrf/authorities-supporting-older-people-summary.pdf>. [22 March 2012].

Charles, C, Gafni, A & Whelan, T 1997, Shared decision-making in the medical encounter: What does it mean? (or it takes at least two to tango). *Social Science & Medicine,* vol. 44, no. 5, pp. 681-692.

Charmez, K 2006. *Constructing grounded theory: A practical guide through qualitative analysis.* London: Sage Publications.

Clough, R, Manthorpe, J, Green, B, Fox, D, Raymond, G, Wilson, P, … Hay, J 2007, *The support older people want and the services they need.* Available from: <http://www.jrf.org.uk/sites/files/jrf/1954-older-people-services.pdf>. [22 March 2012].

Couffinhal, A & Paris, V 2001, *Utilization fees imposed to public health care systems users in France.* Available from: <http://www.irdes.fr/EspaceAnglais/Publications/OtherPubs/UtilisationFeesImposedFrance.pdf>. [22 March 2012].

Cordingly, L, Hughes, J & Challis, D 2001, *Unmet need and older people. Towards a synthesis of user and provider views.* Available from: <http://www.jrf.org.uk/sites/files/jrf/1859353614.pdf>. [14 October 2011].

Craig, G 2004, Citizenship, exclusion and older people. *International Social Policy,* vol. 33, no. 1, pp. 95-114. doi: 10.1017/S0047279403007207

Edwards, W 1954, The theory of decision making. *Psychological Bulletin,* vol. 51, no. 4, pp. 380-417.

Fernandez-Ballesteros, R 2011, Quality of life in old age: Problematic issues. *Applied Research Quality of Life,* vol. 6, pp. 21-40. doi: 10.1007/s11482-010-9110-x

Glasser, W 1975, *Reality therapy: A new approach to psychiatry.* New York, NY:

Harper & Row, Publishers, Inc.

Glynn, M, Beresford, P, Bewley, C, Branfield, F, Butt, J, Croft, S, …Turner, M 2008, *Person-centred support what service users and practitioners say.* Available from: <http://www.jrf.org.uk/sites/files/jrf/2173-person-centred-support.pdf>. [22 March 2012].

Howatt, WA 2001, The evolution of reality therapy to choice theory. *International Journal of Reality Therapy*, vol. 21, no. 1, pp. 7-11.

Innes, A, Macpherson, S & McCabe, L 2006, *Promoting person-centred care at the front line.* Available from: <http://www.jrf.org.uk/sites/files/jrf/0296.pdf>. [16 April 2012].

Katz, J, Holland, C, Peace, S & Taylor, E 2011, *A better life-what older people with high support needs value.* Available from: <http://www.jrf.org.uk/sites/files/jrf/older-people-and-high-support-needs-summary.pdf>. [16 April 2012].

Kelly, F & Innes, A 2012, Human rights, citizenship and dementia care nursing. *International Journal of Older People Nursing,* pp. 1-9.

Leadbeater, C & Lownsbrough, H 2005, *Personalization and participation: The future of social care in Scotland.* Available from: <http://www.socialworkscotland.org.uk/resources/cpsd/PersonalisationThroughParticipationReport.pdf>. [15 July 2010].

Leontaridi, R & Bell, D 2002, *Informal Care of the Elderly.* Available from: <http://www.scotland.gov.uk/Resource/Doc/158068/0042753.pdf>. [20 August 2010].

Nolan, M, Lundh, U, Grant, G & Keady, J (eds) 2003, *Partnerships in family care: Understanding the caregiving career.* Berkshire, England: Open University Press.

Phillips, J 2007, *Care.* Cambridge, UK: Polity Press.

Qureshi, H, Patmore, C, Nicholas, E & Bamford, C 1999, Overview: Outcomes of social care for older people and carers. *Outcomes in Community Care Practice,* vol. 5, York: Social Policy Research Unit, University of York.

Reed, MS 2008, Stakeholder participation for environmental management:

A literature review. *Biological Conservation,* vol. 141, pp. 2417-2431. doi: 10.1016/j.biocon.2008.07.014

Reid, TR 2009, *The healing of America: A global quest for better, cheaper, and fairer health care.* New York: Penguin Press.

Rubin, A & Babbie, ER 2008, *Research methods for social work.* Belmont, CA: Thomson/Brooks/Cole.

Rudestam, KE & Newton, RR 2007, *Surviving your dissertation: A comprehensive guide to content and process.* Los Angeles: SAGE Publications Inc.

Rummery, K, Bell, D, Bowes, A, Dawson, A & Roberts, E 2012, *Counting the cost of choice and control: Evidence for the costs of self-directed support in Scotland.* Available from: <http://www.scotland.gov.uk/Resource/0038/00388624.pdf>. [18 March 2012].

Samuelson, W & Zeckhauser, R 1988, Status quo bias in decision making. *Journal of Risk and Uncertainty*, vol. 1, pp. 7-59.

Sanfey, AG, Rilling, JK, Aronson, JA, Nystrom, LE & Cohen, JD 2003, The neural basis of economic decision-making in the ultimatum game. *Science,* vol. 300, pp. 1755-1758. doi: 10.1126/science.

Scottish Government nd *Self-directed support: A guide for carers.* Available from: <http://guidance.selfdirectedsupportscotland.org.

uk/carers>. [28 March 2016].

Scottish Government 2010, Self-directed support. *A national strategy for Scotland.* Available from: <http://www.scotland.gov.uk/Resource/Doc/329971/0106962.pdf>. [11 June 2012].

Shipman, MD 1997, *The limitations of social research* (4th ed.). New York: Addison Wesley Longman.

Sinding, C & Aronson, J 2003, Exposing failures, unsettling accommodations: Tensions in interview practice. *Qualitative Research,* vol. 3, no. 1, pp. 95-117. doi: 10.1177/1468794103003001770

Stewart, A 2011, *Supporting vulnerable adults: Citizenship, capacity, choice.* Edinburgh: Dunedin Academic.

Thornton, P 2000, *Older people speaking out developing opportunities for influence.* Available from: <http://www.jrf.org.uk/sites/files/jrf/1859353371.pdf>. [14 October 2011].

Vestri, P 2007, *Evaluation of free personal care.* Available from: <http://www.scotland.gov.uk/Resource/Doc/167866/0046182.pdf>. [28 March 2012].

Ware, T, Matosevic, T, Hardy, B, Knapp, M, Kendall, J & Forder, J 2003, Commissioning care services for older people in England: the view from care managers, users and carers. *Ageing and Society,* vol. 23, pp. 411-428. doi: 10.1017/SOI44686X02001137

WHOQOL [The World Health Organization Quality of Life Assessment] Group 1995, The World Health Organization Quality of Life Assessment (WHOQOL): Position paper from the World Health Organization. *Social Science Medicine,* vol. 41, no. 10, pp. 1403-1409.

Appendix A:
Review Process and Search Terms

Topic	Total Records
Views	23
QoL	34
Informal Care	30
Formal Care	27
Grand Total	114

Topic: Views				
Databases	**Search Terms**	**Specifications**	**Results**	**Total Kept**
ProQuest	Older people or aged or geriatrics; and opinion or view; and care services or social care	Timeframe= limited & last three years to narrow the search and also did an unlimited or non-restricted time	19,128	(n =3)
Web of Knowledge	Older people or elderly or aged or geriatrics; and view or opinion; and care services or social care	1997 onward	10,000	(n =4)
Joseph Rowntree Foundation	None, scanned through listed research	None	N/A	(n= 1)
*Other	N/A	N/A	N/A	(n=15)
Grand Total				23

*A very helpful reference librarian supplied me applicable research and I am unaware of her search terms for the articles used and referenced in this work. Previous research was reviewed on the topic from the initial inquiry and from previous work. References were also taken from bibliographies and reference lists of articles.

Topic: QoL				
Databases	**Search Terms**	**Specifications**	**Results**	**Total Kept**
Social Care Online	Quality of life; care, older people and quality of life; "quality of life" and care" and "older people or elderly or geriatric" none	None	1389	(n= 0)
Social Services Knowledge Scotland	Quality of life and care;	Articles only: 3, search within journals: Journal "Applied Research in QL"; Applied Research in Quality of Life Volume 1 / 2006 - Volume 6 / 2011; Health and Quality of Life Outcomes journal	180, 100	(n= 4)
	Quality of life and care; Quality of life and care and older adults	2010 and 2011	808, 287, 36	(n= 1)
Web of Knowledge	Quality of life and care; older adults, geriatrics	2010, UK, Europe or Scotland	93,592, 7197, 375, 2	(n= 0)

Google Scholar	"quality of life" and "care" and elderly, aged, older people or geriatrics; "quality of life" and "care", relationships and elderly, aged, older people or geriatrics;	UK or Scotland	16,200	
			1,990	
	"quality of life" and relationship with "care", relationships and elderly, aged, older people or geriatrics;	UK or Scotland	1,170	
	"quality of life" and relationship with "care," relationships and elderly, aged, older people or geriatrics;	UK or Scotland	1,080	
	relationship between "quality of life and care" UK or Scotland, and elderly, aged, older people or geriatrics; Measuring "quality of life and care" and elderly, aged, older people or geriatrics	UK or Scotland	11	(n= 1)
				(n= 9)
Sociological Abstracts	"quality of life" and "care" and elderly, aged, older people or geriatrics;		368	
		2011	45	
	relationship between "quality of life" AND "care" AND elderly, aged, older people OR geriatrics);	2011	1598	
	relationship between "quality of life" AND "care" AND elderly, aged, older people OR geriatrics;	2011 and UK	6652	
	"relationship between quality of life and care" AND elderly, aged, older people OR geriatrics;	2011 and UK	6649	
	"relationship between quality of life and care" AND elderly, aged, older people OR geriatrics;	UK or Scotland	6255	
	quality of life measures		44926	
	Quality of life measures or assessments and aging, older adults or geriatrics;		8605	
	Quality of life measures or assessments and		2691	

	aging, older adults or geriatrics and UK; Quality of life measures or assessments and aging, older adults or geriatrics and UK and relationships between care and quality of life; defining Quality of life" and aging, older adults or geriatrics and UK; defining Quality of life, relationships and care" and aging, older adults or geriatrics and UK		2203 519	(n=6)
Joseph Rowntree Foundation	Quality of life and care, visual search	None	N/A	(n= 2)
***Other**	N/A	N/A	N/A	(n=11)
Grand Total				34

Topic: Informal Care				
Databases	**Search Terms**	**Specifications**	**Results**	**Total Kept**
ASSIA	Intersectionality, care and older people; intersectionality; intersectionality and older people; intersectionality and care all (unpaid care) OR (family care) AND (older people); ("unpaid care") OR (family care) AND (older people) AND (Scotland)	Scotland	72 6 2200 43	(n=5)
Searched online	Scottish government statistics and informal care	Looked for specific characteristics and demographics in Scotland	(massive search results)	(n=4)
***Other**	N/A	N/A	N/A	(n=21)
Grand Total				30

Topic: Formal Care				
Databases	**Search Terms**	**Specifications**	**Results**	**Total Kept**
Joseph Rowntree Foundation	Formal Care, Long Term Care, Free Personal Care, visual search			(n=7)
Searched online	Government statistics, policy, legislation and reports			(n=15)
***Other**	N/A	N/A	N/A	(n=5)
Updated Search- Collective Journals, online search of statistics…	Formal Care, Paid Care, Long Term Care, Personal Care, Free Personal Care, Free Personal Care in Scotland, Free Personal Care in England,	UK or Scotland	**no new relevant data**	
Grand Total				27

Linguistic Correlates of Deception in Financial Text A Corpus Linguistics Based Approach

Saliha Minhas[1] and Prof A. Hussain

University of Stirling, **szm@cs.stir.ac.uk**
University of Stirling, **ahu@cs.stir.ac.uk**

Abstract: In the present era, linguistic imprints are everywhere. Blogs, tweets, and texting all leave traces of our intentions and emotions. Some call this our linguistic output – akin to a fingerprint.[2] Consequently, its use by those given to lies and deception would be distinct from truth-tellers. Can this uniqueness be harnessed to battle criminality, given the rising level of financial fraud this link is testing empirically in the financial reporting domain? A corpus of 6.3m words is constructed, the composition being narrative sections of 102 annual reports/10-K from firms formally indicted for financial statement fraud juxtaposed with the corresponding narratives from 306 firms of the same industry, time period and size. Language use is examined using techniques from the Corpus Linguistics toolkit. This embraces frequency counts and keyword identification. The latter is undertaken using custom-built wordlists for the financial domain. Additionally, Linguistic Inquiry Word Count (LIWC) 2015, a dictionary-based tool, is also executed over the corpus to further aid in identification of the linguistic correlates of deception. A statistical procedure, Principal Component Analysis, is then run over the keywords and LIWC variables uncovered to further highlight those words that show up the greatest difference in use between the fraud and non-fraud reports. Finally, Multidimensional Scaling is employed to enable visualisation of the differences in the use of linguistic features between the two reports. The results indicate that the linguistic constructs

2 M. L. Newman, J. W. Pennebaker, D. S. Berry, and J. M. Richards, 'Lying Words: Predicting Deception from Linguistic Styles', Personality and Social Psychology Bulletin vol. 29, pp. 665-675, 2003

examined are distinctively different when the two sets of narratives are compared.

Introduction

A recent report[3] puts the annual cost of fraud to the UK economy at £193 billion a year – equating to more than £6,000 lost per second every day. Such costs are then mitigated by business through higher costs on products and services borne by the unsuspecting consumers unconnected to these financial scams. Therefore, it is a self-evident truth that fraud in all its guises negatively impacts quality of life. In the financial fraud arena, detection of the different types of financial fraud as depicted by Ngai[4] is tackled using quantitative variables. Models built on such a premise have failed spectacularly. The 2008 financial crash was in hindsight attributed to models that narrowly focused on features that did not capture the full scale of the risks faced by individuals and firms on the investments they made[5,6]. In this paper, in order to contribute to the search for alternatives that can be an additional aid to predicting catastrophic financial events, financial narratives are examined. Specifically, the aim is to show that those who have engaged in deception, such as financial statement fraud (FSF), have different language patterns from truth-tellers. To demonstrate this, a corpus is constructed from 102 narratives from annual reports/10-K of fraud firms aligned with 306 narratives from similar non-fraud firms. This unbalanced composition of the reports is an attempt to reflect the real-world scenario where there are more truthful narratives than deceptive ones. This corpus will be examined using the techniques commonly applied within the methodological discipline of corpus linguistics. Specific wordlists are also be deployed in an attempt to determine keyness differences between the two types of reports. A tool commonly applied in deception research (Hauch et al. provide a comprehensive list),[7] LIWC is also executed over the corpus to pick out 'cognitive, and structural components'[8] present in reports that could differentiate fraud from non-fraud firms. This is the first study in deception research that executes the new version of LIWC (2015) replete with updated dictionaries over the corpus. The paper is structured as follows: Section 2 covers the rationale for using a corpus to examine deceptive texts and overviews similar pertinent work. Section 3 presents the corpus linguistics methodology and the approach taken to execute LIWC over the reports. It also introduces Principal Component Analysis (PCA) and Multi-Dimensional Scaling (MDS) that are executed over the results from corpus analysis and LIWC variables to determine the most distinguishing features and to enable visualisation in 2D. Section 4 presents the final results and Section 5 concludes the paper.

3 J. Croft, "Fraud Costs the UK up to £193bn per year report says," in Financial Times, ed, 2016
4 E. W. T. Ngai, Y. Hu, Y. H. Wong, Y. Chen, and X. Sun, "The application of data mining techniques in financial fraud detection: A classification framework and an academic review of literature," Decision Support Systems, vol. 50, pp. 559-569, 2011
5 P. Omerod, 'Ostrich Economics', 2009
6 J. Stiglitz, Freefall America, Free Markets and Sinking of the World Economy, New York: W.W. Norton & Company Inc, 2010
7 V. Hauch, I. Blandon-Gitlin, J. Masip, and S. L. Sporer, "Are Computers Effective Lie Detectors? A Meta-Analysis of Linguistic Cues to Deception," Personality and Social Psychology Review, vol. 19, pp. 307-342, 2014
8 J. Pennebaker, R. Boyd, K. Jordan, and K. Blackburn, "The development and psychometric properties of LIWC 2015", University of Texas, Austin 2015

2. Background and Literature Review

Corpus Linguistics is a fast growing methodology in contemporary linguistics.[9] This entails the construction of a corpus: 'a body of naturally occurring language'.[10] Analysis of the corpus is then performed with the help of specialised software. This approach is rooted in the empirical school of thought, originating from the scientific method. It argues that the use of a corpus provides insights into the patterns of language use, the extent to which they are used, and the contextual factors that influence variability.[11] According to Sinclair (2001), the raison d'etre of corpus-based language study is to identify differences: 'the distinguishing features of one type of text only come to the forefront when contrasted to another type of text'.[12] This is particularly needed in deception-based research where the key is to be able to recognise a lie. In the past, researchers[13,14] have set up controlled experiments to aid in distinguishing a liar from a truth-teller. However, such studies are hampered by poor reproducibility of results; subjects have no personal loss or gain at stake and the motivation to lie is weak. Fitzpatrick and Bachenko propose the 'construction of standardised corpora that would provide a base for expanding deception studies, comparing different approaches and testing new methods'.[15] They recommend using publicly available data as it is likely to be a rich source of ground truth evidence. A perfect example of this is the Enron e-mail corpus [15].[16] This has been extensively interrogated and linguistic features put through algorithms to pick up patterns that could be indicative of fraud and workplace behavioural cues. This kind of empirical data would be very hard to attain in a laboratory setting. Further in the arena of high stakes deception there is a 'sparsity of ground truth verification for data collected from real world sources' (Fitzpatrick and Bachenko, 2012). To address such a short supply of 'ground truth' a new
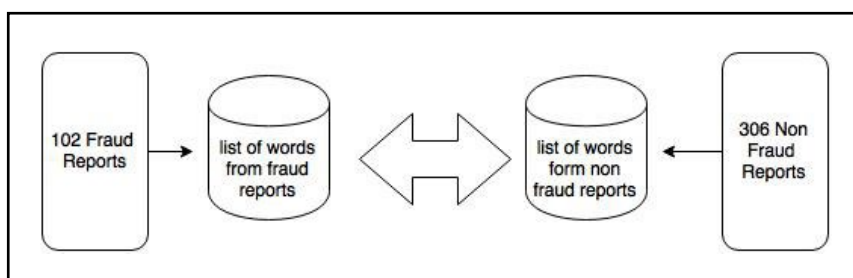

Figure 1: Reports set-up in AntConc to perform keyword analysis

---

9 S. T. Gries, "What is corpus linguistics?", Language and Linguistics Compass vol. 3, pp. 1–17, 2009

10 T. McEnery and A. Wilson, Corpus Linguistics, An Introduction: Edinburgh University Press, 2005

11 D. Krieger, "Corpus Linguistics: What it is and how it can be applied to teaching." The Internet TESL Journal, 2003

12 B. C. Camiciottoli, *Rhetoric in financial discourse*. The Netherlands: Rodopi, 2013

13 J. T. Hancock, L. E. Curry, S. Goorha, and M. Woodworth, "On Lying and Being Lied To: A Linguistic Analysis of Deception in Computer-Mediated Communication," *Discourse Processes,* vol. 45, pp. 1-23, 2007

14 N. D. Duran, C. Hall, P. M. McCarthy, and D. S. McNamara, "The linguistic correlates of conversational deception: Comparing natural language processing technologies," *Applied Psycholinguistics,* vol. 31, pp. 439-462, 2010

15 E. Fitzpatrick and J. Bachenko, "Building a Data Collection for Deception Research," in *Proceedings of the EACL 2012 Workshop on Computational Approaches to Deception Detection,*, Avignon, France, 2012, pp. 31-38

16 J. Hardin and G. Sarkis, 'Network Analysis with the Enron Email Corpus', *Journal of Statistics Education*, vol. 23, No. 2, 2015

corpus of 6.3 million words is constructed. The narratives were collected from firms known to have committed FSF and matched with narratives from similar firms/same time period.

McNamara et al. outline pre-requisites for building a corpus which stipulates that the language must be of a particular genre and be thematically related. It must also be balanced and representative. A corpus is said to be balanced 'if the relative sizes of each of its subsections have been chosen with the aim of adequately representing the range of language that exists in the population of texts being sampled'.[17] A representative corpus is one sampled in such a way that it contains all the types of text, in the correct proportions, that are needed to make the contents of the corpus an accurate reflection of the variety of language that it samples (McNamara, Graesser, McCarthy, and Cai, 2014).

The AR/10-K are financial texts of a particular genre and fulfils the representative and balanced criteria. However, as McNamara et al. point out, it does not need to be a 'perfect corpus; we just need one that gets the ball rolling'. This perfect corpus would be time consuming and expensive to collect. The practical aspects of corpus compilation are underappreciated.[18] The results from corpus-based studies should be 'practical and suggestive rather than exhaustive and definitive' (McNamara, Graesser, McCarthy, and Cai, 2014). The alternative, rationalist school of thought led by Noam Chomsky refutes the validity of using corpora to adequately represent language. Chomsky argues that all empirical collections of language samples are skewed and incomplete.[19] They are skewed in that they favour particular uses of language at the expense of others, and incomplete because the number of sentences in a language is infinite; no finite collection of text could ever fully represent all possible configurations of words (McEnery and Wilson, 2005). Empiricists like McEnery argue that the use of a corpus enables 'good real world performance' by assigning probabilities to linguistic events so that they can say which sentences are 'usual' and 'unusual' (McEnery and Wilson, 2005). They concede that corpora cannot provide complete accounts of language use but maintain that it enables key insights into language use that would be otherwise difficult to grasp. They emphasise that our language capacity is infinite, and our language use is limited. Largely, people speak in preformed phrases that are repeated over and over again without knowing it. This is well-captured in a corpus.

A corpus has been used to differentiate liars from truth-tellers. Some recent research is now briefly described. Burgoon et al. built a corpus of 1114 statements made by a CEO formally indicted for fraud.[20] From this corpus they extracted key linguistic markers of deception, first introduced by Zhou et al.[21] The results from these markers were then put through hypothesis testing. They find fraud-related utterances differed systematically from non-fraud utterances. Specifically they state that 'consistent with recent evidence

---

17 D. S. McNamara, A. C. Graesser, P. M. McCarthy, and Z. Cai, *Automated Evaluation of Text and Discourse with Coh-Metrix*. New York: Cambridge University Press 2014

18 P. Rayson, 'Computational Tools and Methods for Corpus Compilation and Analysis', in *Cambridge Handbook of English Corpus Linguistics*, ed., 2015

19 "Corpus Linguistics" Research Starters eNotes.com, Inc. eNotes.com 24 Nov, 2016

20 J. Burgoon, W. J. Mayew, J. S. Giboney, A. C. Elkins, K. Moffitt, B. Dorn, "Which Spoken Language Markers Identify Deception in High-Stakes Settings? Evidence From Earnings Conference Calls," *Journal of Language and Social Psychology,* vol. 35, pp. 123-157, 2015

21 L. Zhou, J. Burgoon, J. Nunamaker, and D. Twitchell, "Automating Linguistics-Based Cues for Detecting Deception in Text-based Asynchronous Computer Mediated Communication," *Group Decision and Negotiation,* vol. 13, pp. 81-106, 2004
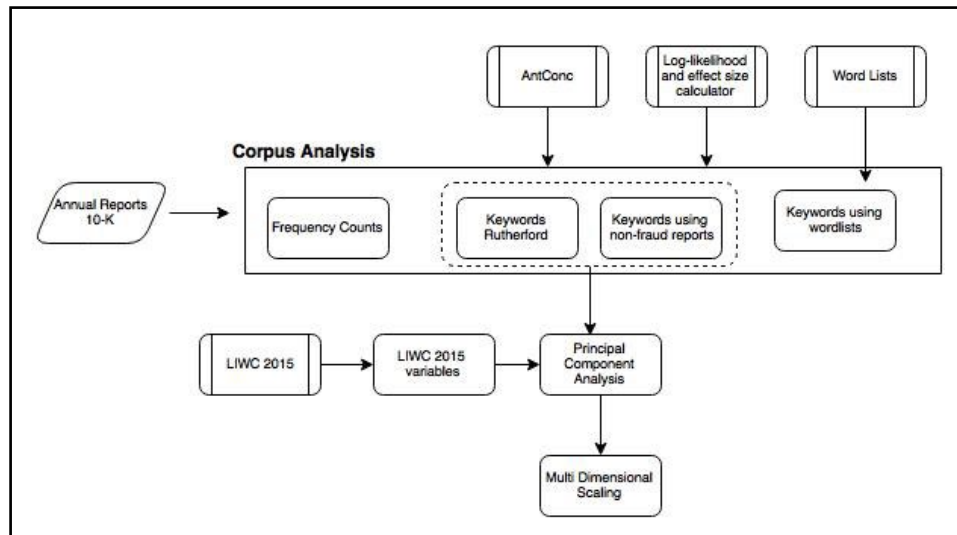
Figure 2: Proposed Corpus Analysis based Approach

in the political arena by Braun et al. (2015) that fraud utterances were longer and more laden with details than non-fraud ones' (Burgoon, Mayew, Giboney, Elkins, Moffitt, and Dorn, 2015).

Fuller at al. also extracted linguistic-based cues from 367 written statements prepared by suspects and victims of crimes on military bases.[22] They found that linguistic markers related to length and details of messages, quantity of emotive language used; language that distanced the speaker from the message were significantly different between liars and truth-tellers.

Burns et al. used 50 transcribed 911 calls (25 truthful and 25 deceptive calls) and executed LIWC (2007) over the data.[23] They found that truthful callers display more negative emotion and anxiety than deceivers. They also referred to others in third-person singular form and gave more details. Deceivers used third-person plural at a higher rate, perhaps to deflect blame. They also demonstrated more immediacy than truth-tellers by using more first person singular and first person plural pronouns.

Fornaciari and Poesio[24] also used LIWC 2007 over a corpus of court transcripts containing both truthful and deceptive testimonies and found marked differences between the two types of testimonies. Larcker and Zakolyukina[25] also used LIWC 2007 over narratives of CEOs and CFOs' conference calls. The analysis indicates that deceptive executives make more references to general knowledge, fewer non-extreme positive emotions, and fewer references to shareholders value and value creation. In addition, deceptive CEOs use

22 C. M. Fuller, D. P. Biros, J. Burgoon, and J. Nunamaker, "An Examination and Validation of Linguistic Constructs for Studying High-Stakes Deception," *Group Decision and Negotiation,* vol. 22, pp. 117-134, 2012

23 M. B. Burns and K. C. Moffitt, "Automated deception detection of 911 call transcripts," *Security Informatics,* vol. 3, p. 8, 2014

24 T. Fornaciari and M. Poesio, "On the use of homogenous sets of subjects in deceptive language analysis," presented at the Proceedings of the Workshop on Computational Approaches to Deception Detection, Avignon, France, 2012

25 D. F. Larcker and A. A. Zakolyukina, "Detecting Deceptive Discussions in Conference Calls," *Journal of Accounting Research,* vol. 50, pp. 495-540, 2012

significantly fewer self-references, more third-person plural and impersonal pronouns, more extreme positive emotions, fewer extreme negative emotions, and fewer certainty and hesitation words.
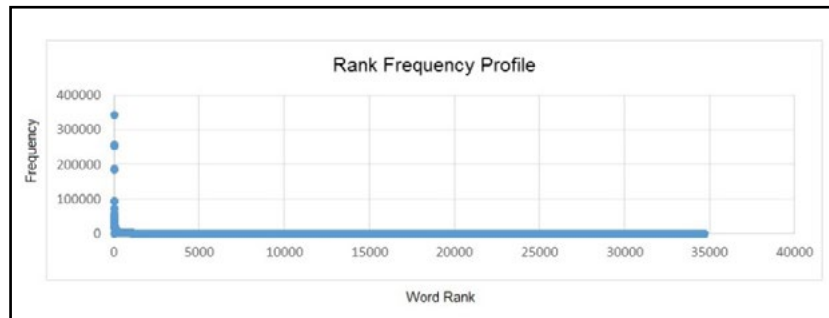

Figure 3: Zipf law in action over the corpus, a plot of word rank versus frequency

Bacheko et al.,[26] McCarthy et al.,[27] Hancock et al., and Duran et al. all built up corpora in a domain of interest and checked linguistic style for differences between liars and truth-teller. The findings are all in the affirmative. There is a marked difference that can be detected. For example, McCarthy et al. found that deceivers employ distancing strategies. Liars produce more words, more sense-based words (for example seeing, touching) and used fewer self-oriented but more other-oriented pronouns when lying than when telling the truth (Hancock, Curry, Goorha, and Woodworth, 2007). Duran et al. find that the total word count, negation, and personal pronouns are variables able to distinguish narratives of liars from truth-tellers. More directed studies using annual report/10-K as a corpus to pick up linguistic features were conducted by Humphreys et al.,[28] Goel et al.,[29] Glancy and Yadav,[30] Purda and Skillcorn,[31] Throckmorton et al.,[32] Cecchini et al.[33] These studies primarily picked up known linguistic cues to deception, or extracted features that were more pronounced in fraud reports and then applied data mining algorithms, such as classification and clustering. The results all indicate that linguistic features are able to differentiate between the narratives of fraud and non-fraud firms.

26 J. Bachenko, E. Fitzpatrick, and M. Schonwetter, "Verification and implementation of language-based deception indicators in civil and criminal narratives," presented at the Proceedings of the 22nd International Conference on Computational Linguistics - Volume 1, Manchester, United Kingdom, 2008

27 P. M. McCarthy, N. D. Duran, and L. M. Booker, "The Devil Is in the Details: New Directions in Deception Analysis," in *Twenty-Fifth International Florida Artificial Intelligence Research Society Conference*, Florida, 2012

28 S. L. Humpherys, K. C. Moffitt, M. B. Burns, J. K. Burgoon, and W. F. Felix, "Identification of fraud financial statements using linguistic credibility analysis," *Decision Support Systems,* vol. 50, pp. 585-594, 2011

29 S. Goel, J. Gangolly, S. R. Faerman, and O. Uzuner, "Can Linguistic Predictors Detect Fraud Financial Filings?," *Journal of Emerging Technologies in Accounting,* vol. 7, pp. 25-46, 2010

30 F. H. Glancy and S. B. Yadav, "A computational model for financial reporting fraud detection," *Decision Support Systems,* vol. 50, pp. 595-601, 2011

31 L. Purda and D. Skillicorn, "Accounting Variables, Deception, and a Bag of Words: Assessing the Tools of Fraud Detection," *Contemporary Accounting Research,* vol. 32, pp. 1193-1223, 2015

32 C. S. Throckmorton, W. J. Mayew, M. Venkatachalam, and L. M. Collins, 'Financial fraud detection using vocal, linguistic and financial cues', *Decision Support Systems,* vol. 74, pp. 78-87, 2015

33 M. Cecchini, H. Aytug, G. J. Koehler, and P. Pathak, "Making words work: Using financial text as a predictor of financial events," *Decision Support Systems,* vol. 50, pp. 164-175, 2010

Methodology

The annual reports/10-Ks of firms formally indicted for FSF were collected from 1989 to 2012. Only the narrative sections were kept (sections that dealt with corporate social responsibility and corporate governance were also removed, in keeping with past research). The narratives were stripped of all formatting and put into .txt files. This resulted in 102 files of narratives from fraud firms matched with 306 files from similar non-fraud firms. These reports were then loaded into AntConc, a freeware corpus analysis toolkit for text analysis.[34] The reports were then put through the following two methods commonly applied in corpus linguistics.

Set up of frequency lists

These lists: 'record the number of times that each word occurs in the text. It can therefore provide interesting information about the words that appear (and do not appear) in a text'.[35] The frequency information gives an indication of the vocabulary composition of the text. Sinclair noted that 'anyone studying a text is likely to need to know how often each different word form occurs in it'.[36] Additionally, according to McEnery and Hardie, a full appreciation of the frequency of a token in the text is only possible through a normalised frequency which answers the question: 'how often might we assume we will see the word per x words of running text?'[37] In this study x is 1000 words, a typical base of normalisation for density scoring.

Keyword Analysis

This is one of 'the most widely-used methods for discovering significant words, and is achieved by comparing the frequencies of words in a corpus with frequencies of those words in a (usually larger) reference corpus' (Baron, Rayson, and Archer). The measure used to determine keyness is a log-likelihood score and/or a log ratio score. The log-likelihood is a *statistical significance* measure – it tells us how much evidence there is for a difference between two corpora. The higher the log-likelihood value, the more significant is the difference between two frequency scores. A score of 3.8 or higher is significant at the level of $p < 0.05$. A negative value indicates underuse in the fraud corpus in relation to the non-fraud reports. However, log-likelihood does not indicate how big or how important a given difference is. The log ratio calculation would show up this difference.[38]

Keyword analysis was performed in 3 alternative ways:

1. The 102 fraud reports were loaded into AntConc. The 306 non-fraud reports were also loaded and set up as the reference corpus. The keyword generation method was set to log-likelihood. This produced

---

34 L. Anthony. (2014). *AntConc (Version 3.4.3). Available from* http://www.laurenceanthony.net/

35 A. Baron, P. Rayson, and D. Archer, "Word frequency and key word statistics in historical corpus linguistics," *International Journal of English Studies,* vol. 20, pp. 41-67

36 J. Sinclair, *Corpus, Concordance, Collocation.* Oxford: Oxford University Press, 1991

37 T. McEnery and A. Hardie, *Corpus linguistics: method, theory and practice.* Cambridge: Cambridge University Press, 2012

38 C. Gabrielatos and A. Marchi, "Keyness: Appropriate metrics and practical issues", CADS International Conference 2012. Corpus-assisted Discourse Studies: More than the sum of Discourse Analysis and computing?, 13-14 September, University of Bologna, Italy, 2012

a list of keywords sorted by keyness scores. Figure 1 shows the approach taken by AntConc to determine keyness for words in the fraud reports. The output produced is a list of word types that are more salient in fraud reports and those that are more salient in non-fraud reports.

2. A study using corpus analysis methods on annual report narratives conducted by Rutherford[39] uncovered words that were deemed indicative of company health. These words were also put through a log-likelihood calculation to determine if there is a difference in usage of these words between fraud and non-fraud reports. For this task, log-likelihood and effect size calculator as devised by Rayson[40] is used. This calculator also computes a log ratio score.

3. Loughran and McDonald[41] developed wordlists customised for the financial domain. They showed that wordlists developed for other disciplines misclassify words in financial texts. The wordlists that they developed included negative, positive and uncertainty bearing words. As indicated by Pollach[42] such words can point to differences in 'themes and attentional foci' between the two sets of reports. These wordlists were loaded into AntConc and raw frequencies were noted. These frequencies are then passed to the log-likelihood calculator to determine keyness scores. A log ratio score is again computed.

In a further bid to pick up differences in linguistic style between the two reports, LIWC 2015 is executed over each text file in the corpus. Tausczik and Pennebaker[43] cite a number of reasons that give weight to using LIWC 2015 to take a closer look at language use. LIWC employs a simple yet intuitive way to measure language use in a variety of settings. LIWC reads written text in .txt files. Its text analysis module compares each word in the text against the programme's user-defined dictionary. Once the processing module has read and accounted for all words in a given file, it calculates the percentage of total words that match each of the dictionary categories. The new 2015 version of LIWC uses a new updated master dictionary. It is composed of almost 6,400 words, word stems, and selected emoticons. A dictionary word can belong to one or more word categories. An example given by Pennebaker illustrates this point: 'the word 'cried' is part of five word categories: Sadness, Negative Emotion, Overall Affect, Verb, and Past Focus. Hence, if the word 'cried' was found in the target text, each of these five sub-dictionary scale scores would be incremented' (Pennebaker, Boyd, Jordan, and Blackburn, 2015). LIWC 2015 is run over each report in the corpus which results in 35 LIWC variables for each report. Examples of variables include function words, total pronouns, affective processes, cognitive processes, perceptual processes, drives, time orientations and relativity (comprehensive details on variables given by Pennebaker [(Pennebaker, Boyd, Jordan, and Blackburn, 2015)]).

In a bid to determine keywords and LIWC categories that lend most weight to the discrimination task, PCA is executed over these features. Principal component analysis (PCA) is a technique used to bring out strong patterns in a dataset. It simply finds the principal components of data which are those data points

39 B. Rutherford, "Genre Analysis of Corporate Annual Report Narratives: A Corpus Linguistics Based Approach," *Journal of Business Communication,* vol. 42, pp. 349-378, 2005

40 P. Rayson and R. Garside, "Comparing corpora using frequency profiling " in *Proceedings of the workshop on Comparing Corpora*, Hong Kong, 2000

41 T. Loughran and B. McDonald, "When Is a Liability Not a Liability? Textual Analysis, Dictionaries, and 10-Ks," *The Journal of Finance,* vol. 66, pp. 35-65, 2011

42 I. Pollach, "Taming Textual Data: The Contribution of Corpus Linguistics to Computer-Aided Text Analysis," *Organizational Research Methods,* vol. 15, pp. 263-287, 2011

43 Y. R. Tausczik and J. W. Pennebaker, "The Psychological Meaning of Words: LIWC and Computerized Text Analysis Methods," *Journal of Language and Social Psychology,* vol. 29, pp. 24-54, 2009

that show the greatest variability.[44]

First, the keywords unearthed from step 1 in keyword analysis are gathered. The tf-idf score for each of these keywords are obtained. The tf is the normalised term frequency (number of times a word appears in a report divided by the total number of words in that document). The second term the IDF is computed as the logarithm of the number of the documents in the corpus divided by the number of documents where the specific term appears. A tf-idf score denotes how important a word is to a document in a collection or corpus. The importance increases proportionally to the number of times a word appears in the document but is offset by the frequency of the word in the corpus.[45]

The tf-idf scores for keywords unearthed by Rutherford [38] is also similarly calculated.

This produced 2 matrices of 408 rows long denoting the reports in the corpus with columns being the keywords and cells being the tf-idf scores. Another matrix was set up, again 408 rows long. This time the columns are 35 LIWC variables (described in Pennebaker et al. [2009]) being the columns with the cells being the count of words in the LIWC category found in the report divided by the total number of words in the report. PCA is executed over these matrices.

The principal components or the features (keywords/LIWC variables) that contribute most to the variability are then used to construct matrices of smaller dimensions. Now, in order to show up the difference between the two categories of reports as defined by the reduced set, Multi-Dimensional Scaling (MDS) is executed. This 'provides a visual representation of the pattern of proximities (i.e., similarities or distances) among a set of objects'.[46]

The multidimensionality of the data (the number of features, in other words) is scaled down to a 2D representation which is cognizant of the initial distances between the features. Closer points indicate that the reports are more similar, as defined by the features chosen than some that are further apart. The corpus analysis methodology as described so far is further illustrated in Figure 2.

Results and Discussion

Once all the reports (fraud and non-fraud) were loaded into AntConc, frequencies of word types and their rank were plotted (see Figure 3). The corpus follows the natural law observed in all languages and in all corpora: 'systematic frequency distribution such that there are few very high-frequency words that account for most of the tokens in text (e.g. 'a', 'the', 'I', etc.), and many low-frequency words'.[47] This simple pattern is often referred to as 'few giants and many dwarves'.[48] This relationship obeys a power law known as Zipf's law. The rth most frequent word has a frequency f(r) that scales according to formula shown in Eq. 1, r is called the 'frequency rank' of a word, and f(r) is its frequency in a corpus, with $\alpha \approx 1$ (de Gryter, 2009).

---

44 I. T. Jolliffe, *Principle Component Analysis*. 2nd edition, England, Springer, 2002

45 C. D. Manning and H. Schutze, Foundations of Statistical Natural Language Processing: MIT Press, 1999.

46 S. Borgatti (1997). *Multidimensional scaling. Retrieved from http://www.analytictech.com/borgatti/mds.htm*.

47 S. T. Piantadosi, "Zipf's word frequency law in natural language: A critical review and future directions," *Psychonomic Bulletin & Review,* vol. 21, pp. 1112-1130, 2014

48 Walter de Gruyter, *Corpus Linguistics An International Handbook* vol. 2. Berlin: GmbH and Co, 2009

Eq.1

Next, lemma frequencies were examined. This is where a single item (lemma) is deemed a canonical representative for a set of related (inflected) word forms. For example, variations of the word type 'interest' include 'interested', 'interesting', 'interests'. Their frequencies are all added together and put under the word 'interest'. Table 1, shows the top 20 lemmas in the fraud reports with normalised frequencies. The corresponding frequencies for lemmas in the non-fraud reports are also listed. Figure 4 shows graphically the nature and strength of this relationship for the top 300 lemmas.

On first inspection, there seems to be homogeneity in the words used, and in some cases a similarity in frequency of word usage. As Rutherford argues this stability supports 'the contention that narratives constitute an identifiable genre and implies that where differences do arise, significance can be attached to them' (Rutherford, 2005).

To further check for differences in the mean frequencies of lemmas between the fraud and non-fraud reports, significance testing was performed. A preliminary test for the equality of variances indicates that the variances of the two groups (fraud with non-fraud) were significantly different. Therefore a two-sample t-test was performed that does not assume equal variances.

The hypotheses are as follows:

(Null) Ho: m1 = m2 (means of the fraud and non-fraud reports are equal)

(Alternative) Ha: m1≠m2(means are not equal)

The mean of the normalised frequencies for all 14066 lemmas in fraud reports were compared with 24441 lemmas in the non-fraud reports. The observed difference (Table 2) is significant (p value < 0.05) and the t stat value is greater than the t critical 2 tailed value. Therefore the null hypothesis can be rejected and the alternative accepted that there is significant difference between how lemmas are used between fraud and non-fraud reports. As noted by Kilgariff: 'any difference in the linguistic character of two corpora will leave its trace in a difference between their word frequency lists'.[49]

The keyword analysis using the non-fraud reports as a reference corpus for comparison revealed the results shown in Figure 5 and 6. The tf-idf score for the top 200 keywords obtained and the matrix constructed was then put through PCA to find features that show the greatest variability between the two categories of reports. These keywords are shown in Figure 7 (top section). The reduced matrix is then put through MDS computation and the results revealed are shown in Figure 7, lower section. It appears that fraud firms are more concerned with bureaucratic issues –'procedures', 'division', 'agreement' and have cash flow issues: 'borrowers', and 'acquisition' (Figure 5 and 6). However once PCA is conducted and the features selected, it seems based on their tf-idf scores the MDS computation indicates a close proximity between the two categories of reports (Figure 9). It appears that for these features, the differences can be quite subtle.

The keyword analysis using keywords unearthed by Rutherford as potential markers of concern with respect to company health were also brought into use. The raw frequencies of all these words outlined by

---

49 A. Kilgarriff, "Using word frequency lists to measure corpus homogeneity and similarity between corpora", *Proceedings 5th ACL workshop on very large corpora.* Beijing and Hong Kong, 1997

Rutherford were input into the log-likelihood calculator devised by Rayson and Garside and log ratio scores were calculated (Rayson and Garside, 2000). The results are depicted in Figure 8. The log ratio scores for the words above the x axis are more prominent in fraud reports. Conversely the log ratio score that is below the x axis depicts those words more prominent in non-fraud reports.

The fraud firms seem again to be concerned with operations: 'division', 'programme', 'management'. Cash flow issues seem to be coming to the surface again: 'sterling', 'liability', 'asset', 'risk'. Whereas the non-fraud firms use language that seeks to relay details on firm performance, e.g. 'profit', 'growth', 'investment', 'net'. It also shows more confidence by using stronger adjectives such as 'exceptional', 'strong'.

The PCA-selected Rutherford keywords are shown at the top of Figure 9. The tf-idf score for each of these PCA selected Rutherford keywords are then put into a matrix which is then put through MDS. The results shown at the bottom of Figure 9 clearly show that fraud and non-fraud reports can be well separated using terms from the Rutherford study which are then further reduced by PCA to produce the results shown in Figure 9.

The LIWC features chosen by PCA are shown in Figure 10 (top half). Complete descriptions of variables given in Pennebaker et al. (Pennebaker, Boyd, Jordan, and Blackburn, 2015). However it seems that the use of pronouns, adjectives, adverbs, tone, and perceptual and cognitive processes all contribute to causing variability between the two categories of reports. Once MDS is applied it can be seen that there is a visible distinction in distance that can show up a fraud firm.

The other remaining analysis performed on the corpus was through the use of words denoted as key by Loughran and McDonald (Loughran and McDonald, 2011) in the financial reporting domain. From the log ratios calculated, it can be seen that for the negative words (shown in Figure 11), the underlying themes surrounding cash flow problems has resurfaced. Lemmas associated with 'bankruptcy', 'loss', 'problem', 'shortage', 'fail' are more pronounced. For example, keywords in context reveal statements like: 'The bankruptcy court approved this application', 'reduced gross margins and loss of market share', 'if we fail to cultivate new or maintain existing', 'a result of cash flow shortage'. Whereas the non-fraud firms seem to concentrate more on issues in the external environment with terms such as: 'unfavourable', 'disrupt', 'challenge', 'negative', 'volatile'. For example examination of keywords in context reveal statements like 'extremely unfavourable stock market environment', 'we anticipate could disrupt our business and could result in', 'in a more challenging economic environment', 'economic crises and other challenging market factors', 'demand may be particularly volatile and difficult to predict'.

The positive wordlist produced the results shown in Figure 12. The fraud firms seem again to be concerned with issues surrounding liquidity, for example: 'ability to generate revenues and sustain profitability', 'improve profitability in existing and acquired operations'. The term 'exceed' is used to highlight limitations, e.g. 'operating costs that exceed', 'clinical trials that exceed the capacity of our pilot facility', 'actual costs could significantly exceed these estimates'. In some cases there seems to be some over-optimism. For example: 'Enron has a solid portfolio of asset-based businesses', 'In Q4 (ENRC) 2008 production volumes achieved a solid performance compared to the prior year' (ENRC - Eurasian Natural Resources Corporation). Often the term 'solid' is used with respect to company operations for example: 'New York city solid waste', 'non-

hazardous solid waste'. The term 'attractive' is often used with terms that denote acquiring. For example: 'acquiring attractive parcels of land', 'stock may make us a less attractive takeover target' or there is mention of 'attractive assets', 'attractive prices'. Whereas the non-fraud firms use the term 'gain' with a quantifiable result: 'store sales gain of 4.3%', 'unrealized gain of $1.1 million', 'the gain included a pre-tax gain of $570 million'. The term 'strength' is used in a very positive and upbeat manner: 'growth was led by the continued strength', 'we have financial strength', 'far-East and the continued strength of sales'. The term 'improve' is used with reference to products and services, company performance. For example: 'find new customers, improve service', 'help automate and improve a company's business processes', 'maintain and improve manufacturing yields'. The term 'excellent' also used as performance measure: 'excellent profitability', 'Peroni had an excellent year', 'providing excellent customer service'.

The uncertainty wordlist produced the results shown in Figure 13. For fraud firms, the term 'pending' dominates; it is often used in connection with 'pending mergers', 'pending patents', 'pending application', 'pending claims', 'pending litigation', 'pending acquisitions'. The term 'believes' again is used to explain a stance: 'The company/corporation/management/the board believes that…', The term 'rather' is used to highlight an unfavourable alternative for example: 'growth of the company rather than distribute earnings', 'evolutionary change rather than revolutionary disruptions', 'revenues and cash flow for us rather than being sold on a…'. The term 'can' is often used to affirm a point made by the firm: 'cumulative costs can be enormous', 'we can reduce these hidden costs', 'no assurance can be given', 'nor can we predict'. The term 'likely' is used in an attempt to quantify an uncertain outcome: 'values more likely to be eroded', 'income is more likely to', 'common stock likely would decline'.

For the non-fraud firms using the uncertainty wordlists, it can be seen from Figure 13 that the term 'nearly' dominates. This is primarily used to quantify a result: 'We created nearly 1 million', 'customers and nearly 8300 broadband', 'reaching nearly 2.3 million'. The term 'sometimes' is used to refer to a challenging situation: 'numerous and sometimes conflicting', 'sometimes in ways that adversely impact demand', 'sometimes competing industry standards'. The term 'revise' is used in reference to 'revise any forward-looking statements', 'revise procedures', 'revise agreement'. The term 'differ' again is used to highlight differences from expectations: 'actual results could differ from these estimates', 'the costs differ because of higher costs', 'actual results differ from assumptions'.

Conclusion

This study has shown that investigating a corpus in a contrastive way can show up patterns of word usage and linguistic style that can alert one to anomalies such as deception.

The approach taken here was to align the investigation along the generally accepted corpus analysis methods. One of these methods is examination of frequency counts. This showed that both fraud and non-fraud firms used similar terminology. However, there is a significant difference in usage as noted by the t-tests conducted. Without such an examination of frequency counts such a distinction would have been difficult to detect.

Another key technique used to examine the corpus were keywords. They are markers of the 'aboutness' (McEnnery and Wilson, 2005) and the style of a text. Keyness was established using AntConc's built in log-likelihood keyword generation method with the non-fraud reports as a reference corpus and through using the alternative method of using a log-likelihood effect size (LL) calculator (Rayson and Garside, 2000). The latter also returned a log ratio score, which showed up more prominently the strength of the difference in keyness between the two types of narratives. Using the former method to determine keyness, liquidity/cash flow concerns could be discerned amongst the fraud firms, with the non-fraud firms giving a more descriptive picture of their operations. This general picture was reinforced by using words unearthed by Rutherford (Rutherford, 2005). The frequencies of these words in the corpus were passed to the LL calculator. The log ratio scores calculated showed clearly the difference in linguistic emphasis. The negative wordlist again brought to fore the concern over liquidity in the fraud reports. The keywords also seem to forewarn of the latent poor company health. The log ratio scores for the positive and uncertainty wordlist again show up the marked difference in emphasis that can alert to anomalies such as fraud and bankruptcy.

The new version of LIWC (2015) was also executed over the reports. In line with previous studies in deception research this showed that some LIWC categories can highlight differences in the narrative style used by fraud/non-fraud firms.

The multivariate nature of the keywords/LIWC variables produced render deception detection a more arduous task. In a bid to determine the features that show the greatest difference between the two types of reports, Principal Component Analysis (PCA) is deployed. The chosen features were then put through Multi-dimensional scaling (MDS) to enable visualisation of the differences between the two narratives. Again this showed the strength of the differences using keywords/LIWC between the two types of reports.

In a bid to further reinforce the linguistic differences noted, the corpus could be tagged with part of speech. This has been noted to give 'added value'.[50] This would allow a clearer definition of the concepts in the corpus and sharpen any distinctions. A corpus that included more narratives of fraud firms would also strengthen the analysis and the findings. Using wordlists that related to risk and uncertainty could also be used to show up further the latent concerns on productivity/profitability between the types of reports.

However, it seems clear that examination of linguistic styles can be used as an additional armoury by law enforcement agents and auditors to alert to a possible misdemeanour in financial reporting.

---

50 G. Leech, "Developing Linguistic Corpora: a Guide to Good Practice Adding Linguistic Annotation", 2004 (web).

		Normalised Frequencies	
	Lemma	Fraud	Non Fraud
1	company	7.7453	7.4395
2	million	5.8301	7.1380
3	service	5.0957	4.8402
4	product	4.7069	5.0045
5	business	4.5451	4.5467
6	increase	4.3935	5.2396
7	market	4.3745	4.4825
8	result	3.9999	4.0022
9	year	3.9767	3.7335
10	other	3.9166	3.9633
11	may	3.8173	3.2351
12	sale	3.5938	3.6922
13	include	3.5462	3.9395
14	revenue	3.3976	3.3497
15	cost	3.2388	3.4475
16	not	3.0913	2.7420
17	operation	2.7798	3.0798
18	customer	2.6757	3.0049
19	system	2.6168	2.1517
20	financial	2.5592	2.6844

Table 1: Top 20 lemmas in fraud reports with corresponding frequency in non-fraud reports
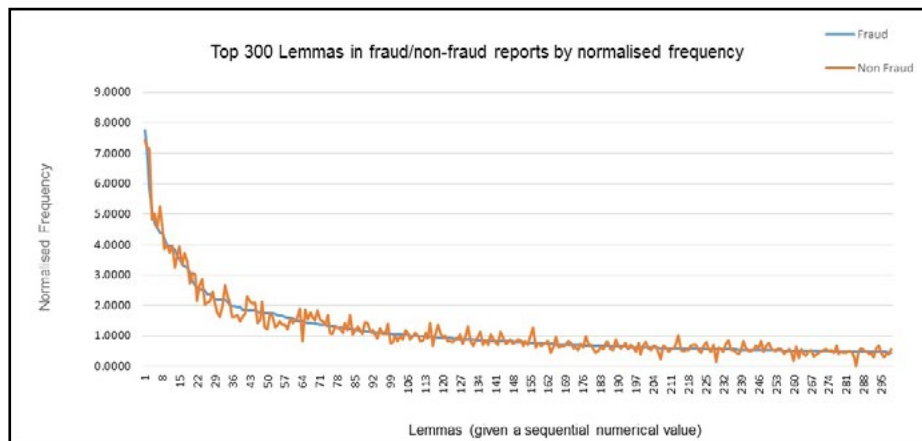

Figure 4: Top 300 Lemmas in fraud and non-fraud reports

t-Test: Two-Sample Assuming Unequal Variances		
	Fraud	*Non-Fraud*
Mean	0.071093417	0.040914856
Variance	0.784882659	0.438103022
Observations	14066	24441
Hypothesized Mean Difference	0	
df	23176	
t Stat	3.514725315	
P(T<=t) one-tail	0.000220524	
t Critical one-tail	1.644919377	
P(T<=t) two-tail	0.000441049	
t Critical two-tail	1.960066349	

Table 2: Significance testing over lemmas (mean) in fraud and non-fraud reports
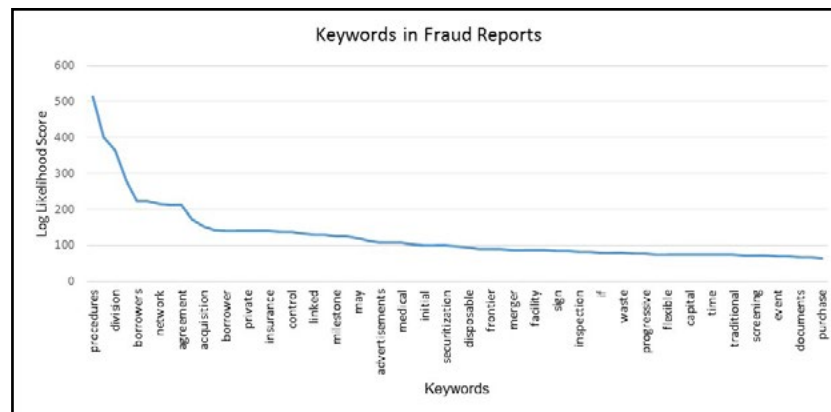

Figure 5: Keywords in fraud reports as identified using log likelihood score in AntConc
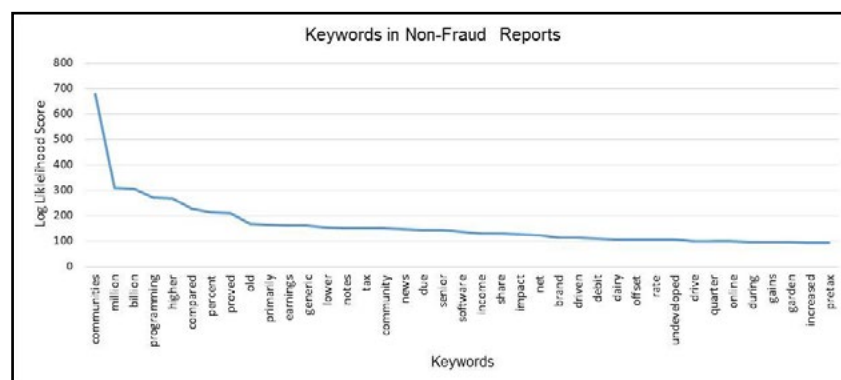

Figure 6: Keywords in non-fraud reports as identified using log likelihood score in AntConc
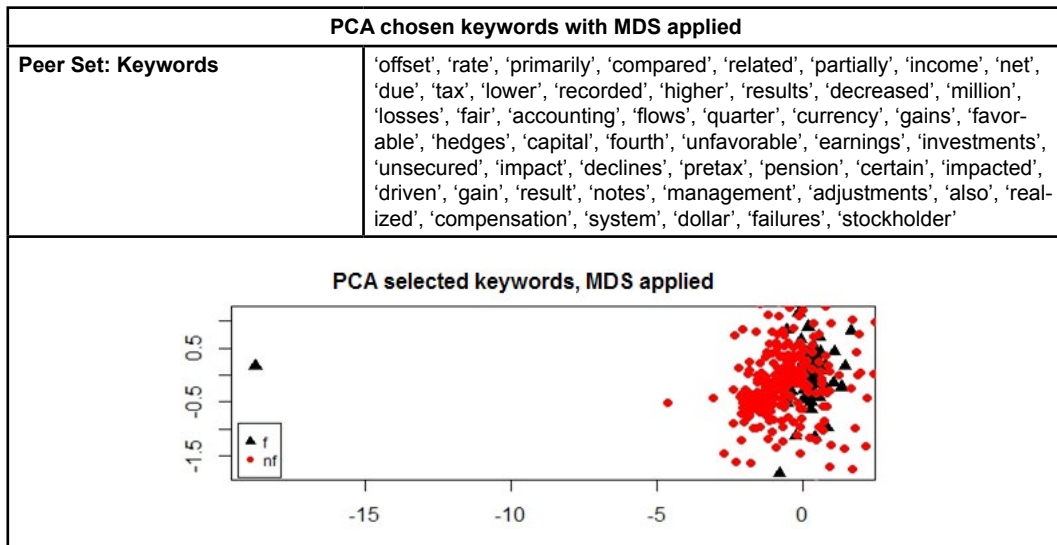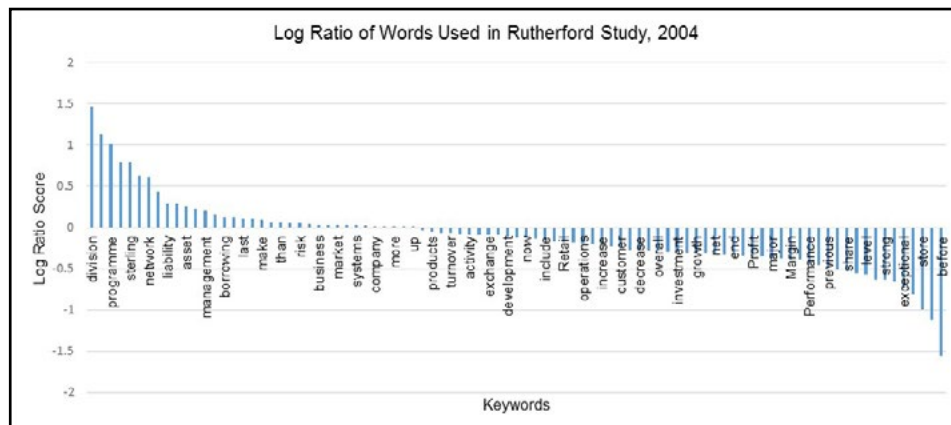
PCA chosen keywords with MDS applied	
Peer Set: Keywords	'offset', 'rate', 'primarily', 'compared', 'related', 'partially', 'income', 'net', 'due', 'tax', 'lower', 'recorded', 'higher', 'results', 'decreased', 'million', 'losses', 'fair', 'accounting', 'flows', 'quarter', 'currency', 'gains', 'favorable', 'hedges', 'capital', 'fourth', 'unfavorable', 'earnings', 'investments', 'unsecured', 'impact', 'declines', 'pretax', 'pension', 'certain', 'impacted', 'driven', 'gain', 'result', 'notes', 'management', 'adjustments', 'also', 'realized', 'compensation', 'system', 'dollar', 'failures', 'stockholder'

Figure 7: PCA selected keywords

Figure 8: Log ratio scores for keywords used in [199]

PCA chosen Rutherford keywords with MDS applied	
Peer Set: Rutherford	'financial', 'rate', 'capital', 'significant', 'increase', 'interest', 'result', 'cash', 'tax', 'include', 'net', 'years', 'new', 'loss', 'debt', 'management', 'operating', 'operations', 'due', 'company', 'decrease', 'total', 'cost', 'sale', 'store', 'growth', 'lower', 'make', 'revenue', 'higher', 'currency', 'item', 'activity', 'exchange', 'reduce', 'products', 'turnover', 'liability', 'division', 'margin', 'now', 'strong', 'borrowing', 'investment', 'risk', 'services', 'previous', 'property', 'asset', 'trading'

Figure 9: PCA selected Rutherford keywords

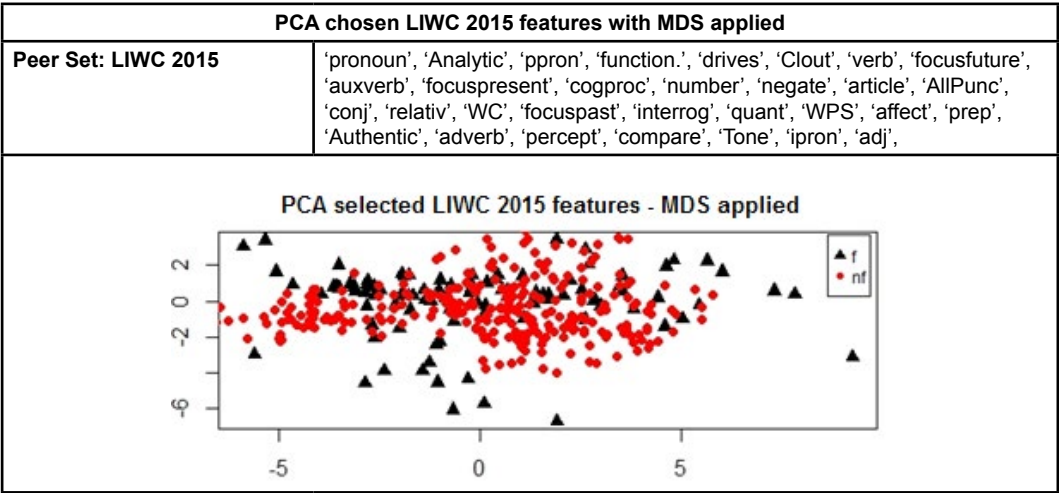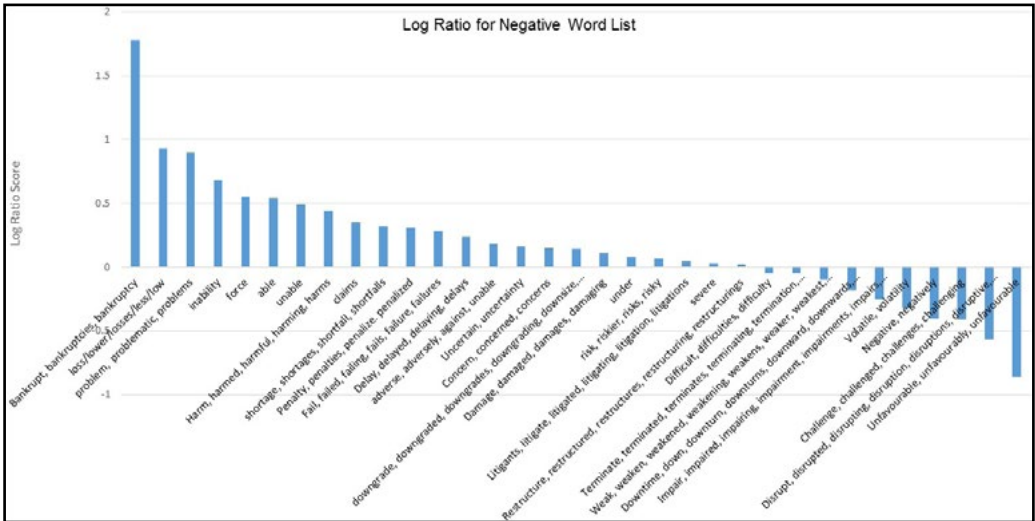| PCA chosen LIWC 2015 features with MDS applied	
Peer Set: LIWC 2015	'pronoun', 'Analytic', 'ppron', 'function.', 'drives', 'Clout', 'verb', 'focusfuture', 'auxverb', 'focuspresent', 'cogproc', 'number', 'negate', 'article', 'AllPunc', 'conj', 'relativ', 'WC', 'focuspast', 'interrog', 'quant', 'WPS', 'affect', 'prep', 'Authentic', 'adverb', 'percept', 'compare', 'Tone', 'ipron', 'adj',

Figure 10: PCA selected LIWC 2015 variables

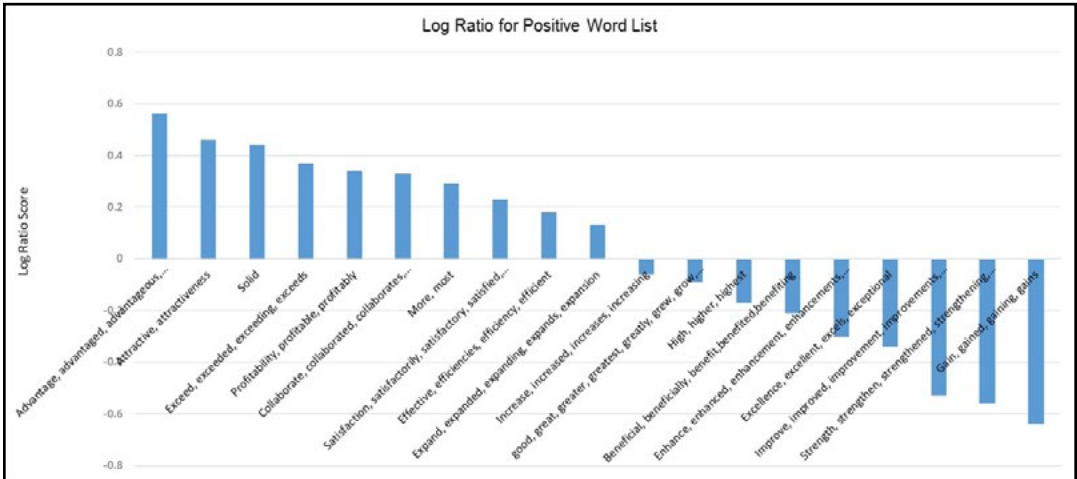Figure 11: Log ratio scores for negative words from [40]

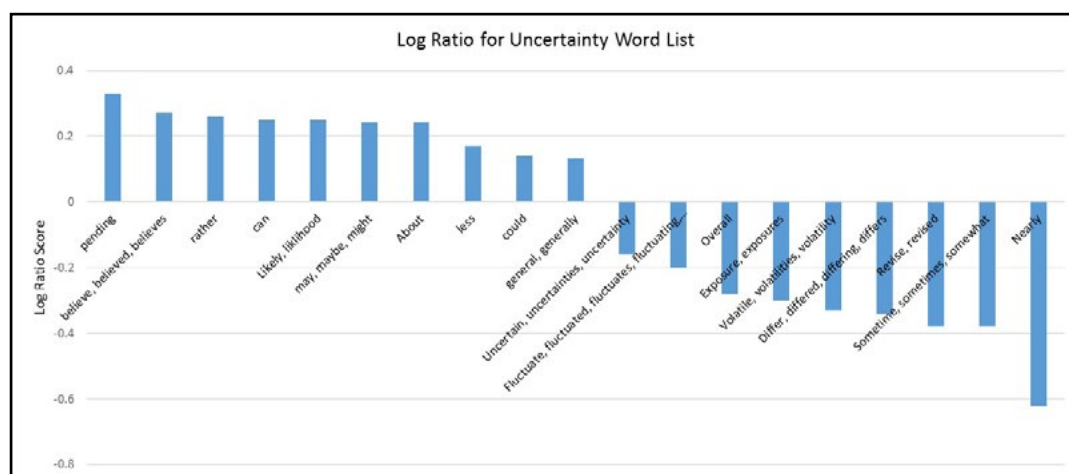**Figure 12: Log ratio scores for positive words from [40]**

Figure 13: Log ratio scores for uncertainty words from [40]

References

"Corpus Linguistics" Research Starters **eNotes.com**, Inc. **eNotes.com** 24 Nov, 2016.

L. Anthony. (2014). *AntConc (Version 3.4.3). Available from <u>http://www.laurenceanthony.net/</u>*

J. Bachenko, E. Fitzpatrick, and M. Schonwetter, "Verification and implementation of language based deception indicators in civil and criminal narratives," presented at the Proceedings of the 22nd International Conference on Computational Linguistics - Volume 1, Manchester, United Kingdom, 2008.

[A. Baron, P. Rayson, and D. Archer, "Word frequency and key word statistics in historical corpus linguistics," *International Journal of English Studies,* vol. 20, pp. 41-67.

S. Borgatti (1997). *Multidimensional scaling. Retrieved from <u>http://www.analytictech.com/borgatti/mds.htm</u>.*

J. Burgoon, W. J. Mayew, J. S. Giboney, A. C. Elkins, K. Moffitt, B. Dorn*,* "Which Spoken Language Markers Identify Deception in High-Stakes Settings? Evidence From Earnings Conference Calls," *Journal of Language and Social Psychology,* vol. 35, pp. 123-157, 2015.

M. B. Burns and K. C. Moffitt, "Automated deception detection of 911 call transcripts," *Security Informatics,* vol. 3, p. 8, 2014.

B. C. Camiciottoli, *Rhetoric in financial discourse.* The Netherlands: Rodopi, 2013.

M. Cecchini, H. Aytug, G. J. Koehler, and P. Pathak, "Making words work: Using financial text as a predictor of financial events," *Decision Support Systems,* vol. 50, pp. 164-175, 2010.

J. Croft, "Fraud Costs the UK up to £193bn per year report says," in *Financial Times,* ed, 2016.

N. D. Duran, C. Hall, P. M. McCarthy, and D. S. McNamara, "The linguistic correlates of conversational deception: Comparing natural language processing technologies," *Applied Psycholinguistics,* vol. 31, pp. 439-462, 2010.

E. Fitzpatrick and J. Bachenko, "Building a Data Collection for Deception Research," in *Proceedings of the EACL 2012 Workshop on Computational Approaches to Deception Detection,*, Avignon, France, 2012, pp. 31-38.

T. Fornaciari and M. Poesio, "On the use of homogenous sets of subjects in deceptive language analysis," presented at the Proceedings of the Workshop on Computational Approaches to Deception Detection, Avignon, France, 2012.

C. M. Fuller, D. P. Biros, J. Burgoon, and J. Nunamaker, "An Examination and Validation of Linguistic Constructs for Studying

High-Stakes Deception," *Group Decision and Negotiation,* vol. 22, pp. 117-134, 2012.

C. Gabrielatos and A. Marchi, "Keyness: Appropriate metrics and practical issues", CADS International Conference 2012. Corpus-assisted Discourse Studies: More than the sum of Discourse Analysis and computing?, 13-14 September, University of Bologna, Italy, 2012.

F. H. Glancy and S. B. Yadav, "A computational model for financial reporting fraud detection," *Decision Support Systems,* vol. 50, pp. 595-601, 2011.

S. Goel, J. Gangolly, S. R. Faerman, and O. Uzuner, "Can Linguistic Predictors Detect Fraud Financial Filings?," *Journal of Emerging Technologies in Accounting,* vol. 7, pp. 25-46, 2010.

S. T. Gries, "What is corpus linguistics?", Language and Linguistics Compass vol. 3, pp. 1–17, 2009.

Walter de Gruyter, *Corpus Linguistics An International Handbook* vol. 2. Berlin: GmbH and Co, 2009.

J. T. Hancock, L. E. Curry, S. Goorha, and M. Woodworth, "On Lying and Being Lied To: A Linguistic Analysis of Deception in Computer-Mediated Communication," *Discourse Processes,* vol. 45, pp. 1-23, 2007.

J. Hardin and G. Sarkis, "Network Analysis with the Enron Email Corpus", *Journal of Statistics Education*, vol 23, No. 2, 2015.

V. Hauch, I. Blandon-Gitlin, J. Masip, and S. L. Sporer, "Are Computers Effective Lie Detectors? A Meta-Analysis of Linguistic Cues to Deception," *Personality and Social Psychology Review,* vol. 19, pp. 307-342, 2014.

S. L. Humpherys, K. C. Moffitt, M. B. Burns, J. K. Burgoon, and W. F. Felix, "Identification of fraud financial statements using linguistic credibility analysis," *Decision Support Systems,* vol. 50, pp. 585-594, 2011.

I. T. Jolliffe, *Principle Component Analysis.* 2nd edition, England, Springer, 2002.

A. Kilgarriff, "Using word frequency lists to measure corpus homogeneity and similarity between corpora", *Proceedings 5th ACL workshop on very large corpora.* Beijing and Hong Kong, 1997.

D. Krieger, "Corpus Linguistics: What it is and how it can be applied to teaching." The Internet TESL Journal, 2003.

D. F. Larcker and A. A. Zakolyukina, "Detecting Deceptive Discussions in Conference Calls," *Journal of Accounting Research,* vol. 50, pp. 495-540, 2012.

G. Leech, "Developing Linguistic Corpora: a Guide to Good Practice Adding Linguistic Annotation", 2004 (web).

T. Loughran and B. McDonald, "When Is a Liability Not a Liability? Textual Analysis, Dictionaries, and 10-Ks," *The Journal of Finance,* vol. 66, pp. 35-65, 2011.

C. D. Manning and H. Schutze, *Foundations of Statistical Natural Language Processing*: MIT Press, 1999.

P. M. McCarthy, N. D. Duran, and L. M. Booker, "The Devil Is in the Details: New Directions in Deception Analysis," in *Twenty-Fifth International Florida Artificial Intelligence Research Society Conference*, Florida, 2012.

T. McEnery and A. Hardie, *Corpus linguistics: method, theory and practice.* Cambridge: Cambridge University Press, 2012.

T. McEnery and A. Wilson, *Corpus Linguistics, An Introduction*: Edinburgh University Press, 2005.

D. S. McNamara, A. C. Graesser, P. M. McCarthy, and Z. Cai, *Automated Evaluation of Text and Discourse with Coh-Metrix.* New York: Cambridge University Press 2014.

M. L. Newman, J. W. Pennebaker, D. S. Berry, and J. M. Richards, "Lying Words: Predicting Deception from Linguistic Styles," *Personality and Social Psychology Bulletin* vol. 29, pp. 665-675, 2003.

E. W. T. Ngai, Y. Hu, Y. H. Wong, Y. Chen, and X. Sun, "The application of data mining techniques in financial fraud detection: A classification framework and an academic review of literature," *Decision Support Systems,* vol. 50, pp. 559-569, 2011.

P. Omerod, 'Ostrich Economics', 2009.

S. T. Piantadosi, "Zipf's word frequency law in natural language: A critical review and future directions," *Psychonomic Bulletin & Review,* vol. 21, pp. 1112-1130, 2014.

J. Pennebaker, R. Boyd, K. Jordan, and K. Blackburn, "The development and psychometric properties of LIWC 2015", University of Texas, Austin 2015.

I. Pollach, "Taming Textual Data: The Contribution of Corpus Linguistics to Computer-Aided Text Analysis," *Organizational Research Methods,* vol. 15, pp. 263-287, 2011.

L. Purda and D. Skillicorn, "Accounting Variables, Deception, and a Bag of Words: Assessing the Tools of Fraud Detection,"

Contemporary Accounting Research, vol. 32, pp. 1193-1223, 2015.

P. Rayson and R. Garside, "Comparing corpora using frequency profiling " in *Proceedings of the workshop on Comparing Corpora*, Hong Kong, 2000.

P. Rayson, "Computational Tools and Methods for Corpus Compilation and Analysis," in *Cambridge Handbook of English Corpus Linguistics*, ed, 2015.

B. Rutherford, "Genre Analysis of Corporate Annual Report Narratives: A Corpus Linguistics Based Approach," *Journal of Business Communication,* vol. 42, pp. 349-378, 2005.

J. Sinclair, *Corpus, Concordance, Collocation.* Oxford: Oxford University Press, 1991.

J. Stiglitz, *Freefall America, Free Markets and Sinking of the World Economy*, New York: W.W. Norton & Company Inc, 2010.

Y. R. Tausczik and J. W. Pennebaker, "The Psychological Meaning of Words: LIWC and Computerized Text Analysis Methods," *Journal of Language and Social Psychology,* vol. 29, pp. 24-54, 2009.

C. S. Throckmorton, W. J. Mayew, M. Venkatachalam, and L. M. Collins, "Financial fraud detection using vocal, linguistic and financial cues," *Decision Support Systems,* vol. 74, pp. 78-87, 2015.

L. Zhou, J. Burgoon, J. Nunamaker, and D. Twitchell, "Automating Linguistics-Based Cues for Detecting Deception in Text-based Asynchronous Computer Mediated Communication," *Group Decision and Negotiation,* vol. 13, pp. 81-106, 2004.

Society Must Be Defended:
Online Quality of Life, a Foucauldian Case Study of Gamergate

Stuart Lindsay[1]
University of Stirling, **s.l.lindsay@stir.ac.uk**

Abstract: The activity of real-life trolls and the psychological impact on their victims has been the subject matter of recent television drama, such as Channel 4's Cyberbully (2015), and horror films with a supernatural twist, such as Unfriended (2015). However, this article explores a key transition in the construction of online social power, from its direct, brutal enforcement by the figure of the troll, to a particular example of the online, biopolitical regulation of quality of life using the device of Vivian James: the fictional character, mascot, and figurehead of the Gamergate protest movement.

Keywords: online quality of life, videogaming, videogaming culture, online culture, gamergate, feminism

There is a proverb on the Internet, claiming for the certainty of online anonymity, which runs as follows: "On the internet, nobody knows you're a dog." In other words, so long as you don't disclose personal information to other Internet users, nobody online knows who you really are. The claim of this proverb is contradicted by that of another: "on the Internet, everyone already knows you're a dog." This second proverb alludes to the notion that your protected identity has already and automatically been compromised by your prior online history or "virtual footprint," which can be detected by HTTP tracking cookies (website

data that records your internet browsing history), and Exif (Exchangeable Image File) tags attached to any photos you've taken and uploaded to public image-sharing bulletin boards (Exif tags contain metadata about the photo, including the time and date it was taken, and, if the camera is GPS-enabled, the location it was taken in).

By following up on these common traces in conjunction with searches of your Facebook posts and tweets, and document tracing or "doxxing" – the act whereby somebody retrieves and publishes online your private or identifying information – other, unscrupulous Internet users can covertly find out who or what you are, what your job is, and where you live. These new powers have the potential to regulate or completely transform the quality of life for netizens – users of the Internet – both online and off. This article will explore notable uses and abuses of online personal data, before analysing a specific example of the regulation of Internet life: the action of Vivian James, cartoon mascot of the videogame protest movement known as Gamergate.

To understand the origins of this life-affecting apparatus, we must turn to the term Human Flesh Search Engine (HFSE), coined in China in 2001. It originally referred to 'a search that was human-powered rather than computer-driven'[2], describing a search engine akin to Google, but of human knowledge that has not been reproduced online and therefore cannot be retrieved via a computerised search. In a human flesh search, it is the knowledge of online users – the human flesh in question – that is searched, rather than internet archives. Conventional human flesh search requests, posted on discussion boards such as 4chan or Yahoo! Answers, are for the titles of obscure books, films and videogames, the names of little-known actors, and other hard-to-come-by facts. However, in the late 2000s, the term Human Flesh Search Engine evolved, gaining an additional, more sinister definition: to refer to the act whereby netizens seek out and expose the identities and private lives of members of online communities whom they (sometimes erroneously) deem guilty of public deception or corruption. Netizens who take it upon themselves to publically prove what they perceive as their targets' true nature or actions gather online information to support this accusation by using the various methods of personal information retrieval previously described, in the belief that they are defending the integrity of their social world. This social world may be an online community, an institution, or an idea of civilization in adherence to certain ethical or moral precepts. This manner of serving vigilante justice has occasionally been used as a means to achieve positive ends, such as the exposure of government corruption and the preferential treatment of the political class by the law. In China,

> in October 2010, a young man named Li Qiming hit two rollerbladers while driving intoxicated through Hebei University. He attempted to flee and when he was stopped by security guards, he yelled out, "Go ahead, sue me if you dare, my father is Li Gang!," who was serving as the deputy director of the Baoding City Public Security Bureau at the time. A HFSE thread [a discussion about the incident on a Chinese online bulletin board] soon led to the personal information and photos of Li Qiming, but also found that his father was involved in corrupt real estate dealings (*Know Your Meme*, 2011).

Despite Hebei University issuing a gag order to its staff and students to silence the accident, Li was arrested by police on October 24, 2010, and on January 30, 2011, after pleading guilty to vehicular

---

2 'Human Flesh Search Engine', *Know Your Meme*, (Seattle: Cheezburger, 2011), <http://knowyourmeme.com/memes/subcultures/human-flesh-search-engine>, [accessed 20 August, 2014]

manslaughter and drunk driving in light of eyewitness testimonies, was sentenced to six years in prison and ordered to pay 460,000 Renminbi (approximately $69,000) to the family of Chen Xiaofeng and 91,000 Renminbi (approximately $13,800) to Zhang Jingjing (the two rollerbladers whom he ran over – killing the former and injuring the latter).[3] The stepping forward of the university's eyewitnesses, upon whose testimony the outcome of Li's trial was dependant, was galvanised in part by the persistent online attention drawn to Li's attitude at the scene of the crime.

However, more often than not, online verdicts on individuals' transgressions are pronounced without satisfactory evidence of their actual occurrence, leading to drastic, adverse affects on targeted Internet users' quality of life. If suspected wrongdoings remain unproven, yet certain netizens persist in their accusations, does the sustained search for a supposed truth become mere cyber-harassment? The cyber harasser, often called a "troll" in Internet slang, is an Internet user who seeks to anger, intimidate, scare, and ultimately to silence another user, using death and rape threats, often due to the target user's political views or views on gender issues. Victims of serious trolling attacks are frequently women, of all ethnicities and races, who are straight, gay, or bisexual, sometimes transsexual, and/or feminist. Trolls' reasons for seeking out, exposing, and harassing their victims are almost exclusively personal. The victim usually represents an identity or cause the troll feels threatened by, or is simply prejudiced against.

Fig. 1 Vivian James, finalized design produced collaboratively by users of imageboard site 4Chan.org.

The activity of real-life trolls and the psychological impact on their victims has been the subject matter of recent television drama, such as Channel 4's *Cyberbully* (2015), and horror films with a supernatural twist, such as *Unfriended* (2015). However, this article explores a key transition in the construction of online social power, from its direct, brutal enforcement by the figure of the troll, to a particular example of the online, biopolitical regulation of quality of life using the device of Vivian James (pictured): the fictional character, mascot, and figurehead of the Gamergate protest movement.

Gamergate is an online collective, formed in late 2014, that claims its goal is to root out corruption within the videogame industry by exposing what they maintain is its source: the personal relations between game developers, the companies that publish their games, and the allegedly bribed or biased journalists who review this output. Taking Michel Foucault's theory of sovereign power and biopolitics as a theoretical model, in which the judgement and direct, brutal punishment of individuals carried out by a monarch or
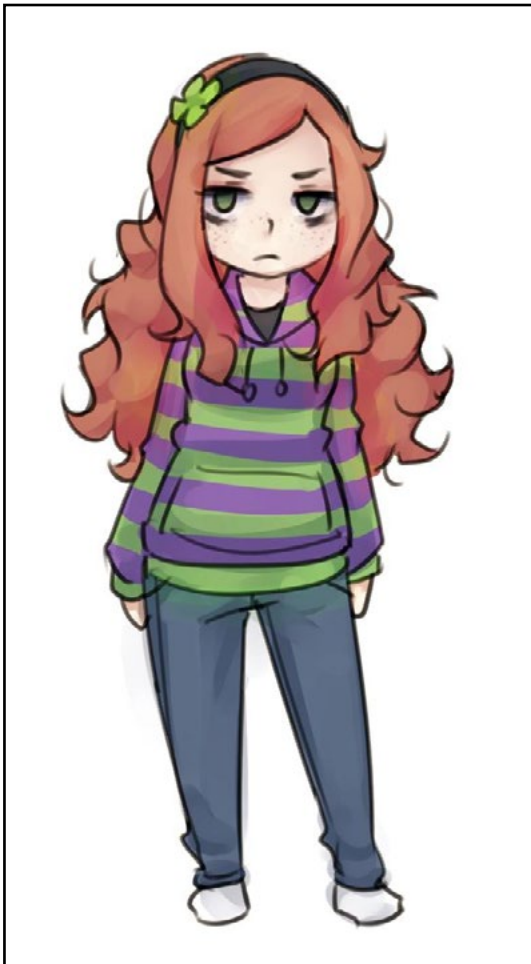
3 'My Dad is Li Gang!', *Know Your Meme*, <http://knowyourmeme.com/memes/events/my-dad-is-li-gang-%E6%88%91%E7%88%B8%E6%98%AF%E6%9D%8E%E5%88%9A>, [accessed 20 August, 2014]

similar central authority cedes to the systematization and regulation of human life as a statistical mass at the outset of modernity in the eighteenth century, I will analyse the movement towards Gamergate's version of biopolitics. I will also investigate Gamergate's regulatory effects on the gaming cultural identity and online quality of life – the freedom for gamers to inhabit freely their gendered, racial, and sexual identities, and to express their opinions without fear of harassment – and the character of Vivian James through which this is facilitated.

To begin with, then, this article will turn to recent developments within online videogame culture, charting the shift from the figure of the Internet troll to the rise of Gamergate, with reference to Foucault's theory of the transition from sovereign power to biopolitics. Before the formation of the Gamergate movement, a number of notable female participants in the videogame industry, from designers to commentators, were subject to sustained campaigns of vicious harassment by trolls. The reason behind this activity was that these women were aiming simply to highlight inequality in the representation of gender and sexuality in gaming, while suggesting that games pander too often to a minority of straight, white males. In a notable example, two women were subject to extensive harassment by trolls: Zoë Quinn, developer of the independent videogame *Depression Quest* (2013), a title which aims to simulate and enable the player to experience a form of depression based on her own battle with the illness, and Anita Sarkeesian, whose ongoing video project *Tropes Versus Women in Videogames* (2013-present) explores the employment of negative gender stereotypes by videogames. Feeling threatened by this content, and fearful of the possible diversification of gaming brought on by emergent voices dealing with emotions and discourses new to gaming, the trolls resorted to bombarding these women with death and rape threats via email, and document tracing their personal data, including their addresses and the addresses of their family members and loved ones, before posting them in online, public forums. The purpose of this was to belittle the views of these women, force them into exile from the gaming scene, and thereby defend the supposedly "authentic" racial, gender and sexual norms of gaming culture.

This trolling of Sarkeesian and Quinn began when the funding and development of *Tropes Versus Women* and *Depression Quest* began, in 2012 and 2013 respectively. This phase of social control over gaming culture acts as a sort of halfway house between what Foucault calls sovereign power and biopolitics in his March 1976 lecture at the Collège de France entitled 'Society Must be Defended'. Exercising a variant of sovereign power over the life and death of the individual via direct, brutal action, gaming trolls 'c[a]me together to constitute a sovereign [...] because they [feel they] are forced to by some threat or need. They therefore do so in order to protect their lives'.[4] Here, sovereign power is organised by the community as a form of defence, violently rooting out and castigating individuals who are a threat to the cultural life of what the trolls term the "true" gamer. This idea of sovereign power merges with the Foucauldian idea of biopolitics, where doxxing and online threats of physical violence constitute the social control of masses 'at the level of the mechanisms, techniques and technologies of power' (Foucault, 1967). The trolls' attempt here is to silence would-be proponents of aspects of gaming opposed to their narrow view of what comprises the "legitimate" gamer identity, where the victimization of some would-be reformers acts as a deterrent to

---

4 Michel Foucault, *"Society Must Be Defended": Lectures at the Collège de France, 1975-1976*, translated by David Massey, (London: Penguin Books, 2003), p.241

others thinking of speaking out.

Gamergate does not entirely replace trolling – some critics of the movement have claimed it has instead absorbed trolling, surrounding it with a seemingly respectable mandate of establishing ethics in videogaming.[5] Nevertheless, the emergence of the Gamergate movement in mid to late-2014 furthers the shift from sovereign power into biopolitics with respect to the defence of a particular gamer identity. The disciplining of individual gamers who do not conform to this – 'by working at the level of the body itself' (Foucault, 1976, p.246) through doxxing and threats of physical violence – is a form of sovereign power in that it is directed towards destroying the cultural life of the selected subject, banishing them from gaming through a campaign of harassment. An alternative attempt at control over the gaming identity has sprung up alongside (though without superseding) trolling: the regulation of women-as-species, a form of biopolitics which became prevalent as GamerGate gained steam. In biopolitics, Foucault's term for technologies of power that emerge at the end of the eighteenth century and are 'not individualising but, if you like, massifying, [...] directed not at man-as-body but man-as-species' (Foucault, 1976, p.243); life is regulated at the statistical level: birth rates and the impacts of endemic diseases on populations. Biopolitics also effects the normalisation of knowledge and behaviour, Foucault writes. It is this latter function of biopolitics that is exemplified by Gamergate, which seeks to regulate the cultural identity and practice of gaming, namely its attempts to diversify attitudes to politics, gender and sexuality. Before exploring the limits of this regulated identity, and the particular device of the Vivian James mascot character that embodies the Gamergate struggle to achieve this end, the link between biopolitics and the social terrain of the Internet must be furthered. We can extend into the internet age Foucault's observations on the domains

> that appeared in the late eighteenth and early nineteenth centuries; many others would appear later – control over the relations of the human race, or human beings insofar as they are a species, insofar as they are living beings, and the environment, the milieu in which they live. This includes the direct effects of the geographical, climatic, or hydrographic environment: the problem, for instance, of swamps throughout the first half of the nineteenth century. And also the problem of the environment to the extent that it is not a natural environment, that it has been created by the population and therefore has effects on that population. This is, essentially, the urban problem (Foucault, 1976, p.245).

The internet, like the late-eighteenth century and early-nineteenth century European city inasmuch as it too is a built environment, is essentially a population problem: a network of the (sometimes violent) relations within the human species. Foucauldian biopolitics unknowingly predicts the Internet age, the virtual world in which many of the different members of the human race live cheek by jowl. In the new, biopolitical regulation of Internet populations, much like the 'intervention [...] of the birth rate, the mortality rate, various biological disabilities, and the effect of the environment' (Foucault, 1976, p.245) beginning in the late-eighteenth century and early-nineteenth century,

What we are dealing with in this new technology of power is not exactly society (or at least not the social body, as defined by the jurists), nor is it the individual-as-body. It is a new body, a multiple body, a body with so many heads that, while they might not be infinite in number, cannot necessarily be counted. Biopolitics

---

5 Allegra Ringo, 'Meet the Female Gamer Mascot Born of Anti-Feminist Internet Drama', *Vice*, (New York: Vice Media LLC, 28 August, 2014), <http://www.vice.com/read/meet-the-female-gamer-mascot-created-by-anti-feminists-828>, [accessed 29 September, 2016]

deals with the population, with the population as political problem, as a problem that is at once scientific and political, as a biological problem and as power's problem (Foucault, 1976, p.245).

Foucault's theory of biopolitics will help to analyse and criticise the ways that Gamergate deals with the online, gaming population, this body of uncountable and supposedly discordant heads.

The fictional character and embodiment of the Gamergate movement, Vivian James (whose name is a play on the word "videogames"), was created by the infamous online image board, **4chan.org** (a platform for Gamergate-related discussion and organisation, reputed gathering spot for anti-feminists, and the alleged source from which some of the earlier, ruthless trolling of female videogame contributors originated). Vivian James is at once as a showpiece for an ostensibly progressive attitude towards the place of women in gaming maintained by the site's users to counter the rumours of misogyny that continue to dog them, and functions as a device for the biopolitical regulation of woman-as-species that recalls the regulatory methods Foucault outlines in his lecture. She is a visual and cultural

> technology which is centred not on the body but upon life: a technology which brings together the mass effects characteristic of a population [of gamers], which tries to control the series of random events that can occur in a living mass, a technology which tries to predict the probability of those events (by modifying it, if necessary), or at least to compensate for their effects. This is a technology which aims to establish a sort of homeostasis, not by training individuals, but by achieving an overall equilibrium that protects the security of the whole from internal dangers (Foucault, 1976, p.249).

The Vivian James character represents a set of key identity tropes possessed only by some gamers (primarily her creators and supporters), and aims to normalise these social conventions and introduce them to gaming in general, so as to establish an identity's status quo and weed out any internal disruptions to it. The identity the character portrays frames that of the traditional gamer as low-affect and perpetually grumpy. According to Leigh Alexander, journalist and critic of the Gamergate movement, to possess this identity (as Vivian James represents it), one must 'be an outcast. Celebrate that. Defeat anyone who threatens you. You don't need cultural references. You don't need anything but gaming'.[6] Vivian James is not a device for disciplining or punishing gamers (female or otherwise) who do not possess these characteristics – feminists in particular, so the implicit logic enshrined in the Vivian James representation goes, are overly emotional, too focused on issues of inclusion, threatening, and read games not for what they inherently are but through a network of supposedly irrelevant texts, events and debates outside gaming. Rather, the character avoids perpetuating overt violence by acting as a biopolitical regulatory tool that performs and thus endorses the behaviour and attitudes of a specific set of traditional gamers (again, primarily her creators and supporters), and discourages opposing behaviour and attitudes hinted at by association. Vivian James is depicted as socially awkward and either emotionless or fed up in order to normalise or even celebrate this behaviour – traits which are possessed by many of the gamers who maintain her status as an all-encompassing icon for the gaming everyman and everywoman. Not everyone who plays videogames is like this, however. Vivian James' representation of this gaming everywoman is selective in another covert manner: her portrayal of a particular brand of femininity – as an asexualised daughter figure that dresses modestly – reveals

---

6 Leigh Alexander, '"Gamers" don't have to be your audience. "Gamers" are over.', *Gamasutra*, (San Francisco: UBM Tech, 28 August, 2014), <http://www.gamasutra.com/view/news/224400/Gamers_dont_have_to_be_your_audience_Gamers_are_over.php>, [accessed 16 February 2016]

her 4chan creators' stance on women in gaming culture, namely that any expression of female sexuality among its players is likely to be damaging to the social group. Finally, and contradictorily, the very thing that is supposed to unite all gamers – the activity of playing videogames – divides them on an ideological basis when filtered through the character: Vivian James' motto is "let's just play [videogames] already," which, by implication, covertly suggests gamers sidestep the complex and nuanced issues surrounding the representation of gender, race and sexuality in gaming that feminist game developers and critics are asking players to think about, in favour of maintaining the status quo. In short, the Vivian James character protects this status quo – don't be too emotional, don't think too deeply about games, don't read too much into them through other texts or influences ("just play already!"), don't show your sexuality too openly or dress too provocatively – thereby establishing a homeostasis among female gamers through the regulation of their behaviour, attitudes, actions and appearances, and mitigating any aberrations that occur within these norms through the character's symbolic identity.

The figure of Vivian James is a tool well-suited to reflect and dramatize the specific dynamics of the Gamergate group. It is a movement without leaders in the traditional sense (although some prominent Youtubers who command considerable viewer numbers and online social influence are involved in it), and is, like 4Chan, constituted largely of anonymous members. In an online space in which all are ostensibly on equal footing, and can each view and respond to the contributions of others, Vivian James becomes an important visual conduit of democratic, yet regulatory, social power. This final section of the article will analyse a further control of gamers' online quality of life, not through the core characteristics of the Vivian James mascot, but through her various artistic representations authored by Gamergate members. Certain ideological precepts in favour of Gamergate's conception of gamers, gaming practices, and notable controversies are not only articulated, but also anonymised, in various Vivian James artworks. The functioning of this democratisation and anonymisation of online social power among gamers can be understood by reconfiguring as a model of Internet users' relations Foucault's theory of the Panopticon – the modern, circular prison originally conceived by the English eighteenth and nineteenth-century philosopher, Jeremy Bentham, in which the occupant of a central tower can observe the inhabitants of the cells that encircle it, without being observed by the members in this peripheric ring.

In the hands of the many, anonymous Gamergate members, Vivian James becomes an avatar of observation, a pedagogic machine that, in dramatising pro-Gamergate opinion and ideology, utilizes the virtual architecture that structures power relations on the Internet.

Fig 2. Vivian James and criticism of Leigh Alexander's article 'Gamers are dead'.

In the above image, attached to an image of Vivian James is the quote of an anonymous female developer criticising Leigh Alexander's controversial assertion that the identity of the gamer is dead in her article, cited earlier, entitled '"Gamers" don't have to be your audience. "Gamers" Are Over'. The picture's anonymously-expressed opinion becomes an expostulation from the entire Gamergate group: the presentation of the movement's name as a hashtag and title to the piece, and of its mascot, Vivian James (pointing in a manner reminiscent of the Lord Kitchener or Uncle Sam army recruitment posters), establish an anonymous, collective authorship over that of an individual. In this and other art featuring Vivian James, it is the character, rather than the individual Gamergate member who creatively employs her, who expresses the power of the movement's ideas.

Like Foucault's theorisation of the Panopticon, the Vivian James mascot is 'an architectural apparatus', 'a machine for creating and sustaining a power relation independent of the person who exercises it'.[7] Foucault's idea of the panoptic exercising of power in the modern prison is not exclusive to prisons; 'it is in fact a figure of political technology that may and must be detached from any specific use' (Foucault, 1987, p. 205). This political technology can be extended into other disciplinary institutions, then, such as the school, the military college, and the hospital. In the Gamergate movement, examples of Vivian James art dramatize in a political language the split between normative gamer lives and those deemed disruptive to the group's conceived society of gaming.

Vivian's opposite, Oculass (a play on the word Oculus, referring to the Oculus Rift Virtual Reality platform), portrays in a negative light the feminist criticism of gaming, pioneered by individuals like Anita Sarkeesian, which is aggressively focused on the absence of gender inclusion and equality in the development of games'

---

7 Michel Foucault, *Discipline and Punish: the Birth of the Prison*, translated by Alan Sheridan, (London: Penguin, 1987), p. 201
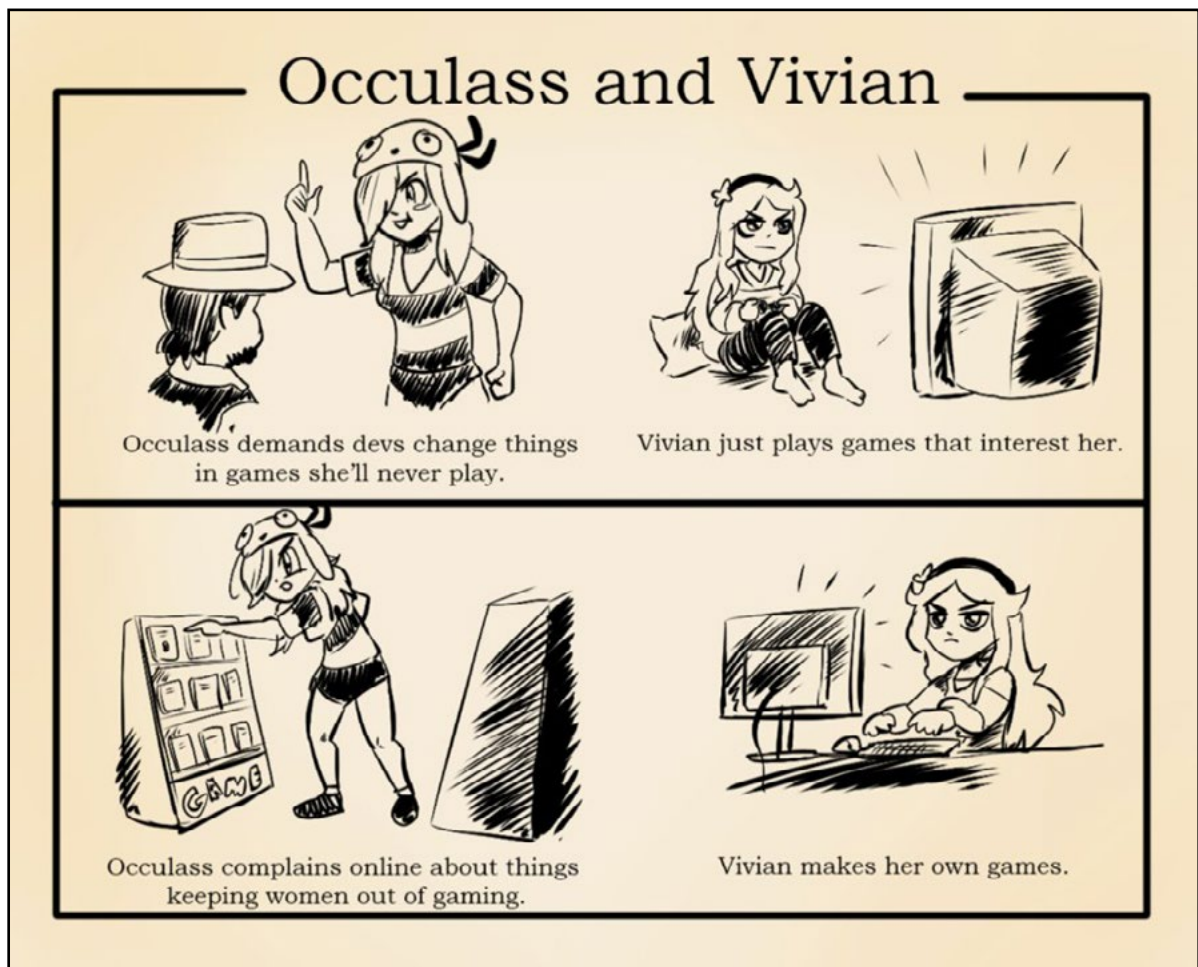
Fig 3. Oculass and Vivian: a play on the instructional comic 'Goofus and Gallant', in Highlights: The Monthly Book for Children.

characters and anrratives, supposedly, without playing the resulting games themselves. This embodiment of the inauthentic or non-gamer within the gaming community that is shored up by Gamergate is countered with the group's conception of the "true" gamer: one who does not protest loudly, but plays and makes games suited to their personal tastes. The above image is structured visually and ideologically by a previous illustration from beyond gaming, which aims at teaching children good behaviour via the examples of two contrasting cartoon characters: Goofus and Gallant, who appeared in comic strips in the long-running children's magazine, *Highlights*.

The influence of this particular strip, published in the October 1980 issue of *Highlights*, is used to render a straightforward, good-bad difference between Gamergate's notion of "true" gamers and those who represent threats to this community. By engaging Gamergate politics with this existing comic, the 'Oculass and Vivian' piece aligns gamers who pursue their own tastes and creativity with gallantry. Yet playing and making games that interest them personally in the absence of existing, satisfactory titles promotes a cult of individuality at odds with Gallant's inclusivity and sharing. On the contrary, using the character of Goofus as a basis for Oculass's embodiment of people with strong opinions concerning the representation of women in gaming builds outspokenness onto a basis of bossy and selfish behaviour, creating a simplified form of feminism that ignores the more nuanced feminist concerns surrounding gaming.
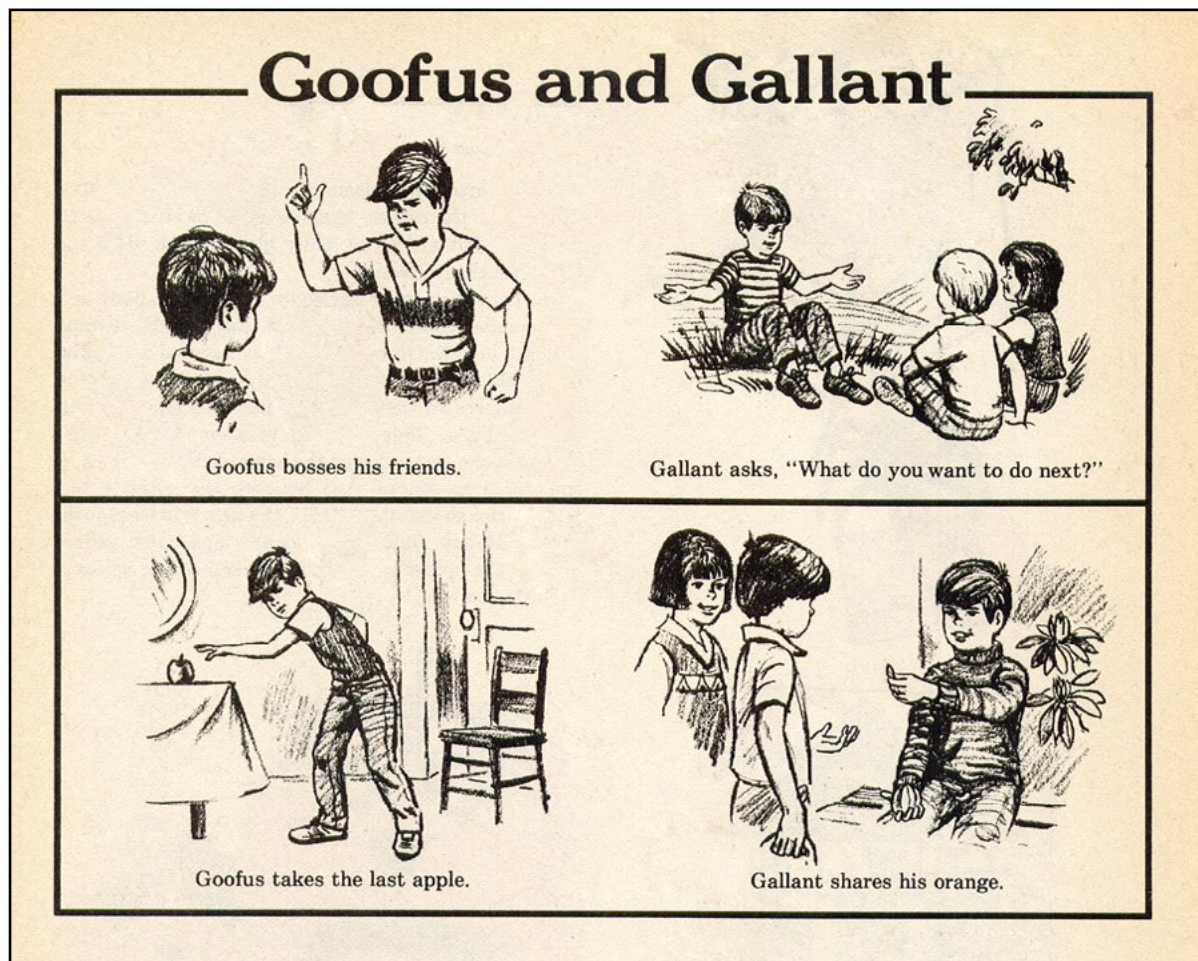
Fig. 4 'Goofus and Gallant', in Highlights: The Monthly Book for Children, (Vol. 35, No. 8, October 1980).

The above, online-circulated images featuring the Vivian James figure demonstrate the functioning of Internet power via their employment of the binary categorisation of the gamer identity. Within Gamergate, anonymity is central to this manifestation of universal power, in which any member of the group, drawing on commonly-held ideological constructions, may exercise the boundary between its standards of "true" gamers and impostors.

In Foucault's theory of the birth of the modern prison, the power of punishment previously attached to an individual sovereign becomes free-standing. In the Panopticon, 'it does not matter who exercises power. Any individual, taken almost at random, can operate the machine: in the absence of the director, his family, his friends, his visitor, even his servants' (Foucault, 1987, p.202). In theory, anyone with access to the central tower of the prison building can wield its power. Ultimately however, such an individual is surplus to requirement in this scheme. The central tower is symbolic for the prisoners in the surrounding cells open to its gaze. Due to a series of blinds within the tower's windows effecting a one-way observation system – 'in the peripheric ring, one is totally seen, without ever seeing; in the central tower, one sees everything without ever being seen' (Foucault, 1987, pp.201-202) – it is irrelevant, from the prisoners' perspective, as to whether or not anyone is occupying the tower. Power in the modern age, Foucault's central thesis in *Discipline and Punish* suggests, is internalized by the observed – a functioning derived from their own position in the regulating structure.

Gamergate, as with the Internet's other powers of observation, such as the snooping tools used to gather users' personal information described at the outset of this essay, effects a development of Foucault's model of power organisation. On the Internet, the centralised architecture represented by the tower is collapsed, and migrates outwards, across the expansive, global network of communication that comprises the World Wide Web. Foucault himself hints at this flattening of panoptic power in an open-access mode, extended beyond the disciplinary institution of the prison: 'The seeing machine was once a sort of dark room into which individuals spied; it has become a transparent building into which the exercise of power may be supervised by society as a whole' (Foucault, 1987, p.207). Following the Gamergate case study, one can see how anonymous or interchangeable individuals now simultaneously occupy multiple locations of observation – not directly, as in the surveillance techniques of human visual contact or security cameras, but at a disembodied remove, through graphical, ideological representations of the ideal gamer exemplified by Vivian James, which maintain the boundary between acceptable and unacceptable variants. The upkeep and collective shifting of this border, which renders certain expressions or identities of gamers as transgressive, has therefore the power to affect gamers' quality of life: what was before uncriticised is now an anathema; what was once cast out is now tolerated. Further research, drawing on the extensive posts of Gamergate-occupied forums as a data source, is required to track the transitions undergone by the regulation of the gamer identity by the movement in the two years plus it has so far existed. Such a study would enable an understanding of the ongoing nature of Gamergate as a biopolitical, regulatory phenomenon of the Internet age.

To conclude, this article will now acknowledge associated problems that it does not address directly, and propose further areas of research for the study of Gamergate. Since the inception of Gamergate in mid-to-late 2014, the usage of Vivian James in art supporting the movement's goals has declined considerably – she no longer plays a central role as the mascot or standard-bearer of the movement. Thus, further investigation into the devices that now facilitate Gamergate's influence must occur if the group is still to be studied. Furthermore, this additional research is required to ascertain as to whether or not Gamergate has augmented its ideology regarding its acceptance of a range of gamer identities since mid-to-late 2014 – the period upon which this article was focused. This piece investigated Gamergate's maintenance of a central gaming identity, via its Vivian James character, which the movement held onto strongly around this time. It was primarily in opposition to feminist criticism of gaming's narratives and characters in which an absence of positive female representation is claimed to exist, an argument most notably made by Anita Sarkeesian's ongoing video project *Tropes Versus Women in Videogames*. Further research into Gamergate beyond its life in 2014 is required to investigate whether or not the movement's acknowledgement of the gamer identity has widened, to include not only feminist voices, but also lesbian, gay, and transgender ones; this current research did not investigate Gamergate's regulation of sexual (or racial) identities – only gendered ones along feminist lines.

Nonetheless, this article did investigate an important aspect of Gamergate's social power in relation to Foucauldian theories of biopolitics and the disciplinary gaze: the regulatory mechanisms of online technology and culture employed collectively to shore up an ideal gamer figure, to the exclusion of other,

competing voices. As Internet communication and culture becomes more central to a growing online-enabled population's lives, global machinery with the capacity to secure, regulate, or exclude certain lives is an increasingly apparent social concern worthy of academic study, to which the Gamergate phenomenon provides an important case study.

Works Cited

Books

Foucault. Michel, *"Society Must Be Defended": Lectures at the Collège de France, 1975-1976*, translated by David Massey, (London: Penguin Books, 2003)

Foucault. Michel, *Discipline and Punish: the Birth of the Prison*, translated by Alan Sheridan, (London: Penguin, 1987)

Online Resources

Alexander. Leigh, "'Gamers" don't have to be your audience. "Gamers" are over.', *Gamasutra*, (San Francisco: UBM Tech, 28 August, 2014), <http://www.gamasutra.com/view/news/224400/Gamers_dont_have_to_be_your_audience_Gamers_are_over.php>, [accessed 16 February 2016]

'Human Flesh Search Engine', *Know Your Meme*, (Seattle: Cheezburger, 2011), <http://knowyourmeme.com/memes/subcultures/human-flesh-search-engine>, [accessed 20 August, 2014]

'My Dad is Li Gang!', *Know Your Meme*, <http://knowyourmeme.com/memes/events/my-dad-is-li-gang-%E6%88%91%E7%88%B8%E6%98%AF%E6%9D%8E%E5%88%9A>, [accessed 20 August, 2014]

Ringo. Allegra, 'Meet the Female Gamer Mascot Born of Anti-Feminist Internet Drama', *Vice*, (New York: Vice Media LLC, 28 August, 2014), <http://www.vice.com/read/meet-the-female-gamer-mascot-created-by-anti-feminists-828>, [accessed 29 September, 2016]

Images

'Vivian James', **4Chan.org**, (New York: 4Chan Community Support LLC.), [accessed 20 August, 2014]

Anonymous Female Developer #5, in Unknown Artist, '#GamerGate', n.d, originally quoted in 'Female Game Developers Share their Views on #Gamergate', *The Escapist*, (New York: Defy Media LLC.), <http://www.escapistmagazine.com/articles/view/features/12306-Female-Game-Developers-Make-Statements-on-GamerGate>, [accessed 01/12/2016]

Unknown Artist, 'Oculass and Vivian', *Know Your Meme*, (Seattle: Cheezburger, 2014), <http://knowyourmeme.com/photos/839013-vivian-james>, [accessed 01/12/2016]

'Goofus and Gallant', *Highlights: the Monthly Book for Children*, (Vol. 35, No. 8, October 1980)

The Quality of Innovative Academic Lives: Influences Past, Present and Future?

Susi Peacock and John Cowan[1]
Queen Margaret University, **speacock@qmu.ac.uk**
Queen Margaret University, **j.cowan@napier.ac.uk**

Abstract: The second writer entered academia four years before the revolts of 1968. The aftermath of these events had direct impact on his academic goals and his lifelong efforts to achieve them. The first writer matured in an environment wherein these events were only remembered as past history. The concept of student-centred learning was simply for her an important and well-established academic aspiration yet to be comprehensively fulfilled in technology-rich learning environments. The writers reflectively review their contrasting academic experiences in pursuit of academic enhancement. Each in turn identifies anecdotally the major influences on the quality of their academic lives which have been devoted to student-centred learning. They speculatively discuss the impact of innovating, of balancing ever more stringent and diverse demands, of taking risks, of collaborating with valued colleagues, and of pursuing rigour by evaluating whilst ever engaging with learners facilitatively and in trusting relationships. They close by summarising the factors that have contributed to enhancing the quality of their academic lives, and applying these to current challenges with learning and technologies.

Keywords: academia, student-centred learning, 1968 revolts, online learning, academic quality of life

Introduction

The *Call for Papers 2016* from *Spark*, with its powerful reminder of the disturbances of 1968, reached Susi with apt timing. We had recently had occasion to discuss the radically different impact of these events on the quality of our academic lives.

In late 2015 we had compiled a paper suggesting enhancements to the Community of Inquiry Framework (Garrison 2011), a well-known approach to the design, maintenance and evaluation of online learning. We received a provisional acceptance, subject to making acceptable responses to the reviewers' comments. John undertook this task, which proved straightforward except in one instance. A reviewer had required further justification of our suggestion to replace the core concept of "Teaching Presence" (Garrison 2011) with "Tutoring Presence". In his response to the editor, John dwelt characteristically and passionately on what he described as the catalytic impact of the 1968 revolts on the inception in northern Europe of Student-Centred Learning (SCL) in higher education. He ventured to regret forcefully that this approach had not always been embraced, noting that many academic authors still write in terms of authoritative teachers who advise and decide for their learners – rather than of facilitative tutors. Susi delicately suggested some rewording; happily, the revised version proved acceptable to the editor.

Nevertheless, both writers were left mulling over their discovery that the events of 1968, which had been so significant for John in his academic career, were but historical incidents for Susi, who is currently immersed in her struggles to encourage tutors to examine the potential of technologies to support, and nurture, SCL. John questioned whether the riots were not the unrecognised heritage upon which Susi's longstanding commitment to student-centred learning was founded. So when the Stirling call for papers arrived, we felt that we were positioned to compile and offer two interestingly contrasting viewpoints regarding the impact of 1968 on the quality of innovatory academic lives in the United Kingdom.

We first look to past and present to identify factors which have significantly influenced the quality of our individual academic lives. We commence with John's account of the attraction for him of concentrating on creating effective learning experiences based on SCL; this has never waned throughout his academic career. Susi provides a contrasting account; she discusses how her academic life has been influenced by opportunities to bring about change by embracing the opportunities and scrutinising the challenges that technologies offer as supportive tools in essentially SCL environments. We finish by summarising the factors that enhanced our academic lives through these activities, and apply these to the sector's current challenges with learning and technologies.

John's Account

My academic starting point

In 1964, I moved from industry to become a university lecturer. I aspired to be a more effective teacher of structural engineering than those who had taught me.

I found myself in a well-established world of classrooms equipped with blackboards and chalk, where my students were addressed by their surnames. My modest attempts to innovate, attracted derision. My introduction of structural modelling competitions, featuring towers or bridges made from balsawood or spaghetti, led to a scathing public criticism from a leading UK professor of structural engineering of the introduction of 'methods suited to a kindergarten'. Fifty years later this modelling is a common learning experience in engineering courses.

By 1969, the reverberations from the events in mainland Europe in the previous year were trundling across the Channel to a Britain which had experienced no revolts. Yet it housed a few academics who were acutely critical of the antediluvian nature of our higher education, and yearned, as did the radical continentals, to bring about fundamental reforms and to concentrate on promoting student-centred learning. That year I attended a visionary two-week course for university teachers. On my return home, I tore up all my lecture notes. I was determined to concentrate on my students' learning rather than on the instruction favoured in my traditional setting. At much the same time, Carl Rogers had published his seminal book entitled *Freedom to Learn* (1969), with its optimistic sub-title: *A view of what education might become.* That vision thrilled and inspired me – as it still does, after nearly half a century.

Consequently 1969 was a watershed year for me – as it was, I believe with hindsight, for higher education in the UK and in northern mainland Europe. It marked the birth of overt student-centred learning in European higher education, entailing not only student autonomy regarding the pace, method and assessment of their learning, but also extending to individual freedom in the choice of course content (Cowan 1978). In some project-orientated universities in Scandinavia, groups of students handled their own resources, and hired lecturers and other support staff in accordance with the students' chosen priorities (Cowan 1982). Amidst a turmoil of initiatives, higher education was on the move from a long-established authoritarian pattern to a rapidly developing situation in which each succeeding decade featured different factors for change, and different changes.

Isolated enthusiasts

In the 1970s, I visited and was inspired by the radical and well-established developments that were already in place in centres of project-orientation such as Aalborg, Roskilde, Bremen, Lund and Luleå (Cowan 1982). Departmental centres for resource-based learning began to appear in British universities such as Glasgow, Aston and my own Heriot-Watt. Modest external support for innovation was forthcoming from such as the Nuffield Foundation. There was as yet little *institutional* support for innovators, who often had to struggle to establish respectability. However, a patchwork of informal networks began to develop, linking together enthusiasts who exchanged accounts of their experiences in conferences devoted to innovation, then known as "educational technology." Few could report extensive evaluative data; but all were encouraged by the positive feedback they received from their students, once they had acclimatised to the move from passive listening to active learning.

In 1979 a group of prominent personalities launched the *Education for Capability Manifesto* in the UK national press (Harris et al. 1981). This outspoken document deplored the inadequacy of current

educational provision, at all levels. It argued for a reconsideration of educational fundamentals, rationale and methodology, to concentrate on the effective development of relevant capabilities. Seemingly the tide had turned, with welcome signs of a grudging admission within the sector that perhaps SCL had something to offer.

This was an exciting period for the still somewhat isolated enthusiasts. We were engaged in creating new ways of promoting learning. We had formed connections and partnerships with kindred spirits, colleagues with whom we shared the conception and the delivery of our new ventures. Our students were enthusiastically, if subjectively, supportive about what we – and they – were achieving. Being at the forefront of these changes was highly motivating for us. However, some of us were troubled by the absence, in most innovations, of any systematic attempt to gather data which would inform the making of reliable judgements of the effectiveness of what we were doing. This issue moved onto the agenda for myself and fellow specialist advisers on teaching, learning and assessment for the Council for National Academic Awards (CNAA).

Academic auditing

On routine validation visits to polytechnics offering CNAA degrees, specialist advisors began to inquire about the collection of useful data and its use in programme evaluations. Gradually, we began to encounter examples of sound evaluative practice, in a trend which seemed to us to move the polytechnics ahead of the established universities in terms of quality assurance.

Policy makers in the traditional university sector were soon prompted to follow suit. For, by the end of the 1980s, some in the traditional universities foresaw problems arising from the inevitably comparisons of the quality assurance systems in CNAA institutions and their virtual absence in universities. The Academic Audit Units (AAU) was established with a remit to assure quality and standards in chartered universities. It was my good fortune to be invited to become one of the first auditors. I immediately encountered university situations featuring assorted and generally deficient procedures for quality assurance. Teams often found grave lack of alignment in much of the provision which we audited. There was often little compatibility between the declared learning outcomes, what the assessment scrutinised and rewarded, and the learning activity which should prepare learners to satisfy the intended learning outcomes. Moreover, many universities were blandly unaware of these discrepancies or of their importance. So audit teams were particularly encouraged by the AAU Directorate to probe alignment and other quality matters rigorously; to report objectively; and above all to constructively suggest in specific terms the remedial action which should be taken to promote adequate standards for learning.

Serving on audit was a highlight of my entire academic career. I was teamed with academics of the highest calibre. We worked to specific and creative remits, which demanded our best constructive responses in regard to challenges involving assuring academic quality, in a range of disciplines and settings. Together we discussed issues which emerged for our immediate audit, and for more general cases. Our actions and findings were scrutinised by the Directorate before our honed recommendations emerged in the audit reports, of which I believe we could be justifiably proud. The quality of my academic life in terms of

the level of my creative and evaluative academic thinking, both on audit and in my own university, was literally transformed. The close professional relationship with high quality colleagues working together to constructively suggest need for, and means of enhancement, was a powerful influence for me at that time, and thereafter. The reported recommendations were a powerful influence in the sector, for they went into the public domain as publications.

Innovating at the grass roots

In every academic year in my career I have taught learners on certificated courses; and there has only been one year in which I have not launched a significant initiative. Most of these have involved me in working alongside tutors and learners to improve the effectiveness of learning experiences. Most have called on me to find and work with tutors who had already identified scope for enhancement. They were willing to take risks with me and to devote creative effort to bringing about the outcomes to which we aspired. Most of our initiatives therefore featured schemes in which a group of tutors together collected data to inform our processes of formative and summative evaluation. These (usually small) teams were often multi-disciplinary and multi-institutional, devoted to the development of higher-level cognitive and interpersonal abilities. Some were formed in developing countries which had sought my concentrated short-term input to improve the quality of their higher education.

In such joint innovative activity at the grass roots, we were always and deliberately researching into the learning of *our* students, in *our* discipline areas, facilitated by *our* efforts – and always seeking to identify scope for enhancement of what *they* were learning. These teams developed tight collegial relationships, which endured long after a team's activities and its task were mere memories. They inspired tutors who had never envisaged themselves as researchers to report their evaluated efforts to international conferences and in academic journals. I joyed in the fellowship, the creative discussions, the successes and the relationships with students which were a natural feature of our student-centred innovations. I took particular pleasure when these colleagues, who might earlier have classed themselves as ordinary teachers or tutors, had clear cause to feel modestly proud of what they had created and achieved, and did not really need me anymore.

John's overview

It was my great good fortune to begin my academic career at the time when the revolts of 1968, the writings of Carl Rogers, and the zealous efforts of local agents for change, all combined to spark an educational revolution in my country. Student-centred learning, educational research, educational development, and evidence-based evaluations and judgements all feature strongly nowadays in the expectations of the sector. Those who lectured to me in 1950, or who were my first colleagues when I was appointed in 1964 to lecture, could probably never have imagined such changes.

My journey has been one in which the quality of my academic life has been at a consistently high level, for a variety of reasons. It has been a journey through a period when Student-Centred Learning grew in strength and influence in the sector. It has taken me into an era when the creative planning of learning and

teaching has become more and more professional, and when evidence-based evaluations have become the norm. I was fortunate to live through a period of quality enhancement and of innovation, when the high quality of my academic life and attendant relationships were to serve as motivating factors which constantly drove me to go beyond the calls of duty, and to strive for further enhancement of Student-Centred Learning.

Susi's account

My long-standing aim, over the last two decades, has been to empower learners, tutors, team-members, co-workers/researchers, members of cross-institutional working groups, and, of course, myself, to develop and flourish in their professional and personal lives, fulfilling their potential in our technology-rich worlds. Innovation, risk-taking and collaboration are at the heart of all my activities.

Underpinning my vision is my belief that learning is both a social and individual activity, which builds upon learners' previous experiences and knowledge. I always hope that learning may lead to new or radically revised understandings involving a permanent change for the individual, and often leading to a modification of perspective, ethics, and/or values (Rogers 1969; Vygotsky (Nicholl 1998)). I envisage learning as taking place at a pace and by a method suited to and mainly chosen by learners, accepting that my learners have different learning styles, approaches, abilities and skills (TEAL 2010).

The quality of academic life is dependent upon the opportunities that I have in my working environment to progress, and to nurture my vision. I have sought to bring about change by embracing the opportunities and scrutinising the challenges that technologies offer as supportive tools in our learning environments, and by encouraging others to do so as well.

The potential of online learning

I believe that the online learning environment can now provide an innovative, dynamic space for my learners, impacting on the quality of their academic lives. Most specifically, it can allow them access to educational opportunities, particularly for continuing professional development, whilst retaining employment and fulfilling their familial responsibilities (O'Shea et al. 2015). Many studies have documented learners' joy at gaining unhoped for access to learning opportunities. As one of the students in the study by Zembylas et al. (2008) noted:

> For the first time I am able to study in my own country, without having to leave my family, abandon my work and suffer the consequences, especially the psychological effects of abandoning my children and my wife. (p.112)

Technologies now provide us with exciting opportunities to arrange for learners to work and learn together a/synchronously, regardless of where they, and their tutors, are physically located. It is often only our imagination, courage and resources that limit the spaces which we as tutors provide for our learners.

Nevertheless, I am an increasingly aware that the online environment can be alien, even threatening, for many learners, negatively impacting on the quality of their academic lives whilst studying. To address this, I aspire to develop and maintain with my learners an inclusive, trusting online collaborative community.

I have found that such a grouping is dependent upon the nurturing of social presence (Kehrwald 2008). Kehrwald's insightful work demonstrates how students link social presence with a sense of being with other sentient beings who are actively 'listening' and prepared to respond meaningfully. The sense of 'other' is conveyed through visible contributions such as online postings which identify the sender as a 'real' human with emotions and personal history, and also signal that the other is 'present' – available to engage in dialogue. As Kehrwald (2008) notes, social presence can enhance '[...] learners' experiences of online learning by allowing them to cultivate and maintain productive relations with others in the online environment [...]' (p.98), thus impacting on the quality of their academic lives.

Eight years ago, an innovative and risk-taking programme team supported me in taking my core module in our MSc in Professional and Higher Education online. My proposal to innovate was fortunate in attracting constructive suggestions to improve the learning environment for all. Group work, to develop and sustain our learning community, has been central to my module, "*An introduction to technology enhanced learning*". Online group work is often problematic even in face-to-face learning; negative learner reaction to online group work is well-documented (Capdeferro and Romero 2012; Goold et al. 2008). My colleagues provided pointed guidance on how to generate positive experiences of online group work. Consequently, learners in my module self-select groups and within them critique articles about theories of online learning. These critiques are shared with the whole community, and peer review is offered, thus nurturing our learning community. During such activities, learners are often challenged, frequently frustrated, and sometimes annoyed. Much guidance is provided by me as the tutor about how to provide creative feedback using assessment criteria to structure this learner journey (Nichol and Macfarlane-Dick 2006). Many learners have afterwards remarked about the power of this activity, giving them confidence and ability to proffer relevant feedback in their professional lives. For the final assessment, learners develop an online group resource in their preferred technology. Submissions are created in a variety of technologies including Prezi, Pinterest, and Padlet, and are often used in my learners' professional lives to support innovative initiatives therein. Learner feedback has sustained me and impacted on the quality of my academic life:

> as the module progressed, I was truly experiencing the benefits of such approaches to teaching and learning and will utilise this in my own practices. A transformational learning experience! (PGCert student).

Engaging in old challenges in new ways, or engaging in new challenges in new ways

Over the last twenty years, I have worked alongside tutors and learners, always hoping to improve the quality of their academic lives. Often tutors have identified a specific challenge that they seek to address in a different way, which may result in the use of technologies as supportive tools. Many new challenges emerge, especially in the design of new programmes, when tutors are keen to embrace innovations and emergent technologies.

A typical example of this work was our institutional implementation of a commercially-available ePortfolio system. I believed this tool had potential for many of our professional programmes, which then embodied reflective learning using paper-based portfolios. Institutional and programme-level workshops

provided exemplars of good practice focusing upon Personal Development Planning, whilst also raising awareness of the ePortfolio as an alternative mechanism for formative/summative assessments. Tutors readily grasped the opportunity to move paper-based portfolios online, reducing the need for heavy, cumbersome paper submissions. Learners, too, relished a central system for the creation, collection and collation of the evidence required to support their reflective submissions (Peacock et al. 2012). However, the implementation of this tool often led to heated debates about reflection.

For example, in the core module, *"Education in Action"* in our MSc in Professional and Higher Education, our discussions about ePortfolio provoked lively debate about reflection. We ultimately decided to take a pragmatic approach, viewing reflection as an activity that is purposeful, focused, and deliberate, associated with a sophisticated form of thinking and learning involving an evaluation of frames of references, the nature of knowledge and the process of learning (Cowan 1998; Moon 1999; Dewey 1933; Schön 1987). Thus our learners create an online folio for their assessment which includes a reflective, critical commentary, linked evidence, and selected personal blog entries. This linking of evidence to commentary allows learners to make their thinking, decision-making, design and actions transparent to themselves, and to their tutors. Critically the freedom to select what to focus upon in the webfolio, explaining rationale, and critiquing theory to practice, empowers these learners to personalise the assessment to support their future role as educators.

The quality of my academic life as a staff developer is thus dependent upon the opportunities that I have to work alongside tutors, to scrutinise new technologies, evaluating their potential to support learning.

Collaborating and risk-taking with technologies

To bring about my vision, and directly influencing the quality of my academic life, are the diverse opportunities that I have for collaborative working. These range from cross-institutional groups to small select groupings. A highly satisfying aspect of my role has been participating in working groups comprising staff from professional services and the faculties, and learners who meet to seek workable solutions to identified issues and to share experiences in so doing.

An example was a small working group that tussled with our institutional vision for the plagiarism checking software, Turnitin. We had been influenced by the work of Carroll and Appleton (2001) who warned against using this tool solely as a policing mechanism. Instead they suggested a more 'balanced institutional approach'. Our proposal, now incorporated into our institutional regulations, was for the use of Turnitin to be *primarily* regarded as an empowering learning tool. Students can submit draft assessments and use the resulting Originality Report to assist them in reviewing their paraphrasing and referencing and in general improve their academic scholarship. *Subsequently*, after a final assessment has been submitted, tutors may use Turnitin to check for plagiarism.

Throughout my academic career, I have been privileged to undertake many joint innovative activities with tutors who are prepared to take risks, exploring how emergent technologies can be implemented for the benefit of all. I have also been fortunate to secure funding to evaluate such initiatives, identifying possibilities for further enhancement. Such action research has resulted in long-standing collegial relationships. One

such example was when a group of drama tutors, a researcher and myself undertook action research on the early versions of what would become known as webinar software. In 2009, these technologies were truly emergent. Nevertheless, these tutors wanted to explore if they could be used to supporting learners who were often removed from our physical campus on extensive work-related placements, often as a requirement for professional bodies. The situation was further complicated since, due to life-work commitments, the tutors were also infrequently at our campus. Three programmes trialled the software for dissertation supervision, for the provision of feedback on rehearsals, and for pastoral support. Learners and tutors were interviewed about their use of the software. Our findings indicated significant learner benefits including convenience, immediacy of communication and empowerment, even for our rehearsal-based case study (Peacock et al. 2012). Academics reported the software requiring them to re-think the design of the learning environment, re-visiting how they facilitated discourse, and re-examining their communication skills especially with regard to feedback on student performance. Reports, conferences and publications emerged from our collegial work. Today such synchronous sessions are commonplace; but their establishment has been informed by such innovative and risk-taking initiatives.

Susi's overview

I have been lucky to work during a period when technologies have become ubiquitous in UK higher education, and when their use has been promoted politically and by institutional management. The opportunities that these offer to tutors supporting learning, now and in the future, are diverse and exciting, and provide me with numerous ways in which I can progress my vision of learning and my belief in a form of student-centred learning transformed by the affordances of emerging technologies. We can now realistically design interactive learning spaces for fully online learning in which collaborative, trusting communities can be developed and nurtured. Such endeavours will always be "work-in-progress"; but by taking risks, innovating and working collaboratively, we can continue to develop online learning environments that foster deep learning.

A summary of factors influencing the quality of our academic lives

We have presented two highly personal accounts which have featured our frequently changing personal circumstances. From these we now extract for readers' consideration our suggestions regarding the aspects which have contributed to enhancing the quality of our academic lives as innovators in pursuit of Student-Centred Learning, during times of academic, political and technological changes:

1. **Collaborating:** We find fulfilment in collaborating educationally with enthusiasts who share our aims and are motivated for the reasons we have listed here.

2. **Innovating:** We derive satisfaction from engaging with an old challenge in a new way, and even more so, when engaging with a new challenge in a new way.

3. **Facilitating:** We value activities with learners through which we can enable them to develop abilities which we and they value.

4. **Taking risks:** Some of our most effective and satisfying work has taken place in situations where we and our collaborators knowingly took risks, and managed to almost surprise ourselves by delivering achievements which we and our learners valued.

5. **Being rigorous:** The pursuit of rigour in course design, monitoring, management and evaluation has brought us great satisfaction through its constructive influence.

6. **Engaging with learners:** We find it rewarding to engage with learners during their learning, to promote their development, to share with them in planning how best to bring about that development, and generally to learn *from* them as well as *with* them.

7. **Action researching:** Discovering how our students learn, as a basis for contributing to the enhancement of learning, makes research worthwhile for us.

8. **Trusting:** In our most highly valued relationships with colleagues and learners, strong trust in both directions has been implicit. It has been a catalyst for the assurance of endearing high quality in what we do together.

Future Challenges

We often exhort our students to conclude project or research reports by addressing the "So what?" question. On this occasion, we feel strongly obliged to ask this of ourselves: What should we, the writers, and you, the reader, take forward from the challenges raised in this highly anecdotal article?

As in the 1970s, we live in an academic era in which rapid and radical change is the norm. Those working in the sector are balancing ever more stringent and diverse demands against a backdrop of league tables, institutional monitoring, and audit reviews. Technologies permeate the higher education landscape, accelerating the move to blended and online learning with every passing month, requiring many tutors to review their deeply held beliefs about learning and teaching (O'Shea et al. 2015). Many of our colleagues have relished the opportunity to respond to such "disturbances," often undertaking action-research seeking to discover how their students learn best in this new land. However, others have not – frequently due to competing demands on their time. This, alongside lack of institutional commitment, has resulted in less than ideal implementation of Student-Centred Learning environments incorporating technologies.

We now examine three on-going challenges, trusting that the factors we have identified should feature in our suggestions for action, whilst harnessing the potential of technologies in learning in each case. It is also our hope that the application of our list of factors will support others currently immersed in addressing similar issues and endeavouring, like us, to find sustainable solutions.

1. Learners and technology

Over the last decade we have experienced a 'disconnect' between the rhetoric regarding 'digital learners' and the reality of working alongside our learners in online and blended learning environments. Students born after 1980 have often been referred to as the Net Generation (Oblinger and Oblinger 2005), Digital natives (Prensky 2001) and Generation Y (McCrindle 2006). Such learners have grown up surrounded by technology and are portrayed as always 'plugged in' and online 24/7. This has led '[...] many higher educators to assume that contemporary students have the skill, desire and knowledge to use technology in the learning process [...]' (O'Connell and Dyment 2016, p.404), and to expect it within their learning environments. There is often an implicit assumption that such learners' sophisticated skills with technologies can be harnessed to develop and nurture critical and higher order thinking skills within their studies. However, as noted by many authors such as Buckenmeyer et al. (2016), the situation is much more complex.

Margaryan and her colleagues in 2011 summarise studies from Australia, Canada and UK which present a less coherent picture of student comfort with, and desire for, technologies in the learning environment. Most notably they call upon Kennedy et al.'s work in 2008 with over 2,000 undergraduate students that concluded '[...] we cannot assume that being a member of the Net Generation is synonymous with knowing how to employ technology strategically to optimise learning experience in university settings' (p.10). Such findings have been corroborated in more recent studies such as that of O'Connell and Dyment's (2016) work in 2013, in which 42 participants undertaking studies in Physical Activity and Education reported a lack of skill or knowledge in using Web 2.0 technologies for a reflective journalling assignment. Learners preferred word processing, as being more familiar and easier. One learner commented:

> "Ah, I mean it takes, it's quite a lot of time and energy to you know, to come up with something all of your own. So maybe that was daunting. Maybe they don't expect, maybe they've just never had this, you know, this experience of having freedom of choice before, and they just like to be told what to do." (O'Connell and Dyment, 2016, p.403)

Like Kennedy and his colleagues (2007) several years before, they concluded that many students did not have the technological know-how or aspiration to use Web 2.0 technologies in their studies to any great extent (O'Connell and Dyment, 2016, p.404).

In our work (Peacock and Hooper 2007; Cowan, 2006), and noted in the writings of others such as Dohn (2009) and Buckenmeyer et al. (2016), we have found that learners' preference, or not, for learning in technology rich learning environments may be particularly linked to their individual view of education and their underlying values and beliefs. As Dohn (2009) suggests, those learners who consider education to be an acquisition of knowledge, skills and working life practices may find a disconnect between what HE is like (SCL, creative and participatory) and their expectations – didactic, reproductive or acquisitional. Implementing technology based upon SCL may cause a particular disconnect which is made all the more transparent in online learning. Thus, like Margaryan et al. (2011) and Jones (2015), we agree upon the important of a more nuanced understanding '[...] of the extent and nature of technology use by university students [...]' (p.430) including the context in which technology is being used, students' socio-economic background and their personal psychological characteristics, such as openness to new learning experiences.

So what?

To provide us with this deeper understanding, we are collaborating with our online learners to explore how we can help the transition into and through online learning for those new to this alien environment based upon SCL. As in many institutions, Queen Margaret University (QMU) seeks to have learners playing an active part in the co-design and delivery of curriculum and services. We also seek to engage with our learners through joint-research initiatives such as a small institutionally-funded project where we recently worked innovatively with our learners as co-researchers. They co-constructed the questionnaire, interviewed other learners, and took a significant role in the data analysis undertaken during an away day. The outputs of such rigorous work indicated that the learners were particularly underprepared for online self-managed learning, struggling with workload management and use of technologies, whilst also missing the intimate face-to-face interactions of their previous studies (MacDonald et al. 2016). As a consequence of this partnership activity, we are developing longitudinal inductions for our online learners in which learners can, for instance, take a version of the Readiness for Online Learning questionnaire (Parkes et al. 2015), informing them and their tutors of their levels of self-regulatory maturity. However, like Shea and Bidjerano (2010), we wonder if, in the future, criteria for entry into online programmes should include formal assessments of students' preparedness for online learning and levels of self-regulation. A further output of this collaboration was the learning for us, as tutors, through hearing our students' voices explaining their joys, frustrations and challenges of moving to a more active approach to learning, in their own words. After the project, one of our learners shared their thoughts with us:

> My very small part in the process was enlightening and it was a privilege to be involved. Each of you have inspired me on my journey in learning at different points and in different ways during the course so it was bit like being with my heroes for a day!

2. Tutors and technology

Although there have been some veritable successes with technologies in learning, as discussed in our individual accounts, we acknowledge that the heralded changes have not always been as innovative or widespread as hoped. For instance, virtual learning environments such as Blackboard and Moodle are all too often used as repositories providing learners with access to materials and supporting the administration of learning and teaching rather than explicitly encouraging innovative approaches to learning and teaching. There are certainly peripheral innovations such as flipped classrooms but the core learner experience for many learners is the lecture/seminar. Too often it is simply more of the same with sometimes visually attractive technology to make it look as if we are doing something new. We thus concur with Henderson and his colleagues in Australia (2015) that

> much of how digital technologies are being used, and [are] perceived as being useful, appeared to be shaped by dominant university models of the 'transmission' of learning, rather than any more fluid, networked, connected or individually driven forms of learning.

So what?

There are fledgling online learning offerings at QMU, with tutors beginning to move postgraduate programmes online. Like others across the sector, our tutors are challenged by the prospect of becoming pedagogical, and technological experts, requiring them to turn the '[...] computer screen into a window so that students feel and behave as if they are working together with a group of peers' (Rovai, 2002, p. 331). Tutors in many cases take the known (face-to-face) as their starting point when developing online learning, being reluctant to change and/or lose their familiar face-to-face practices. Such approaches may result in less than ideal online environments with learners failing to engage at an appropriate level in activities that should foster deep learning.

To support our academics, an online tutor network is being launched in autumn 2016, based upon the Community of Inquiry Framework (Garrison 2011). The Network, supported by senior management, will bring together staff to engage in collaborative, educational conversations, sharing resources, pooling knowledge and exchanging experiences. Core to this Group will be acknowledgement that innovative, risk-taking individuals need to be associated with kindred spirits with positive tales to tell, who have similar aspirations for scholarship and rigour in student-centred online course design, monitoring, management and evaluation. We envisage this initiative as a mechanism for advancing participants' understandings, knowledge, and practice about online, collaborative, community-based learning in general, and their own communities of inquiry with their learners in particular. The aim is to enhance '[...] understandings of what it means to be a faculty member in contemporary times' (Brooks 2010, p.267).

3. Institutions and technology

Institutional conversations about technology and learning often take a techno-determinist turn, focusing upon the impact, or not, of technology on learning. Whilst such an approach has been largely discredited in the rhetoric of learning and technologies (Hartnett et al. 2014), it persists in the wider community. This may, in some circumstances, lead to an institutional over-emphasis on technology initiatives, with funding following suit, rather than on informed institution-wide decision-making about the creative management and leadership of the opportunities afforded by technologies in supporting learning. Learning technologists may, as a consequence, often find themselves subsumed into Information Technology Units, or equivalents with limited opportunities for progression.

So what?

Innovative, risk-taking trailblazers, who have a track-record of change management, should be recruited and nurtured within institutions, acknowledging the importance of learning and technology for long-term institutional sustainability. Such individuals should be located in key positions with direct reporting lines to senior management, provided with appropriate resources, influential in strategic and audit decision-making. Critically such individuals should have formal and informal networks outwith their institutions, for instance, with JISC, SEDA and ALT as well as working alongside learning technologists who work on a day-to-day

basis with tutors. The outcome of such an approach will surely be a more balanced, informed, contextually-appropriate, and more effective perspective on learning and technologies.

Conclusion: the promise of a new educational renaissance

We are allowing ourselves to close this article on a note of optimism, tinged with concern for the future. We feel positive about our cautious suggestions in the previous section of how the sector might progress. However, these feature initiatives that are driven, to some extent, by "battle-hardened" veterans continuing their ongoing struggles to achieve student-centred and student-managed higher education. We acknowledge that over the last five decades, conditions have favoured the efforts of passionate and idealistic innovators; we can only hope that in the coming five decades such conditions will continue to sustain and flourish further innovations that feature technologies. We trust that managers and policy-makers, at the local, national and international level, will avoid decisions that constrain or crush the factors we have suggested as conditions for a quality of innovative educational life which leads to worthwhile educational development and progress.

In this closure, however, we are counterbalancing such anxieties with our continuing belief in the innovatory efforts of the next generation. Again, and again, it has been shown that newcomers can generate injections of creativity and originality in ventures which surge forward on the wave of their enthusiasm. We sense that higher education in the UK is presently on the brink of just such an educational renaissance. Such a change is dependent upon progressive staff/student partnerships, mutually facilitative and committed to adventurous and even risky creativity and innovation in higher education and its use of emerging technologies. We envisage powerfully constructive and trusting interactions involving less experienced members of staff, well-prepared by their learning in effective PgCertHE courses, but unprejudiced, and unhindered, by the influence of established practices. Such tutors will be teamed with eager students immersed in their experiences of learning and able to suggest and plan how these can be changed to good effect. If, and when, this collaboration becomes sufficiently rigorous and advanced to attract postgraduate recognition for those concerned in innovative research and development, it will surely increasingly feature useful and influential action-researching of the consequent learning. We are encouraged in our optimism by the fact that this summary of our vision for the future actually embodies all of the eight features we have earlier identified as catalysts for effective development, and for motivation of the innovators. We hope that we will be involved in such initiatives, supporting and nurturing those who will be fundamental in its emergence.

References

BROOKS, C.F., 2010. Toward 'hybridised' faculty development for the twenty-first century: blending online communities of practice and face-to-face meetings in instructional and professional support programmes. *Innovations in Education and Teaching International.* vol. 47, no. 3, pp. 261-270.

BUCKENMEYER, J., BARCZYK, C., HIXON, E. ZAMOISKI, H. and TOMORY, A. 2016. Technology's role in learning at a

commuter campus: The student perspective. *Journal of Further and Higher Education*. vol. 40, no. 3, pp. 412-431.

CAPDEFERRO, N. and ROMERO, M., 2012. Are online learners frustrated with collaborative learning experiences? *International Review of Research in Open and Distance Learning*. April, vol. 13, no. 2, pp. 26-44.

CARROLL, J. and APPLETON, J., 2001. *Plagiarism: A Good Practice Guide*. JISC publication. Available from: http://www.plagiarismadvice.org/resources/institutional-approaches/item/carroll-goodpractice-2.

COWAN, J., 1978. Freedom in selection of course content: a case study of a course without a syllabus. *Studies in Higher Education* 3, (2).

COWAN, J. 1982. Courses based on project-orientation. In: Proceedings of Institution of Civil Engineers Congress *Education for Design*. Edinburgh.

DEWEY, J. 1933. *How we think: a restatement of the relation of reflective thinking to the educative process*. Boston: D.C. Heath.

DOHN, N. 2009. Web 2.0: inherent tensions and evidence challenges for education. *Computer-supported collaborative learning*. vol. 4, pp.343-363.

GARRISON, D.R., 2011. *E-learning in the 21st century: a framework for research and practice*. 2nd ed. New York: Routledge.

GOOLD, A., CRAIG, A. and COLDWELL, J., 2008. The student experience of working in teams online. In: *Hello! Where are you in the landscape of educational technology? Proceedings ascilite, Melbourne*. Available from: http://www.ascilite.org.au/conferences/melbourne08/procs/goold.pdf

HARRIS, D., GORB,P. and CALDECOTE, V. 1981. Education for capability . *Journal of the Royal Society of Arts* 129 (5298). Available from: http://www.jstor.org/stable/41373301.

HARTNETT, M., ANDERSON, A. and BROWN, M. 2014. Learning in the digital age: how are the ways in which we are learning changing with digital technologies. In A. St. George, S. Brown, and O'Neill, J., eds. *Facing the big questions in teaching: purpose, power and learning*. Melbourne: Cengage, pp. 116-125.

HENDERSON, M., SELWYN, N., FINGER, G. and ASTON, R., 2015. Students' everyday engagement with digital technology in university: exploring patterns of use and 'usefulness'. *Journal of Higher Education Policy and Management*. vol. 37, no. 3, pp. 308-319.

O'CONNELL, T.S. and DYMENT, J.E., 2016. 'I'm just not that comfortable with technology': student perceptions of and preferences for Web 2.0 technologies in reflective journals. *Journal of Further and Higher Education*. vol. 40, no. 3, pp. 392-411.

JONES, C., 2015. *Networked learning. An educational paradigm for the age of digital networks*. London: Springer.

KEHRWALD, B., 2008. Understanding social presence in text-based online learning environments. *Distance Education*. vol. 29, no. 1, pp. 89-106.

KENNEDY, G. , DALGAMO, B., GRAY, K., JUDD, T., WAYCOTT, J., BENNETT, S.J., MATON, K.A., KRAUSE, K. BISHOP, A., CHANG, R., and CHURCHWOO, A. 2007. The Net Generation are not big users of Web 2.0 technologies: preliminary findings. In R. Atkinson, C. McBeath, S. Soong & C. Cheers, eds. *Annual Conference of the Australasian Society for Computers in Learning in Tertiary Education*. Singapore: Nanyang Technology University, pp. 517-525.

MACDONALD, K., OBERSKI, I., IRVINE, L., CHRISTIE, K., STEERS, A. and PEACOCK, S. 2016. Final report for the Projects for the Enhancement of Teaching and Learning (PETL) 2015/2016. Edinburgh: Queen Margaret University.

MARGARYAN, A., LITTLEJOHN, A., and VOJT, G. 2011 Are digital natives a myth or reality? University students' use of digital technologies. *Computers & Education*. vol. 56, no.2, pp.429-440.

McCRINDLE, M. 2006. *New Generations at work: attracting, recruiting, retaining and training generation Y*. Sydney: McCrindle Research.

NICOL, D. and MACFARLANE-DICK. 2006. Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education*. vol. 31, no. 2, pp.199-218.

NICHOLL, T., 1998. *Vygotsky*. Available from: http://www.massey.ac.nz/~alock/virtual/trishvyg.htm

O'CONNELL, T., and DYMENT, J. 2011. The case of reflective journals: is the jury still out? *Reflective Practice*. vol. 12, no. 1, pp.47-59.

O' SHEA, S., STONE, C. and DELAHUNTY, J., 2015. "I 'feel' like I am at university even though I am online." Exploring how students narrate their engagement with higher education institutions in an online learning environment. *Distance Education*. vol. 36, no. 1, pp. 41-58.

OBLINGER, D. and OBLINGER, J. 2005. Is it Age or IT: first steps towards understanding the Net Generation. In D. Oblinger and J. Oblinger, eds. *Educating the Net Generation*. Available from http://www.educause.edu/educatingthenetgen.

PARKES, M., STEIN, S. and READING, C., 2015. Student preparedness for university e-learning environments. *The Internet and Higher Education*. vol. 25, no. 4, pp. 1-10.

PEACOCK, S., MURRAY, S., DEAN, J., BROWN, D., GIRDLER, S. and MASTROMINICO, B., 2012. Exploring tutor and student experiences in Online Synchronous Learning Environments in the Performing Arts. *Creative Education*. vol. 3, no. 7, pp. 1269-1280.

PEACOCK, S., SCOTT, A., MURRAY, S. and MORSS, K., 2012. Using feedback and ePortfolios to support professional competence in healthcare learners. *Research into Higher Education Journal*. vol. 16, pp. 1-23.

PEACOCK, S. and HOOPER, J., 2007. E-learning in physiotherapy education. *Physiotherapy*. September, vol. 93, no. 3, pp. 218-228.

PRENSKY, M. 2001. Digital natives, digital immigrants. *On the Horizon*. vol. 9, no.5, pp. 1-6.

ROGERS, C., 1969. *Freedom to learn*. New York: Merrill.

ROVAI, A.P., 2002. Sense of community, perceived cognitive learning, and persistence in asynchronous learning networks. *The Internet and Higher Education*. vol. 5, no. 4, pp. 319-332.

SCHÖN, D., 1987. *Educating the reflective practitioner*. San Francisco: Jossey-Bass Inc.

SHEA, P. and BIDJERANO, T., 2010. Learning presence: towards a theory of self-efficacy, self-regulation, and the development of a community of inquiry in online and blended learning environments. *Computers & Education*. vol. 55, no. 4, pp. 1721-1731.

TEACHING EXCELLENCE IN ADULT LITERACY (TEAL) CENTER STAFF, 2010. *Student-centred learning*. Washington, DC: TEAL.

ZEMBYLAS, M., THEODOROU, M. and PAVLAKIS, A., 2008. The role of emotions in the experience of online learning: challenges and opportunities. *Educational Media International*. vol. 45, no. 2, pp. 107-117.

Book Review

Communication and "The Good Life"
Edited by Hua Wang

New York: Peter Lang Publishing, Inc, 2015. pp.271
ISBN: 978-1-4331-2855-4

Starting from the cover of this book, the authors have made an effort to emphasise the enormous power of change emerging from the vigorous mediated communication that is so iconic of this age. The cover is made by one of the authors, by touching heavy paper to the surface of a container of water and mixed inks, representing this phenomenon beautifully. The title *Communication and "The Good Life"* is driven from the theme of the 2014 International Communication Association Conference of the same name, convened in Seattle. The tripartite book focuses on 'Meaning, Happiness and Flourishing' in the first part; 'Perceptions, Connections and Protection' in the second; and 'Challenges, Opportunities and Transformation' in the third. The concept of "The Good Life" has been thoroughly discussed in all areas throughout history, particularly in philosophy, where the focus was on how to achieve it and what prevents humans from doing so (Vorderer, 2015: xi). On the other hand, Communication, a relatively new discipline, has emerged carrying the notion of "Happiness" in its hands. Communication has drastically changed in the last few years, reflecting on the way we interact with one another with the help of new gadgets, which owning has been the main purpose of advertising that promises whomever owns them to be happy or simply enjoy a "better quality of life". However, the link between consumerism and happiness is not recent but the intensity and dimensions of this relationship which, of course, is all about using the Social and Digital Media, has differed in some dimensions, such as access to the enormous amount of information which is unconditional to the time and place and also the promise that we will never feel lonely or isolated no matter if we are physically remote. It is a "utopian" promise to achieve most of our needs through an innovative and unprecedented manner which has become only possible via the attainment of social media. The significant change, made evident in the ways we communicate currently, due to the huge advancement of technologies, has created new challenges as well as opportunities. While celebrating these advancements, we need to reflect on how these changes affect our individual well-being. There are two faces for using these technologies; it is a double edged sword, as while we enjoy the huge connectedness and instant information, we have in turn lost control of our time and mental presence with our families and closely related acquaintances. There is a call in the end of the introduction to the media and communication scholars to study the risks and dangers,

not only the opportunities, especially as the risks are masqueraded by the promise of the "Good Life" that social media offers to individuals.

Part 1: Meaning, Happiness and Flourishing (chapters 1-5)

Chapter One: In Search of the Good Life

This chapter focuses on searching for the Good Life through exploration as a framework which helps analyse the design of new media practices. The authors conclude that our abilities to communicate, connect and network in the age of Exploration searching for the "Good Life" using our "personal devices, sensors and data feeds, which are the vessels that convey us to both new worlds and new experiences of old worlds" in an age where our mobile phones are our personal "compasses" that help us navigate in the sea of human experiences. Every day, there are always new additions to these gadgets; more applications are created, new methods, new dimensions giving us new experiences. Spiegel and Carlile (2016:7-16) consider these new tools our "vehicles of exploration". The authors suggest that the journey or the act of exploration itself might be the joy or the "Good Life" rather than the goal.

Chapter Two: The Good Life, Selfhood and Virtue Ethics in the Digital Age

This chapter argues that "The Good Life is the core of virtue ethics" (Ess 2015:17-29). It focuses on the re-emergence of virtue ethics recently within the domains of Information and Computing Ethics (ICE), and then within Media and Communication Studies (MCS). The author discusses his views about bridging between the two disciplines.

Chapter three: Eudaimonia, Mobile Communication and Social Flourishing

This chapter focuses on the Greek notion of *Eudaimonia*, which means flourishing or "the Good Life." The chapter investigates the role of mobile phones and whether it helps us to live a better life (Ling 2015:31-44), looking from different angles at mobile phone adoption and its usage among different age groups, genders in different societies in countries such as Norway, Indonesia, Tanzania, Jamaica and China. The author discusses the effect of mobile phones on the structure of our daily lives and concludes that it is a double edged sword.

Chapter Four: Meanings and Entertainment, Fiction and Reality in the Land of Evolving Technologies

(Oliver & Woolley 2015: 45-60) argue that new technologies have blurred the lines between entertainment and "real life" experiences. The authors are concerned that this blurring might undermine many aspects of our lives. They also discuss the importance of studying the concept of reality in media studies, especially research about meaningful media. New technologies might enhance our communication, connections and awareness of values that we share as human beings.

Chapter Five: Media Policy for Happiness, A Case Study of Bhutan

(Ang 2015: 61-78) discusses the notion of the Gross National Happiness (GNH), which has been applied in Bhutan as an ideal model that the rest of the world can apply. It is quite similar to the Declaration of Independence of the United States but it differs only in the way Bhutan has included it as a part of the National Constitution. It has also ensured that the media should act as a watchdog in order to improve democracy which could not be achieved without being totally independent of any business or governmental authority; merely Utopian application, in spite of depending on advertising but it is totally financially independent. The author discusses the application of this model from various perspectives, especially the challenges in applying and improving "GNH-friendly" media policies, which is food for thought.

Part 2: Perceptions, Connections, and Protection (chapter 6-10)

Chapter Six: Communication and Perceptions of the Quality of Life

(Jeffers, Neundorf and Atkin, 2015: 61-105) researches the Good Life from the perspective of people's assessment to their wider communities and the impact of their environment on them. The authors studied the data sets of more than 30 years of various measures of communication related to QOL assessments and concluded the impact of the size of environment, sociodemographic categories, individual differences and people's views about QOL in their neighbourhoods which is a very interesting angle to look at, especially the role of traditional media in attaching people to their communities. The authors recommended revisiting this research perspective by applying the role of the interactive modern media platforms, but in this case it will not be their Geographic Communities anymore but their virtual ones that they chose from their like-minded friends in the growing intermass forums as Facebook.

Chapter Seven: Tuning in Versus Zoning out, The Role of Ego Depletion in Selective Exposure to Challenging Media

(Eden, Hartmann and Reinecke, 2015:107-125) suggested that media content can be differentiated according to the challenge that it presents. They applied an experimental study in order to test the role of the media content (cognitive or affective) in motivating its consumption. They discussed various dimensions such as self-control, cognitive and emotional processing of media content. They concluded that 'pleasure counteracts depletion' so that people who are ego-depleted are more attracted to the less intellectual media content. Future research is recommended to further investigate the relationship between selective exposure, self-control and their effect on consumers' psychological well-being, especially with the extensive availability of media entertainment.

Chapter Eight: The Secret to Happiness, Social Capital, Trait Self-Esteem and Subjective Well-Being

(Rui and Stefanone 2015: 127-141) applied a survey to investigate in their study the factors that affect the individual well-being looking from the lens of the personal evaluation to happiness based on the study of

(Diener, Sapyta & Suh, 1998) which argued that 'subjective happiness is the key component to defining well-being and proposed subjective well-being'. The findings suggested that 'social capital facilitated subjective well-being'. The researchers recommended having a longitudinal study in the future in order to better investigate any changes related to individual access to 'Social capital, subjective well-being and trait self-esteem'. Also researchers recommended using other approaches other than the subjective in future research as social, or objective or psychological in order to investigate other types of well-being.

Chapter Nine: Modelling Communication in Research Network, Implications for the Good Networked Life

(Mok, Wellman and Dimitrova, 2015: 143-159) investigated the effect of the social network, internet and mobile revolutions on people who work together in a research arena, concluding that relationships improved and maximised producing a 'hyperconnected version of the Good Life' among researchers.

Chapter Ten: Communicating Online Safety, Protecting our Good Life on the Net

(Larose et al 2015: 161-177) have discovered the perfect marriage between Health Communication and online safety protection that can use the same theories based on (LaRose, Rifon & Enbody, 2008; Lee, LaRose & Rifon, 2008) who focused on the Protection Motivation Theory (PMT, Rogers, 1975; Rogers & Prentice-Dunn, 1997). They compared the behaviour of protecting the individual's health to the online protection behaviours as it is considered a threat to the well-being of individuals, they suggested that 'online threats spread through contact with others as disease does'. This innovative approach aims to relate the PMT theory to Online Safety behaviour which is an innovative approach worth further investigation theoretically and empirically, the researchers encourage policy-makers and future researchers to adopt this approach.

Part Three: Challenges, Opportunities, and Transformation (chapter 11-14)

Chapter Eleven: Communicative Figurations of the Good Life, Ambivalences of the Mediatization of Homelessness and Transnational Migrant Families

(Hepp, Lunt and Hartmann, 2015:181-196) chose two categories: homeless people and migrants, to better present the mediatisation process. Because of the difficult circumstances they experience, their need to access the media is important, as it will improve their lives. The authors argue that in spite of the opportunities given through mediatisation, it might be an obstacle in itself, as without having access to these media, people's needs cannot be achieved. They suggested the role of media for the "Good Life" particularly through the Communicative Figurations perspective.

Chapter Twelve: Reimagining the Good Life with Disability, Communication, New Technology, and Humane Connections

(Alper, Ellcessor, Ellis and Goggin, 2015:197-211) discussed that "the Good Life" is imagined far from

illness, disability and impairment. Unfortunately new media and modern communication have contributed to forming the image of disability as a barrier or a tragedy that can be dealt with and improved when modern technology used. The authors in this chapter focused on the dynamics, tensions and texture of communication in the daily lives of people living with various disabilities. Giving a good example of Stephen Hawking, they focused on using a speech-generating communication i.e. augmentative and alternative communication (AAC) which in spite of the digital revolution, these gadgets are still a neglected area in theories of technology. They also discussed other undermined areas in media as closed captioning and video description. They also linked between disability studies and Science and technology studies (STS). The authors concluded that a critical examination of disability is about communication in the first place.

Chapter Thirteen: The 20th Anniversary of the Digital Divide, Challenges and Opportunities for Communication and the Good Life

(Kretchmer, Pierce and Robinson, 2015: 213-132) The author argue in this chapter about the meaning of "the Good Life" and that it is not the happy medium or destination that people arrive and stay at but it is about having the tools and circumstances that will allow them to reach this good life. They call for catering for the diversity i.e. cultural, linguistic and social needs of the marginalised groups. Also, they stressed the importance of students accessing the digital resources and supplying them with the tools and appropriate conditions in order to achieve equity that will help them to reach "the Good Life". This will not be achieved except by mapping the knowledge gaps and facing the challenge of the digital divide.

Chapter Fourteen: Liberating structures, Engaging Everyone to Build a Good Life Together

(Lipmanowiccz, Singhal, Mccandless and Wang, 2015:233-258) display various ways of liberation structures (which dates back to the Greek philosopher Socrates more than two thousand years ago) in the work place and also transforming classrooms and learning experience aiming to better achieve great goals in big projects which does not request any outstanding levels of leadership or qualifications. Media scholars have presented a very rich piece of work, they discussed their views about "the Good Life" from various perspectives and argued if the new technologies and various social media platforms have shifted our lives towards or away from "the Good Life". They discussed the big change that occurred to the structures of our daily life and the change in behaviour with its impact on our social life. Some dimensions have been neglected as the impact on the new technologies and communication patterns in the work place and working styles. Also all the authors have dealt differently with the notion of "the Good Life" according to their framework. Demographics were not one of the dimensions in any of the chapters, although I would expect that "the Good Life" from the perspective of youth is totally different from than that of adults. A behavioural approach was needed to wrap all the various perspectives of "the Good Life" discussed in this book which might be a call for future research.

Reviewed by Dr Soha El-Batrawy, Assistant Professor, Cairo University