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Foreword

I am delighted to introduce the first issue of Estro, the University's online academic journal for undergraduate and postgraduate research. Some of the work produced by our students is of quite outstanding quality and I am delighted that we are now able to celebrate and showcase the very best examples at an institutional level. I am sure you will find the articles to be both informative and – in the spirit of a multidisciplinary journal – highly accessible.

The journal provides opportunities for students at every level of study: as authors, as reviewers, as editors, and as readers. For authors, an early experience of academic publishing and the peer-review process is invaluable; for reviewers and editors wishing to pursue an academic career in an increasingly global and competitive academic market, the chance to gain experience of this kind is equally precious. For readers, the journal provides illumination and inspiration; all of the articles are engaging, and I challenge you to read one from a discipline you might otherwise overlook or avoid. In whichever capacity you are involved, you are helping to shape and strengthen our academic community.

On behalf of the University I would like to thank the reviewers for sharing their time and expertise with students who are at an earlier stage in their academic careers, but I would like to reserve my special thanks for the small but dedicated team of students who have made the journal a reality with only minimal resources and only the most essential help from staff.

Professor Colin Riordan
Vice-Chancellor

Editorial

Welcome to the very first issue of *Estro*, the new student journal for the University of Essex. Our aim in creating such a journal was not only to provide students with early experience of the academic publishing process, either as reviewers, authors, or both, but also to enrich the academic community at the University by celebrating and promoting student research across all disciplines. It was always our intention to publish articles which were accessible to the non-specialist reader, and so we hope that while browsing the contents of this inaugural issue, you will discover new perspectives and ideas on subjects which you never knew you were interested in, or even existed!

As a multi-disciplinary journal, we are pleased to publish a first issue which covers such a broad range of subjects. We begin with a timely analysis of the retroactive politicisation of the tragedy at Hillsborough football ground in 1989. Richard Wade's 'The Politicisation of the Hillsborough Disaster' is likely to be controversial, since the themes of political responsibility and media coverage of the event have not ceased to be loci for intense debate. However, the editors confidently maintain that Wade's challenge to the hegemonic discourse surrounding the event offers a thought provoking and sensitive analysis and we are very pleased to have been able to include Wade's work in our first issue, not least because of the coincidence of *Estro*'s launch and the 20 year anniversary of the Hillsborough disaster.

If our first article could be said to be ideal for the date of *Estro*'s launch, then our second article is certainly relevant to the location of *Estro*'s launch. Michael Bass' sociolinguistics research, culminating in his paper 'Street or Shtreet?', examines the transformation of speech in the Colchester area. Specifically, Michael's study analyses different pronunciations of "street" as examples of phonological variations of the (str-) consonant cluster at the beginning of spoken words. Interestingly, Michael suggests that the change he observes in Colchester palatalisation of (str-) may be due to a London influence, which may in turn be a result of counter-urbanisation and the increased mobility of the London-based workforce.

This issue also features a second linguistics paper, albeit a study based much further afield. Ariel Vazquez explores the use of different second person singular forms of address in Mexican Spanish. Vazquez's article focuses specifically on the use of *tú* and *usted* by an elderly Mexican married couple, in particular the use of these forms of address in the couple's close social relationships. The study of the use of these terms of address and their corresponding social relations reveals important elements of Mexican social deixis (the linguistic manifestation of social relationships in words

expressions and gestures). Vazquez argues that these linguistic phenomena not only indicate the structure of the relationship between the addresser and the addressee, but also reveal the nature of this relationship prior to the formation of *compadrazgo* relations, a particularly close form of Mexican social relation. As an exciting gesture towards further research in the field, Vazquez also suggests that the differences in forms of address between older and younger generations may support the hypothesis that previous, asymmetrical forms of address in *compadrazgo* relations may be phased out over time, and that the symmetrical forms observed primarily in younger generations indicates an historical shift in this direction.

This Latin-American focus is echoed in Sophia Davies' 'Tanya'. Davies' poetic piece is based on her experiences whilst studying in Cuba, and is designed to capture the visual and emotional impact of the family that she stayed with. The familiarity of the author with the Cuban mother blends in a strange yet ultimately harmonious fashion with her detached reverence to effect an honest and beautiful portrayal. In particular, Sophia's work demonstrates the wealth of poetic possibility created by student's experiences while studying abroad on courses such as Latin American Studies and we would encourage students of all disciplines to follow her example and submit their own creative writing.

Steven Kimberly's contribution to our first issue comes in the form of an intriguing historical reading of some of the cultural manifestations of vampire myths. 'A Psychological Analysis of the Vampire Myth' synthesises Freudian and Jungian analysis of vampire myths to reveal the social significance of the vampire archetype. Steven's innovation opens the possibility for applying psychoanalytic categories in a symptomatalogical study of cultural myths, leading to his suggestion that associating the vampire character with the id indirectly reveals implicit social norms. Interpreting the vampire myth as a product of the normative framework of a variety of societies and cultures proves to be an imaginative way for us to explain some of the qualities of vampire character, including its strong sexual presence, its nocturnality and its anti-religious element.

'Bodies of Matter' adds to the theoretical strand of the first issue with an impressive engagement with a notoriously difficult philosophical issue. Aaron Reeves surveys the work of Roy Bhaskar, Judith Butler and Bruno Latour on the issue of corporeality, bravely and successfully attempting to think through the complex ways in which we might theorise embodied subjectivity. One of the biggest problems for any theorist or philosopher attempting to understand the embodiment of subjectivity in the material world is combining the self-directed agency of the human subject with the physical presence required for agency in the material world. With Latour's concept of the 'actant', Aaron questions the traditional distinction between human

agents and physical objects and suggests that some of the problems faced by Bhaskar and Butler may be solved by expanding the category of actors to include non-human entities.

Estro's aim of showcasing some of the best student work throughout the University of Essex means that a wide variety of subjects has been included in this first issue. We will continue to encourage contributions from all disciplines, including submissions from students who are based at University of Essex sites outside of Colchester. Abbey Andersen's paper, which analyses the relation between the sale price and race performance of Thoroughbred horses, comes from her work at Writtle College. We are ashamed to admit that, until receiving Abbey's paper, we were unaware that the University is partnered with a number of other Further and Higher Education institutions, including Writtle. We were however delighted to receive a number of papers concerning Animal Management and Equine Studies. Abbey's paper consists of a specific statistical analysis of the relation between the price at which Thoroughbred yearlings are sold and the performance rating they subsequently receive at the age of three years old. The analysis achieves a highly sophisticated and detailed investigation of the relation, concluding that the relation between price and performance is less consistent than one might expect, suggesting other factors that may contribute to this inconsistency and pointing a clear direction for further research. Abbey's work reveals much about the intricacies of the Thoroughbred industry which we are confident will prove fascinating for the layperson (evidenced by this editor's interest) and thought provoking for the specialist.

Our final article concerns what will doubtless for some be a sensitive issue. Alexia Casale has produced a detailed examination of the traditional methods for identifying dyslexia, offering a convincing case for reflection on the theories and tests used specifically for identifying dyslexic students in Higher Education. Alexia's work raises a number of theoretical questions, particularly regarding our working definition of dyslexia and the practicalities of understanding the range of abilities demonstrated by dyslexic students who, by the age of eighteen, have likely learnt to somewhat mask their difficulties. Whilst Alexia's conclusion is a negative one, insofar as she argues that there is no adequate test for HE students specifically, she tells us that her research has continued into finding a preferable method. For now, 'Identifying Dyslexic Students' offers grounds for taking up research into alternative testing procedures.

In the process of setting up this journal, we have encountered a great deal of good will and enthusiasm from both staff and students, for which we are extremely grateful. An enormous 'thank you' must go to our reviewers, who have volunteered their time, often at very short notice, to read and comment on our submissions. Likewise, gratitude is due to both the authors who

appear in this issue and to all who submitted pieces to the journal. We were very impressed by both the number of submissions we received and their excellent quality.

Thanks are also due to all the staff in the Learning and Teaching Unit for their help and support, in particular Richard Yates, without whom this journal would never have come into being. Our Web Developer, Luke Whittington, has also worked extremely hard to set up our website and to create the final version of the journal, for which we are very grateful. Finally, thanks must also go to the graphic designers from the Printing Centre who are responsible for our fabulous logo.

Looking to the future, we hope to publish our second issue in early November. It is hoped that we will be able to include a letters section in subsequent publications, as well as reviews of events such as seminars and conferences, and accounts of academic experiences such as study abroad or work placements.

Finally, we hope you enjoy reading this edition of *Estro*, and will consider contributing in the future either as an author or as a reviewer.

Matthew Bennett and Katy Dillon, Executive Editors.

The Politicisation of the Hillsborough Disaster

Richard Wade

ABSTRACT:

The Hillsborough Disaster which occurred on 15th April 1989 and resulted in the deaths of 96 Liverpool Football Club supporters was not only the worst disaster in British sporting history, but an event which has left a profound and unhealthy legacy in terms of how the event has been assessed in academia. Those who have published influential work on the tragedy have, for reasons set out in this article, generally been from the political left and have focused upon the blunders of authorities, in particular the police, on the day of the disaster itself. Whilst these criticisms are to a large extent justified, the result has been an unwillingness to put Hillsborough into the correct historical context and as a result a number of myths have been propagated regarding the long term causes of the disaster, with a politicised narrative emerging in which many of the arguments made cannot be sustained under closer analysis. This article argues that not only are many of these arguments incorrect, but that a new approach should be taken in assessing the long term causes of the Hillsborough Disaster and that the period after 1989, during which significant developments changed the face of football in Britain, should not be allowed to distort our views of these long term factors.

On April 15th 1989, 96 supporters of Liverpool Football Club sustained fatal injuries on the Leppings Lane terrace at the western end of Hillsborough Stadium in Sheffield, South Yorkshire. In terms of loss of life, it remains the worst disaster in British sporting history. The match in question was an FA Cup semi-final to be played between Liverpool and Nottingham Forest at 3pm. The Leppings Lane terrace had been divided into pens by a combination of perimeter fencing, which had been installed at the front of the terrace in 1977, and radial fencing, which had been installed in stages during the 1980s and ran at right angles to the perimeter fencing.

Between 2:30pm and 2:40pm, a large crowd built up outside the entrance to the Leppings Lane End and crushing ensued. Fearing fatalities, the police opened an exit gate designed to be used only in an emergency or in order to allow fans to exit the ground at the end of a game. An estimated 2,000 supporters entered the ground through the exit gate and a significant proportion of them proceeded down a tunnel that led directly into pens 3 and 4 in the centre of the terrace (Taylor, 1989: 12). These pens were already dangerously overcrowded, in stark contrast to the relatively empty pens towards the outsides of the terrace which could be accessed by alternative but less obvious routes. The additional numbers in the central pens, with no easy means of escape, created a deadly crush.

The Hillsborough Disaster also unhappily precipitated a blame game that has been played out between the supporters of Liverpool and the South Yorkshire Police and has legal ramifications even today (Kay, 2008). The discontent between the two parties results from their opposing views about who was ultimately responsible for the tragedy. The two views can be summarised as follows: version one, championed by Liverpool, consists of the claims that crowd control arrangements outside the Leppings Lane End were inadequate, resulting in a crush that could be relieved only by opening exit gate C, allowing large numbers of fans to enter pens 3 and 4. These had already been allowed to become dangerously overcrowded by the police and should have been closed off before gate C was opened. Version two, as supported by South Yorkshire Police, claims that fans that had drunk heavily and, in many cases, did not possess tickets, caused commotion outside the Leppings Lane End. This forced police to open gate C, resulting in a rush of impatient fans into pens 3 and 4 (South Yorkshire Police, 2005).

In the immediate aftermath of the Hillsborough disaster Home Secretary Douglas Hurd launched a public inquiry into the tragedy to be undertaken by Lord Justice Peter Taylor, a distinguished lawyer with a longstanding interest in football. The Taylor Final Report was published in January 1990 and became an important document that would help change the nature of football within the United Kingdom due to its recommendations regarding football stadia. But it did not look at the Hillsborough Disaster itself.

The more important document when considering the Hillsborough Disaster was the Taylor Interim Report, which was published in August 1989, and enquired into what took place at Hillsborough whilst providing short term recommendations for the 1989/90 football season. Taylor's verdict on the Hillsborough Disaster would prove significantly closer to the first version of the disaster outlined above than the second. Taylor (1989: 47) acknowledged the existence of 'an unruly minority who had drunk too much [and] aggravated the problem'. But it was the police who bore the brunt of his criticism, with the failure to seal off the tunnel leading to the already dangerously overcrowded central pens at the time of the opening of gate C identified as the immediate cause of the tragedy (Taylor, 1989: 47).

The most comprehensive analysis of the Hillsborough Disaster to have appeared since is that by criminologist Phil Scraton, who first published his book on the tragedy in 1999. Much of Scraton's analysis focuses on the aftermath of Hillsborough and the legal issues that arose. Scraton does, however, spend approximately the first third of the book looking at the problems of crowd safety and crowd control in the years leading up to 1989 and the events at Hillsborough themselves. But Scraton's work is significantly undermined by his political bias. When discussing Douglas

Hurd's account of the reaction of Prime Minister Margaret Thatcher to the tragedy, Scraton makes clear his political agenda:

However sincere her compassion on the day, throughout the previous decade the policies of successive Thatcher administrations, driven by moral righteousness and rigid dogma, had contributed to the Hillsborough deaths. An unswerving commitment to the principles of free-market economy actively promoted a market-place unrestricted by the state and its institutions (Scraton, 2006: 239).

This analysis is incorrect for various reasons. Scraton goes on to cite a number of other disasters which occurred in the second half of the 1980s, such as the rail crashes at Clapham Junction and Purley, in order to justify his thesis of the negligent state. This analysis does not bear scrutiny as the railways lay within the public sector, whereas Hillsborough Stadium was maintained by Sheffield Wednesday Football Club, a private company. Additionally, regulation of football grounds had never been stricter following the introduction of the Safety at Sports Grounds Act in 1975, and the Thatcher governments did not abolish or amend this Act in any supposed attempt to 'deregulate' football.

In the case of Hillsborough, it is virtually impossible to blame an obsession by the government with free markets. The argument for free markets is that consumers possess the power to withdraw their custom if they feel their money could be better spent elsewhere, and this drives up the standard of the product as producers adapt. A problem with football is club loyalty, meaning that a fan is unlikely to stop watching one club in favour of one with better facilities. Scraton (2006: 240) himself implicitly acknowledges this: 'Loyal fans spent their money to risk injury, even death. They had no voice, no constituency and little support in high places'. But fans were able to withdraw their custom and pursue entertainment outside of football, as many did. The fact that Hillsborough was a full house for the 1989 semi-final does not detract from the fact that attendances at football matches had dwindled during the 1980s (Taylor, 1990: 6).

The problem was that most football clubs did not care. The Football League had long been run as a cartel of 92 clubs occupying the top four divisions with no opportunity for emerging clubs to enter this elite group. Promotion into and relegation out of Division Four from its subordinate league, the Conference, did not begin to take place until the 1986/87 season. In the period 1961-86, just five clubs left the Football League to be replaced by five new clubs. In all cases, such demises resulted from financial and administrative collapse. With the 92 league clubs having their status all but guaranteed, any incentive to innovate and modernise was stifled (*The Economist*, 1989).

The most admirable attempt to modernise football stadia in England in the period leading up to 1989 was the conversion of Highfield Road by Coventry City to an all-seated stadium in 1981. The fan power which Scraton insists did not exist was channelled into a local newspaper campaign at Coventry to bring back the terraces, and by 1984 it had proved successful (Williams et al. 1984). The Taylor Final Report (1990: 13) is unequivocal in ascribing the change in thinking over terraces to the Hillsborough Disaster itself, implicating supporters in the same lack of foresight as the authorities. This state of affairs changed in the aftermath of Hillsborough as clubs increasingly competed with each other in order to provide facilities that would become a model for stadia throughout Europe and the world.

Scraton (2006: 240) also attacks the law and order agenda of the Thatcher Premiership in no uncertain terms: 'It remains a dreadful irony that in relentlessly pursing policies of crowd control – supposedly geared to eliminate violent disorder – the government, the police and the clubs created the very conditions which, in part, killed people'. The problem with this sweeping statement is that virtually no role was played by central government in any of the arrangements for the safety of football fans at Hillsborough or any other football ground in Britain. In 1975 the Wilson government, acting on the advice of the 1972 Wheatley Report into Crowd Safety, which had been set up in response to the 1971 Ibrox Disaster, introduced the Safety at Sports Ground Act. The Guide for Safety at Sports Grounds, which provided non-statutory guidelines, was introduced in 1973 and was updated in 1976 and 1986.

The Act designated that Hillsborough, along with all grounds accommodating more than 10,000, needed a safety certificate authorised by the local authority (Taylor, 1989: 21). This became effective for Hillsborough from January 1st 1979, four months before Mrs Thatcher and the Conservative Party were even elected to office. The local authority in question was initially South Yorkshire County Council. On April 1st 1986, Sheffield City Council took over responsibility for the safety certificate. Both South Yorkshire County Council and Sheffield City Council were renowned for being radically leftwing and had little time for authoritarian policing policies. Yet both considered perimeter fencing and penning arrangements necessary at Hillsborough (Taylor, 1989: 23), despite these not being a pre-requisite for crowd arrangements at top football grounds (Smith, 1989). It remains an irony that a Ministry that has received criticism from leftwing commentators in particular (Hutton, 1995: 37-38) for acts of political centralisation, such as the abolition of the Greater London Council, is also criticised in relation to Hillsborough for leaving control in the hands of local authorities hostile to the government.

Scraton's argument is further undermined by the fact that he fails to even acknowledge the problem of hooliganism at football matches during the 1970s and 1980s. Instead he dwells on the over-policing of football matches and how there was no parallel in British society to the authoritarian approach taken by the authorities towards football supporters (Scraton, 2006: 30). Whilst Scraton may have a point that football supporters were, and to some extent still are, treated differently in these regards to other groups watching entertainment in the United Kingdom, he should perhaps consider which groups in society outside of football supporters have thrown coins that have been sharpened for the purpose at those entertaining them, as happened at football matches during the 1970s and 1980s (Taylor, 1990: 6).

In spite of these criticisms, one should bear in mind that Scraton's work is very much a symptom rather than a cause of the politicisation of the analysis of the Hillsborough Disaster. There are a number of reasons for this. Firstly, the nature of the disaster and its immediate aftermath make it very difficult for those on the intellectual right to engage in the debate. Any rational discussion of Hillsborough and its causes requires acknowledgement of the conclusions of Taylor and the central role played in the disaster by the actions of the police. Criticising the police is not a position typically adopted by commentators from the right, and can be seen in their reaction to the Hillsborough Disaster. The most recent attempt by the right to engage in the debate came with an unsigned editorial in the conservative magazine *The Spectator* in October 2004, and it proved an infamous, ham-fisted farce. The section of the article specifically related to Hillsborough is as follows:

The deaths of more than 50 Liverpool football supporters at Hillsborough in 1989 was undeniably a greater tragedy than the single death, however horrible, of Mr Bigley; but that is no excuse for Liverpool's failure to acknowledge, even to this day, the part played in the disaster by drunken fans at the back of the crowd who mindlessly tried to fight their way into the ground that Saturday afternoon. The police became a convenient scapegoat, and the Sun newspaper a whipping-boy for daring, albeit in a tasteless fashion, to hint at the wider causes of the incident (*The Spectator*, 2004).

As a piece of journalism it is sloppy in the extreme. The reference to 'more than 50' supporters dying is insultingly vague given the ease with which the correct number could have been ascertained. In terms of substance the article is wrong in its assertions. The weight of responsibility given by Taylor to police incompetence as opposed to fan misbehaviour makes the central thesis of the article incorrect, whilst the claim that *The Sun* was attempting to look into the wider causes of the tragedy through its vulgar allegations is risible. The allegations made by *The Sun* that Liverpool fans picked the pockets of the dead and urinated on both victims and the police were not

only highly insulting, but were firmly rejected by the Taylor Interim Report (Taylor, 1989: 44).

Another problem faced by the right in engaging with the issues raised by Hillsborough is the fact that the debate fits naturally into disciplines such as sociology and social history, both areas in which the right does not enjoy a natural constituency. This means that the right has tended to withdraw from the debate and the left has annexed the territory, with Scraton's work being a prime example of this phenomenon. It is significant that the three most influential ministers during the Thatcher Premiership (Mrs Thatcher herself, Sir Geoffrey Howe, and Nigel Lawson) all failed to refer to Hillsborough in their respective memoirs (Lawson, 1992; Thatcher, 1993; Howe, 1994). The Hillsborough Disaster has provided the left with a simplistic argument that attempts to vilify, respectively, the police for their supposed inhumanity and incompetence and the Thatcher Ministry for its dogmatic pursuit of law and order and free markets. I have already outlined why this view is flawed.

Ian Taylor, another commentator from the left, gives a much more considered response to both Hillsborough and the Taylor Report in an essay published in 1991. In contrast to Scraton, who seems content to strongly oppose any structure for football which incorporates even a modicum of capitalism whilst failing to supply an alternative, Taylor offers a solution along the lines of the corporatist European model which had proved relatively successful in Italy during the staging of the 1990 World Cup. Taylor (1991: 20-21) describes this as 'a planned, co-operative and modernising society with new and efficient institutions and a range of relatively safe and accessible opportunities and entertainment'. With the advantage of hindsight, it can be concluded that Taylor's hopes have generally been realised in British football, although not via the institutions and methods through which he thought they would be.

Football in England has undergone an extensive revolution since the Hillsborough Disaster. Three developments between 1990 and 1995 were crucial in determining its nature: the Taylor Final Report of 1990; the beginning of the FA Premier League in 1992; and the Bosman ruling in 1995. The Taylor Final Report made specific recommendations about the provisions that should be in place at modern football stadia. The legislation brought in by the government in order to implement the recommendations of Taylor changed the face of football grounds in Britain, with the most significant example being the statutory requirement that all football clubs in the top two divisions should play their football in all-seated stadia by the 1994/95 season. The Taylor Final Report (1990: 12) encouraged the adoption of all-seating stadia, concluding that: 'seating does more to achieve those objectives [good behaviour and crowd safety] than any other single measure'.

The second major development occurred with the breakaway of 22 clubs from the Football League to form the FA Premier League, which began in August 1992. This resulted in unprecedented efforts to market the game of football and the financial rewards for being part of the elite Premiership group, in the form of the money paid by British Sky Broadcasting for television rights, made survival in the top division a necessity for any aspiring football club. At a stroke, the Football League cartel had been broken. The re-admission of English football clubs into European competition provided additional financial incentive based on performance, with lucrative prize money available from European competitions which were accessed through strong domestic performance.

Such performance was predicated on the acquisition of high quality footballers and the third development, the Bosman ruling, effectively ended quotas in Europe and ensured free agency for players and the proliferation of transfer fees and player wages. To compete in such a transfer market clubs needed to market themselves effectively to both existing and potential supporters in order to maximise revenue, and the comfort and facilities on show at English football stadia from the 1990s onwards were a welcome departure from those seen previously. It was a change that owed as much to the ruthless competition and marketing at the top of English football as to the provisions championed by Taylor in 1990. In short, success on the pitch became strongly correlated with financial muscle off it. But the change was so sweeping that putting Hillsborough into its historical context from subsequent events exclusively becomes impossible.

Instead of looking to evidence from the 1990s to help explain why the Hillsborough Disaster took place, it is much more important to look at the years leading up to the disaster. Hillsborough was the result of long term factors as well as the mistakes and circumstances of the day. The politicisation of the disaster has prevented a rebalancing of the literature on Hillsborough towards these long term factors, with the political left reluctant to look beyond the day itself and the political right unwilling to look at the issue at all. Only by analysis of the decisions taken by the authorities in response to the various issues affecting the watching of football prior to 1989 can an appropriate conclusion be drawn to explain why 96 people died at Hillsborough.

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Street or Shtreet? Investigating (str-) palatalisation in Colchester english

Michael Bass

ABSTRACT:

The following paper details a sociolinguistic study into language change in Colchester English. The variable that is undergoing change is the consonant cluster (str-), which can either be pronounced in Standard English, as in "street"; or with a distantly assimilated palatalised /s/, [ʃt], pronounced "shtreet". The experiment uses a rapid anonymous survey methodology, made famous by the influential sociolinguist William Labov (1972) in an investigation in New York, US. This methodology allows the researcher to quickly elicit a number of responses that include a certain language feature that the researcher is studying, in this case the variable (str-), a relatively infrequently occurring English consonant cluster. I will conclude that the (str-) variable is undergoing change in Colchester English, with the non-standard palatalised variant occurring most frequently in the speech of adolescents. The results will be based upon the apparent time hypothesis which states that any differences between generation's language usages are a reflection of language change. The linguistic change underway in Colchester is probably due to influences from London English, the source of many recent phonetic innovations in dialects in the South of England. The results obtained are unusual in respect of the gender that is leading the change.

Introduction

This investigation aims to look at the phonological variants of the (str-) consonant cluster in the word initial position in Colchester English. In some dialects[1], the standard (str-) pronunciation, [stɹ], has undergone a phonological change of palatalisation, whereby the alveolar fricative /s/ anticipates the retroflex nature of /ɹ/, and is thus pronounced with a palato alveolar fricative: [ʃtɹ]. In an article on this phonological phenomenon, Michael Shapiro concludes that the palatalisation of (str-) is an example of assimilation from a distance. This is because the /s/ acquires qualities of the final consonant in the cluster, not the /t/, which remains the same: "by stipulating that since /t/ remains /t/ and can, therefore, not figure in the assimilation of /s/ to /r/…it is an example of assimilation at a distance" (Shapiro, 1995: 103). Palatalisation of (str-) has been noticed in a variety of places around the world, including London, where it is currently believed to be affecting the working and middle social classes (Altendorf, 2003).

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[1] (str-) palatalisation is currently observed in London English, and is thought to be spreading to other areas in the South East of England (Harrison, 1999), for example, Canterbury in Kent (Altendorf, 2003: 101).

This paper will investigate whether (str-) palatalisation is a feature that has spread from London into Colchester English. Being situated between London and East Anglia, Colchester is an interesting area to study. This investigation was based on the hypothesis that, as a consequence of counterurbanisation and the increasingly mobile workforce, due to economic liberalisation and improving infrastructure, there will be a spread of dialect features from London, Britain's economic powerhouse, to surrounding places in the South East of England. A great deal of evidence exists that demonstrates diffusion of phonological innovations from London to its surrounding areas, indeed it has been claimed that London is the source of many phonetic innovations (Foulkes and Docherty, 1999). In fact, diffusion from London to areas like Colchester and other East Anglia population hubs (such as Clacton and Chelmsford) is so likely that Trudgill comments: "the older speakers sound like East Anglians... younger speakers, as is often noted by lay observers, sound like Londoners" (1986: 44). The investigation will focus on comparing the speech of young and old Colchester inhabitants, and will conclude that the palatalised variant is used more frequently by speakers from the younger generation. The investigation will also look at gender differences, to see if the stereotype that women use more standard variants than men is true for the (str-) variable, and to see which gender is leading the language change.

Methodology

The application of a rapid anonymous survey in Colchester was a relatively simple and efficient process. In order to elicit the desired consonant cluster (str-) in the word initial position, we had to design a set of questions that could have only a limited number of responses; namely a response which would contain at least one variant of the linguistic feature in question – either standard [stɹ] or non-standard palatalized [ʃtɹ]. Upon researching the variable, it was discovered that Labov had partaken in a rapid anonymous survey of the (str-) variable in Philadelphia, USA (Labov, 1984). In it he asked the simple question "Can you tell me how to get to *X* Avenue?" to which the respondent would reply "Do you mean *X* Street?" due to the fact the road in question actually had 'Street' in the title. It was decided that this efficient method would be implemented, with alterations, in the study of (str-) palatalisation in Colchester English.

Our study was centred on three roads in the town centre of Colchester: the High Street, Head Street and Culver Street. The interviewer, posing as a lost visitor to Colchester, approached the subject on any one of the three streets and firstly asked: "Excuse me, do you know the name of this road?" to which the normal reply would be one of the three aforementioned road names. The interviewer would then ask a secondary question that involved asking for directions to landmarks in Colchester, the Odeon cinema, located on Head Street; and the Colchester department store Williams and Griffin, situated

on the High Street. For example, if standing on Head Street or Culver Street, the interviewer would ask "Do you know the way to William and Griffins?" (on the High Street), to which it was hoped the respondent would reply with the directions to the store and the road name where the store was situated: "Turn right onto the High Street", for example. This way, it was hoped that the questions would elicit two responses that contained an example of at least one variant of the (str-) variable. As the experiment was attempting to test the hypothesis that the (str-) variable is undergoing language change in Colchester English, it was decided that the study should focus on two distinct age groups – distinctly young (aged between sixteen and twenty one) and distinctly old (aged sixty five plus). This decision was based in accordance with the apparent time hypothesis, which states that people from different generations can represent how language was spoken at a particular time. Thus, by comparing two generations that are very far apart, one should be able to observe whether language change is in progress: comparing the generations "allows the researcher to draw diachronic inferences about developments over the last fifty or so years" (Milroy and Gordon, 2003: 35). The experiment was started at around one o'clock; a good time given that the streets of Colchester were filled mostly with students on lunch break from the local sixth form college and elderly retired people spending the day shopping.

Thus, the information recorded in the researcher's notebook contained (str-) variable used in first answer, (str-) variable used in second answer, estimated age ('young' or 'old') and the gender of the speaker. Obviously, these notes were not made in front of the speaker as this would make it somewhat obvious that the interviewer had an ulterior motive. Rather, the interviewer would continue along the road for a few metres before making the notes. In order to see if this method would be successful, a preliminary testing stage was used on ten subjects.

Early Methodological Problems
It quickly became apparent in the testing stage that the first question asked – "Which road is this?" would be a successful way to elicit the response of either "X [stɹiːt]" or "X [ʃtɹiːt]". Only in the minority of cases did the response not involve the word "Street", namely when the person asked was not actually aware of the name of the road, perhaps due to the fact they were not actually from Colchester. Only the results that did contain a variant of the (str-) variable in the word "street" were recorded. However, there was a problem with the data collection process, namely it was not always possible to elicit a second response containing the word "street". Indeed, sometimes a second "street" was uttered without the prompting of another question – many people uttered "I think its Head Street, yes, Head Street", as if to confirm their first answer. However, when the interviewer had to ask the second planned question, "Can you direct me to the Odeon/William and

Griffin?" the subject would often respond with solely directions, and not mention the road name. In these cases, the interviewer tried once more to elicit the word "street" by asking "Do you know what road it is on?" – a question which received mixed results. Sometimes a second "street" was uttered; however, many times, the subject would just look confused as to why this question was asked and instead just repeat the directions they had already given. Perhaps the third question was one step too far; bearing in mind the aim of a rapid anonymous survey is to ask an unobtrusive question, it is likely the subjects were uncomfortable being probed for answers by a stranger, and perhaps annoyed at the interruption to their day.

However, in general the method was successful in gaining at least one response that included the word "street". Some secondary responses were elicited, but not as many as hoped. These secondary responses were still recorded, and will be discussed below. In total, one hundred and twenty subjects were interviewed in one hour and a half. Of these, one hundred and one used the word "street" in their first response. Only these subjects were recorded. Of the one hundred and one recorded subjects, thirty eight uttered "street" a second time. The subjects were also well balanced between young and old (fifty seven young, forty four old) and between male and female (fifty one male and fifty female). To collate the results, a percentage use of non-standard variant [ʃtɹ] was calculated for both the first responses and the second responses. This was achieved by dividing the number of non-standard variants used by the number of (str-) variable occurrences, and multiplying by one hundred. The methodology allowed the interviewer to gain many examples of two different variants in the dialect: "the exchange was a systematic elicitation of the exact forms required, in the desired context… with the desired contrast of style" (Labov, 1972: 310), whilst the subject was oblivious to their participation in a linguistic experiment. Rather, they assumed they were responding to a genuine question from a lost and confused stranger, thus their language use should not have been affected: the "tenuous relationship was the minimum intrusion upon the behaviour of the subject" (ibid).

Results and Analysis

Table 1 – Comparing the first responses of young subjects to the first responses of old subjects

	No. of [stɹ] variant used	No. of [ʃtɹ] variant used	Total number of (str-) possibilities	% use of non-standard [ʃtɹ]
Young	18	39	57	=(39/57)*100 =68%
Old	33	11	44	=(11/44)*100 =25%

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Total	51	50	101	=(50/101)*100 =50%

These results show a clear difference between the speech of those classed as distinctly young and those classed as distinctly old. Sixty eight percent of the young age group used the non-standard palatalised variant [ʃtɹ] from London, the majority of that age group, whereas seventy five percent of the older age group used the non-palatalised variant [stɹ] that is standard to Colchester English. The use of variable (str-) could therefore be interpreted as a change in progress, and thus be seen as evidence of a London English feature diffusing into Colchester English. It could be the case that if the apparent diffusion of the palatalised variant continues, the non-palatalised variant could die out in Colchester English, although currently is still in use. These assumptions are again based on the aforementioned apparent time hypothesis (Milroy and Gordon, 2003).

Table 2 – Comparing the first responses of male subjects to the first responses of female subjects

	No. of [stɹ] variant used	No. of [ʃtɹ] variant used	Total number of (str-) possibilities	% use of non-standard [ʃtɹ]
Men	21	30	51	=(30/51)*100 **=59%**
Women	30	20	50	=(20/50)*100 **=40%**
Total	51	50	101	=(50/101)*101 **=50%**

Table 2 shows that the variant used is also influenced by the gender of the speaker. As aforementioned, gender is a highly debated topic in variation studies. It would be futile to suggest that the results from table two show that women use a more standard form than men. However, in the restricted context of the word initial consonant cluster (str-) in Colchester English, it would appear that more men use the non-standard palatalised variant [ʃtɹ] than women. This pattern is perhaps unexpected given the belief that, broadly speaking, women are said to lead linguistic change[2]. Therefore, perhaps one should expect to find women using the [ʃtɹ] variant more than men if this feature was really undergoing linguistic change in Colchester English. However, the results from table 1 and table 3, which will be discussed below, show a clear difference in the variant of (str-) used between

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[2] Women are shown to be the innovators of linguistic change in most recent studies, with new innovators appearing in the speech of women before men (Labov, 1966; Trudgill, 1974; Cerdergren, 1973; Fasold, 1969; Eckert, 1986; Luthin, 1987). This is perhaps due to women's superiority to men in most aspects of verbal behaviour (Chambers, 1995: 291).

the young and old. This would suggest language change is in progress in Colchester, with regard to the (str-) variable in word initial positions. Perhaps it is the case that, in this situation, the linguistic change is being led by males. Indeed, despite being in the minority, some linguistic changes that have been recorded have been led by men; see for example Labov (1963).

Table 3 – Comparing the first responses of young male subjects to the first responses of old male subjects, and young female subjects to old female subjects

	No. of [stɹ] variant used	No. of [ʃtɹ] variant used	Total number of (str-) possibilities	% use of non-standard [ʃtɹ]
Young Men	7	22	29	=(22/29)*100 =76%
Young Women	11	17	28	=(17/28)*100 =61%
Old Men	14	8	22	=(8/22)*100 =36%
Old Women	19	3	22	=(3/22)*100 =14%
Total	51	50	101	=(50/101)*100 =50%

Table 4 below presents a graphical version of the results above, and a commentary follows.

Table 4 – Graph charting the percentage use of the non-standard variant [ʃtɹ] of the (str-) variable in Colchester English, comparing young male and female first responses to old male and female first responses

% Use of non-standard (str-) in Colchester English
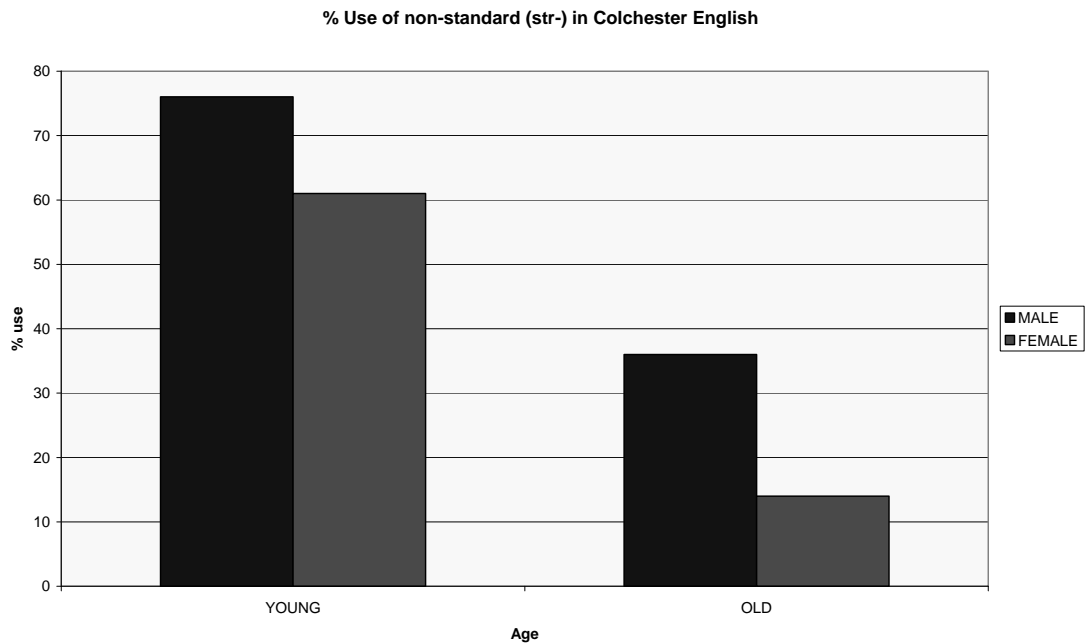
After dividing the young and old into male and female, it is evident that the initial patterns observed in tables 1 and 2 remain. A considerably higher percentage of young men use the non-standard palatalised variant [ʃtɹ] compared to old men. Likewise, young women are more likely to use the palatalised variant than old women. In addition, the gender differences are apparent in both age groups, with a lower percentage of young women using the palatalised variant than young men and a lower percentage of old women using the palatalised variant than old men. However, age appears to be the most important factor. Even though young women use the standard non-palatalised variant more than young men, they still use the non-standard palatalised variant [ʃtɹ] more than old men. This would match the analysis of table 1 as possibly demonstrating an ongoing phonological change, despite the gender differences.

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Table 5 – Second Responses

	No. of [stɹ] variant used	No. of [ʃtɹ] variant used	Total number of (str-) possibilities	% use of non-standard [ʃtɹ]
Young Men	5	9	14	=(9/14)*100 =**64%**
Old Men	5	5	10	=(5/10)*100 =**50%**
Young Wom en	4	3	7	=(3/7)*100 =**43%**
Old Wom en	5	2	7	=(2/7)*100 =**29%**
Total	19	19	38	=(19/38)*100 =**50%**

The collection of two responses was not greatly successful, and was hampered by the factors explained above in the methodology section. However, from the small set of second responses involving the word "street" that were collected, some patterns that emerged in the first responses are maintained – a greater proportion of young men use non-standard (str-) than old men, whilst more young women use the non-standard than old women. However, in these responses, a higher percentage of old men use the palatalised variant [ʃtɹ] than young women. This is a strange result that does not keep to the patterns established in the results from the first responses. Unfortunately not enough results were collected for the secondary responses, and therefore it would not be beneficiary to make any sweeping conclusion given these sets of results.

Thus, it would appear that speakers in the younger generation are more likely to use the palatalised variant than those in the older generation. This would suggest, using the aforementioned apparent time hypothesis, that the word initial (str-) variable in Colchester English is undergoing change, with the palatalised variant [ʃtɹ] becoming more common, possibly as a result of diffusion from London English. A problem with the apparent time hypothesis is that a person does not speak in consistently the same way throughout their lives. Rather, particular forms or styles are more commonly used at particular stages in life, a phenomenon known as age-grading: "using speech appropriate to your age group" (Wardhaugh, 2006: 196). This is potentially damaging to this experiment, as it could be the case that the

differences observed are simply a consequence of age-grading, and not language change. However, the feature in question is not one of high social awareness or one that is consciously manipulated, and thus it is unlikely to be influenced by the age-grading phenomenon (Milroy and Gordon, 2003).

Evaluation of Experiment Methodology

Firstly, one must point to some criticisms of the methodology. As previously examined, not enough secondary responses were elicited to enable them to be evaluated seriously. It would have been interesting to see if the strange patterns that emerged in the second responses (see table 5) were maintained had more data been collected. In addition, there are some key independent variables that are missing from the data which, with hindsight, perhaps should have been included. One error was not recording the name of the road the participant uttered. This could have been important in that the preceding sound could have influenced the choice of (str-) variant used. Both Culver Street and the High Street have vowels at the end of the first word: 'Culver' could be pronounced with a central vowel [ɜ:] or a schwa [ ]; 'High' ends in the diphthong [aɪ]; whilst Head Street has a voiced alveolar stop [d]. It would have been interesting to see if the preceding sound influenced the pronunciation of the following (str-) cluster. In addition, it would perhaps have been interesting to look at some other social factors, such as social class or ethnicity. However, in this type of experiment, it would be practically impossible to guess a participant's social class from such a short exchange. Perhaps the experiment could have been carried out in two places with different inhabitants or two shops with different target shoppers (as Labov did in his famous survey of New York department stores (1972)).

It is also necessary to point to the limitations of this type of experiment. A major problem is the data being unrecorded, thus the unconscious bias of the interviewer in selecting which variant the subject used may have played a part, distorting the answers: "it is always possible that an unconscious bias in transcription would led to some doubtful cases being recorded" (Labov, 1972: 323). In addition, the experiment could be made more fair and systematic by picking out only a certain number of random subjects, rather than choosing which people to ask. For example, every fifth person could have been asked to make the experiment more random. The rapid anonymous survey methodology gives the researcher a sample of the population that is present on the street (Labov, 1984); it is unknown how close this representation is to the total population of Colchester. Furthermore, one cannot be certain that all subjects were Colchester residents, as to ask where they reside would have violated the anonymity of the surveyor. To verify the results, perhaps a more detailed study could be embarked upon, for example a series of sociolinguistic interviews could be made, whereby many casual conversations are recorded and transcribed.

However, despite the problems with the rapid anonymous survey method, there are some very large advantages. The experiment was quick, achieving one hundred and one examples of a phonological variable that would usually be relatively infrequent in a person's speech in just one hour and a half. In addition, the experiment shows a clear pattern of results with speech differences between young subjects and old subjects, as was hypothesised.

Conclusion

To conclude, this rapid anonymous survey has highlighted key differences in the pronunciation of the word initial (str-) variable in Colchester English. It would appear that language change is in progress, given the non-standard palatalised variant was more likely to be used by the participants from the younger generation. This is possibly as a result of the feature diffusing from London English. In addition, it would appear that male subjects are more likely to use the palatalised variant than women, which could suggest that, unusually, in this case, linguistic change is being led by men.

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Bodies of Matter: Theorising corporeality through Bhaskar, Butler and Latour

Aaron Reeves

ABSTRACT:

There is some difficulty for social theory in trying to understand corporeality. This paper works through the ideas of Bhaskar, Butler and Latour in order to draw out those concepts that may be of value in theorising materiality. Bhaskar's Critical Realism deals with matter primarily through the concept of 'emergence'. His tri-partite ontology coupled with his multi-layered view of scientific reality and focus leads to an overly complex and cumbersome view of matter that leaves vey little space for social theorists to comment upon corporeality. His conception of agents is useful and can be compared with Latour's later ideas around humans, non-humans and actants (agents). Butler's work wants to move away from constructivist arguments of matter while retaining the history (or changing conceptions) of matter. Butler therefore sees matter as caught in an aporia between materiality and signification; where each is reliant upon, but not reducible to the other. In this regard Butler lays out how matter is brought to mean and the consequences of this for those bodies that are privileged and those that are abjected. For Latour social theory is primarily concerned with associations between humans and non-humans (each are regarded as actants or agents). In this regard he wants to collapse the bifurcation of nature, which Butler appears to be guilty of accepting uncritically. Consequently, it is argued that social theory can speak about corporeality as long as it considers both humans and non-humans as actors, and remembers to consider the history of matter and the way that it comes to mean. Bodies that matter are always bodies of matter, however they are materialised.

There seems to be a conceptual slipperiness that comes with speaking about the body. For example Butler notes 'the thought of materiality invariably moved me into other domains… I could not fix bodies as simple objects of thought' (1993: ix). Further, within the many attempts to theorise the body in social theory there has been an increasing chasm emerging between the cultural and material body (see Turner: 1996; Shilling: 2003). This paper will discuss attempts within social theory to account for materiality, using the body as a specific example of the challenges, while discussing its success in working with this slipperiness. Consequently this argument will contain an explication and discussion of three broad attempts to account for materiality in social theory: Bhaskar's (1975; 1979; 1989) Critical Realism, Butler's (1993; 2006 [1990]) Materialisation and Latour's (1993; 2005) Actor-Network Theory (ANT) of nature-culture. This essay will argue that social theory can account for the materiality of the body but only by breaking

down the nature-culture divide, thinking of all objects as actants[3] and carefully considering the way that matter materialises.

Critical Realism and Emergence

This outline will not provide a full discussion of Bhaskar's philosophy of science and its role in social theory, but it will briefly articulate his ideas around emergence and their relation to how he theorises materiality. It should be noted that Bhaskar is not explicitly trying to deal with materiality in his theory, in the same way that Butler is for example, but is more interested in materialism as a philosophy.[4] Yet he is concerned with developing theories of society and nature under the premises of realism and naturalism and therefore inevitably discusses the nature of materiality. Bhaskar is aware, like Butler, of the problems of conceptualising materiality, for he writes that 'in any discussion of materialism there lurks the problem of the definition of matter' (1989: 130).

Bhaskar argues that 'the operations of a higher level cannot be accounted for solely by the laws governing the lower-order level in which… the higher-order-level is 'rooted' and from which… it was 'emergent'' (1975: 113). The lower-levels might be hydrogen and oxygen while the higher-order level would be water; the properties of water are not reducible to its constitutive parts but can act back upon them. The sum is always greater than the parts. Bhaskar posits, and it seems even hopes that, 'there is a substance, whose nature is at present unknown, which is the bearer of [emergent] powers' (1979: 124); this substance Bhaskar labels 'matter'. Further 'emergence is an irreducible feature of our world… it has an irreducible ontological character' (1975: 113). Now each level of a higher-order would, when joined together with other parts, become the lower-level of another higher-order level: thus water becomes part of the cell, the cell becomes part of the organ and this moves onward until we reach the agent and then on to society.

Each level is as 'real', in Bhaskar's ontological theory, as the one below it and each should become the subject of its own discipline or field of study (Bhaskar: 1975). Thus each level (society, agents, atoms etc.) contains within it Bhaskar's (1975) tri-partite model of reality: that of the real, the actual and the empirical. The real, as an 'intransitive dimension' (Bhaskar: 1975: 17), corresponds with the causal laws of scientific enquiry, described as

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[3] For Latour, as will be discussed in greater detail later, actants is a loose, but technical, term that can refer to humans and non-humans. Actants are actors in that they are potentially translatable by mediators in the networks they are connected to. They are the effects that are transported around networks. An air pump, a government, an individual and a tree can all be a figuration of an actant. They are 'different ways to make people do things' (Latour: 2005: 55).

[4] 'In its broadest sense, materialism contends that whatever exists just is, or at least depends upon, matter. (In its more general form it claims that all reality is essentially material…)' (Bhaskar: 1989: 125). Bhaskar uses this frame because of his Marxist leanings, but there are a number of versions of materialism, especially within sociology (see Scott & Marshall: 2005).

the 'generative mechanisms of nature' (Bhaskar: 1975: 14). These 'generative mechanisms' are differentiated, meaning that they persist in open and closed systems (Bhaskar: 1979).[5] The actual level refers to events resulting from the 'generative mechanisms' of the real (Bhaskar: 1975). The empirical level is the sense-experiences, mediated by individual perceptions, of these actual events.

These generative mechanisms should be expressed as 'tendencies of things, not conjunctions of events' (Bhaskar: 1975: 10). Thus as tendencies they are omnipresent but are not always active or productive; further the activation of such 'generative mechanisms' is not solely contingent upon a specific sequence of events or conditions. Thus they are described as 'tendencies'. Therefore 'the mechanisms constituted at each level have their own specific reality' (Benton & Craib: 2001: 127). Consequently materiality has as one of its fundamental properties these emergent powers and also this tri-partite ontological reality which is increasingly stratified and complex. Interestingly, and we will return to this, both Butler (1993) and Bhaskar (1975) - although in different ways – resist defining materiality but instead explain the *process* of how matter comes to be(come); its 'emergence' or 'materialization'.

Based on Bhaskar's (1979) multiple levels of reality that emerge from each other, he begins to sharply demarcate the academy's disciplinary jurisdiction. Thus psychology has the responsibility to account for a different level of ontological reality to sociology and also from biology. Such a sharp disciplinary distinction means that social theory is not capable of accounting for matter outside of saying that it emerges from a lower ontological level which they are not responsible for or cannot account for. Societies in Critical Realism are real but primarily immaterial (even though Bhaskar (1989) does seem to recognise that they are in part material); whereas all lower levels are material only (Bhaskar: 1989). Thus as sociology primarily studies the immaterial 'social' it will inevitability grasp the *cultural* body (one that is real but immaterial).[6] It must leave the study of the physicality of the body to those disciplines that are designated to deal with it. Thus materiality becomes sequestered from social theory within the Critical Realist frame - all that it can say is that it is emergent, which to some extent Bhaskar (1979; 1989) himself argues.

A further problem that this view raises is the contradictory ways that Bhaskar describes agents, nature and society. In this regard Benton (1981) has

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[5] 'Where mechanisms coexist and interact with one another in contingent ways, Bhaskar speaks of 'open' systems. Where mechanisms exist in isolation… or where there is artificial isolation… Bhaskar speaks of 'closed' systems' (Benton & Craib: 2001: 128).

[6] As noted earlier this consequence of Bhaskar's ideas has been inadvertently realised in the work of Shilling (2003), Turner (1996) and others. However this is not necessarily characteristic of all work that has been completed in the area of embodiment. For example, Kirby (1997) represents a specific attempt to theorise the substance of corporeality.

observed in Bhaskar a dualist conception of humans and nature, each with their own way of being studied because of their differing ontologies. Further, Bhaskar (1989) explicitly acknowledges that nature, agents and societies are ontologically different. What is unclear as a result of these formulations is upon what basis these dualist or tri-partite categorisation of nature, agents and society are maintained considering that each is emergent from the others. It seems that Bhaskar's distinctions are arbitrary and reflect certain commonly accepted distinctions within the 'modern' tradition (see Latour: 1993), rather than being based upon accurate considerations.

In addition, the concept of emergence raises some questions which are not fully answered in Bhaskar's theory. First there is no consideration of how or why he can assume that emergence is 'an irreducible ontological character' (1975: 113) of matter. Such an important presumption would seem to require a more detailed discussion; this is not to suggest that such a view is not intuitively accurate but that part of the role of philosophy and sociology is to question common sense assumptions. Secondly, if emergence is an 'irreducible ontological feature' then why does it stop at society? What is it about societies that mean there is no higher level emerging from them? If there is a higher level, what is it and why does Bhaskar not describe it? Third, emergence, in reality, is not the simple linear model that it is often represented to be, in which one level flows neatly into the next (see Benton & Craib: 2001). It is much more fragmented and uneven; for example how many agents are required for a society to emerge, or where are animals featured in this model? Fourth and perhaps most importantly is the idea of a foundation or origin, for implicit in Bhaskar is the notion that there is a primary substance from which all things originate or emerge. There is within this expectation an idea that this lowest level is the really 'real' substance of the world, which harks back to a number of the problems associated with ideas around reality that Bhaskar is trying to combat. These questions seem to create a space where the place of materiality in Critical Realism is undecided and perhaps undecidable and is at the very least contingent upon the work of the 'hard' sciences in uncovering what is the origin and foundation of the world.

There is one final part of Bhaskar's work which is interestingly underdeveloped within Critical Realism and this is the specific definition he gives for the 'agent'.[7] Bhaskar explicitly defines an agent as 'anything which is capable of bringing about a change in something (including itself). A hydrogen atom is… an agent' (1975: 109). He argues that even for an atom 'the concept of their agency is irreducible' (1975: 114). Now he does also note that there are other emergent powers that humans possess which atoms seem not to possess, but he is keen not to conflate the terms agents and

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[7] I of course do not mean that agents have been undertheorised, but that Bhaskar's idea that even an atom can be an agent has (see 1975).

humans (Bhaskar: 1975). This idea will have important implications as we discuss Butler and Latour later.

Butler and Materialisation

Now, recognising that Bhaskar's theory is not a specific attempt to theorise materiality, we will attempt to critique his ideas and develop the theory further by working through Butler's account of matter. Early in Butler's work the body's slipperiness was captured. She writes that 'the body is not a 'being'' but is theorised as a 'variable boundary, a [permeable] surface… a signifying practice' (2006 [1990]: 189). Butler's main insight here seems to be that bodies are not an essence but are becoming, or are in process. Although this understanding began early it was not fully formulated until *Bodies that Matter* (1993) and for that reason this argument will use that text primarily for the following discussion.

Butler's argument in this book tries to walk between critiquing constructionist accounts of the body while also recognising that matter cannot be understood outside of language resulting in the interpretative character of those attempts to conceptualise matter (see Fraser: 2002). Further it seems that Butler has endeavoured to reclaim what is made 'prior and passive' with regard to the body: it is an attempt to reject any purely constructionist accounts, which Gender Trouble leaned toward[8], while bringing matter back into the discussion about the body (see Kirby: 1997).

Thus we read that matter is 'a process of materialization that stabilises over time to produce the effect of boundary, fixity and surface' (Butler: 1993: 9). In this regard it is interesting to note Jonas' insight that being is doing and that things 'exist by way of exchanging matter with the environment, transiently incorporate it, use it, excrete it again' (1996: 88). The body is not a fixity or boundary but is constantly exchanging and shifting; it is in flux. Hence the process that Butler sees of creating such boundaries or fixities is in part the process of materialization.

There is yet another important aspect to Butler's notion of the process of materialisation; 'matter has a history' (Butler: 1993: 29).[9] It has been argued that the very articulation of matter conditions and enables materiality. Thus to materialize is to become intelligible but this cannot be separated from

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[8] The following quotations are not a comprehensive list of how Butler describes the construction of the body but merely provide a selection of comments on her allusions to the body as a construction. Butler writes that ''the body' itself is a construction… bodies cannot be said to have a signifiable existence prior to the mark of gender' (2006 [1990]: 12), and notes that 'the discursive construction of the body…' (2006 [1990]: 17) and 'the culturally constructed body will then be liberated…' (2006 [1990]: 127).

[9] As an aside it is interesting to note that one of Latour's (1993) concerns is to give non-human actants (or matter) a history.

coming to mean which invariably invokes notions of power (Butler: 1993).[10] Therefore notions of sexual difference are played out within this process of materialisation. Similarly, Haraway (1991) has traced the ways that accounts of the body have been influenced by the technological framing of the body; thus descriptions of the body come to make matter something else as it shifts its meanings. For Butler, "to matter' means at once 'to materialize' and 'to mean'" (1993: 32) which captures both the corporeality and the meaning of matter while recognising that 'language and materiality are fully embedded in each other' (1993: 69).

A Foucauldian vision of power is linked closely with Butler's view of materialisation. Foucault's (1998) account has been widely discussed (see Lukes: 2005; Rouse: 1994) and will not be recounted here in detail. Yet Butler recognises in *Discipline and Punish* (Foucault: 1979) bodies are materialised under 'the historically contingent nexus of power/discourse' (1993: 33). In Butler power simultaneously materialises and dematerialises; thus there are those bodies that mean, or matter, and those that do not. These dematerialised bodies become less than, or peripheral to, those that are materialised; they are abjected. Thus what is at stake for Butler in the process of materialisation is not just academic word games (see Nussbaum: 1999), but 'the possibilities for a liveable life for those who live, or try to live, on the sexual margins' (2006 [1990]: xxviii).

Now this process of materialization is especially important because it works with and against Bhaskar's account previously described. Bhaskar (1975) is aware of the influence of the transitive dimension in understanding the intransitive dimension, and therefore the way that matter has a history.[11] However, Butler's theory fails to account for how, if it is possible at all, theorists can escape the transitivity of the discourses around materiality. Therefore Bhaskar neglects to account for how his own theory will 'materialise' matter and it is therefore possible to subject it to a Butlerian critique. It is likely that Bhaskar's theory of emergence is liable to (de)materialise bodies in ways similar to previous theories of matter, as Butler highlights, and may therefore be implicated in legitimating certain notions of social dominance.

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[10] In part Butler's argument follows Foucault (1979; 1991; 1998) here by noting that discursive formations are a system of norms of values that are intimately tied up with notions of bio-power and the disciplinary society. Thus that which is intelligible is also that which is normative while that which is unintelligible is abjected and is deviant; norms and values are part of the politics of power.

[11] The real is an 'intransitive dimension' (Bhaskar: 1975: 17) and corresponds with the causal laws of scientific enquiry, described as the 'generative mechanisms of nature' (Bhaskar: 1975: 14). Bhaskar also accepts the socially mediated nature of scientific knowledge, which is the transitive dimension (Bhaskar: 1975). Bhaskar stresses how '[humans] in their social activity produce knowledge which is a social product' (Bhaskar: 1975: 21) and is therefore a transitive version of the intransitive dimension.

Butler's theory is also liable to criticism, for as Kirby notes 'Butler deploys the term 'matter' rather than 'substance' because the former is a synonym for significance/signification' (1997: 125). Thus it is possible that Butler is playing a word game where 'we are no longer dealing with matter as a substance, but with matter as signification' (Wilson: 2005: 162). Butler can be read in this way. For example, she states that 'to posit a materiality outside of language is still to posit that materiality' (1993: 67). Further Butler (1993) argues that trying to draw an absolute distinction between language and materiality is to undermine that very distinction by lifting language off the material. In so doing we take away any means of language referring to materiality; consequently we find ourselves locked in the old structuralist problem of Saussure.[12]

Yet, it seems that to interpret Butler solely in this way is to mis-represent the aporia she is dealing with. Butler is keen to point out that 'every effort to refer to materiality takes place through a signifying process which, in its phenomenality, is always already material' (1993: 68). Further she is aware that 'it must be possible to concede and affirm an array of 'materialities' that pertain to the body… biology, anatomy, physiology, hormonal and chemical composition' (Butler: 1993: 66). These cannot be denied but neither can we separate what these 'mean' or 'matter' to society. Butler sees that 'each of these categories have a history' (1993: 67) and therefore materialise. The aporia Butler is describing then is a material one, not a discursive one: for every time we signify we invoke materiality. This process of signifying matter is then performative[13] of the essence or ontology of matter; thus matter is constituted by the material process of signification (Butler: 2006 [1990]).

One weakness in Butler's (2006 [1990]) theory is the way she attempts to destabilise the essentialised ontology of gender and bodies by noting that they have a history without recognising how her own theory of matter materialises. Butler argues that 'the presumption here is that the 'being' of gender is an effect… that maps out the political parameters of its construction in the mode of ontology' (Butler: 2006 [1990]: 45). Thus

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[12] This refers to the distinction that Saussure makes between signifier (the material rose) and the signified (the linguistic word or letters 'Rose' and then also the mental associations of flower, love and romance). If this association between the signifier (the material) and signified (the linguistic) is arbitrary, which Saussure argued it is, how then can language ever refer to anything but itself? Language is lifted off of matter and becomes an internal system of difference without any access to the material world. For an excellent and extended discussion of these issues see Kirby (1997).

[13] Part of the difficulty with understanding performativity is, as Butler acknowledges, her 'theory sometimes waffles between understanding performativity as linguistic and casting it as theatrical' (2006 [1990]: xxvi; 1999 Preface). The confusion then is that for Butler 'the two are invariably related' (2006 [1990]: xxvi; 1999 Preface) and that her 'own views on what 'performativity' might mean have changed over time' (2006 [1990]: xv; 1999 Preface). For clarity here, 'performativity must not be understood as a singular deliberate 'act', but, rather, as the reiterative and citational practice by which discourse produces the effects that it names' (Butler: 1993: 2).

Butler's (2006 [1990]) attempt to criticise this stabilisation of a material ontology is done by revealing that bodies materialise within and through cultural inscriptions rather than ontologically pre-existing them. However one could ask to what extent this theory of materialisation presumes another ontology of matter, an ontology that is boundary-less or non-fixed but is capable of assuming the appearance of a boundary or a fixity. What impact will this materialisation of matter have on gender and bodies? In one sense this ontology reinforces distinctions between nature-culture, for this theory provides a space where it is only human-bodies that come to 'matter'; this is both a reappropriation and an exclusion of nature/matter/bodies, much like those that Butler is combating.

Latour and the Nature-Culture Divide

Latour (1993) has made an extended effort to explicate how this exclusion of the natural is, to use Butler's own phrase, a dematerialisation of other types of materialised bodies. Specifically his work has been an attempt to consider how through the modern constitution there have been a number of implicit assumptions that have led to an untenable separation of culture and nature. For Latour (1993) all objects, or things, are concurrently natural and cultural; he describes them as hybrids. Butler (1993) is not completely oblivious to this oversight, for she recognises in her discussion of Aristotle that there is a hierarchy of matter between men, women and animals, but there is also a resemblance between them. However, animals or even any discussion of other parts of the natural world are then forgotten in the rest of Butler's argument.

A similar criticism has been made by Barad (1998), who notes that in Butler there is no meaning for matter without humans and therefore no chance of a theory of materiality without the subject. Barad (1998) believes that this is an important neglect and one that she tries to rectify. Kirby also sees Butler's matter to be 'unspeakable and unthinkable' (1997: 108). In a similar vein Fraser notes that 'the human realm is the only one in which matter, for Butler, really matters' (2002: 614). Thus when Barad highlights that Butler's process of materialisation seems to displace the inert passivity of nature she argues that materialisation should be reconfigured so that it captures 'not only… how discourse comes to matter but how matter comes to matter' (1998: 108).

Latour takes an interesting route in trying to accomplish a comparable end. He argues that by changing and collapsing how we reconfigure nature and culture we then need to redistribute the status of agents 'to all the entities that make up… history' (1993: 81). Subsequently these entities become 'actors endowed with the capacity to translate what they transport, to redefine it, redeploy it, and also to betray it' (1993: 81). Here we see a return to Bhaskar (1975) and his notion of agents discussed briefly earlier.

For as Bhaskar notes a 'hydrogen atom is… an agent' (1975: 109). Within this model Latour often refers to actants instead of agents or actors, yet the intent is somewhat the same.

Elder-Vass (2008) has warned social theorists of taking this insight too far, although he recognises that it is valuable. He notes that some translations (from example from French to English), although they may be incorrect, of Callon and Latour (two principle exponents of ANT) have attributed emotions or actions to non-human actants that seem untenable positions to maintain, such as betrayal, representation or negotiation. Yet, it would seem that for actor-network theorists these are supposed to be metaphors that jar readers out of thinking in these dualistic ways. For ANT argues that there are differences between nature and society but not the ones that are commonly accepted (see Latour: 1993). In fact, in some ways, it is exactly this type of speaking for non-human entities that Latour (1993) criticises in his discussion of the modern constitution.

In a similar vein Whitehead has criticised this bifurcation of nature (see Halewood: 2008) which has resulted in 'nature' being characterised as a 'life-less realm, devoid of feeling and value' (Halewood: 2005: 59). Thus like Jonas (1996) earlier, Whitehead argues that 'we cannot tell with what molecules the body ends and the external world begins' (in Halewood: 2005: 76). Materiality is a process of exchange; humans are as much hybrids, or actants, as are engines (see Latour: 1993), if not with slightly different capabilities or powers (see Benton: 1991).

In following this line of argument ANT can be seen as espousing the view that 'entities take their form and acquire their attributes as a result of their relations with other entities' (Law: 1999: 3). Consequently, we can see through this paradigm materialisations and dematerialisations, but we can also see non-human entities in relational networks as well. Thus, it is not that ANT argues that there are no divisions, but that 'such divisions or distinctions are understood as *effects or outcomes*' (1999: 3; *emphasis in original*); hence the importance of Fraser and Barad's aforementioned critiques of Butler.

Benton too has opposed the maintenance of dualistic notions of social theory, such as: 'biology/society, nature/culture' (Benton: 1991: 7). His critique also highlights the power of such arguments. Benton notes that the animal world is one example where the possibility of matter coming to mean for itself is located. For '(some) animals are conscious beings, suffer pain and fear, and can be regarded as 'subjects of a biography'' (1991: 8). In addition, these ideas have the ability to work with and against biologically-based accounts of the body (such as gender), which have often been categorised as subject to a different discipline and therefore a different set of theoretical and

methodological tools.   This view, however, has created a 'biological blindness' (Benton: 1991: 2) in some sociological accounts of gender.   The result has been to fail to account for how such biological accounts legitimate 'naturalised' ideologies of social domination (see Benton: 1991).   For Benton such dualisms 'obstruct the sociological investigation of the *relations* between these abstractly counter-posed domains' (1991: 7; *emphasis in original*).

Similarly, Law notes that ANT can be regard as a 'semiotics of materiality' (1999: 4), where the relational nature of entities is applied to all materials. Thus ANT is conceptualised as a means of overcoming such obstructions, as noted by Benton.   Law argues that another important feature of ANT is the notion of performativity (see 1999); it is unclear whether he draws this specifically from Butler but what is clear is that there are some similarities between how they are conceptualised.   Thus Law writes that entities are constituted by, in and through the relations of performance, which is similar to Butler's use of the linguistic performative she borrows from Austin (see Butler: 1993).   Further, Law also highlights the relative durability of performativity, much like Butler.   Thus in ANT it is 'performativity which (sometimes) makes durability and fixity' (1999: 4).

These ideas may sound conceptually attractive, but can Latour so easily reconfigure and define the entire social world by creating a catch-all concept of actants and then linking them with, what could be regarded as, a loose or even arbitrary relationship system called networks? Rix (1991) argues that to do so is to leave these reconstructions without any content: they become vacuous because all entities are the same. It is as if by tracing these networks Latour places everything into an epistemological blender making all entities the same type and size (see Rix: 1991).   Yet for Rix, this blender is only possible because of the way Latour gathers his research; his analysis, although attempting to trace networks, is too narrowly defined within a specific locale to observe the networks that extend beyond these restricted spaces.

However for Latour (1993) not all actants have the same capabilities or potentialities and thus these differences serve as suggestions for how the 'social' could still have content. Furthermore, it is the connections, networks and associations of these actants that further complicate the content of the 'social'. Thus Rix's argument is like saying that if everything is reducible to atoms (i.e. the same) then there can be no content. This is patently an error; for each atom may have a different structure to the next (just as actants differ from each other) while the connections between them also organises a variety of substances and contexts.   Thus within Rix's monist-soup there are still entities that are capable of different relations, inscriptions and traces. Thus 'there is no genuine distinction between the material and the social… all existence is a complex combination of the two' (Halewood: 2005: 75) and

therefore Latour's account does not seem to leave us with no content, but leaves it saturated.

This brief discussion of ANT through Latour and Law demonstrates some of the links between Butler, Latour and Bhaskar and shows how the criticisms and strengths of each may in some ways be preliminarily reappropriated in a theory of relations between material actants. Thus in providing 'actant' status to both humans and non-humans Latour attempts to understand both; for 'so long as humanism is constructed through contrast with the object… neither the human nor the non-human can be understood' (1993: 136). Thus without a social theory that can understand materiality, and specifically the materiality of the body, social theorists will not be able to understand the relations of the actants that assemble the 'social'.

Consequently the materiality of the body can be accounted for if theorists are successful in breaking down the nature-culture divide and then redistributing actant/agent status to both human and non-human entities while tracing the relational networks such actants/agents are involved within. This formulation will allow researchers to observe the process of (de)materialisation while also allowing a theory of matter that comes to mean without the subject and which can therefore reflexively engage with its own materialisation   of   matter.

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Tanya

Sophia Davies

Your hips sag over each side of that tiny broken chair. Your eyes look inwards, to your sorrow. At least it is yours. The damp house is not yours, nor the chair. It all belongs to them (you point to the sky and your eyes roll high). You rest an old shoebox on your knee and quietly take out and show me each certificate they have given you: once a year for working hard; once every five years for dedication to the job; once every ten years for devotion to the goals of the revolution; and then you always win 'hardest worker' too. You have never missed a day. Not in 27 years! Except when you gave birth. Your youngest son enters and you are silent once again. You murmur something to him as he takes the tin pan outside to fill with water for his evening wash. I do not understand what you say. We laugh about this; my lack of understanding, your quiet voice. He tells me that Cubans are lazy talkers, but most of the time you just seem too tired. You sigh after each murmur, and then you clear the space between your nose and your throat with the panicked sound of a lost goose circling an empty pond. Your body is robust and when you throw your head back and laugh you seem like a young girl and you are so beautiful. Your beauty dissipates quickly with your laughter; we are all desperate to make you laugh.

Your firstborn stumbles in noisily and you click your teeth. He is drunk and looking for a dollar to buy more rum. His drinking makes him aggressive, yet more affectionate than the others. He is somehow very exposed, and his tenderness permeates us all. We feel we are all in it together when he is around. He has a sad smile and twisted brow, shrugging his shoulders at his own hard luck and tripping over his feet. He makes you shake with laughter, and me. A real clown. Do you remember that time when he said that my teacher from England could stay with him in the little room next to the bathroom? No need for a hotel! He had been sleeping there since that argument with his wife. The guttering had broken and all the shit from the next twenty households was festering right underneath the toilet. The men had tried to fix it with a piece of piping and an old brush. The smell just kept getting worse. It was really quite funny when he said that. Afterwards he drank and drank and then collapsed sleeping in the doorstep like an old fool. You just frowned down at him with your screwed up nose so very close to his, a concerned mother inspecting her child, trying to work out what went wrong.

The rice is ready. You put your certificates back, on top of your fifteenth birthday photographs and one of a man I don't recognise sitting in a deck chair. You get up slowly and drag your feet across the floor to switch off the

pressure cooker and plug in the electric fan instead. It is getting dark but the heat of the day's sun is still hanging upon us. The fan rotates unwillingly, jerking slightly every now and again before settling back to its routine. You load each plate with rice and beans, and sing a name softly to designate plate to person as you swing around and place it on the table. As we shovel food from plates to mouths you fall asleep in that tiny broken chair with your head hung forward, cradling your life in that shoebox on your lap.

A Psychological Analysis of the Vampire Myth

Steven Kimberley

ABSTRACT:
The myth of the vampire is both ancient and modern: elements have changed over time but the essence of the myth has stayed the same; this is true across different cultures and civilizations. The paper argues that the hardiness of the myth can be partly explained by its significance to the human mind, the depth of which can revealed through application of the psychoanalytical theories of Jung and Freud. These theoretical perspectives shed new light on the myth and demonstrate its versatility as a vehicle for the expression of our most primitive fears and fixations.

One of the most famous and widely known myths throughout the world – particularly across western civilisation, where it has remained ripe throughout literature along with numerous other forms of media, maintaining a constant presence in popular culture – is that of the vampire.

Whilst the vampire myth presented in society today appears modern, it is in fact a cultural reconstruction of a vampiric demon, present in myth and literature in countless forms throughout many human societies, making it one of the oldest examples of myth in the world. In fact, the oldest recorded example of the vampire myth comes from a Babylonian prayer, thousands of years old: "Spirits that minish the land, of great strength… knowing no mercy, they can rage against mankind. They spill blood like rain, devouring flesh and sucking their veins. They are the demons of full violence, ceaselessly devouring blood" (Thompson, 1903: 124). Examples are also present in ancient Greek and Chinese literature.

Although the essence of the vampire myth has remained constant throughout human society, countless variations of the myth have been spawned across the span of its existence. For example, what originated as a vampiric demon of unknown origin in the ancient world has gradually adapted into its most recent form of the contagious and evil un-dead creature of popular culture and fiction.

The transformation of this myth, in some instances, is purely a result of two separate societies independently developing their own form of the myth; alternatively, it could also be a result of the psychological process of reconstructive memory. The psychologist, Frederic Barlett, claimed that as a result of schemas (a psychological element of memory in which your own social expectations create a bias upon recollection), stories and myths can be gradually altered over time. The result of reconstructive memory is that

factors may be 'edited' in order to better suit the social expectations and values of the society in which the myth is being told. This may explain variations in the vampire myth, such as the ancient Chinese belief that "a dead body may become a vampire if anything bestial like a cat or dog jumps over it" (Mascetti, 1991: 78), which has been slowly transformed into the contagious bite of the modern myth.

These variations of the vampire myth can also be simple misinterpretations of previous forms of the myth. For example in literature such as Bram Stoker's 'Dracula', or Anne Rice's 'Interview with the Vampire', a wooden stake driven through the heart of a vampire is sufficient to kill them. This concept of the wooden stake originated in Scotland where "bodies suspected of being vampires were staked to the earth during their burial" (Wickwar, 1925: 146) in order to prevent them from returning to life and emerging from their grave as a vampire.

So upon consideration of these different forms of the vampire myth, its constant presence throughout the civilizations of history suggests that there is something about the myth that carries great importance and significance to the minds of humans, binding the myth to our history. One explanation for the fascination with the vampire myth can be provided by the work of psychoanalyst Carl Jung.

To Jung, the human psyche shares "collective universal images and motifs which come from the collective unconscious" (Stevens, 1990: 22). These characterisations or 'archetypes' usually originate from an emotion or event that is central to the psychology of all humans. This is how Jung explained the presence of the same myths throughout history, and in the instance of the vampire myth, can provide a highly credible explanation.

In Jungian terms, the vampire itself is one of the main archetypes of the human psyche and is sometimes referred to as one of the images associated with the archetypal character, 'the Shadow', one of the most negative of all archetypes. So the image of the vampire is embedded into the collective unconscious of all human minds as a result of its emotional and psychological significance to human beings, thereby explaining its continuous presence in myth and literature, regardless of cultural variations.

This can be explained by the theory that all conscious beings (not just humans) are born with, or at least quickly develop, a natural instinct to fear and avoid theft from other beings. This autonomous recognition and fear of theft, is one of the most basic animal instincts of the id. The vampire represents the epitome of this natural fear of theft in the psychology of humans. Therefore it could be claimed that the formation of the character of the vampire comes from the idea of vampirism being the darkest and most extreme form of theft, naturally feared by all humans. Jung saw "blood

standing for life: the archetypal symbol for the soul" (Anon., 1999). Through the vampire's parasitic stealing of one's very life-force and soul in order to sustain itself, we can clearly see how the image of the vampire has become a natural psychological characterization of one of humanity's deepest and most primitive fears.

This 'archetypal' explanation of the vampire myth also withstands the cultural variations of the vampire myth. While there are countless variations of the myth in terms of the vampire's origins, powers and weaknesses – the result of the society in which the variations are created – they all share the common factors which form the psychological archetype: the un-human creature that feeds on the life-force of humans.

Another psychological perspective that can be adopted to analyse the vampire myth is the psychodynamic approach of Sigmund Freud. Freud's attitudes towards the vampire myth would likely be typical of his 'dream analyses', whereby any kind of dream imagery implies some form of unconscious sexual wish fulfilment. For instance, Freudian psychoanalysis claims that "morbid dread always signifies repressed sexual wishes… the vampire is a kind of phantom projection produced by the medium's desire to be possessed, controlled and vampirised"(Rickels, 1999: 19).

In terms of id-conflict, the vampire itself represents the unconscious human mind. The id is said to "dominate the unconscious part of the personality with a primitive disregard for social rules in pursuit of self gratification… driven by the pleasure principle" (Flanagan, 2004: 887). The vampire's violent bloodlust and lack of social emotions such as conscience may depict the unconscious sexual and primitive desires of the id. The vampire's representation of the id's dominance over the ego and superego, which act to "suppress and regulate the demands of the id in terms of social demands" (Flanagan, 2004: 886), can be seen in the way that the vampire characters in the myths are always described as inhuman, emphasising the loss of humanity through this regression to an animal-like state of mind. This idea of the animalistic personality is further emphasised through numerous modern variations of the vampire myth in which the vampire possesses the ability to shift physical form into that of an animal, as is the case with Bram Stoker's Dracula, who can both "transform himself into wolf… [and] be as a bat" (Stoker, 1897).

This dominance of the id can be further explored as a regression to the mental state of a child's psychosexual development. The vampire's popular depiction of prolonged incisors making pointed fangs could be small pointed phallic symbols used to indicate and amplify the 'oral aggression' of vampires. Oral aggression is the result of under indulgence during the oral stage of a child's psychosexual development, most commonly in terms of

breastfeeding and other forms of sustenance. This can be seen in all cases of the vampire myth through their thirst and "aggressive obsession for pleasure and gratification and need to sustain themselves" (Flanagan, 2004: 887) through the Oedipal sucking of blood from the body of their victims. This personality trait of the orally aggressive character in which the id claims dominance over the ego and superego is a striking feature in the character of vampires.

The deeply sexual nature of the oral aggression of vampires can be further understood if we were to imagine the removal of the teeth of a vampire. The teeth are used as an obviously sexual image of penetrating others in order to fulfil the id's demands for pleasure; their removal acts as a kind of castration of vampires, rendering them impotent in their need for oral gratification just as castration renders males impotent in terms of sexual gratification. This follows Freud's theory of 'castration anxiety', further justifying the idea of the vampire myth representing the unconscious sexual desires within humans as a result of personality ego-conflict.

Another feature that is characteristic of modern variations of the vampire myth is that of the vampire's representation as a highly sexual being. The portrayal of the vampire in modern adaptations such as Anne Rice's 'Interview With The Vampire' still features the dated appearance of the Gothic-Romantic era through elements such as language and costume in order to highlight the profound sexual characteristics that the vampire has come to represent.

More obviously, the character of the Count from Bram Stoker's 'Dracula', has an undeniable fascination with young women. This can be seen in the three beautiful vampire brides over whom he has complete control. This is shown through the way he commands them whilst rescuing Jonathan from their mercy: "How dare you touch him when I have forbidden it… he belongs to me" (Stoker, 1897). Another example of this fascination is Dracula's desire to bite virtuous young women before they are married. During the novel, Dracula inflicts his bite – which has already been identified as being a highly sexual image – upon both Mina and Lucy while they are engaged to be married: a crude psychosexual image of virginity-taking. This highly sexual behaviour seen in the Count has become a stereotypical image of the male vampire attacking pure young women and, in doing so, removing their purity. After her encounter with Count Dracula, "Lucy changes from a silly, giggly girl to a powerfully erotic woman" (Anon., 1992).

This highly aggressive and sexual fascination that has become associated with the vampire myth could also be representative of "sexual obsession and deviances" (Flanagan, 2004: 886) which is the result of phallic aggression

developed during the genital stage of human psychosexual development. This possibility provides further support for the Freudian psychodynamic idea that the vampire myth is a psychological representation of the unconscious desires within the human mind.

The common depiction of vampires being unable to venture out into the light of the sun may represent the id's rejection or inability to function within society or in regulation with the ego and superego in cases of vampirism. The daylight in this image represents society, which sleeps during the night when the vampires are awake and vice-versa. Dracula's obsession with earth, which he fills his coffin with and ships to England along with himself, is equally revealing. This can be viewed as an Oedipal obsession with the natural earth, in this instance representing the character of the mother. So through retreating to his coffin along with the earth that it contains, we are presented with an image of "an Oedipal regression back to the womb" (Rickels, 1999: 23) and a further rejection of society and life.

The killing of vampires is another aspect of the vampire myth which has strong Freudian imagery. The use of knives, as used to kill Dracula – "Jonathan's great knife… plunged into the heart" (Stoker, 1897) – or the more popular stake, are obvious phallic symbols. These pointed phallic symbols are, in Freudian terms, images of power which are used in the sexually aggressive image of penetrating the vampire in order to overpower and ultimately defeat. The superiority with which vampires are presented to us through the myth – for example their eternal life and the fact that humans are ultimately their sustenance and therefore inferiors – makes the slaying of vampires by humans recall the strong Oedipal image of the inferior son killing the father.

Similarly, the mythical depiction of defensive effects of religious icons, such as crucifixes and holy water, can be viewed as psychologically significant. In terms of psychodynamic analysis, the religious devices used to suppress the vampire (a representation of the sexual and aggressive nature of the id), could be a psychological representation of how religion is used in life in order to help suppress the sexual and aggressive demands of one's own id. The religious guidelines, if followed, would be forced upon the id by the ego and superego, repressing these aggressive and sexual unconscious desires.

An element of the vampire myth which appears in Bran Stoker's 'Dracula' is that "he may not enter anywhere at the first, unless there be some one of the household who bid him to come" (Stoker, 1897). So, whilst at home, one is perfectly safe from vampires, unless tricked into inviting them in. From a Freudian perspective this supports the idea of the vampire myth being a form of wish fulfilment and that the emotions of vampirism lie dormant in our unconscious. Through this factor of the myth, one is technically free from

vampirism unless one chooses otherwise, strongly supporting the psychodynamic approach to the vampire myth.

One modern literary adaptation of the vampire myth, 'Twilight' by Stephanie Mayer, uses social and religious imagery within the story. The story entails a vampire resisting against the natural demands of the id, for the love of a human. This adaptation of the vampire myth, whilst being a metaphor for chastity, focuses on the power of the ego over the id during personality conflict, which is ultimately ignored by most variations of the vampire myth which only focus upon what lies dormant in the unconscious desires of the id.

Another modern adaptation of the vampire myth that explores Jung's archetypal ideologies surrounding the vampire myth is Richard Matheson's novel 'I Am Legend'. The author presents the primitive fear of vampirism in its most extreme form in which the protagonist Robert Neville has had his entire world stolen from him as a result of vampirism, leaving him the only remaining human. This represents the fear felt by an 'anal retentive' personality which can be seen in Robert Neville as he attempts to regain control over the world that has been stolen from him. Another psychological factor of this book is how Neville discovers that, throughout the vampire world, he has become the object of fear, suggesting that the unconscious sexual and aggressive instincts that the vampires represent may only seem unacceptable as a result of society that regulates the ego and superego. In a society where the id is dominant, it is the ego and superego that may be viewed as evil. This suggests that psychology can only dictate as much as the society, which it is within, will allow.

While the vampire myth has always been the subject of fear – a characterisation of a primal fear of emotions within the human unconscious – it may have also served another purpose. Psychologically, although fearing this mythical being, humans have possibly embraced the myth through its potential to provide answers to some of life's more problematic questions. This can be seen through the overtly Christian elements surrounding many modern variations of the vampire myth, such as the aforementioned Christian icons that can be used as a defence against the vampires. Freud saw religion as "not based on truth, but rather infantile wishes" (Lear, 2005: 204), suggesting that one of the reasons behind the human fascination with vampires may be a confirmation of faith in religious beliefs which the myth is able to provide, such as life after death.

In summary, the ancient myth of the vampire, which has resonated throughout human civilisation for thousands of years, has undeniable significance in the psychology of humans. Whilst both Jungian interpretation and the Fruedian interpretation of the vampuire myth are

entirely credible alone, when presented together they provide far greater insight into the vampire myth. Throughout the span of its existence, the vampire myth has survived in different manifestations because of its powerful psychological significance to the human mind. Its numerous purposes and countless variations means that the vampire myth remains immensely popular in modern culture. Could it be, then, that the vampire myth is one of our most important in revealing the nature and processes of the human mind?

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Is Racetrack Performance Related to Yearling Sale Price?

Abbey Andersen

ABSTRACT:

This study aimed to investigate the relationship between Thoroughbred yearling sale price and race performance at the age of three. Sales details of all yearlings sold at Tattersalls October Yearling sales (Newmarket, UK) and Goffs Yearling sales (County Kildare, Ireland) in 2004 and 2005 were collected. End-of-year Timeform ratings were used to measure racetrack performance at the age of three. Yearlings that did not meet the study's criteria were excluded from the statistical analysis, reducing the sample size from 5,749 to 1,735. Comparisons between Tattersalls and Goffs were made for sale prices and end-of-year Timeform ratings. Tattersalls had a greater average sale price (56,787.51 gns) than Goffs (52,680.49 gns). Average end-of-year Timeform ratings were extremely similar for those yearlings sold from Tattersalls (78) and Goffs (77). A very highly significant correlation between LOG yearling sale price and end-of-year Timeform rating at the age of three ($r = 0.363$, $n = 1,735$, $p<0.001$) was established. Yearling sale price accounted for 13.3% of the variation in end-of-year Timeform ratings at the age of three ($p<0.01$). A regression equation was formulated, allowing end-of-year Timeform rating at the age of three to be predicted from yearling sale price. The relationship between Thoroughbred yearling sale price and end-of-year Timeform rating at the age of three has been established, as well as identifying other external factors contributing to Timeform rating. An expensive yearling will not guarantee a successful racehorse; however, it increases the likelihood.

1. Introduction

The Thoroughbred industry is one of the largest and most profitable sectors of the equine industry (Cassidy, 2002). The growth of the Thoroughbred racing industry can be seen by the increase in racehorse ownership; in 2007 there were 15,294 racehorses owned, a 3.4% increase from the 14,795 racehorses owned in 2006 (British Horseracing Board, 2006, 2007). Prospective buyers spend thousands and sometimes millions of pounds at one of the many Thoroughbred auctions with the hope that their purchase will prove successful (Weatherbys, 2004). Two of the leading yearling[14] sales venues are Tattersalls, Newmarket, UK and Goffs, County Kildare, Ireland. Tattersalls is the oldest firm of Thoroughbred auctioneers in the world, as well as the largest in Europe and it accounts for approximately 70% of

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[14] All Thoroughbreds are given an official birthday of January 1st to keep the age groups easily defined for race conditions. A Thoroughbred racehorse is defined as a yearling when they are in their second calendar year, beginning January 1st of the year following their birth.

yearlings sold within the British market (Pacemaker, 2003; Parsons and Smith, 2008). Goffs is currently Ireland's leading Bloodstock Sales Company (Goffs, 2008a).

All horses are sold through a standard auction process. Bidding normally occurs between a number of bloodstock agents, who are employed by owners to act on their behalf at the auction. Sale price is dependent upon many factors, including pedigree, conformation and behaviour in the sale ring; therefore predicting the sale price can be extremely difficult (Cassidy, 2005; Parsons and Smith, 2008). Yearlings are purchased for a wide range of prices from a minimum bid ranging from 800 guineas (gns) – 5,000 gns (Tattersalls October yearling sales) or €2,000 - €5,000 (Goffs yearling sales) to exceptionally high prices such as *Diaghilev*, the *Sadler's Wells* colt, purchased for an incredible 3,400,000 gns from Tattersalls in 2000; the highest selling Thoroughbred yearling in Europe to date (Weatherbys, 2005).

Once yearlings have been purchased the owner will make the choice of which trainer to send them to. The majority of horses enter training at the age of two, even though only approximately half of them race during the two-year-old season (Bailey *et al.*, 1999). However, for a number of reasons, including injury, death and poor performance, a large proportion of horses never make it to the racetrack.

Wilsher *et al.* (2006) established that 45% of the 1999 foal crop never entered training, compared to the 38% found by Jeffcott *et al.* (1982). Others do not begin their race career until they are older. The true worth of the horse is determined on the racetrack where its performance is measured in a number of ways, including prize money, black type and race times (Cassidy, 2002); however, Timeform Rating[15] is perceived as the definitive measure of racing merit (Timeform, 2008).

The majority of owners hope to win a race with their racehorse and earn prize money to cover their expenses for the upkeep and training of their horse; however, this is not always the case. More (1998) studied 1804 Thoroughbreds during their first year of racing, and found that 1567 (86.9%) of them earned insufficient funds to cover their training costs; 701 (38.9%) of these were three year olds.

The aim of this study was to investigate whether price paid for Thoroughbred yearlings is related to their performance on the racetrack as three year olds. The study was based upon the hypothesis that there is a

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[15] Timeform ratings are assigned to racehorses to express their level of performance; they consider the horse's weight, sex, age and the race's distance, going and level of competition, therefore racehorses of all standards can be compared (Yiannikouris, 1998). Timeform ratings express in terms of pounds the level of form a horse has shown; on the flat the ratings range from below 30 for bad performers to over 130 for the top performers (Timeform, 2009).

significant correlation between the sale prices of Thoroughbred yearlings sold at Tattersalls and Goffs and their performance on the racetrack as three year olds, measured via end-of-year Timeform ratings.

2. Materials and methods

The initial population sample consisted of 5,749 yearlings. This was made up of all sales returns from:

- Tattersalls October Yearling Sale Part 1 (2004 and 2005)
- Tattersalls October Yearling Sale Part 2 (2004 and 2005)
- Tattersalls October Yearling Sale Part 3 (2005)
- Goffs Orby Sale (2004)
- Goffs Millions Sale (2005)
- Goffs Sportsman's Sale (2005)

Data collected for each individual yearling was discriminated by lot number, sex, sire, dam, vendor, purchaser, and price. Sale prices from Goffs were converted from Euros to gns using the standard exchange rates used by Weatherbys in 2004 (€1.42 : 1 gns) and 2005 (€1.41 : 1 gns), to allow accurate comparisons to be made between sales (Weatherbys, 2004; Weatherbys, 2005).

The Racing Post website was used to examine all yearlings that were sold, to identify if they went on to race in Britain on the Flat turf as a three year old (Racing Post, 2008). Those that had were then searched for within the Timeform annual publications, *Racehorses of 2006* and *Racehorses of 2007* to obtain their end-of-year Timeform rating at the age of three (Timeform Racing, 2007, 2008).

Yearlings that were withdrawn, not sold, unnamed, did not race on the Flat turf in Britain as a three year old or did not receive an end-of-year Timeform rating at the age of three were excluded from the statistical analysis. The final sample population included 1,735 yearlings (1,329 from Tattersalls and 406 from Goffs).

The statistical package, SPSS version 15.0, was used to produce descriptive statistics of both yearling sale price and end-of-year Timeform ratings at the age of three (SPSS Inc., 2001). Pearson's Skewness values were produced to examine the distribution of the data; the sales data was not normally distributed, therefore a LOG transformation was performed (Zar, 1999). Pearson's Product Moment Correlation Coefficient (r) was used to assess the association between LOG yearling sale price and end-of-year Timeform ratings. A linear regression analysis was performed within SPSS (using the enter method), where LOG yearling sale price was the independent variable and end-of-year Timeform rating the dependent variable.

3. Results

3.1. Study Sample size

The total population size for this study consisted of 5,749 yearlings that were sold at Tattersalls October Yearling Sales and Goffs Yearling Sales during 2004 and 2005. However, 69.8% of these yearlings were not used within the statistical analysis as they did not meet the study criteria, resulting in a final sample size of 1,735 yearlings (Table 1).

Table 1; Study population size

	Tattersalls Yearling Sales		Goffs Yearling Sales		Total number	Sample Size (as a percentage of the initial population)
	2004	2004	2004	2005		
Number of yearlings entered at auction	2093	1764	1018	874	5,749	100
Number of yearlings withdrawn	206	220	97	67	590	10.3
Number of yearlings recorded as not sold	152	78	115	33	378	6.6
Number of yearlings returned as unnamed	319	267	231	171	988	17.2
Number of horses that did not run on the Flat turf in Britain at the age of three	768	608	153	433	1962	34.1
Number of horses that died as two year olds	5	6	1	0	12	0.2
Number of horses that died as three year olds	17	21	0	0	38	0.7
Number of horses that did not run to a sufficient standard to receive a published three year old end-of-year Timeform rating	100	79	36	27	242	4.2
Number of horses that did run on the Flat turf in Britain as a three year old but were not published in the annual Timeform publication	181	138	172	212	703	12.2
Sample population included within price/performance analysis	690	639	204	202	1735	30.2

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Note: Yearlings may be part of more than one group e.g. unnamed and did not run on the Flat turf in Britain at the age of three.

3.2. Sale Price

Table 2 shows the variation in mean sale prices seen at both Tattersalls and Goffs Yearling sales during 2004 and 2005 for those yearlings that went on to race as three year olds and receive a published Timeform rating.

Table 2; Descriptive statistics and measures of dispersion: yearlings sold at Tattersalls and Goffs sales in 2004 and 2005

Sale name and year		Sample number	Mean sale price (gns)	Standard deviation (gns)	Standard error
Tattersalls Yearling Sales	2004	690	53,041.88	82,086.974	3124.998
	2005	639	60,832.08	81,076.107	3207.321
	Total	1329	56,787.51	81,664.676	2240.122
Goffs Yearling Sales	2004	204	40,307.24	42,562.805	2979.992
	2005	202	65,176.25	77,745.353	5470.144
	Total	406	52,680.49	63,740.185	3163.372

Both sales saw an increase in their mean sale price from 2004 to 2005 despite the sample numbers decreasing. The mean sale price increased by 7,790.20 gns and 24,869.01 gns for Tattersalls and Goffs respectively from 2004 to 2005. The mean sale price varied amongst individual sales; however, Tattersalls October Sale Part 1 had the largest mean sale price for both 2004 (95,006.31 gns) and 2005 (104,890.51 gns). Goffs Millions Sale 2005 had the highest mean sale price (77,725.24 gns) amongst the Goffs yearling sales in 2004 and 2005.

The sale prices of all 1,735 yearlings included in this study, sold from both Tattersalls and Goffs in 2004 and 2005, did not follow a normal distribution and produced a Pearson's Skewness value of 4.524. The yearling sale prices

were transformed using a log transformation and the log of the yearling sale prices had a Pearson's skewness value of -0.255, therefore following a normal distribution.

The Pearson's skewness values for the end-of-year Timeform ratings of yearlings sold at Tattersalls and Goffs were 0.364 and 0.361 respectively, thus following a normal distribution.

3.3. End-of-year Timeform ratings

Little variation was seen in the end-of-year Timeform ratings (age three) between those yearlings sold from Tattersalls in 2004 and 2005 and those sold from Goffs (Table 3).

Table 3; Descriptive statistics and measures of dispersion: Timeform ratings at the age of three years

Sale name and year		Mean Timeform Rating	Standard deviation	Standard error
Tattersalls Yearling Sales	2004	78	19	0.706
	2005	77	18	0.725
	Total	78	18	0.506
Goffs Yearling Sales	2004	76	19	1.317
	2005	78	18	1.252
	Total	77	18	0.909

The mean end-of-year Timeform ratings varied more with individual sales, with yearlings sold from Tattersalls October Sale Part 1 (2004 and 2005) achieving the highest average end-of-year Timeform rating at the age of three (82) compared to those sold from Tattersalls October Sale Part 3 (2005) who achieved the lowest average end-of-year Timeform rating at the age of three (67); emphasising the high quality of the yearlings sold at Tattersalls October Part 1.

No yearlings achieved an end-of-year Timeform rating higher than 133 (Figure 1). The two yearlings that achieved a rating of 133 at the age of three were purchased for very different amounts as yearlings; one for 400,000 gns, and the other for 1,150,000 gns. The latter purchased for 1,150,000 gns was not only the highest rated horse within this study, but also the second highest priced horse; the highest priced horse was purchased for 1,250,000 gns and only achieved an end-of-year Timeform rating of 93. One notable purchase (*Sir Percy*, 2006 Epsom Derby winner at the age of three) was sold for 16,000 gns and achieved an end-of-year Timeform rating of 129 at the age of three. Other notable purchases include a yearling purchased for 3,500 gns that achieved a rating of 117, a yearling purchased for 2,000 gns that achieved a rating of 104, and two yearlings purchased for 420,000 gns and 320,000 gns, that only achieved of 69 and 57, respectively.

3.4. Correlations

A very highly significant correlation between LOG yearling sale price and end-of-year Timeform rating was observed across the whole population (Figure 1), (r = 0.363, n = 1,735, p<0.001). Individual sales showed varying levels of correlation. The highest level of association at an individual sale was observed at Goffs Orby Sale 2004 (r=0.389, n=202, p<0.01). Two sales, Tattersalls October Sale Part 3 2005 and Goffs Sportsman's Sale 2005, returned no statistical significance in their sales price vs. Timeform rating
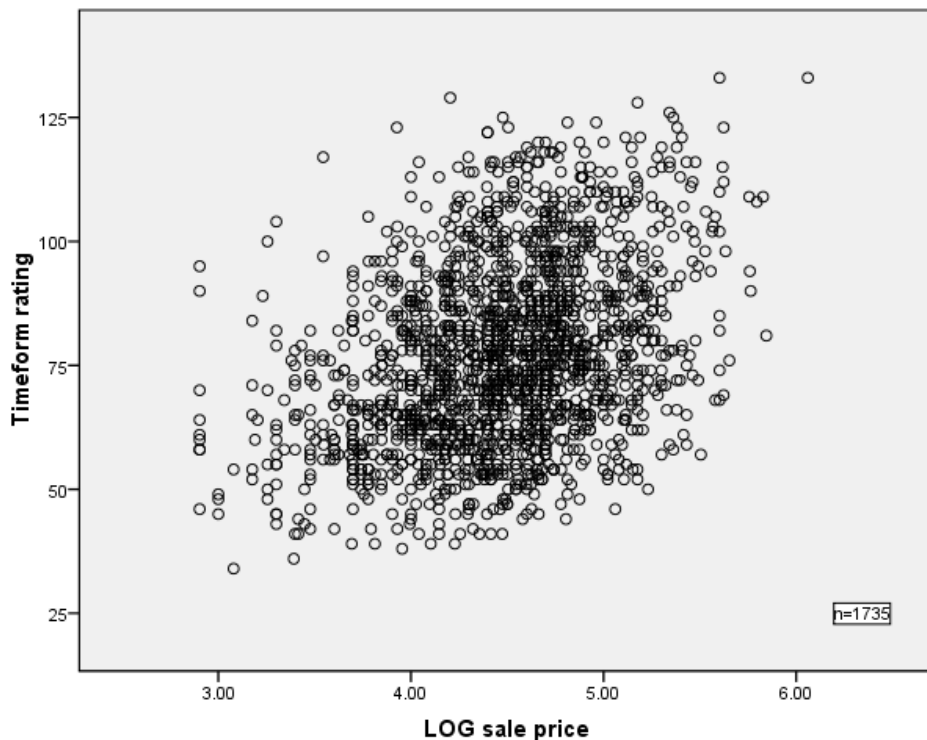
correlations.

Figure 1; The association between LOG yearling sale price (2004-2005 Tattersalls and Goffs sales) and end-of-year Timeform rating.

3.5. Regression analysis

Regression analysis was performed on the whole population (n=1,735), to establish a prediction of end-of-year Timeform rating via LOG yearling sale price. The analysis returned an r^2 = 0.133, (n = 1,735, p<0.01), unstandardized beta coefficient ( ) of 13.118, and a constant (y) of 18.775.

Using these variables with a standard regression equation (*a = y + x)* it was estimated that on average a yearling with a sale price of 10,000 gns (LOG = 4) would return an end-of-year Timeform rating of 71 at the age of three.

4. Summary

Seventy percent of yearlings purchased at Tattersalls October Yearling sales and Goffs Yearling sales in 2004 and 2005, did not go on to run on the Flat turf in Britain and obtain an end-of-year Timeform rating at the age of three. The reasons for this effective culling from the population are likely to be multifactorial. They may include death or injury. Sobczyńska (2007) studied 1759 polish Thoroughbreds that raced from 1998-2005 and found that an incredible 28% of those that first raced as two or three year olds did not continue to race for more than one year. A large number of the yearlings within the presented study were purchased by foreign buyers to train and race abroad, such as the *Sadler's Wells* colt purchased for 700,000 gns at Tattersalls October Part 1 2004 by Japanese agent Nobutaka Tada who went to Japan to be trained (Weatherbys, 2004). A higher percentage of the yearlings sold at Goffs in 2004 and 2005 did not run on the Flat turf in Britain and achieve an end-of-year Timeform rating at the age of three, compared to those sold from Tattersalls. John Ingles (an employee at Timeform), explains this may be because Goffs is a more popular sale for foreign buyers than Tattersalls; therefore more horses move abroad and thus are not included in the Timeform annual publications (personal communication, 10 November 2008). This reason provides part of the explanation why only fifty percent of the yearlings from Fuller's (2003) study did not run on the Flat turf in Britain at the age of three, compared to the seventy percent in this study. Fuller (2003) only studied Tattersalls, which is not as popular with foreign buyers as Goffs, therefore fewer horses will move abroad to be trained and race.

Additionally non-performance to an expected level is likely to account for a large proportion of the excluded yearlings within this study. Of the yearlings sold from Tattersalls and Goffs in 2004 and 2005 that went on to be named, 34% did not run on the Flat turf in Britain at the age of three years. The most common reason for this was that horses either did not run to a sufficient standard to achieve an end-of-year Timeform rating or if they did achieve one, it was not sufficient enough to be published in the annual

Timeform publication. John Ingles (an employee at Timeform) explained that a lot of horses sold at Goffs are trained and run in Ireland, therefore their details are not provided in the Timeform annual publications unless they are of an exceptional standard. This accounted for a large number of horses that were not suitable for this study's statistical analysis (personal communication, 10 November 2008). Not all yearlings sold went on to race on the Flat turf, a large number became hurdlers (n=105) or ran on all weather racetracks (n=109), therefore they were excluded from the statistical analysis. The gamble involved with purchasing a yearling for future racing is considerably high. This was demonstrated by the large number of horses purchased that failed to either achieve an end-of-year Timeform rating or were unable to be assessed with confidence.

As yearling sale price increases the performance on the racetrack does not increase proportionately, however a low-medium correlation (r=0.363, n=1,735, p<0.001) was found for the whole population between LOG yearling sale price and end-of-year Timeform rating at the age of three (Figure 1). This indicated some level of association. Fuller (2003) had similar findings (r=0.380, n=919, p<0.001) but from only one auction house (Tattersalls). Standard linear regression analysis shows that end-of-year Timeform rating at the age of three can to an extent be predicted from yearling sale price; yearling price accounts for 13.3% of the variation in end-of-year Timeform rating. There are likely to be many environmental factors that affect racehorse performance. Cunningham (1991) stated that racecourse performance is approximately 65% due to environmental factors. Environmental factors include amongst other things, handicap weight, track condition, year, season, class of race, post-position, distance, trainer, jockey and race effect (Thiruvenkadan *et al*, 2008). The yearling's environment after being sold at auction is likely to be a key factor in determining their its on the racetrack.

In order to take account of environmental factors affecting racetrack performance further investigative study is needed. The correlations established in this study are relatively low, therefore predictions of racetrack performance should be considered with caution.

5. Conclusions

There is a significant relationship between Thoroughbred yearling sale price and racetrack performance at the age of three when end-of-year Timeform ratings are used. However, the study has confirmed that the high prices paid for yearlings at auction are often not justified by their performance on the racetrack, with many performing worse when compared to less expensive yearlings. There are a number of factors affecting yearling sale price; principally conformation and pedigree are considered most important by buyers. There are a great number of yearlings sold at auction that do not

succeed in achieving an end-of-year Timeform rating at the age of three, either due to never racing or racing to an insufficient standard. The reasons for such failures are not clear; however, they are likely to depend on environmental factors such as the effect of the trainer and jockey, or the inability of buyers to value yearlings accurately.

The hypothesis for this study was accepted; yearling sale price does have a significant effect on end-of-year Timeform rating at the age of three. However, although the horses in this study showed a statistically significant correlation, the actual biological strength of this relationship is moderate to weak. Consequently, the use of any predictive modelling needs to be treated with considerable caution. Further work requires the inclusion of other factors that are likely to affect racetrack performance within the modelling process. This is likely to achieve a greater amount of accountable variation with the predictive model and therefore greater confidence in any prediction made.

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The Use of *Tú* and *Usted* in Mexican *Compadrazgo* Relationships: A case study

Ariel Vazquez

ABSTRACT:
This paper examines the use of second person singular address forms, *tú* (T) and *usted* (V) in Mexican Spanish, in the *compadrazgo* relationships of an elderly married couple. We report their usage of these forms of address in the *compadrazgo* relationships they hold with friends and relatives. In general, it is confirmed that variation in the use of T and V depends on the age of the speakers and their kinships. In particular, this study, based on observations, demonstrates that the pronominal address forms used among *compadres* are highly determined by the relationship that the addressee and the addresser had before they established the *compadrazgo* ties. It is suggested that symmetrical V-V could represent solidarity and closeness between speakers when this symmetry is used in a *compadrazgo* relationship; furthermore we provide evidence to support the hypothesis that exists in the literature, which predicts the shift to symmetrical T-T.
KEYWORDS:
T-V distinction, Mexican Spanish, *compadrazgo* relationship, Social Deixis, Speech Styles.

Speech styles, Social Deixis and T/V distinction

In his article *Models of Interaction of Language and Social Life*, Hymes (1972: 52) suggests that in order to "guarantee the maintenance and success of the current interest in sociolinguistics" there is the need for a theory of language use. He claims that this theory should provide specific technical concepts for the adequate analysis of individual communities; and he proposes some of the notions that such a descriptive theory may involve. He regards speech community as the principal social unit; he affirms that speech community is a local unit whose characteristics may be reflected in a person's primary interaction in a common locality. The other social units that he suggests depart from that principle. These units are speech situation, speech event and speech act. He points out the difference between them using the following example: 'a party (speech situation), a conversation during the party (speech event), a joke within the conversation (speech act)' (56). Having described these units he moves to explain speech styles, which is the social unit of his model with which this paper will deal. He argues that speech styles are selections that people make in their discourse according to their judgment and appropriateness. In regard to the sociolinguistic description, he states that, on the one hand, speech styles have elements of stylistic and referential function; and on the other, they have a syntagmatic and paradigmatic dimension, which means that there is variety of speech styles in the talk of people, and what people do is to choose among these options the adequate

one to use in a given context or situation. We could claim then, that the referential function of speech styles and the accommodation of people's choices may constitute what is known as social deixis.

Social deixis is the term used to refer to the way in which, during an interaction, the participants make explicit the social relationship that exists between one another by using certain words, expressions, gestures, etc. In other words, when two people address or refer to each other, they select from the repertoire offered by their language, the appropriate word, expression, gesture, etc. to make explicit their relationship; this means, they reveal their relationship with their choice. Some languages like Spanish, Italian, French and German among others have in their grammar specific pronouns which the speakers can chose in order to manifest certain relationships; according to Fernandez (2003: 3) this happens because pronouns work as *puntos de anclaje[16]* within a conversation; that is, during a conversation or another linguistic interaction, people resort to pronouns when referring or addressing others to distinguish and make explicit their social relationships (e.g. the Spanish pronouns, *tú, usted* or the German ones *Sie*, and *du*).[17] These distinctions that people exhibit are called pronominal. In languages like English[18], one does not have such pronominal distinction. Instead what one uses are certain nouns that help us reveal the identity of the people being referred to or addressed (e.g. Mr. or Mrs.); this distinction is described as nominal. We are not trying to imply that if one language has pronominal distinction it would then not have nominal; on the contrary, languages may have one or both and, as said before, other words, expressions, gestures, etc. may be used to reveal the social distinction in a relationship. For example, at work, one chooses to use expressions like 'Good morning' or 'Hi' depending on whom one is greeting, a colleague or one's boss (Brown and Ford, 1961: 38-9). In this paper we focus our analysis on the pronominal distinction.

Mühlhäusler and Herré (1990: 131-2) claim that there are two types of relationships which can be expressed with the pronominal distinction. They call them asymmetrical and symmetrical relationships, the former are 'compounded of respect and condescension, of contempt adulation and patronage', and the latter occur when 'the parties to an interaction agree on the formality, level of politeness or degree of intimacy that is proper'. Sociolinguistic research with respect to this matter focuses its attention on the variation of the pronominal distinction present in the linguistic interaction where the social relationships are displayed by the usage of particular pronouns. In other words, sociolinguistics investigates the social factors that enable the speakers to establish an asymmetric or symmetric relationship with one another.

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[16] Anchor points.

[17] In English these pronouns are translated as "you".

[18] In the past English used to have pronominal distinction.

With respect to the Indo-European languages, the study that is deemed to be the most classic research on this matter is the one carried out, almost fifty years ago, by Roger Brown and Albert Gilman (1960). Their work is based on two semantic dimensions, 'power' and 'solidarity'. They explain that in French, German and Italian the speakers may use two forms of address; on the one hand, speakers could use the asymmetric form T-V[19] to show a relationship of power; on the other, they may use the symmetrical T-T or V-V, the former used to distinguish a relationship of solidarity and the latter used by speakers belonging to the upper class. They propose that throughout the years people started to use symmetrical T-T in friendly and close relationships, whereas symmetrical V-V was used to denote formality and politeness. The phenomenon they describe is an overlapping in the semantics dimensions, that is, symmetrical T-T has extended towards relationships where there is no equality in terms of power, but rather in terms of solidarity; correspondingly, symmetrical V-V is used in relationships where the interlocutors do not have the same power or the same closeness with one another. They predicted that solidarity would overcome power; they assert that 'the change is increase in the number of relations define as solidarity enough to merit a mutual T [, principally in relationships of] camaraderie resulting from a common task or common fate …' (Brown and Gilman, 1960: 111). Their paper was the pioneer in the matter; however, their semantic framework cannot be thought to be universal since there are other languages that do not adhere to the pronominal distinction they propose; for example, as Martin (1964: 408-9; Wardhaugh, 2006: 280) shows, when Japanese speakers address someone, they have to take into account the axis of reference (out-groupness and social position) and the axis of address (age and gender) so as to choose the proper address form. Similarly, Mashiry (1999) illustrates how in Shona, an African language, there are different forms of address such as nicknames or prefixes; furthermore this author states that Brown and Gilman's study should be considered 'as a local theory of markedness for a narrow range of European languages' (109).

In this paper we see that also in languages which may fit in the category of 'Indo-European languages', in this case Mexican Spanish, a variety of Spanish, there are relationships that do not stick completely to Brown and Gilman's claims. We specifically focus our attention on the relationship of *compadrazgo* in Mexico, where we may find symmetrical V-V used to reflect a relationship of solidarity and closeness. The aim of this paper is twofold: (a) we intend to show that the pronominal T/V distinction in *compadrazgo*

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[19] The Latin pronouns *vos* and *tú*. According to Brown and Gilman (1960: 104-5) the T-V distinction started in the Roman Empire when there were two emperors, one in the eastern and the other in the west. Despite the fact that the empire was ruled by two persons it was unified. Therefore, people used to address the emperors with the plural *vos*. Also the authors argue that the "emperor is also plural in another sense; he is the summation of his people and can speak as their representative (p. 105).

relationships may partially follow Brown and Gilman's hypothesis and (b) we analyze and illustrate the variation that exits in the forms of address in the Mexican relationship of *compadrazgo*. The data used in this paper was taken from the observation of the usage of the pronominal address forms in the *compadrazgo* relationships of Antelmo and Carmelita, a Mexican couple.

The Compadrazgo T-V distinction
First of all, let us define this relationship: *compadrazgo* is believed to be one of the strongest and closest links that may exist among Latin Americans. It can be defined as a 'system of ritualized personal relations established between two sets of individuals: [on the one hand] the child (*ahijado*) and his godparents (*padrinos*) and [on the other] the parents and the godparents (*compadres*), with the latter ties taking precedence over those between child and godparents' (Kemper, 1982: 28). The origin of this connection is found in the various rites within the Catholic Church such as baptism, confirmation, first communion and marriage; however, more recently has also manifested in other non-religious settings like school graduations, civil marriages, fifteenth birthday celebrations[20], etc. Through *compadrazgo* the parents and the godparents strengthen ties of friendship and/or kinship; these ties may already exist or it may be the first step towards its creation. To become someone's *padrinos* entails a great responsibility[21] because they are actually meant to become mentors or substitute parents for the *ahijado*; they should accompany him/her at the ceremony and provide them with the items needed to accomplish that particular ritual.

In regard to the forms of address, the *padrino* and the *ahijado* address each other respectively with those words; and since it is an asymmetrical relationship, it requires the *padrino* to give T (*tú*) and the *ahijado* to give V (*usted*). We may describe this relationship as a power relationship where the subordinate, in this case the *ahijado*, is addressed with T but s/he addresses his/her superior with V. The parents and the godparents call each other *compadre* or *comadre*, depending on the gender. Although we said before that this relationship is meant to strengthen ties of friendship and closeness, which would normally require mutual T-T, in the 'ideal' *compadrazgo* relationship presented by Torrejón (1991: 1074), chart (1), all the dyads shown there use reciprocal V-V. It is worth mentioning that the *compadrazgo* relationship that he describes takes place in Chile

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[20] It is a popular tradition that, on their fifteenth birthday girls have a big party to celebrate their transition from childhood to youth.

[21] This responsibility is only granted to those who become *padrinos* because of a religious rite.

(1)
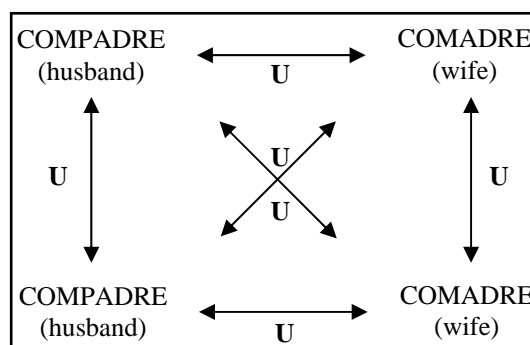
U = usted

The chart presents the *compadrazgo* relationship that would exist between two married couples; as we mentioned above all the address forms used in all the possible dyads, even in husband-wife relationship, were V-V (*usted*), which in terms of Brown and Gilman would require symmetrical T-T (*tú*). Torrejón not only claims that the husband-wife dyads in a *compadrazgo* relationship may use symmetrical V-V, but also suggests that in this relationship 'en el uso pronominal no se observan discrepancies que puedan correlacionarse con el estrato social, sexo o edad…'[22]; however, in the Mexican context of *compadrazgo* that we observed, we found variation depending on the age of the members of the relationship, and on the type of connections that exists between both couples. In general, young couples tend to use symmetrical T-T in all the dyads of chart (1) and they would only use symmetrical V-V within a joke or sarcastic context; in contrast, dyads composed by older people present symmetrical V-V in all the dyads of chart (1). In terms of Brown and Gilman this supports the overlapping of symmetrical T-T with V-V in younger generations. However, we also found variation in dyads of older people depending not only on the age of the dyads members but also on previous relationships they may have had. The couple we describe and analyze here are Antelmo and Carmelita, both in their early sixties; we focus on the *compadrazgo* relationships they hold with relatives and friends; and we consider as variables that may influence the pronominal distinction the age of the dyads' members and the previous relationships amongst them.

Compadrazgo among relatives
We have stated that, even though the *compadrazgo* is a relationship of friendship and closeness, people use symmetrical V-V to address each other; our data provides us with evidence to suggest that the pronominal address form that is used among *compadres* is highly determined by the relationship that existed between the addressee and addresser before they established the *compadrazgo* ties. Let us regard the following three examples.

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[22] 'There is no variation with regard to social class, sex or age in the pronominal usage'.

(2)
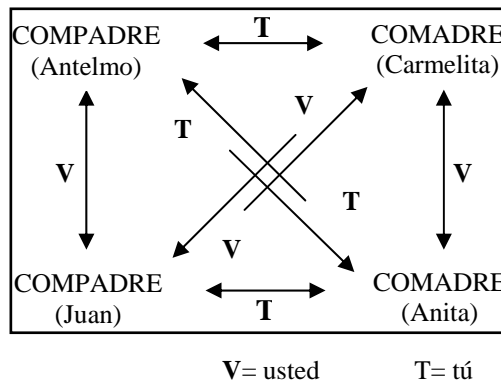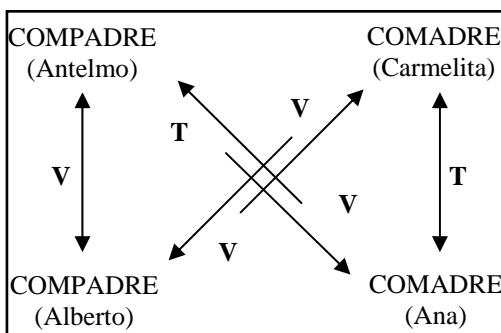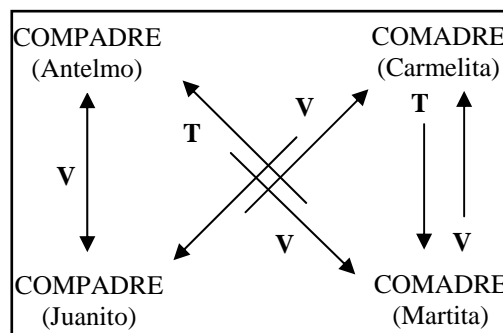

V= usted   T= tú

Chart (2), which is rather similar to chart (1), shows the *compadrazgo* relationship between the dyads formed by Antelmo and Carmelita and by Juan and Anita who are in their early seventies; Anita and Antelmo are siblings. As we notice symmetrical V-V is present in almost all the dyads except for the one formed by Antelmo and Anita. Therefore, we infer that they address each other with symmetrical T-T because their kinship clearly precedes the *compadrazgo* relationship. Another dissimilarity with chart (1) is the fact that husband-wife dyads use mutual T-T; this is explained knowing that in Mexico one may never find spouses who address each other neither with symmetrical V-V nor with asymmetrical T-V; none of the couples observed for this paper use this asymmetrical form. Finally, we may say that the remaining dyads in chart (2) all follow the 'ideal' pattern of address between *compadres*.

(3)

V= usted   T= tú

(4)

V= usted   T= tú

Chart (3) and (4) are other examples. In both of them we have Antelmo and Carmelita accompanied in chart (3) by Alberto and Ana, who are in their mid-fifties; and by Juanito and Martita, who are in their late-forties, in chart (4). Antelmo and Carmelita are Ana and Martita's uncle and aunt-in-law

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respectively; both women have a very good relationship with Carmelita, but the fact that Ana moved to live with them for five years soon after they got their first child, enabled her to become closer friends with Carmelita than Martita. This explains why Ana and Carmelita use symmetrical T-T whilst Carmelita and Martita use asymmetrical T-V. In other words, the latter dyad remains similar to the dyads formed by Antelmo and his nieces, in that it follows the asymmetrical T-V address form that an uncle-niece relationship requires, despite the friendship between Carmelita and Martita. Carmelita and Ana's dyad resembles the one formed by Antelmo and Anita in chart (2), in the sense that their solidarity symmetry T-T precedes their *compadrazgo* relationship. Furthermore, this dyad can be explained using Gilman and Ford's (1961: 145) paper which describes the 'temporal progression of address form' towards friendship in American English; in this case we could propose that since Carmelita is Ana's aunt, Carmelita and Ana's dyad started with them using asymmetrical address V-T, but as time passed, they became friends and they eventually switched to mutual T-T. Later on, when the *compadrazgo* relationship was established between them they chose not to shift to V-V or to V-T because it would have meant going backwards in the progression towards friendship or solidarity.

Compadrazgo among friends

The compadrazgo relationships in the previous charts have been mainly influenced by the kinship and friendship ties held before the *compadrazgo* started; therefore, we may expect symmetrical T-T to be used in *compadrazgo* among friends; however, in the charts below we see that *compadrazgo* among friends may in some cases present symmetrical V-V.
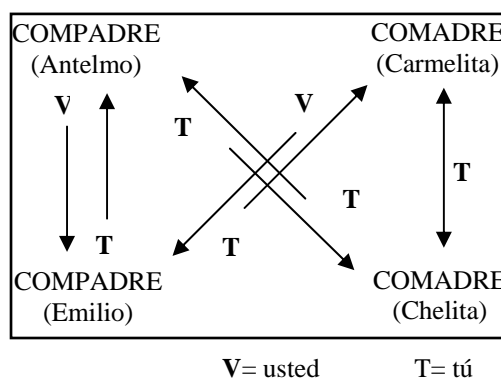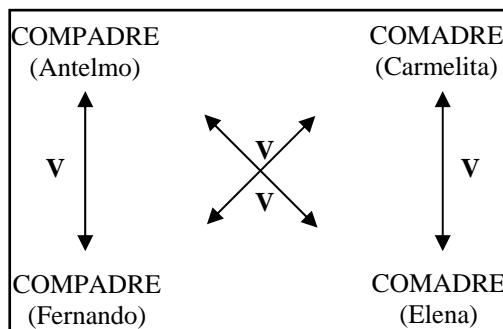
(5)

Chart (5) shows a very different usage of address forms. We notice that almost all the dyads are symmetrical T-T, except for those including Emilio. We can explain this by mentioning that Chelita, Antelmo and Carmelita worked for the same bank for around 35 years; they met when they were in their early twenties and now one could even consider their friendship as a
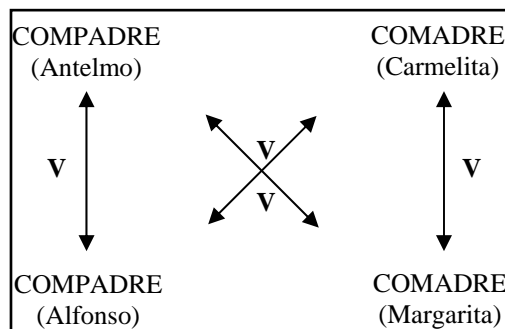
'best-friend relationship'. That is why they address each other with symmetrical T-T of solidarity and closeness, resembling the dyads Carmelita and Ana (chart 3). The situation with Emilio is different. He is 20 years older than them all and he has never become close friends with Antelmo and Carmelita even after the *compadrazgo* tie. So that is the reason why they keep the asymmetrical T-V of respect with Emilio.

(6)   **(7)**

COMPADRE (Antelmo)	COMADRE (Carmelita)	COMPADRE (Antelmo)	COMADRE (Carmelita)
V V\nV	V	V V\nV	V
COMPADRE (Fernando)	COMADRE (Elena)	COMPADRE (Alfonso)	COMADRE (Margarita)

V = usted   V = usted

Finally in chart (6) and (7) we have all the dyads as symmetrical V-V illustrating the 'ideal' address forms used in a *compadrazgo* relationship proposed by Torrejón (1991). Let us explain why this happens. First in chart (6) we have Fernando and Elena, who are as old as Antelmo and Carmelita. They met when they became neighbours and they started addressing one another using symmetrical V-V which, as suggested by Brown and Gilman, represents a relationship of formality and politeness. Through the years they established a cordial relationship, and then became *compadres*; however, we notice that although they established a relationship of solidarity, such as *compadrazgo,* they do not use symmetrical T-T. We can explain this by suggesting that for them the 'ideal' symmetrical V-V form of *compadrazgo* is the one that best reflects their relationship, because they never established a closer friendship before. Chart (6) presents quite similar characteristics. In this case although Carmelita and Margarita are very close friends (they go out to have breakfast every week) they do not use symmetrical T-T. This is because when they first met, they used symmetrical V-V, just like with Fernando and Elena. However, they did not frequent each other for many years, and only re-established their relationship when they became *comadres*, so they chose to keep using symmetrical V-V which for them does not represent asymmetry of formality and politeness, but rather a relationship of closeness and solidarity.

Conclusions

Having described and analyzed the charts above, we may come to the following conclusions:

1. We have found evidence in Antelmo and Carmelita's *compadrazgo* relationships among relatives and friends to propose that symmetrical V-V

represents a relationship of solidarity and closeness when this symmetry is used in a *compadrazgo* relationship. Furthermore, the symmetrical V-V of *compadrazgo* may vary depending on the age of the members of the dyad and the previous relationships (e.g. kinship, friendship) they may have been involved in after establishing the *compadrazgo* tie.

2. Symmetrical V-V seems to be present in all of Antelmo and Carmelita's *compadrazgo* relationship charts; and although not exemplified here, we have observed that *compadrazgo* relationships between young Mexican couples do not present this form of address; we then may suggest that symmetrical V-V can be considered as a characteristic of Mexican *compadrazgo* relationships used by the elderly.

3. Brown and Gilman's hypothesis was confirmed with regard to the fact that new generations have shifted to symmetrical T-T in a relationship that requires symmetrical V-V; however, we have shown that symmetrical V-V is used in relationships of solidarity and closeness.

Final remarks

In terms of Hymes, we have shown examples where the 'syntagmatic' and 'paradigmatic' dimensions of speech styles are present; in other words we have seen how people choose from the pronominal form of address the option that is thought to be the most appropriate to use; we have seen as well how the choices that people make of the T/V pronouns reflect the relationship they have with others as well as which are the social relationships that may determine a symmetrical or asymmetrical address form; or as Gilman and Ford explain 'the selection of certain linguistic forms is governed by the relation between the speaker and his addressee' (1961: 128).

Finally, we want to mention that in the research consulted, all with regard to the forms of address, we noticed that all of this research gives a description and interpretation of social deixis. However the authors differ in their instruments used to collect data, which are mainly of three kinds: questionnaires (e.g. Brown and Gilman 1960; Orozco, 2006); analysis of plays (e.g. Gilman and Ford, 1961; Jaramillo, 1996); and observations (Solé, 1978; Leeds-Hurwitz, 1980; Ringer, 1985; Ardila, 2003). All of them have proved to be adequate to achieve the aims of each study and to be sufficient to analyze variation in the forms of address. However, we believe that further research should consider ethnographic data as it could provide other elements that people in interaction use to show the relationship that exists between the participants; for example, the different actions in which the pronominal or nominal forms of address are involved within interaction and the different context they might create. These would enrich the analysis.

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Identifying Dyslexic Students: The need for computer-based dyslexia screening in higher education

Alexia Casale

ABSTRACT:

Dyslexic university students can only be provided with support if their disability is identified. However, diagnosis is expensive and time consuming. Quality screening tools, which are generally short and easy to administer, provide robust indications of whether or not a person is likely to be dyslexic. Administering free screening to all students would allow those at risk to be identified and diagnostic testing to be provided in a cost-effective, targeted manner. However, HE students differ significantly from the general adult population: dyslexic students are highly intelligent and most have developed advanced compensatory strategies that effectively mask their disability on screening tests developed for use in the general adult population. Moreover, for a screening test to be made freely available to all students, it must be delivered in a computer-based format. Existing instruments have insufficient discriminatory power for the HE population, or are unsuitable for delivery to all students, which is only possible (due to resource implications) with a computer-based test. There is a pressing need for a test specifically targeted at students, which can be used for widespread, cost-effective dyslexia screening

Current Context

UK Higher Education Statistics Agency figures reveal that around 5.5% of university students are disabled; dyslexia represents around 40% of this subset (i.e. 2.2% of all students are dyslexic). Compared with a 4% estimated incidence in the general population (DSM-IV)[23], dyslexics[24] appear to be under-represented in UK universities[25]. From September 2002, the Disability Discrimination Act requires that UK educational institutions make reasonable adjustments to allow students with disabilities to study without disadvantage compared to non-disabled students. These provisions are vital in allowing current dyslexic students to succeed, while encouraging other dyslexics to consider higher education (HE). In order for universities to

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[23] However, the British Dyslexia Association (2006) states that approximately 10% of the UK population is dyslexic, of which 4% are severely affected (The Dyslexia Handbook 2006). As discussed in the second section of this paper, different definitions of dyslexia give rise to different estimates of incidence in the general population and also in specific sub-groups, such as students.

[24] A recent discussion by a forum for professionals in dyslexia research and support, indicated that the use of the term 'dyslexic' to describe an individual with dyslexia was often preferred by dyslexics themselves. Therefore, the terms 'dyslexics' and 'dyslexic students' will be used interchangeably.

[25] Although the article refers primarily to statistics and procedures in the UK, the need for a computer-based screening tool targeted at university students exists in many other countries.

provide reasonable adjustments, students must be identified as having a disability. Of the UK students who are identified as dyslexic when they leave university, only an estimated 57% are identified on entry to university (Singleton et al., 1999); therefore, universities play a vital role in identifying dyslexia. However, there may be students with dyslexia who are not identified before or at university.

Formal dyslexia diagnosis by an educational psychologist costs around £300 (British Dyslexia Association, 2004) and is usually funded by the student; only the result of such an assessment is considered a definitive diagnosis of dyslexia or definitive decision that the individual is not dyslexic. Formal assessment takes around three hours, including a battery of cognitive tests, and an 'interview' to discuss the individual's educational and personal history to identify any everyday dyslexic difficulties, and to reveal any complicating factors (e.g. other disability or lack of educational opportunity). As full assessment is time-consuming, expensive and requires administration by highly-trained professionals, it is not possible to make it available to all students.

The purpose of dyslexia screening is to provide reliable results which indicate the probability that an individual is dyslexic; screening is employed to identify which students are most likely to benefit from a full assessment, allowing for effective allocation of resources. Screening can involve an interview, self-completion questionnaire, professionally administered tests, or any combination of these elements. As screening does not constitute a diagnosis, it requires only limited information and can be administered without expert knowledge; the shorter a screening test is, provided it gives reliable results, the more resource-effective it is. Singleton et al. (1999) recorded that 70% of UK universities offer dyslexia screening; it is likely that all universities will offer screening in the near future.

Operationalising Definitions and Theories of Dyslexia

One of the major challenges in developing tests to screen for dyslexia is the lack of a single, accepted definition of dyslexia (Beaton & Singleton, 1997). Different screening tests are based on different models, derived from different definitions of what constitutes dyslexia, and thus produce different diagnostic results, hence the variation in estimates of the incidence of dyslexia from 0.3 to 30% (Cornwall et al., 1984; see footnote 1).

The World Federation of Neurology (1968) defines dyslexia as: 'a disorder manifested by a difficulty in learning to read despite conventional instruction, adequate intelligence and socio-cultural opportunity. It is dependent on fundamental cognitive difficulties which are frequently of a constitutional character' (World Federation of Neurology [WFoN], 1968,

pp. 21-22). Genetic research (Gallagher et al., 2000; Petryshen et al., 2001) and neuro-imaging studies, demonstrating significant differences in the structure and usage of dyslexic's brains (Backes et al., 2002; Shaywitz et al., 2002; Simos, 2002), have led to widespread agreement over the second part of this definition. While most researchers concur that difficulties with written language (i.e. reading, writing and spelling) are the primary 'symptoms' of dyslexia, many different 'fundamental cognitive difficulties' have been suggested as underlying these problems.

Although dyslexics have difficulties learning to read, many eventually acquire adequate skills, while others are able to study at university, which presupposes advanced written language skills. This begs the question: if university students with dyslexia can compensate for written language difficulties, what other factors are useful for identifying their disability, or has it been 'cured'? If only 57% of dyslexic students were diagnosed when starting university (Singleton et al., 1999), then (despite strong written language skills) dyslexic students must still evidence difficulties in order to be identified and diagnosed at this point.

Phonological deficit theories are supported by a large body of research (Bradley & Bryant, 1978; Goswami, 2000; Snowling, 1987, 1997) and have been successful in explaining cross-linguistic variations in the incidence and characteristics of dyslexia (Goswami, 2002; Seymour et al., 2003). Most current remedial programmes focus heavily on developing phonological skills, and have demonstrated a high level of success with this approach: as such, dyslexia theories focusing on phonological deficits are currently the most widely accepted as explanatory models.

A growing body of research has detailed dyslexics' visual deficits (Eden et al., 1996; Facoetti & Turatto, 2000), although, despite a focus on the magnocellular system, the field is divided as to the precise nature of these deficits. Automatisation deficit theories, now linked to the cerebellum (Finch et al., 2002; Moore et al., 2003), suggest a difficulty in automatising basic skills (which often involve sequencing processes) as the underlying causal factor in dyslexia (Denckla & Rudel, 1976; Nicolson & Fawcett, 1990; van der Leif & van Daal, 1999). Another possible key factor is the short term memory (STM) deficit exhibited by most dyslexics; as this deficit is so pervasive, most dyslexia tests include at least one STM measure (McLoughlin, 1993; Miles, 1997).

These deficits are assumed to underlie the acquisition of reading skills; in other words, these deficits represent fundamental difficulties which often manifest in reading problems, but which may still be present when reading skills appear normal, as in university students. The WFoN definition is flawed because it relies on reading difficulties as evidence of dyslexia, rather

than referring to underlying processes. The focus on reading derives from the fact that, in highly literate first world societies, reading and writing impairments are the most socially significant of the difficulties experienced by most dyslexics, given the implications for education and work. The WFoN definition has also come under heavy criticism for the inclusion of the requirement that dyslexics be of 'adequate intelligence': more recent research has indicated that people of sub-average IQ also show dyslexic patterns of deficit. However, it can be difficult to distinguish general deficits from deficits due to dyslexia: as such, this element of the definition remains contested. Interestingly, a similar problem applies to highly intelligent dyslexics, such as HE students: how do you demonstrate dyslexic deficits in individuals performing at extremely high levels? Most instruments have focused on comparing individual's scores on dyslexia sensitive versus dyslexia neutral measures in order to show that, while an individual may still score highly on dyslexia sensitive measures, there is a significant difference between scores on these measures and the dyslexia neutral ones (e.g. via the ACID profile of the Weschler Intelligence Tests, also a feature of the DAST).

There is little agreement as to what constitutes the key underlying cognitive deficit(s) which dyslexics (whether or not they acquire adequate reading skills) exhibit; there is strong research is favour of each of the deficit theories discussed above. Therefore, dyslexia might be better characterised as consisting of a range of deficits, the extent of which differs across individuals: key deficit theories are complementary rather than mutually exclusive.

Some researchers have tried to assimilate key deficit theories into a single model by proposing a number of dyslexia subtypes, the most common being visual/surface dyslexia versus phonological dyslexia (Bakker, 1992; Boder, 1973; Castles & Coltheart, 1993). Wolf and Bowers (1999) argue for three subtypes of dyslexia comprising: dyslexics with phonological difficulties; those with rapid naming difficulties (which are associated with automatisation deficits); and those with both types of deficit. Although this body of research provides strong evidence that individual dyslexics show different types and levels of deficit, supporting the idea that there is no single key dyslexic deficit but rather a range of them, these variations may more accurately be conceptualised as a series of continua (see Genard et al., 1998) which may interact in different ways in individual dyslexics.

However, sub-type theories of dyslexia have not proven particularly reliable, especially when linked to diagnosis or research to develop remedial programmes. No existing screening or diagnostic tests employ subtype theories to help identify dyslexia, let alone explore individual configurations of difficulties, despite the fact that this is the primary theoretical benefit offered by subtype models; while subtype models attempt to recognise the diversity of deficits experienced by individual dyslexics (Rack, 1997), they fail to capture the true nature of these variations. They still represent a simplified understanding of the truly heterogeneous nature of dyslexia.

Existing tests focus on one or a small subset of difficulties in defining what dyslexia is and, consequently, focus on a limited spectrum of fundamental deficits, primarily Short Term Memory (STM) deficits, phonological deficits and verbal processing deficits. Until a definitive definition of dyslexia is produced, or tests become more comprehensive in terms of the types of deficits that they seek to operationalise in sub-tasks, tests will remain limited in applicability and effectiveness.

However imperfect current tests are bound to be, given the significant gaps in our understanding of the fundamental nature of dyslexia and how it manifests, it is still important to attempt to develop reliable instruments to diagnose and screen for it. Perhaps these endeavours will eventually lead to a true understanding of dyslexia. In the meantime, it is necessary to attempt to identify those with this difficulty so that they can be assisted.

Traditional Tests

While there are a number of reasonably reliable, well-established tests for diagnosing and screening dyslexia in the general adult population, these tests may be inappropriate for screening students, who are often able to mask their difficulties. Rack (1997) argues that these traditional dyslexia tests lack discriminatory power when used with adults of high general ability due to ceiling effects, while recent studies have demonstrated that dyslexic students use a variety of effective strategies to compensate for their difficulties (Beaton & Singleton, 1997; Warren, 1999). Separate normative scores for HE versus other adults on the Nicolson and Fawcett Dyslexia Adult Screening Test (DAST, 1998; Nicolson & Fawcett, 1997) support the conclusion that students cannot be reliably diagnosed or screened according to the same criteria as the general adult population.

The DAST, like other traditional dyslexia tests, assumes that the differences between dyslexic students and the general adult dyslexic population are purely quantitative: students are expected to evidence the same pattern of errors and difficulty across the different DAST tasks, but at higher levels than the general adult population. However, dyslexic students may compensate so effectively for their difficulties that they perform at 'normal' levels (even when task difficulty is increased) on tasks which are useful for identifying dyslexia in the general adult population. Therefore, the profile of difficulties that dyslexic students exhibit may be qualitatively (as well as quantitatively) different from that of the general adult dyslexic population (Beaton & Singleton, 1997); specifically designed tasks, addressing dyslexic students' high ability and highly developed compensatory strategies, may be needed.

Interestingly, while the DAST does examine areas of individual weakness (by comparing individuals' scores on different sub-tests), it does not attempt to

examine qualitative differences. Indeed, in their 1997 article on using the DAST to diagnose dyslexic students, Nicolson and Fawcett demonstrate that the measure failed to identify a particularly intelligent student who had developed strong coping strategies. Although they introduced an additional sub-test, this focused on identifying particularly high general ability, rather than developing a new sub-test that might be sensitive to dyslexic deficits even in highly able individuals with advanced compensation strategies at their disposal.

Dyslexia screening in HE usually involves a dyslexia sensitive measure: an instrument which can reliably indicate whether or not an individual is dyslexic by distinguishing between 'dyslexic' and 'non-dyslexic' results (i.e. it is sensitive to the presence of dyslexia markers in an individual's results). The screening test is often accompanied by an informal interview with disability support staff; the latter goes some distance towards addressing this issue of qualitative differences.

Few studies have investigated the cognitive profile of dyslexic students, thus little information is available to examine the nature of differences between high-achieving dyslexics and other adult dyslexics. Most of the relevant studies are based on anecdotal evidence or case studies (Fink, 1998; Holmes & Standish, 1996), while quantitative studies of dyslexic adults, often employing a student sample, usually focus on one or two specific cognitive tasks (Gallagher et al., 1996; Gang & Siegel, 2002; Watson & Brown, 1992).

Hatcher et al. (2002) conducted a large-scale quantitative study, involving a wide range of tasks, to investigate which were the most effective discriminators of dyslexia in the student population. From this research, they compiled a reliable, short-form screening test, comprising non-word reading, writing speed and short term memory tasks.

However, like DAST, Hatcher et al.'s test requires expert administration, though it is not as time consuming as DAST. Although the DAST manual indicates that administration takes approximately 30 minutes, Bodenham (2000) reports that administrators require 45 minutes (administration) plus 30-45 minutes (scoring and interpretation of results). Therefore, although the DAST and Hatcher et al. tests are targeted specifically at the HE population, both instruments are resource-intensive with regard to highly-trained staff and/or time, precluding their use for widespread screening.

Computer-based Tests

Computerised screening provides an effective solution to this issue. Although disability support staff must explain test results and counsel students on further action, using computers for test administration and scoring results in

significant work-hour savings for highly-trained staff and, consequently, significant monetary savings (Singleton, 2004). Other advantages of computer-based assessment (CBA) include: consistent administration with no margin for bias (Bocij & Greasley, 1999); reduced test anxiety, especially in disabled users (Weisband & Keisler, 1996; Wise, 1999); increased enjoyment (Russell, 1999); and greater flexibility (Holder & Gibson, 2000). Although differences in computer literacy across users may bias CBA results, a well-designed program can minimise these effects. Current technical limitations present a more significant disadvantage; voice recognition programs require training before results are accurate, so neither DAST nor Hatcher et al.'s screening test can be effectively computerised (two of four Hatcher et al. tasks, and six of eleven DAST tasks require a spoken response).

Currently, three computerised dyslexia screening tests for adults are available: Lucid Adult Dyslexia Screening (LADS) (Singleton et al., 2002b), Instines (Teare, 2000) and QuickScan (Pico, 1998). With no peer-reviewed scientific studies currently published to support claims of a 98% reliability rate and no information provided concerning the criteria used to classify users as dyslexic/non-dyslexic, Instines' reliability and validity are uncertain. QuickScan, a 110 item self-report questionnaire claiming 95% accuracy, is a subjective measure not sufficient as a stand-alone screening test since honesty and self-presentation are likely to exert a strong bias on results.

LADS is an adaptive test involving: (non)word construction, digit span, and word recognition. A non-verbal reasoning task is included, as the discrepancy between performance on dyslexia sensitive tasks versus tasks tapping unaffected skills, may '*increase the accuracy of detection of dyslexia in bright, well-compensated adults*' (Singleton et al., 2002a: 7).

In Singleton et al.'s (2002a) LADS validation study of 2 universities, 3 further education colleges and 3 basic skills centres, highly significant differences (at the 0.001 level) were found between 71 dyslexic and 69 non-dyslexic students on all sub-tasks and on the combined LADS score. In a second study, involving 19 dyslexic and 19 non-dyslexic university students, matched on Weschler Adult Intelligence test scores, a significant difference (at the 0.05 level) was found between Word Recognition, Word Construction and LADS composite scores of dyslexic versus non-dyslexic individuals. However, the drop in significance levels between the two studies indicates that dyslexics and non-dyslexics are less easily distinguished in HE.

T-test analysis of the data for the Word Recognition and Word Construction tasks (Singleton et al., 2002a) revealed no significant difference between the scores of the non-dyslexics in Study 1 and Study 2, though a highly significant difference (at the 0.01 level) was found between the dyslexics. Thus the differences between dyslexic university students (Study 2) versus

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Study 1 students (from a variety of institutions), reached a higher level of significance than the differences found between dyslexic and non-dyslexic university students in Study 2: it was easier to discern whether a student was from Study 1 or 2 (whether a student was at university or not) than whether a university student was dyslexic.

Mean scores were 5.6 on Word Recognition and 6.04 on Word Construction for Study 1 dyslexics (standard deviations were 2.27 and 2.43 respectively), but 4.05 and 4 for Study 2 dyslexics (standard deviations were 1.78 and 2.11 respectively), showing that the Study 2 university dyslexic students did not demonstrate less pronounced score deficits than their Study 1 counter-parts. Indeed, given that the non-dyslexic mean scores in Study 2 were 2.37 and 2.11 (with standard deviations of 1.42 and 1.56), the 'gap' between dyslexic and non-dyslexic scores was relatively small: indeed, on both sub-tests the mean dyslexic scores were within one standard deviation of the non-dyslexic scores. Interestingly, the score gap between Study 1 and Study 2 dyslexics was roughly as big as the score gap between Study 2 dyslexics and non-dyslexics. This supports the conclusion reached in relation to significance levels: LADS has lower discriminatory power when used to screen dyslexia HE students. In effect, it demonstrates whether a student is at university or not approximately as effectively as distinguished dyslexic and non-dyslexic university students.

 Interestingly, reliability rates are not given for Study 2. It is likely that these will be lower than for Study 1 (92%) and so may fall below the established minimum 90% reliability-rate criterion for screening tests (Salvia & Yssledyke, 1978). In other words, since LADS has less discriminatory power for HE students and its reliability is usually only 92% (perilously close to the 90% minimum), it is likely that reliability is less than 90% when the test is used to screen university students: thus at least 1 in 10 university students is probably incorrectly identified (either as dyslexic or as non-dyslexic).

There is compelling evidence that, although LADS is highly appropriate for the general adult population, it is less appropriate for HE. This supports the argument that university dyslexics have unique screening needs, requiring a specifically targeted test, which should be computer-based to allow widespread use.

Conclusion

  There is an urgent need for new research to address the specific diagnostic challenges of the HE population so that an effective and reliable dyslexia screening test can be designed and implemented. Although dyslexia tests are hampered by the lack of agreement over what dyslexia is – making it impossible to operationalise a single definition in suitable sub-tasks – this is a gap in provision which can and should be filled. Given the recent legislative measures, especially via the Disability Discrimination Act, to ensure that all

educational institutions provide reasonable adjustments to allow students with disabilities (of which dyslexia is the most common) to study without disadvantage compared to non-disabled students, universities will welcome such a test, but only if it can be made available to all students at a reasonable cost: this will not be possible unless the test is computerised.   At   present, there is no screening test for dyslexia that is suitable for the HE population that could be implemented in a computer-based format to allow all students to be screened easily and cost-effectively. Until such a test becomes available, unidentified dyslexic students will continue to struggle through higher education or drop out due to lack of appropriate support.

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