

The Maastricht Journal is a peer reviewed journal that encourages and rewards excellence in liberal arts. The articles in this edition have been selected from a large number of submissions and represent the work of UCM students. The topics tackled in this edition are wide ranging as is to be expected from a journal and their scope covers a wide range of liberal arts disciplines.

MJLA

The Maastricht Journal of Liberal Arts

Vol.3 – 2011-2012



Profiles of Contributors

Christopher Klän, Tom Shortland & Leonie Willenbrink

Christopher Klän, Tom Shortland and Leonie Willenbrink are bachelor students at University College Maastricht. Leonie focuses on International Relations and Sustainability Sciences. Tom's fields of interest are Economics and Politics. Chris combines Political Philosophy, International Relations and Cultural Studies.

Willem Nuijen & Pieter Verhallen

Willem Nuijen and Pieter Verhallen are students at University College Maastricht. Willem Nuijen focuses on how (bio)technology affects cultural and psychological aspects in Western societies and how new technologies are influenced by societal developments. Pieter Verhallen's fields of interest are Neuropsychology and Behavioral Economics.

Lisanne Raderschall & Janina Zander

Lisanne Raderschall and Janina Zander are both third year students at UCM. During her studies, Lisanne mainly focused on Sociology and Cultural Studies. She will graduate in February 2012. After that she is planning to continue her studies in Sociology. Janina completed courses in Psychology and Sociology, with her main focus on Clinical Psychology. After her graduation in February 2012, she plans to become a psychotherapist.

Florian Rucker

Florian Rucker is a bachelor student at University College Maastricht. His research interests span multiple fields of the social sciences. The network analysis approach that he applied on his HIV and transit article was introduced to him while conducting empirical research on herd behaviour in Singapore. His focus during UCM's undergraduate research programme was on analyzing political arguments on corruption, reflecting his study in Politics and Economics.

Kai Schnier

Kai Schnier is a bachelor student at University College Maastricht. His fields of interest are international politics/political science and media studies. Currently, he is an exchange student at the Chinese University of Hong Kong. In June 2012 he will complete his BA at University College, after which he intends to attend a master's program in Political Science and Political Journalism.

Berenike Schott

Berenike Schott is a bachelor student at University College Maastricht. Her field of interest is Political Science, with a focus on International Relations. To enrich her understanding of how Foreign Policy is made, she has also followed courses in International Law and Philosophy.

Michael Schulze

Michael Schulze is from Bielefeld, Germany. Currently he is studying at University College Maastricht with a concentration in Social Sciences. His main areas of interest are Political Science, Sustainability and Economics. Afterwards he plans to pursue a master in the field of Political Science and Public Policy.

CONTENTS

- 3 *Berenike Schott*
“CITY ON THE HILL” OR “CRUSADER NATION” – The influence of religion on American foreign policy and its changes through the period of ‘born-again’ presidency
- 17 *Christopher Klän, Tom Shortland & Leonie Willenbrink*
TRANSHUMANISM – A dangerous vision?
- 33 *Florian Rücker*
HIV INFECTION RATES & HUMAN TRANSIT – A social network and risk analysis approach to the relationship between travel and the HIV epidemic
- 47 *Kai Schnier*
TAMIL DISENFRANCHISEMENT AND THE PERCEIVED LOSS OF STATUS – The share of British policies in causing the Sri Lankan Civil War
- 59 *Lisanne Raderschall & Janina Zander*
NEGOTIATING GENDER ROLES – Experiences of female Saudi-Arabian students at Maastricht University
- 81 *Michael Schulze*
THE FRANCO-PRUSSIAN WAR OF 1870/1871 – A diversionary conflict
- 93 *Willem Nuijen & Pieter Verhallen*
HUMAN PHEROMONES – Theory or fact?



“CITY ON THE HILL” OR “CRUSADER NATION”

The influence of religion on American foreign policy and its changes through the period of ‘born-again’ presidency

Berenike Schott

Abstract This paper aims to identify the ways in which personal religious convictions of self-declared ‘born-again’ presidents shaped their perceptions of and assumptions about the world and the U.S.’s role in it, and how that thinking was further translated into foreign policy. Constructivist theory can explain how through the articulation of their worldviews derived from the experience of new spiritual birth and the convictions related to it, the presidents framed reality in a corresponding way. Having depicted the world, the other actors and the task of the country according to their beliefs, reinforced the convictions of the speakers and created public expectations about corresponding actions, thereby making certain policy choices more likely. The presidencies of Jimmy Carter and George W. Bush will serve as examples.

I Introduction

After the 2004 presidential election, newspapers inside and outside the U.S. wrote about “a revolution in American politics” (Newman, 2007, p. 582) and

about religion “never having played such a central role in American presidential politics” (p. 581). This in turn invoked a set of scholarly articles on why this is actually not true, pointing at the influence of religion on American politics throughout the country’s history. Indeed, religion has always played a significant role in American politics. From the founding of the nation to the post 9/11 war on terror, presidents have referred to God as the transcendental source of men’s rights and the nation’s righteousness. Religious rhetoric in presidential discourse can be found throughout the centuries, especially in its form as ritualistic statements, such as in ‘God bless America’. However, despite this continuity, also a change in the influence of religion on American politics can indeed be witnessed through the so-called period of “born-again” presidency, lasting from Jimmy Carter’s election to that of Barack Obama. Because of the limited scope of this paper, the analysis will focus on the Carter and George W. Bush presidencies. In this time period, more personal religious convictions publicly entered the White House and arguably also the policy-making process.

This paper is based on the methods and insights of constructivism and aims at identifying the ways in which personal religious convictions shaped the presidents’ perceptions of and assumptions about the world and the role of the U.S. in it, and how that thinking was further translated into foreign policy. Constructivist theory can explain how through the articulation of their world-views derived from the experience of new spiritual birth and the convictions related to it, the presidents framed reality in a corresponding way. Depicting the world, the other actors and the task of the country that way, reinforced the convictions of the speaker himself and created public expectations about corresponding actions, thereby making certain policy choices more likely. Through the analyses of the religious orientations and foreign policies of Carter and Bush it will be shown that while in both cases a clear connection existed between the two, the particular theological and spiritual teachings encountered at their times of spiritual reorientation led them to very different perceptions of the world and appropriate policies. Thus, in addition to understanding the decisive shift from presidents who involved religion in their politics according to ‘American civil religion’ to those who introduced personal convictions into their policy-making, a thorough analysis of the particular convictions of the born-again presidents is needed to understand and evaluate the role of religion in their politics.

The paper consists of four parts. The first provides the reader with a short introduction into the theory of constructivism and its most relevant concepts for the subsequent analysis. The second part gives an overview of the role of religion in American foreign policy throughout the country’s history and its impact on identity formation and policy choices. The latter two parts are analyses of

the influences of personal religious convictions on the foreign policy courses by Presidents Jimmy Carter and George W. Bush respectively.

2 Constructivism and the social dimension in international relations

In the 1980s, constructivism emerged in the field of international relations providing it with a social dimension through shifting the focus from an assumed a priori reality and rationality of the actors concerned, as was common for the traditional theories of realism and liberalism, to an analysis of how perceived reality is constructed through social interactions (Checkel, 2008). The use of language, the norms adopted by the actors from their social environment and the influence of identity on the chosen course of action are considered essential elements of these interactions and their impact on global affairs (Fierke, 2007).

According to constructivism, language is what gives meaning to things and determines the priorities that are being set. Language creates categories and while these might first serve as interpretations only, they can easily become designations of identity. These identities are in turn likely to invoke certain actions (Fierke, 2007). Choices in foreign policy are thus not merely determined on the basis of a cost-benefit analysis but are also heavily dependent on the self-perception of the country, the linguistic classification and subsequent perception of the other actors, and the norms and values adopted by the agents from their social environment (Fierke, 2007). To illustrate this, one can look at George W. Bush initially identifying the terrorists of 9/11 as “evil” while later referring to a whole set of evil powers, the ‘axis of evil’ (Bush, 2002).¹ The linguistic categorization of a whole set of states as “evil” is likely to lead to foreign policy action, as a president will not openly declare states evil and then remain passive. Peter Howard (2004) argued in an analysis of the U.S. decision to invade Iraq, that after the U.S. government had emphasized the urgency of the threat coming from Iraq, it was in a “linguistic trap for war” (p. 824) and could not remain passive any more.

It is important to notice though, that the link between the use of a certain language and foreign policy action is not one of causality but of probability (Fierke, 2007). However, in the struggle to obtain public support of policies, policy-makers tend to claim definite causality to legitimize their policies (Meyer, 2009). This is especially the case if the presented causality leads to a promise (as e.g. to

¹ Obviously, in this case language also has a persuasive force in applying a well-known concept (‘the axis’) that will remind the American public of a past successful fight against states generally recognized as ‘evil’.

protect the country from any further attacks). What was considered a probability before has then been turned into a necessity for action by the policy-maker himself (Meyer, 2009). The use of language thus has a crucial impact on the perception of the situation, both in terms of public expectations as well as through a reinforcement of convictions by the speaker himself, who through his use of language creates what he believes to be reality. The assumption of constructivism is that there is no *a priori* reality but that agents constitute the structure and the structure in turn constitutes the agents, so that e.g. articulating the world as being in an antagonist state of good and evil will actually confer these categories from the linguistic to what we consider the real realm, thus not allowing for an in between and forcing the actors to choose for one of the constructed sides and corresponding courses of action (Fierke, 2007).

Religion is closely linked both to the use of language as well as to the designation of identity. As will be shown in the analysis below, religious rhetoric is frequently used to invoke a common identity, e.g. around the time of the nation's founding as God's Chosen Nation, and to implicitly justify policy choices, such as territorial expansion under the banner of manifest destiny (Newman, 2007; Schoultz, 1998). Furthermore, religion provides a moral framework assigning categories of good and bad behavior. As argued above, these categories can serve to create an image of oneself and "the other" and subsequently be used to suggest and justify actions. The application of the insights of constructivism to the case of religious influence on American foreign policy will proceed in three parts. Before analyzing the ways in which the religious convictions of Presidents Jimmy Carter and George W. Bush impacted their foreign policy decisions, an overview of the influence of religion on American foreign policy throughout the country's history will be given.

3 American Civil Religion

The United States is sometimes presented as one of the most secular states, while at other times it is portrayed as one of the most religious states. While the separation of church and state and the freedom of religion are fundamental aspects in the founding of the nation, the American people, not excluding their presidents, have nevertheless always also been a religious people. What may seem like a paradox actually has a common root: The majority of immigrants to what would later become the United States had left their home countries because of religious persecution (Newman, 2007). Protestants, most of them belonging to an evangelically oriented branch, left their countries to live in a state where they could

freely pursue their religion and where politics would not be guided by the rules and interests of a particular church, such as they had experienced for example in the UK dominated by the Anglican church (Newman, 2007). The separation of state and church thus did not originate from a non-religious people but on the contrary from a multi-religious society, religion taken at the time as forms of Christianity.

Out of this unique combination of a highly religious people living in a secular state, arose what Robert Bellah (1967) coined as 'American Civil Religion'. This "set of beliefs, symbols, and rituals" (p. 4) is not bound to a particular religion, not even to Christianity, but is based on certain assumptions: There is a God who gives rights to men, there is an obligation to do good, and doing good will be rewarded. Furthermore, it involves self-identification with the people of Israel. America is the 'Promised Land' of those whose religious affiliations made them flee their homes, and thus it is land that God has a special plan for (Bellah, 1967). Out of this identification with the people of Israel arose a conviction of likewise being God's chosen nation. This unique status entrusted Americans with the task of forming a social order as envisioned by God, which could then constitute an example for other nations to follow. Already in 1603, long before the founding of the United States as one nation, the Governor of Massachusetts John Winthrop called upon the Americans to "consider that wee shall be as a City upon a Hill" (McDougall, 1998, p. 17), referring to Jesus' order to his followers to live lives of example to others (Matthew 5:14). This position was challenged through the Civil War, when the States were threatening to disintegrate and slavery was openly criticized and pointed out as being contrary to God's envisioned order mentioned above. The crisis was however overcome and soon after America reassumed its role as 'the last best hope of earth' as Abraham Lincoln (1861) had called for during the war. Religious language was thus from the birth of the nation on invoked to construct a common identity for a diverse people and to set the course for a policy providing an example to the other nations.

While American Civil Religion was in the beginnings of the nation primarily used to argue for the fundamentals of the new state, as for example for equal rights of all, to underline the unity of the people and to call upon them to be an example, with the westwards expansion it was eventually, if to a lesser degree, also applied to what could be called foreign policy. If the U.S. was God's chosen nation and if its order constituted the right one, it had the right, if not the duty, to expand this order (Roof, 2009). As John O'Sullivan put it at the time: It was the manifest destiny of the U.S. to expand (Pratt, 1927). However, even if an assumption of divine authority resonates in the concept of manifest destiny, reli-

gious rhetoric only played a minor role in justifying foreign policy events such as the Mexican War.

As pointed out in *The Economist* (2006), Americans have always had a genius for mixing realpolitik with their religion. The assumptions about their nation as framed in American Civil Religion led them to American exceptionalism, or the American perception of being unique (Sichermann, 2007). Even if not anymore phrased in religious terms, this self-perception formed a general basis for policy, namely one of superiority and righteousness in showing others the way (Buzan, 2004). Particular policies were not explicitly reasoned for or justified on the basis of religion. For example, it was argued that the American soldiers were legitimately entering Mexican territory in 1846 as Mexican soldiers had killed Americans on American soil before (Schoultz, 1998). Other foreign policy events in the 19th and beginning of 20th century, such as the Spanish-Cuban-American War or invasions in Central America, were clearly wrapped in a rhetorical mantle of superiority towards the other nations, yet did not display particularly religious motives or rhetoric (Schoultz, 1998). The U.S. involvement in World War I can likewise be largely attributed to pragmatic considerations, such as the concern for the freedom of the seas and economic relations with the European powers, but a vision of a more just world was also important (Papp, Johnson & Endicott, 2005). Franklin D. Roosevelt, during World War II, however, “skillfully raised the use of civil religion to new heights” (Smith, 2009, p. 203). He used typically civil religious rhetoric such as in a radio address in June 1942, saying, “God of the free... Grant us victory over tyrants who would enslave all free men and Nations... Yet most of all grant us... a common faith that man shall know... justice and righteousness, freedom and security... throughout the world” (p. 191). However, FDR also introduced specifically Christian rhetoric in addressing the public. In July 1941, e.g., he demanded all people to “work and pray for the establishment of an international order in which the spirit of Christ” ruled (p. 201). Likewise and in the same year, he joined in with Winston Churchill in singing “Onward Christian Soldiers” (p. 185). This shift from an implicit to an explicit Christian character of the American civil religion is an important one and most certainly prepared, if unintentionally, the further shift toward more personal convictions influencing presidential religious discourse.

4 The beginning of “born-again presidency”: President Jimmy Carter

When Jimmy Carter, then presidential candidate, campaigned in California, he was warned that public statements about his faith might cost him essential votes,

if not in religious states like his home state Georgia, certainly at the more secular American West coast (Morris, 2009). Carter proved his advisers wrong though and, whether because of or despite his religious rhetoric, won the 1976 presidential elections. Bringing his particular faith into politics, he was “breaking all the rules”, if unwritten, about the degree to which religion and politics, faith and presidency, could be publicly interlinked (Morris, 2009, p. 322). Carter grew up in the Baptist Church and had his first conversion experience at eleven years of age. What he referred to as his experience of being born again, however, was in his forties when he realized that he had thus far lived his faith too timidly and inconsistently.

The presidency of the first openly ‘born-again’ Christian raises the question as to what being “born again” means and in how far it determines particular views on faith and the general worldview. The concept of being born again is biblical and comes from a dialogue between Jesus and the Rabbi Nikodemus in John’s Gospel. Here, Jesus tells the Rabbi that only those born again by the Spirit can enter the kingdom of God (John 3:3). The importance of this act of new spiritual birth was acknowledged in the 16th century mainly by independent protestant movements that argued for a direct relationship between the believer and God. The basis of this relationship was a decision to repent and to reform their life and faith (Grislis, 1993). Today, most protestant churches acknowledge the importance of repenting and renewing one’s life, while evangelical branches mostly emphasize the importance of a particular moment of being “born again”.

All presidents from Carter to Bush Jr. are self-declared born-again Christians, thus all had a moment in their adult life of rather radically rethinking their life and the role of faith in it. It is important to notice that this “new birth” is common to all, yet does not lead to a common interpretation of the Bible and even less to common political views. What it does, is to convince the believer that faith is a question of entirety, of giving one’s entire life to Jesus, meaning to involve faith in all matters of life. This is in most jobs not a problem, and is even less a concern for the whole world. When the conversion experience of the American President inevitably leads to religious considerations being introduced into politics, as his entire life is to be dedicated to God, however, the extent of the issue is on a completely different level. Here, we do not deal with a general and unifying ‘civil religion’ anymore but with specific convictions about the most fundamental questions of morality. To uncover these convictions, it is most helpful to look at who or what shaped the Presidents’ view on faith most during the time of ‘regeneration’.

In the case of Jimmy Carter it was writings by theologians such as Dietrich Bonhoeffer, which made him see the need for a closer link between his beliefs

and actions (Morris, 2009). What he considered the most important biblical message, to love God and one another, had to be translated into politics. Carter frequently quoted theologian Reinhold Niebuhr saying, “The sad duty of politics is to establish justice in a sinful world” (p. 331). For Carter the translation from faith to politics thus meant foremost a focus on justice. It is noticeable that the quote displays an assumption of the entire world as being sinful, yet there being the possibility for positive action, in contrast to a division of the world into sinful and righteous, where the former commits evil acts while the latter is claimed to behave according to God’s will. Based on this articulation and perception of common problems and common possibilities to resolve these, a cooperative foreign policy was able to emerge.

Dietrich Bonhoeffer, a German theologian whose writings were inspirational to Carter, was killed in 1945 in a concentration camp for attempting to assassinate Hitler. Bonhoeffer had argued for a life based on Christian faith that did not center on the rewards of the afterlife but on just actions on earth “*etsi non daretur deus*”, as if there were no God but everything depended on human actions (Bonhoeffer, 1944, p. 24). This radical quest for justice and a focus on possible actions in the present is visible in Carter’s foreign policy through his commitment to human rights, policies like the Panama Canal Treaties that attempted to set historical injustices right, and the peace negotiations in the Middle East that successfully led to the Camp David Accords in 1978 (Morris, 2009). Furthermore, Carter made a noticeable effort to avoid military action as long as possible. The Iranian Hostage Crisis can serve as an example, where Carter first tried to apply diplomatic and economic measures against Iran until he decided, five months after the hostages had been taken, to launch a secret military operation to rescue them, but failed (Hastedt, 2010). Furthermore, statements like “The best weapon of any kind is one that is never used, and the best soldier is one that never dies in war” (Carter, 1980) support the impression that Carter was generally opposed to the use of force. Though he was not a pacifist (as little as Dietrich Bonhoeffer was one), he clearly preferred the use of means other than violence.

5 The hitherto end of “born-again presidency”: President George W. Bush

An entirely different perception of the world and guidelines for action emerged from the born again experience of George W. Bush. Instead of turning to scholarly theological writings to order his new faith and life, as Carter did, he turned

to advice by the evangelists Arthur Blessitt and Billy Graham. Blessitt, the “Pilgrim with the Cross” travelled across the globe to preach the gospel. On his website, he gives a handy list of six ‘What to do now!’ points after the born-again experience: Two of them are to “witness for Jesus to every person we meet wherever we are”, and to be “open witnesses” (Blessitt, 2010). The emphasis on witnessing can clearly be seen in moments of Bush’s presidency, such as the answer “Jesus, because he changed my heart” to the question about his favorite philosopher in a pre-election TV debate (Jones, 2006, p. 102). Billy Graham, who as Bush records “led me to the path and I began walking” (p. 102), preaches a theology that has a clear focus on the afterlife, apparent in books written by him like “Till Armageddon” and “Facing Death and the Life After”, or arguing that “The Bible teaches your soul will live on forever in one of two places: it will live on in Heaven or in Hell” (Graham, 1953, p. 77) and admirably quoting someone who said that “My home is in Heaven. I’m just traveling through this world” (Graham, 1991).

This is an entirely different view on the world and our position in it than Carter’s philosophy. It is a theology that is directed toward the final judgment and is based on linguistic dichotomies; heaven or hell, good or evil, saved or not (yet) saved. Framing the world in dichotomies necessarily leads to generalizations, as it does not allow for grey zones. It is striking how many dichotomies and generalizations one can find in Bush’s rhetoric. On September 20th 2001, Bush claimed that “Freedom and fear, justice and cruelty, have always been at war, and we know that God is not neutral between them” (Bush, 2001) As the U.S. obviously was not neutral either, this statement implicitly claimed God’s plan and the nation’s plan to be congruent (Roof, 2009). To question U.S. foreign policy objectives would therefore mean to question divine righteousness – a hard task. In the same speech Bush stated famously “Either you are with us, or you are with the terrorists” (Bush, 2001). On September 16, 2001, the national day of mourning, Bush announced: “This crusade, this war on terrorism is going to take a while” (Bush, 2001). Using the word ‘crusade’ translates the above understanding of the world as split into two, good and evil, into a call to action while implying God’s support for it and expressing a certainty of righteousness. This crusade, this mission, is further elaborated on in the National Security Strategy of 2002, which states: “Freedom has been threatened by... the evil designs of tyrants” (p. vi) so “our responsibility to history is clear: To answer these attacks and rid the world of evil” (p. 5). Certainly one can ask whether this rhetorical dichotomy is not merely a tool to simplify political decisions rather than deriving from religiously framed thinking. Surely there cannot be a definite answer. However, as dichotomous rhetoric appears with a remarkable frequency in the

religious writings Bush was exposed to most, such as those of Billy Graham and other dispensationalists, it can be considered likely to have had an effect on Bush's worldview.²

The apparent combination in the thinking of President Bush of being convinced of an inherent righteousness of American actions ["America has always been willing to do what it takes for what is right"; "Our Nation is strong and steadfast. The cause we serve is right, because it is the cause of all mankind" (Bush, 2004)] and tending to sort reality into dichotomies, is dangerous because it leaves the other (the 'evil') little room to show that it does not fit into that category. What started as a linguistic categorization can thus invoke reality. If the other is generalized as being evil, there is a high probability for action to follow against it, as shown in the above-mentioned argument on the 'linguistic trap of war' by Howard (2004). Furthermore, generalization will leave the other little possibility to act in a different manner to that which is expected.

The 'new birth' of George W. Bush *per se* cannot be considered a cause for the policies taken in the global war on terror, such as the decision to invade Iraq. Based on the insights of constructivism, it can however be argued to have had an important influence on his general perception of things, in particular the world order as divided into opposing forces, which again is likely to have impacted his policy-making. Bush's religious convictions might only be one reason amongst many others for certain policy choices. Yet, observing that he was the first president to take his faith that comfortably into the White House (Aikman, 2009), makes this reason an important one. As noted above, presidents can build their own decision traps by using certain language. Using religious language in public, as Bush did, set a frame for decision-making made up of the expectations of the public and of a possible reinforcement of his own convictions by vocalizing them.

6 Conclusion

Religion has always played a decisive role in American politics. However, its influence has changed over the decades from a more general "civil religion" to particular religious convictions of presidents being introduced into politics. This is visible in FDR's explicit Christian rhetoric during World War II and most strik-

² Dispensational belief, the focus on the final divine judgment to come, looks with 'future hindsight' on the present. Looking at the present from the view of the final judgment, which is based on either-or decisions (saved or not saved), transposes this either-or thinking also into the present and the perception of current events (Harding, 1994).

ingly through the period of “born-again” presidents who publicly introduced personal religious experiences and beliefs into the White House. Constructivist theory can explain how this change in rhetoric also affected thinking and perception of the presidents. Framing reality in a specific way increased the probability for corresponding actions. As shown above, being born-again does not in itself determine a specific worldview but rather encourages the application of faith in all areas of life, which in the case of the president includes his policy-making. Be it a foreign policy that is based on the concepts of justice and peace, like that of Carter, or one that is driven by the struggle against evil, like Bush’s - the influence of their respective beliefs on their worldviews and the effects this religious rhetoric had in terms of raising public expectations and the reinforcement of convictions, can help to better explain their policy choices. It is crucial to see the differences between civil and particular religion and between specific interpretations of the meaning of faith. Only then can we understand the role of religion in presidential politics and evaluate its chances or dangers.

References

- Aikman, D. (2009). Religion and the presidency of George W. Bush. In G. Espinosa (Ed.), *Religion and the American Presidency* (pp. 477-503). New York: Columbia University Press.
- Bellah, R. (1967). Civil religion in America. *Daedalus*, 96(1), pp.1-21.
- Blessitt, A. (2010). *The new life as a follower of Jesus*. Retrieved on 10 October 2010 from <http://www.blessitt.com/thenewlife.html>
- Bonhoeffer, D. (1944). *Letter to Eberhard Bethge from Tegel prison, Berlin*. Retrieved October 7, 2010, from <http://www.discipleschurch.net/wp-content/uploads/2009/07/Bonhoeffer-on-God-in-Secular-World.pdf>
- Bush, G. W. (2001, Sep 16). *Remarks by the president upon arrival*. Retrieved October 10, 2010, from <http://georgewbush-whitehouse.archives.gov/news/releases/2001/09/20010916-2.html>
- Bush, G. W. (2001, Sep 20). *Address to a joint session of congress and the American people*. Retrieved October 10, 2010, from <http://www.britannica.com/presidents/article-9398253>
- Bush, G. W. (2002, Jan 29). *State of the union address*. Retrieved October 10, 2010, from <http://www.americanrhetoric.com/speeches/stateoftheunion2002.htm>
- Bush, G. W. (2004, Jan 20). *State of the union address*. Retrieved October 10, 2010, from <http://usgovinfo.about.com/library/weekly/aasou2004.htm>
- Buzan, B. (2004). *The United States and the great powers: World politics in the twenty-first century*. Cambridge: Polity.
- Carter, J. (1980, Sep 18). *The president’s news conference*. Retrieved October 4, 2010, from <http://www.presidency.ucsb.edu/ws/index.php?pid=45082>

- Checkel, J. (2008). Constructivism and foreign policy. In S. Smith, A. Hadfield & T. Dunne (Eds.), *Foreign Policy: Theories, Actors, Cases*. Oxford: Oxford University Press.
- Fierke, K. (2007). Constructivism. In T. Dunne, M. Kurki & S. Smith (Eds.), *International Relations Theories: Discipline and Diversity*. Oxford: Oxford University Press.
- Graham, B. (1991). *Hope for the troubled heart – How you can survive and thrive even through the toughest times*. Thomas Nelson Inc., Nashville Tennessee
- Graham, B. (1953). *Peace with god*. Chapter 7, as retrieved on October 7, 2010, from <http://www.gotobible.com/HTML/peacewithGod7.html>
- Grislis, E. (1993). Menno Simons on conversion: Compared with Martin Luther and John Calvin. *Journal of Mennonite Studies*, 11, 55-70.
- Harding, S. (1994). Imagining the last days: The politics of apocalyptic language. *Bulletin of the American Academy for Arts and Sciences*, 48(3), 14-44.
- Hastedt, G. (2010). *American Foreign Policy*, 8th edition. New York: Pearson Longman
- Howard, P. (2004). Why not invade North Korea? Threats, language games and US foreign policy. *International Studies Quarterly*, 84(4), 805-828.
- In the World of Good and Evil. (2006, Sep 16). *The Economist*, 380(8495), pp.37-38
- Meyer, D. (2009). Constructing threats and opportunities after 9/11. *American Behavioral Scientist*, 53(1), 10-26.
- Jones, D. (2006) *The Liberal Antichrist – Left Behind in America*. In K. Newport & C. Gribben (Eds.), *Expecting the End – Millenialism in Social and Historical Context*. Waco: Baylor University Press.
- Lincoln, Abraham (1861, Dec 1), *Annual message to congress*. Retrieved October 4, 2010, from <http://www.historytools.org/sources/lincoln-messages.html>
- McDougall, W. (1997). *Promised land, crusader state: The American encounter with the world since 1776*. Boston: Houghton Mifflin Harcourt.
- Morris, K. (2009). In G. Espinosa (Ed.), *Religion and the American presidency* (pp. 321-345). New York: Columbia University Press.
- Newman (2007). One nation under God: Making historical sense of evangelical protestantism in contemporary American politics. *Journal of American Studies*, 41(3), 581-597.
- Papp, D., Johnson, L. & Endicott, J. (2005). *American foreign policy: History, politics and policy*. New York: Pearson Education Inc.
- Pratt, J. (1927). The origin of “Manifest Destiny”. *The American Historical Review*, 32(4), 795-798.
- Roof, W. (2009). American presidential rhetoric from Ronald Reagan to George W. Bush: Another look at civil religion. *Social Compass*, 56(2), 286-301.
- Schoultz, L. (1998). *Beneath the United States: A history of U.S. policy toward Latin America*. Cambridge: Harvard University Press.
- Sichermann, H. (2007). Virtue, interest and works in American foreign policy. *Society*, 44(6), 113-119.
- Smith, G. (2009). In G. Espinosa (Ed.), *Religion and the American Presidency* (pp. 185-211). New York: Columbia University Press.

White House (2002). *The national security strategy of the United States of America*, Washington, D.C.
Retrieved October 4, 2010, from <http://www.globalsecurity.org/military/library/policy/national/nss-020920.pdf>

TRANSHUMANISM

A dangerous vision?

Christopher Klän, Thomas Shortland & Leonie Willenbrink

Abstract This paper explores the potential dangers posed by ‘transhumanism’ - a philosophical movement which advocates the use of human enhancement technologies. Similar projects were advocated by thinkers in National Socialism and early Soviet communism. We will analyse how such projects worked within their respective ideological frameworks. By comparing contemporary arguments for transhumanism with past patterns of argumentation, two main strands of argument - a collectivist and an individualist one - can be seen to emerge. Both strands represent certain political dangers. The fact that a more moderate approach is philosophically inconsistent with human enhancement makes transhumanism a dangerous philosophy.

I Introduction: Booting the machine

All forms of political thought are based on a certain vision of humanity. Some thinkers argue for policies that fit their perceptions of human nature. Others have a vision of what humanity should be like in the future and work towards that aim. It is the latter of these categories that proponents of utopian thought

belong to. However, some go beyond a vision of a future for humanity as it is, to a vision of how human nature itself should be improved. This is the essence of the movement of 'transhumanism'.

Transhumanist thought advocates the improvement of humanity using a fusion of technologies, such as bioengineering, nano-physics and communication technologies (World Transhumanist Association, 2002). Human enhancement is, however, not a specifically modern idea. Historical precursors can be found among techno-philosophical thinkers in the earlier 20th century - most notably in the early Soviet Union and Nazi Germany. Some of their arguments and projects bear strong resemblance to modern transhumanist publications. In the current age of exponential technological advancement, it appears increasingly feasible to make drastic alterations to the human condition. Therefore, the World Transhumanist Association (2011) (WTA) is probably right in stating that humanity has to "emphasize what we have the potential to become". As transhumanism becomes a more realistic perspective it warrants an investigation into its desirability and its potential pitfalls.

In his own investigation in *Foreign Affairs*, Francis Fukuyama (2004) claims that transhumanism is one of the "world's most dangerous ideas" (p. 1). Using a historical comparison, this essay will attempt to examine whether such claims are justified. It does not aim to show that it was specifically the transhumanist element of those ideologies which served as justification for the crimes of the respective regimes. Rather, its purpose is to point out how the transhumanist project and argumentation fit into these ideological systems. On account of this, contemporary transhumanism may be dangerous by employing strategies which lend themselves to totalitarian or dehumanising projects.

Having defined 'transhumanism', the historical proponents of human enhancement technologies and philosophies will be introduced. After an exposition of contemporary transhumanist thought, the paper will move on to compare contents and arguments of the historical and contemporary philosophies. From this, a conclusion as to the actual 'danger' of the movement and its underlying philosophy can be drawn.

2 Definition: Focusing concepts

For the purpose of this paper, the definition of transhumanism shall be the one provided by the WTA. It defines transhumanism as an "intellectual and cultural movement that affirms the possibility and desirability of fundamentally improving the human condition through applied reason, especially by develop-

ing and making widely available technologies to eliminate ageing and to greatly enhance human intellectual, physical, and psychological capacities” (World Transhumanist Association, 2011). The ultimate aim of transhumanism is to create post-humans-beings which are enhanced to such a degree as to be no longer recognisable as human. The ‘trans-human’ is an in-between stage on the way towards achieving this condition. Technologies which aim at improving the human being beyond itself will be referred to as measures of human enhancement.

3 The redemption of humankind: Transhumanism in the early Soviet Union

Three prominent visions of human enhancement were articulated in the early Soviet Union (until the late 1920s) (Groys & Hagemester, 2005). Firstly, there was the idea of the creation of a physically and morally superior ‘New Human’. The population was to be educated according to new moral principles, work procedures and even criminal justice¹ were to be rationalised and mathematically optimised. The intellectual elite believed in Lamarck’s theory of evolution, according to which organisms pass on acquired capabilities to the offspring. Therefore, people were to be physically and mentally optimised during their lifetimes in order to transfer the benefits to the next generation. Secondly, it was held that it would be possible to control physical space. By means of rapid transportation, the earth was to be subjected to human will and control was to be extended to other planets. Thirdly, life and death were to be controlled and, by extension, time itself was to be subdued. Efforts were therefore made to prolong the human lifespan and eventually reach immortality. Humans who had died were to be resurrected in order to include them in the ‘paradise on earth’ (Federov, 1913).² The human body was described as a mere machine, a ‘realm of immortal atoms’ (Tsiolkovsky, 1935). Consciousness was regarded as a mere function of the body, as the existence of anything resembling a soul was denied. Therefore, it was believed that humans might be reduced to a chemical formula

¹ Criminals were not to be punished, but to be ‘reeducated’ by means of propaganda schooling and forced labour was thought to have an intrinsically positive effect on people and was therefore regarded as a great tool for the re-socialization of criminals

² The most prominent example is the mummified Lenin, who is awaiting his resurrection in the mausoleum at the Red Square in Moscow

(Muraviev, 1924). Such a formula, gained from the remains of a person,³ would serve as the basis for that person's resurrection in the Communist 'realm of freedom' (Trotsky, 1932). Most philosophers regarded all three of these causes as closely interconnected or even as mutual prerequisites (Federov, 1913; Tsiolkovsky, 1935).

These goals were set in the context of a Communist utopia. Their proponents believed they could only be achieved by the united efforts of humankind working towards a common goal (Federov, 1913). This would be the case in a socialist society as opposed to a capitalist one where humans were thought to be merely self-interested. In turn, new technologies were to benefit humankind as a whole. However, some advocates of the above agendas went much further, stating that true Communism could only be completed if their goals were achieved. Valerian Muraviev (1924) believed that as long as there was private ownership of time, that is, no immortality, it would be impossible to abolish material private ownership. Nikolaj Fedorov (1913) held that a paradise on earth would be unjust if all generations that had died before its achievement would not come to experience it by means of resurrection. Finally, Konstantin Tsiolkovsky (1935), the much-celebrated initiator of the USSR's space program, believed that science would advance to a state in which humanity's minds were to be separated from their bodies and merge into the true manifestation of Communism - a single consciousness.

Although they were not central to Soviet Ideology, these ideas were a part of the political spectrum in the early Soviet Union⁴. This was possible, because visions of human enhancement visions were very much compatible with the revolutionary Communist agenda of the early Soviet years (Groys & Hagemester, 2005). Whatever the specific reasoning of the different advocates of human enhancement in the early Soviet Union, they all share an important characteristic - the belief that their mission is the most important one to fulfill for humanity's advancement. Civil liberties were regarded as far less important than the liberation from the boundaries of time and space (Association of the Anarchists-Biocosmists, 1922).

³ "Remains" could imply either actual physical remains or artifacts or texts created by a person or even accounts about that person by others. As the mind was a mere function of the body, it should be possible to reconstruct both by merely having some form of expression from a person.

⁴ Prominent revolutionaries such as Trotsky (1932) made a number of statements in favour of human enhancement. Alexander Bogdanov, a leading Bolshevik, founded an Institute for Blood Transfusions where he hoped to rejuvenate older people by injecting them with a younger person's blood.

4 Selective improvements: The vision of humanity in National Socialist thought

Civil liberties were also disregarded in the National Socialist vision of humanity (Lerner & Rothman, 1995; Weigmann, 2001). It was based on the concept of race, with a strict racial hierarchy in which the Aryan race was placed firmly at the top. National Socialists believed the different races to have diverging qualities and capabilities (Longerich, 2010; O'Mathúna, 2006). From this, they inferred different social status and rights. National Socialism hoped to achieve the “creation of a pure Aryan race” (Lerner & Rothman, 1995, p. 73). The national socialist ideology placed particular emphasis on the inheritability of traits and characteristics. Therefore, National Socialism advocated the idea of eugenics, a “biosocial movement which advocates the use of practices aimed at improving the genetic composition of a population” (Genetics Home Reference, 2011).

In order to achieve a pure Aryan race, National Socialism applied the ideas of eugenics to the human population. There was a widespread programme of forced sterilisations by which several hundred thousand (Biddis, 1997; Longerich, 2010) people were targeted. This was to prevent the passing on of undesirable physical or mental traits to the next generation. However, the prospect of slowly improving future generations by means of sterilisation did not satisfy the ambitions of the National Socialist Party (NSDAP). In order to create a better society in the present, it initiated a campaign of mass murder against those it considered to be inferior or threatening to the well being of the Aryan Race (Bauman, 1989). For example, at the Hadamar Psychiatric Hospital, systematic killings of mentally disabled patients were undertaken. In the first nine months of 1941, 10,000 mentally ill patients (Strous, 2006) were killed. The most infamous manifestation of eugenic policies is maybe the Holocaust. Millions of Jews, along with other societal groups deemed deficient or undesirable were killed. This was supposed to prevent the corruption of the Aryan Race which they were deemed to cause. The crucial reason for the killing of undesirable groups was that they could never conform to the National Socialist vision. Zygmunt Bauman (1989) uses the analogy of gardening to illustrate this point; gardening is the “activity of separating and setting apart useful elements destined to live and thrive, from harmful and morbid ones, which ought to be exterminated” (p. 70). National Socialism propagated the idea that those who did not fit their vision of humanity were “incurable” (Bauman, 1989, p. 73); to achieve their desired vision there was no chance of reform, only elimination (Bauman, 1989).

5 Contemporary transhumanism

Contemporary transhumanists would contend that their vision of humanity is fundamentally different from the one espoused by National Socialism. Transhumanist thinkers hold the belief that humans have not yet reached the end of their evolution. They are convinced that by the use of performance-enhancing and mood-controlling medicine, neurological implants, stem cell research and genetic engineering the quality of life can be increased tremendously. According to the famous transhumanist Nick Bostrom (2005), there are three “central capacities” (p.1) which characterize a post-human. One is greatly improved health and a higher life expectancy. Secondly, transhumans should become able to control their emotions and physical desires. Lastly, transhumanism wants to extend a person’s cognitive abilities, namely, the abilities to think more critically, analytically and rationally. The ultimate combination of these goals is human immortality in the form of “quasi- immortal cyberminds” (Coenen, 2007, p. 4). To realize this vision human minds are to be digitally scanned and the data transferred to computers or robot-like artificial bodies (Coenen, 2007). Until this is achieved, the human body is to be enhanced by technological implants and embryonic screening. Many transhumanists hope to optimise it even further by replacing sexual reproduction with selective forms of cloning. Some transhumanists even advocate the resurrection of former generations by reverse-engineering them with phenomenal computing systems (Tipler, 1994). The threat of overpopulation is to be circumvented by adapting humans to life on other planets (World Transhumanist Association, 2011).

Transhumanism has been highly criticised by various scholars. Francis Fukuyama (2004) is concerned that it would lead to an increase in inequality within and amongst societies. Societies would be divided into individuals who can afford human enhancements technologies, and those who cannot. Elaine Graham (2002) underlines this by showing how the world is presently divided between countries which are highly technologically developed and those that are not. She states that 93.3% of all internet users belong to 20% of the world’s richest population whereas only 0.2% of the poorest 20% have internet access.

6 Comparative study

Contemporary transhumanism appears to be a very novel idea due to its advocacy of technologies that exceed the bounds of what science is currently capable of. However, it is evident that human enhancement was a goal for earlier his-

torical projects such as National Socialism and Soviet Communism⁵. From the comparison with these two, ideologically quite distinct, visions of an improved humankind, it may be possible to come to a better understanding of how the contemporary project of transhumanism is justified and what its social implications may be.

The main difference between Soviet philosophers and contemporary transhumanists, is their social focus. In the context of Soviet ideology, visions of human enhancement focused on humankind as a whole. Contemporary transhumanism, on the other hand, is explicitly individualistic (World Transhumanist Association, 2011)⁶. However, transhumanists stress the right for everyone to decide if and how they wish to be augmented. Thus, contemporary transhumanism is more concerned with creating the possibility of augmentation than with actually augmenting society. That such possibilities would be predominantly and firstly available for wealthier individuals is of rather little concern, as a strong 'trickle-down' effect is expected (World Transhumanist Association, 2011).

Human enhancement technologies, however, also have a social dimension. Their distribution and use require some ethical standards and laws because of the potential risks of certain technological projects. Moreover, while many transhumanists are personally interested in achieving a new stage of evolution, they often stress the advancement of human civilisation as a whole over the fate of individual humans. This is why endurable disasters such as volcano eruptions or nuclear bomb droppings are of minor concern when compared to existential ones which threaten overall scientific progress (World Transhumanist Association, 2011). Interestingly, transhumanism's individualistic approach towards human enhancement still points towards a technologically improved society which is

⁵ When comparing the human enhancement technologies envisioned by some thinkers in the early Soviet Union with contemporary transhumanist theories, it is striking how even the technical aspects of these projects bear a strong resemblance. Muraviev's (1924) idea of a 'structural formula' according to which humans can be altered or even reconstructed is close to modern genetic engineering. Furthermore, Tsiolkovsky's (1935) convergence of disembodied minds is not too far from a post-human cyberspace. Also, the extension of the human life-span towards immortality, as advocated by thinkers like Bogdanov (1922) is still a main objective of transhumanist thinkers (WTA, 2009). Finally, Federov's (1913) project of the universal resurrection of all dead finds its heir in Frank Tipler's (1994) vision of a virtually reverse-engineered humanity, encompassing all individuals who ever lived.

⁶ This describes the greatest part of the contemporary transhumanist movement. Transhumanists with other ideological outlooks, such as socialists and feminists also exist, but represent a minority. For an example of a socialist feminist vision of humankind, see Donna Haraway's (1994) 'A Manifesto for Cyborgs: Science, Technology, and Socialist Feminism in the 1980s'.

portrayed as a place with supreme potential for happiness. In this, it is not too different from some early visions of Communism in which humanity would live in leisure and happiness after having created a socialist society and having attained supreme control over nature.⁷

While there are certain similarities between contemporary transhumanism and early Soviet ideology, points of reference between National Socialism and contemporary transhumanism exist as well. Science is viewed by both as being the primary method by which the respective visions of humanity can be accomplished. Science is not only seen as a means of achieving the vision of the 'New Human' but it is also a tool which can be utilised to mould a new society (Bauman, 1989). While the WTA claims it is for individuals to decide whether they want to adopt human enhancement technologies or not, it remains without doubt that these technologies would fundamentally alter society. Contemporary transhumanists admit that they have no means of predicting the resulting social developments (World Transhumanist Association, 2002). However, they hardly ever doubt that it would, indeed, be a form of progress rather than a degeneration in terms of quality of life overall. This positivism with regards to scientific progress is common to National Socialists as well⁸.

The danger of such thinking is that certain ethics and morals are neglected. This was the case in Nazi Germany where the creation of a pure Aryan race, took precedence over the value of human life and dignity. Humanity was split into different moral and legal categories according to race. As most moral systems are based on the common humanity of all individuals, this fracturing of humankind allowed for gross human-rights violations. The victims were simply not seen as being on the same level of human-ness as the perpetrators (Bauman, 1989). A similar disregard for common humanity is a great concern with contemporary transhumanism. By advocating the creation of trans-humans, the ideology creates a society in which beings of differing capabilities live side by side. If, in the case of National Socialism, the delusion that different capabilities existed

⁷ This point may be even more striking if one recalls that many advocates of human enhancement technologies in the early Soviet Union were rather unconcerned about questions of social justice or equal distribution, as they believed that a realization of their projects would quasi automatically lead to the desired state of Communism (Association of the Anarchists-Biocosmists, 1922).

⁸ For a more philosophical investigation of the dangers of scientific positivism, it is worthwhile considering Max Horkheimer's and Theodor Adorno's (1944) 'Dialectic of enlightenment'. The two philosophers show how a positivist enlightened belief in progress can turn against itself and into a totalitarian regime such as that of National Socialism if it fails to reflect on this inherent flaw. The same may well be the case for transhumanism.

resulted in diverging moral and legal status, it seems likely enough to assume that in the case of factually superior trans-humans, a similar differentiation might occur.

There is another common thought among National Socialist, Soviet Communist and transhumanist views on human enhancement. All three apply methods of “gardening” (Bauman, 1989, p. 188) to humans. In the case of National Socialist visions of society, undesirable groups were to be eradicated in order to ensure the growth of society. Very similar arguments were made by some Soviet philosophers. Tsiolkovsky, for example writes: “The power of the perfected human would span across every planet and every habitat and everywhere else. Without causing suffering, it will eradicate all imperfect roots of life and populate these areas with its own mature species. It is as if a gardener were to destroy all the useless weeds and only allow the best vegetables to grow!” (Groys & Hagemester, 2005 p. 61.). The goal of perfecting the work of nature through breeding and enhancement as well as through eradication and destruction and to violently accelerate the dying off of the imperfect and the outlived in order to clear the way for the ‘New Human’ was a fundamental principle of totalitarian thought in the 20th century. While contemporary transhumanism does not advocate forcibly enhancing or killing people, their espoused methods of embryonic screening and genetic manipulation can be regarded as a more sophisticated form of gardening. Like in Tsiolkovsky’s vision, the eradication of undesirable elements happens ‘without suffering’. This would shape society according to dominant social norms⁹.

7 Binary of contemporary transhumanism: Individualism vs. collectivism

Contemporary transhumanism has two main strands of argumentation and justification. On the one hand, it has a strongly individualist approach, believing that everyone should retain the right to decide on his or her technological enhance-

⁹ “Gardening” is not, however, only a social tool. It also occurs on the individual level as “self-gardening” or “self-optimisation” (Groys & Hagemester, 2005, p. 21). In the course of the Communist revolution, the individual was expected to optimise itself so as to best serve the common cause. These ‘hardened’ individuals were regarded as role-models for the Communist society. In contemporary transhumanism with its strong individualistic focus, “self-gardening” is also regarded as a moral obligation (World Transhumanist Association, 2011). The reasoning is if individuals were to optimise themselves, society at large would be better.

ments. On the other hand, transhumanism generates much of its appeal by stating that human enhancement would lead to a better society. It regards the development of human enhancement technologies as something that is intrinsically beneficial to humanity. It is important to note that the two strands of argument are parallel rather than complementary. They are stressed in different instances for the justification of certain aspects of transhumanist thought, not combined in a moral stance of transhumanism overall. Depending on which one is stressed, contemporary transhumanism bears a resemblance to aspects of National Socialist or early Soviet ideology. This is not to say that it is akin to Nazism or Soviet Communism overall, but the comparison serves well to illustrate the specific problems posed by either course of argument.

If one follows the individualistic line of thought, it soon becomes apparent that it is very likely to result in a society composed of individuals of vastly diverging capabilities. This problem is exacerbated by the fact that it would be those people who already hold considerable power and wealth who would first be able to afford human enhancement technologies. Their expanded capabilities would then, in turn, allow them to develop themselves even further in short order. There would soon be a gap between them and the rest of the population. The existence of a gap between different states of augmentation poses the question how humanity would be defined in such a society. Transhumanists seek to overcome this problem by stressing the importance of ensuring that individuals are humane rather than human (World Transhumanist Association, 2011)¹⁰. 'Humaneness' is not further specified except as 'human-friendliness' for the case of super-intelligent beings.¹¹ By demanding enhanced beings be humane, transhumanists set ethical standards. These standards would almost certainly come to define a transhumanist society. The standards themselves are not further specified. However, other arguments provided by the WTA (2011), such as the characterisation of a nuclear bomb explosion as an endurable disaster, suggest them to be strictly utilitarian. Therefore, transhumanist super-intelligence might regard the expenditure of human lives as something to be accepted if the payoff for

¹⁰ This transhumanists argument assumes that humans could be enhanced and programmed in such ways as to only preserve their positive side. It is questionable in how far that is possible and also, in how far it is precisely the deficits of the human condition which enable such things as love and creativity. That, however, is a philosophical question which will not be the concern of this paper.

¹¹ It seems highly presumptuous to assume that humans could outsmart a intelligent being greater than themselves, by making it default friendly towards them. This, however, is not the point to be made here.

humanity as a whole was sufficiently great. Such thoughts bring contemporary transhumanist thinking all the closer to Soviet views on human enhancement. Thus, the collectivist strand of contemporary transhumanist justification may well function within a totalitarian social vision¹².

Contemporary transhumanists might argue that it is not possible to link the thoughts of National Socialism and early Soviet views on human enhancement to contemporary transhumanism. They would contend that there are no comparisons to be drawn. Certainly, transhumanists do not advocate the inhumane measures associated with Soviet Communism or National Socialism. They are also very careful to point out the *practical* dangers presented by some of their proposed technologies. Such reasoning is correct in denying a direct association between the different ideologies, but it misses the core of the argument; that transhumanism inherently represents a *political* danger due to its *potential* to be part of a totalitarian or oppressive system.

If the conclusion is then reached that transhumanism is, indeed, dangerous, it has to follow that measures need to be taken to prevent its vision from coming true. This could be regarded as an imposition of present values on future generations, as human enhancement technologies would not be developed and would thus not be available for use. This would, according to some transhumanists (Aubrey de Grey, 2005) go against the human urge not to be content with one's environment and seek to develop further. They consider it as immoral to deny future generations the opportunity to benefit from those treatments, just because the current generation chose not to develop these technologies. It may seem odd that transhumanists invoke the right for future generations to hold their own moral values, while at the same time upholding the (current) value of 'humane-ness'. Thus, allowing the development of human enhancement technologies, for the sake of giving the power to decide about their use to future generations, would also be merely an application of present dominant values. After all, moral judgements of any sort can only be articulated within present ethical frameworks. If there is a danger of transhumanism facilitating the rise of a totali-

¹² The danger of a totalitarian transhumanist society is all the more menacing due to the advanced instruments of social control provided by human enhancement technologies. As the regulation of the individual human body becomes near-absolute, the body of the state is ever more likely to become a total 'biopower' in Foucault's (1976) sense. This total control of human life, including its reproductive capabilities has been vividly illustrated by Aldous Huxley's "Brave New World". The relationship of transhumanism and biopolitics would have to be examined in more depth. However, it seems that body-control becomes dangerous in particular when advocated in the context of a totalitarian social project. Therefore, this paper will limit itself to examining the likelihood of such a project as part of a transhumanist vision.

tarian regime and if such a regime is judged immoral by our present standards, that danger has to be taken into account when dealing with transhumanism, independent of possibly diverging future values.

Within the current frame of values, transhumanism might have a chance to negate the above dangers by refraining from extreme individualistic and collectivistic strands of argumentation. Arguably, transhumanism might attempt to unite the two strands and come to a moderate middle-ground which does not exhibit the same totalitarian dangers¹³. As well-intentioned as this approach may be, it faces a serious philosophical dilemma. A main characteristic of transhumanist thought is the blurring of the definition of humanity. The extreme justifications examined above are internally coherent, because they circumvent a moral justification based on common humanity by setting independent standards - power and overall utility. Almost all moral systems currently require the common humanity of all people as the foundation for their laws of conduct. If this foundation is blurred, the moral construct becomes ontologically unstable. If transhumanism does not manage to create a new basis for moral conduct, it is not foreseeable how it could be independent from its present, extreme justifications¹⁴.

8 Conclusion

Human enhancement technologies have proposed tempting improvements to the human condition. Throughout history, their proponents have been part of different ideological movements in which they articulated their visions of an enhanced humanity. After the October Revolution, a vast space for progress seemed to have opened up in Russia. Finally, the efforts of humanity would not anymore serve merely the individual, but would be redirected for the common good of humanity. Now the vision of a radically improved humanity appeared to be suddenly within reach. The control of time and space, of life and death, were regarded

¹³ Some movements already exist within transhumanism which advocate a more pragmatic or moderate approach (Young, 2006). However, this often concerns only the extent to which technologies are to be developed and not the initial justification for those developments. It is, however, possible to assume that these movements might try to advocate more moderate justifications.

¹⁴ A valid point of contention is, that the different aspects of transhumanist thought warrant an independent assessment. After all, some of them could be beneficial if separated from the justifications employed by the greater movement. Such an investigation would go beyond the scope of this paper. Moreover, transhumanism presently appears as a comprehensive philosophy which first necessitates a comprehensive assessment.

by the advocated of human enhancement as the most important agendas. Only once immortality was attained and humanity had set out on the conquest of space, would Communism be truly attained. Then, past generations would have to be resurrected in order to include them in the newly attained paradise. The National Socialist vision of a future humanity was considerably more exclusive. The NSDAP's "gardening state" (Bauman, 1989, p. 189) aimed at the purification of the Aryan race. By splitting the population into immutable moral and legal categories, the National Socialists legitimised their crimes.

In both cases, the goal was the optimisation of humankind according to certain ideals by means of scientific methods. Essentially, this is also the goal of contemporary transhumanism. By using a convergence of communication technology, genetic engineering, technological implants and enhanced artificial intelligences, transhumanists hope to make humans into superior beings. The trans-human would have a radically improved lifespan, enhanced intelligence, resistance to disease and a supreme potential for happiness as it becomes able to control its emotions. While transhumanists are convinced that society would be improved if their technologies were to be used wisely, they refrain from advocating forced enhancements of individuals. There are a number of practical similarities between transhumanist projects of human enhancement and those advocated in the frameworks of Soviet Communism and National Socialism. Less obviously, but more importantly, there are also several argumentative parallels. On the one hand, transhumanism follows a strongly individualistic line of argument. This bears the danger of splitting society into groups of diverging capabilities. These actual inequalities could very well serve as the basis for different moral or legal categories, similar to the way imagined inequalities lead to a hierarchical society in National Socialism. On the other hand, society is to benefit from human enhancement technologies by the imposition of humane values. By defining what these humane standards should be, transhumanists would have the power to determine core aspects of a society shaped by such super-intelligent beings according to present moral standards. If we follow the transhumanist argumentation in other areas, the result may well be super-intelligent beings who ultimately care little for the lives of single humans, who are on the wrong side of an equation with the progress of humanity overall on the other. This, it seems, is quite similar to early Soviet visions of a state of Communism achieved by technological advancement. Again, it is the comparison with the effects of those past ideas which suggests that the present argumentation is highly dangerous.

The danger of transhumanism does not lie with human enhancement technologies in themselves. Nor is the general pursuit of a better society to be condemned. However, transhumanism advocates an enhancement which blurs the

boundaries of humankind. This necessitates the use of strongly individualistic or collectivistic justifications. It is the compatibility of these extreme justifications with totalitarian visions of society which makes transhumanism dangerous.

References

- Association of the Anarchists-Biocosmists (1922, January 4th). Deklarativnaja rezoljucija. *Izvestija VCIK*, p. 3, In B. Groys & M. Hagemeister (Eds.), *Die Neue Menschheit. Biopolitische Utopien in Russland zu Beginn des 20. Jahrhunderts* (p. 54). Frankfurt am Main: Suhrkamp.
- Bauman, Z. (1989). *Modernity and the Holocaust*. Ithaca: Cornell University Press.
- Biddis, M. (1997). Disease and dictatorship: The case of Hitler's Reich. *Journal of the Royal Society of Medicine*, 90(6), 342 - 346,
- Bogdanov, A. (1922). Die Tektologie des Kampfes gegen das Alter. In B. Groys & M. Hagemeister (Eds.), *Die Neue Menschheit. Biopolitische Utopien in Russland zu Beginn des 20. Jahrhunderts* (pp. 510-524). Frankfurt am Main: Suhrkamp.
- Bostrom, N. (2005). A history of evolution and technology. *Journal of Evolution and Technology*, 14(1), 1-25.
- Coenen, C. (2007). Utopian aspects of the debate on converging technologies. In G. Banse, A. Grundwald, I. Hronszky & G. Nelson (Eds.), *Assessing societal implications of converging technological development* (pp. 141-172). Berlin: edition sigma.
- Daly, T. (2005). Life-Extension in Transhumanist and Christian perspectives: Consonance and Conflict. *Journal of Evolution and Technology*, 14(2).
- De Grey, A. (2005, July). Aubrey de Grey: Aubrey de Grey says we can avoid aging [video file]. Retrieved 19.01.2011 from http://www.ted.com/talks/lang/eng/aubrey_de_grey_says_we_can_avoid_aging.html
- Federov, N. (1913). *Philosophie des gemeinsamen Werkes (Filosofija obscego dela)*. Moscow.
- Foucault, M. (1976). *The history of sexuality Vol. 1: The will to knowledge*. London: Penguin.
- Fukuyama, F. (2004, September 1). Transhumansim. *Foreign Affairs*, 144, 42-43
- Genetics Home Reference (2011). Eugenics Retrieved 20.01.2011, from <http://ghr.nlm.nih.gov/glossary=eugenics>
- Graham, E. (2002). Nietzsche gets modern: Transhumanism and the technological sublime. *Literatur & Technology*, 16(1).
- Groys, B., & Hagemeister, M. (Eds.). (2005). *Die Neue Menschheit. Biopolitische Utopien in Russland zu Beginn des 20. Jahrhunderts*. Frankfurt a. M.: Suhrkamp.
- Hagemeister, M. (2007). *The Occult Roots of Soviet Space Travel*. Paper presented at the International Conference. March 11-13, 2007, Berlin, European Academy. The Occult in 20th Century Russia. Metaphysical Roots of Soviet Civilisation. Retrieved 20.01.2011, from <http://www.harrimaninstitute.org/MEDIA/00734.pdf>

- Haraway, D. (1994). A manifesto for cyborgs: Science, technology, and socialist feminism in the late twentieth century. In Steven Seidman (Ed.) *The Posthuman Turn: New Perspectives on Social Theory (Simians, Cyborgs and Women: The Reinvention of Nature)* (pp. 82-118). Cambridge: Cambridge University Press.
- Hayes, R. (2002). Towards an international ethical, social and political accord on human cloning and human species - Alteration Retrieved 15.01.2011, from <http://www.geneticsandsociety.org/article.php?id=255>
- Lerner, B., & Rothman, D. (1995). Medicine and the Holocaust: Learning more of the lessons. *Annals of internal medicine*, 122(10), 793 - 794.
- Longerich, P. (2010). The Nazi racial state, 15.01.2011, from http://www.bbc.co.uk/history/world-wars/genocide/racial_state_01.shtml
- Mitchell, B., & Kilner, J. F. (2007). Remaking humans: The new utopians versus a truly human future Retrieved 12.12.2010, from http://www.russellmoore.com/documents/russellmoore/Remaking_Humans.pdf
- Muraviev, V. (1924). Die Beherrschung der Zeit als Grundaufgabe der Arbeitsorganisation. In B. Groys & M. Hagemeister (Eds.), *Die Neue Menschheit. Biopolitische Utopien in Russland zu Beginn des 20. Jahrhunderts* (pp. 425-455). Frankfurt am Main: Suhrkamp.
- O'Mathúna, D. (2006). Human dignity in the Nazi era: Implications for contemporary bioethics. *BMC Medical Ethics*, 7(1).
- Sharpe, D. (2007). Cyborg philosophy: Ethical issues concerning augmentation Retrieved 10.01.2011, from <http://www.cyborgdb.org/sharpe.htm>
- Strous, R. (2006). Nazi euthanasia of the mentally ill at Hadamar. *American Journal of Psychiatry*, 163(1), 27.
- Tipler, F. J. (1994). *The physics of immortality: Modern Cosmology, God and the Resurrection of the Dead*. Doubleday.
- Trotsky, L. (1932). Eine Vision der Zukunft In I. Deutscher (Ed.), *Denkzettel, Politische Erfahrungen im Zeitalter der Permanenten Revolution* (pp. 420-423). Frankfurt am Main.
- Tsiolkovsky, K. (1935). Die kosmische Philosophie. In B. Groys & M. Hagemeister (Eds.), *Die Neue Menschheit. Biopolitische Utopien in Russland zu Beginn des 20. Jahrhunderts* (pp. 379-390). Frankfurt am Main: Suhrkamp.
- Weigmann, K. (2001). In the name of science. *EMBO reports*, 2(10), 871-875.
- World Transhumanist Association (2002). Transhumanist Declaration Retrieved 20.01.2011, from <http://humanityplus.org/learn/transhumanist-declaration/>
- World Transhumanist Association (2011). Transhumanist FAQ Retrieved 10.01.2011, from <http://humanityplus.org/learn/transhumanist-faq>
- Young, S. (2006). World Transhumanist Society Retrieved 10.01.2011, from <http://www.worldtranshumanistsociety.com/>

HIV INFECTION RATES & HUMAN TRANSIT

A social network and risk analysis approach to the relationship between travel and the HIV epidemic

Florian Rücker

Abstract Numerous recent studies have found transit – including export-based transit, migration and trafficking – to be positively correlated to new HIV infections in the general population. This paper aims at identifying an underlying mechanism for a possible causal relationship. To approach this aim, first social network analysis (SNA) is applied as it offers a parsimonious and very applicable framework to demonstrate how transit may perpetuate an epidemic such as HIV. Second, it is argued that each individual transit group is particularly susceptible to HIV for its own set of reasons. SNA and the strength of empirical support suggest that transit may indeed not only correlate to, but cause higher HIV infection rates.

I Introduction

The rise of the HIV/AIDS epidemic has been halted. This message, conveyed for instance in the UNAIDS report of 2010, is true in particular in terms of AIDS and death rates. Yet, there are still 2,6 million new HIV infections yearly and in 2008 as well as 2009 the highest numbers of HIV infected since the outbreak of

the epidemic were reported; over 33 million (UNAIDS, 2010). While epidemiological research on HIV has made considerable leaps in the past decade, the disease is still not fully understood. Considering record numbers of HIV infected individuals worldwide, it is imperative to continue efforts in understanding and preventing the epidemic.

This paper ventures to better understand the relationship of transit and HIV-infection rates. Transit here includes domestic and international migration, export-based travel along trade routes with trucks as well as illegal drugs and slave trafficking. As shown below, the amount of travellers engaging in this kind of transit has been found to correlate with the rate of HIV-infections not only within the transit group but also in the general population. This may have important implications for policy makers: UNAIDS, numerous NGOs, individual countries and multilateral programmes spend billions on tackling the HIV epidemic. The initiatives differ in terms of success as well as cost-effectiveness (Bendavid et al., 2008; Creese et al., 2002). Since people that travel between cities and countries have been identified as possible catalysts in the epidemic, designing programmes to reduce new HIV infections as well as infectiousness in travelling people may pose a highly (cost-)effective option (Oster, 2009). Before being able to formulate a policy response, however, it is necessary to fully comprehend the mechanisms that underlie the relationship between travel and HIV infection rates. Thus, why do migrants, people working in trade and other travellers tend to infect more people? Why and to what extent are they themselves at risk? And has the amount of transit been found to correlate to HIV infection rates in the general population? Whereas this relationship is currently considered correlational, identifying an underlying mechanism could be a step closer to inferring causation. This is especially true if such mechanism is more plausible than alternative explanations for the correlation that involve confounding variables.

The following research question guides this paper: What causal mechanisms underlie the spread of HIV through human travel and movement? The paper is structured in three parts to shed light on a possible answer. First, a brief literature review introduces the finding that HIV-infection rates correlate to export, migration and trafficking. This review relies especially on the recently published findings by Emily Oster (2009), whose analysis resulted in strong support of this relationship for both export and migration in sub-Saharan Africa.

Second, at the core of this paper, two approaches are taken to explain the relationship between transit and HIV infection rates. On the one hand, social network theory presents a model that identifies certain groups of people (nodes) as spreaders – particularly those that travel between or across more than one community. It thus offers a possible mechanism to explain why transit and HIV infec-

tion rates are related in general. On the other hand, the different transit groups are independently analyzed to better understand their respective circumstances. By doing so, it is shown that they tend to be more susceptible to the virus than the general population, beyond the fact that they all travel.

Finally, the findings, their relevance and feasibility for policy implementation are discussed. A logical policy response is to increasingly target transit groups through programmes to prevent and treat HIV/AIDS. It is furthermore discussed as to why it is necessary to support rather than criminalize transit groups of all kinds and to ensure their access to prevention and treatment initiatives.

2 Literature review

According to a theory propagated by Gladwell (2002) and others, the HIV virus was brought to North America in the late 1970s by a flight attendant who worked on flights between several destinations in North America, Europe and Africa, and was known to have had numerous male sexual partners throughout his life. Whereas the theory has been largely refuted, it illustrates a point that cannot be dismissed; that the human immunodeficiency virus came to the Western World by somebody who travelled. Decades after the virus reached the US and Europe, research confirmed that HIV infection rates correlate with the amount of people in transit.

Transit groups are people whose current life circumstances are characterized by travel – transit – from one destination to another. This paper includes three transit groups. Firstly, people who legally work in transit and are largely responsible for the transport of goods via land and sea. Secondly, people who are in the process of (e)migrating or who regularly return home. Thirdly and finally, people who illegally and/or involuntarily work in transit; drug traffickers, and sex workers who are being trafficked. Whereas other groups of people who are in transit – business travellers, globe trotters, for example – may offer similarly relevant cases for this paper, they will be excluded here as they cannot be considered to be under risk in terms of HIV susceptibility and infectiousness to the extent that the other three groups are.

Some of the most relevant findings were published by Oster (2009), who considers a dataset for all African countries, and comes to the conclusion that there is a strong positive correlation between new HIV infections and exports. Her findings indicate that a 100% increase in exports may lead to up to 400% increase in new HIV infections. She explains these findings by assuming that an increase in exports leads to an increase in truck drivers travelling domestically

and internationally. It is argued below as to why more truck drivers may relate to more new HIV infections. Oster presents similarly strong findings for a positive correlation between the number of migrants and the rate of new HIV infections.

Lurie et al. (2003) tested the likelihood of migrant couples to have one or both partners infected with HIV in South-Africa. The study focused on domestic migration for work and came to the conclusion that working men tend to carry the disease from the cities to rural areas. Migrant couples have a 35% likelihood of having at least one partner that is HIV-positive, as compared to 19% in non-migrant couples.

Del Amo et al. (2010) studied data of HIV in EU countries and migration. They found that for the 8354 HIV cases where geographical origin could be determined, 5429 (65%) were from a state different to the state in which the case was reported.

Anarfi (1993) reports for the case of Ghana that even though a general decline in the number of sexual partners has been reported to alleviate the national epidemic, migration increases the risk for people “at both ends of the migratory movement” (p. 1). His findings indicate that migrants tend to have more casual sexual partners in addition to their regular sexual partners – both in the new and the old home. Besides the transit-factor, he mentions the typically inadequate hygienic and health conditions that tend to accompany migration on a large scale. He goes so far as to suggest that, besides behavior-change campaigns, policy makers should compel people not to migrate.

Beyrer (2008) analyzed the two major heroin trafficking routes worldwide in East and Southeast Asia, and their relationship to the HIV/AIDS epidemic. Beyrer comes to the conclusion that countries crossed by the heroin traffickers tend to face considerably higher HIV infection rates, due to the nature of intravenous drug use and needle sharing. In 2002 he predicted a considerable surge of the epidemic in central Asian countries along the trafficking routes: “Iran, Kazakhstan, Kyrgyzstan, Pakistan, Tajikistan, Turkmenistan and Uzbekistan” (p. 114). The UNAIDS report of 2010 indicates an increase of 25% or more in Kazakhstan, Kyrgyzstan and Tajikistan between 2000 and 2009.

Finally, Steinbrook (2007) has studied transit routes and rates of HIV infections in Africa and South Asia. According to his results, HIV especially spreads along trucking routes.

2.1 Confounding variables & simultaneity bias

The findings in the above studies are not to be ignored. Some of them report very high significance scores. Is it, however, conceivable that human transit does not directly cause an increase in HIV rates? Drug trafficking and HIV could,

for example, be caused by a confounding variable. That common independent variable may be social issues. Massive job losses in an impoverished region, for example, may lead to both, increased HIV as a result of malnutrition and bad health as well as increased drug use. Concerning the relationship between migration and HIV infection rates, simultaneity bias is possible: thus, an HIV infection may induce a person to migrate, for example with the intention of living somewhere with better healthcare.

Oster's findings of export and HIV infection rates are more intuitive, however, and causation is unlikely to go in the opposite direction. The findings, that most HIV infections in the EU stem from HIV-mutations commonly found abroad, are also difficult to refute, especially when considering that most of the nondomestic mutations both originate from sub-Saharan Africa and often can be traced to African immigrations and European citizens with African migratory background. Despite the possible confusion of causality, this paper hereinafter argues for the likelihood of a causal relationship between transit groups and new HIV infection rates.

3 Understanding causation

It is important to understand that, as for all HIV matters, there is no monocausal explanation. This paper thus attempts to explain the above data from two perspectives. First, the basic mechanism to explain why more travel leads to more HIV infections is explained and illustrated using social network analysis. Second, the transit groups are regarded individually to understand their respective risks.

3.1 A network of risky behavior

This paper turns to social network analysis as a possible causal mechanism underlying the finding that human transit correlates to new HIV infections. Social network analysis is first presented as a general theory and then applied to the case of transit groups in the HIV/AIDS epidemic.

Social network analysis

In social network analysis (SNA), the entity of research is not the individual by itself, but networks and the individual within context of the network. Networks consist of nodes and connections (Barros et al, 2009). What constitutes a node and a connection is defined by what type of analysis SNA is used for. Contagion spreads through networks. Contagion does not necessarily refer to diseases, it can refer to anything passed on from one human to another; this includes ideas, habits

(Ahuja et al, 2005) and viruses. The reach, speed and characteristics of a contagion are contingent on two aspects. First, it depends on the type of network – i.e. its structure – and which people in that network are most infectious. This factor is regarded here. Second, it depends on how infectious the infected are and how susceptible the uninfected are to the contagion. This finds consideration in 3.2.

There is a range of network types of which two will be presented at this point. For a long time researchers assumed that our lives can best be modeled in *random* networks, where all nodes have roughly the same amount of connections (Knoke & Yang, 2008). It is illustrated in figure 1.1. It has, however, been found that human contact is best modeled in so-called *scale-free* networks – random networks will thus merely serve as a counterexample. In scale-free networks, all nodes have different amounts of connections: a few nodes tend to have many connections and most nodes have rather few of them. Since connections between nodes in scale-free networks – on which this paper has set its focus – are unevenly distributed and some nodes have many connections, the nodes build so called clusters, i.e. closely linked groups of nodes. When scrutinizing the scale-free network in the social network graph of figure 1.2, it becomes furthermore apparent that different nodes have a differing significance in passing on any given contagion throughout the network (Epstein, 2007). The majority of nodes have merely one or two connections to other nodes within the same cluster. They are thus not very significant in spreading a contagion to others. Node a is one of the few nodes with a large number of connections. When this node is infectious, it tends to pass on the virus to many nodes in its cluster. Whereas node a is of great interest in epidemiology, it is not of greater interest for this analysis. Node b only has two connections. Its potential role in an epidemic is, however, remarkable. Since it connects two clusters (groups) of nodes, it essentially holds the link between the upper-right and lower-left part of the network. Node b is a so-called *spreader* in this network (Ahuja et al., 2005).

Spreaders in networks of risky behavior

Social network analysis and its different types of nodes can be applied to the HIV/AIDS epidemic. For the purpose of modeling the spread of HIV, a node refers to an individual. A connection between two nodes refers to risky behavior between two individuals. For this analysis, risky behavior is defined as either unprotected sex or needle sharing. This is a simplification since both have different circumstances and different degrees of risk. Yet, they both lie at the core of spreading HIV and their differences do not hinder the analysis of transit with SNA.

Since transit groups travel across communities, they also cross paths with members across different clusters of nodes. People working in transport, for

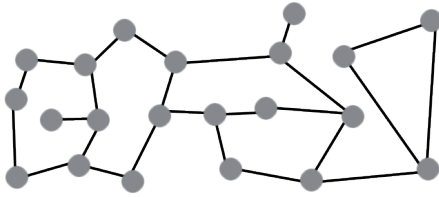


Figure 1.1 Random Network: 2–3 connections per node

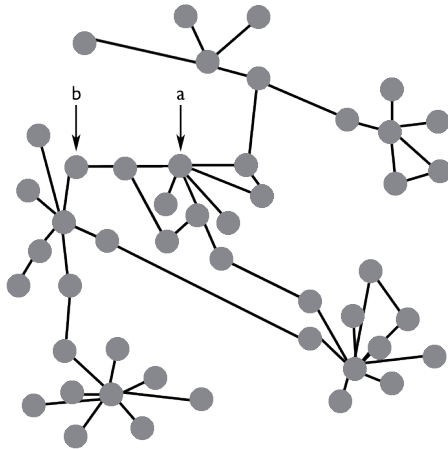


Figure 1.2 Scale-Free Network: 1–8 connections per node

example truckers, tend to regularly visit two or more destinations – different cities within or across countries. The same goes for people involved in drug trafficking. Migrants travel less between two destinations – especially in international migration. However, they tend to have stronger roots in their old and their new home, as compared to people in transport and their destinations. The destinations (i.e. cities) of people in transit can be seen as large clusters, within which the nodes are largely interlinked. The roots or the bond of a traveller influences the number of sexual partners they have.

Transit groups within a social network graph can thus be seen to take the role of spreader-nodes in SNA, such as node b in figure 1.2. They constitute the link between one cluster of nodes and another. While figure 1.2 is a simplification, and in reality it is more likely to have thousands of such nodes that connect two

big clusters, the illustration grasps the core of their role: A large number of nodes do not have connections, i.e. sexual relations or needle sharing, with nodes outside of their cluster, and a proportionally much smaller number of nodes does. Spreaders are thus crucial in transporting the virus from one community to the other. If their infectious potential could be contained, the epidemic would remain within any given community – which would prevent an epidemic from happening in the first place. Whereas it is unlikely or impossible to completely remove the possibility of transit groups getting infected or infecting others, a mere reduction of susceptibility and infectiousness may have considerable impact by reducing the number of new HIV infections.

3.2 Understanding the respective risk factors

In social network analysis, every human being is merely regarded as a node that is defined through its position within the social network and the number of connections. Whereas SNA serves well in understanding the most fundamental mechanism underlying a correlation of transit and HIV infection rates, it disregards the individual risk factors that lead to increased susceptibility and infectiousness of the different transit groups. The here regarded transit groups, their particular circumstances and the resulting risk factors are presented hereinafter.

There are three factors that determine the infectious potential of the transit groups. If the above mentioned flight attendant would not have travelled regularly from Congo to the US (one), would not have had unprotected sex with Congolese (two) and not have had unprotected sex with numerous others around the globe (three), the HIV/AIDS epidemic would have taken a different shape, at least in North America. Even if the theory of the flight attendant is not valid, it serves well even as a fictional example. The three factors can be defined as follows. First, the transit in itself – how much do transit groups travel back and forth? The impact of transit is demonstrated through social network analysis above. This relationship has furthermore found considerable empirical support. Particularly relevant were the findings by Oster (2009), who was able to show a close correlation between export – as a factor that strongly impacts travel by trucks – and new HIV infections. At this point it is important not to jump to conclusions like prohibiting transit, as this would not only contradict human rights but may also worsen the situation, as is argued below. The second factor is the susceptibility to HIV. There is a wealth of research showing that the probability of getting infected with HIV varies enormously, in some cases by a factor of up to 10 (Hakan, 2008), depending on individuals' general health, nutrition, skin condition and preexisting conditions. Unfortunately, the peculiar social environment can lead to particularly high susceptibility in transit groups, as will be

discussed below. The third factor is infectiousness. Assuming an individual is already infected, how likely is it for him to infect others? This, again, depends on physical and behavioral variables. If the individual is healthy and receives proper antiretroviral treatments, physical infectiousness is likely to be low. Behavioral factors play a role as well, however. Not engaging in unprotected sex and adhering strictly to the ART therapy, if offered, obviously plays a role. What has furthermore been found to strongly impact infectiousness is the number of sexual partners that an individual has contact to simultaneously (Epstein, 2007). Both the access to ART therapy as well as the number of simultaneous sexual partners tends to differ in certain transit groups, as compared to the general population. These risk factors find consideration below.

Legal transit of goods: trucker

Beyond crossing cities and countries, truck drivers are a risk group for themselves. Lurie et al.(2003) have found that truckers are more likely to be infected with HIV. As mentioned, Steinbrook (2007) found that HIV infections tend spread from trucking routes in both Africa and India. Studies have found three factors that explain the above findings. First, it has been found that truckers have, on average, a higher number of sexual partners than the rest of the population (Brockerhoff & Biddlecom, 1999; Lurie et al., 2003b). Second, Orubuloye (1993) found that truck drivers not only have more partners, but are more likely to engage with commercial sex workers who are often a high-risk group themselves (Pyett & Warr, 1997). Finally, the regular partners of those who travel for a living have been found to be more likely to have additional sexual encounters at home while their partners are away (Lurie et al., 2003b).

Migrants

Migrants are in a situation different from truck drivers, but have similar risk factors. They are also more likely to be infected with HIV as compared to the rest of the population and tend to have more partners than the average population (Brockerhoff & Biddlecom, 1999; Lurie et al., 2003b). Migrants have bonds both to their home and their adopted home and are hence more likely to have sexual partners in both communities.

For the case of international migration, illegal immigrants face additional risks. Due to their criminalization, they have less access to health care and information about HIV. They are furthermore at risk of being subjected to human rights violations, as they lack the legal foundation or lack of language skills to defend themselves. This results in a considerable increase in the risk of getting infected with HIV (Khin, 2008). Caoette (2000) found this for illegal immigrants

in South-East Asia. Pezzoli et al. (2009) came to results that indicated a similar trend for illegal immigrants in Italy and Ruiz and Briones-Chavez (2010) have found this for illegal immigrants in the Southern US. Migrants that are forced to leave their home due to violent conflict or natural disasters are especially at risk (UNGASS, 2001). The push factors alone usually mean higher health risks. Beyond that, conditions at the chosen destinations are commonly bad; mass camps or criminalization and the treatment as illegal immigrants increase general health risks shown to be related to HIV infections such as malnutrition and other infections (Gardiner, 2001; Hankins et al., 2002).

Heroin & sex trafficking

Heroin traffickers and people trafficked for forced prostitution belong, due to their occupation and the people they encounter, to high-risk groups. People who traffick and deal with heroin tend to use it themselves, and heroin use – a drug consumed intravenously – is strongly related to HIV infection risks (Beyrer, 2008; Peryskina, 2010). Similarly, forced sex workers are a high-risk group due to their large number of sexual partners. They are a transit group, since they are often bought, kidnapped or lured in one country and then trafficked to another country where they are forced to prostitution. Women and children in that situation face an even larger risk, since they are usually not free to participate in society or receive health care (Khin, 2008). Besides that, sexual violence, their inability to negotiate condom use, inability to refuse sex and substance use to cope with their situation are all factors increasing their vulnerability to HIV (Gupta et al., 2009; Kamalesh et al, 2008).

High risk, different causes

The evidence presented here shows, that besides connecting to different communities, or network-clusters, all of the above groups have additional, individual risk factors. This underlines their particularly relevant role in the epidemiologic development of HIV. It also shows, that it is important to distinguish between the different transit groups – i.e. to go beyond social network analysis – in order to be able to address the problems in a differentiated, targeted manner.

4 By way of a conclusion: policy implications

The above two-tiered analysis shows why the empirical results indicating a positive correlation between human travel and new HIV infections may, indeed, be the result of causation. In an attempt to answer the research question – what

causal mechanisms underlie the spread of HIV through human travel and movement – two factors were identified. First a simple application of social network analysis shows that spreaders – the here discussed transit groups – play a significant role in transmitting the human immunodeficiency virus from one cluster – e.g. city – to another. Second, it is argued that the three identified transit groups are at particular risk of getting infected with the virus. They thus also pose a particular risk of infecting others. Due to the synergy of these two factors, it is sensible to assume that an increase in these transit groups *causes* an increase in new HIV infection rates.

While more research on the role of transit in the HIV epidemic is dearly needed, it may be sensible to already shed light on possible policy implications. Most intuitively, it would be beneficial to increasingly target the transit groups in already existing programmes to inform about, prevent and treat HIV/AIDS. The targeting of resources to those most susceptible and infectious may be a potent measure to reduce rates of new HIV infections. It is furthermore likely to be more cost-effective to target resources, than trying to cover the whole population. While universal access to treatment would be an ideal condition, access to ARTs in Africa is low mainly due to financial constraints (UNAIDS, 2008). The prioritizing of treatment based on risk may create the greatest benefit for society. In approaching and helping the here identified risk groups, it may be wise to learn from and emulate other initiatives targeted at certain risk groups. Programmes targeting sex workers in Thailand have been relatively successful (Phoolcharoen, 1998) and could be the foundation for similar programmes adapted for transit groups. Griensven (1998) discusses several approaches that were taken in an information and condomization campaign in southern Thailand. First, the individual circumstances were analyzed. For example, IV drug use was very uncommon among the commercial sex workers (CSWs) and illiteracy was high. Second, they identified the best ways – contact points – to approach the target group. For this campaign, they used STD clinics and approached brothels directly. Third, they distributed media and information materials to increase perceived vulnerability to HIV. The material was suitable for an illiterate target audience and included cassette tapes, comic books and video tapes. Fourth, Griensven's campaign emphasized peer learning: for each contact point, two people of the target group were selected and trained to be peer educators. For this case, a contact point was a brothel. Finally, the team searched for the cooperation of the superiors responsible for the target group. Thus, for this campaign, brothel owners and managers were involved and informed about the benefits of using condoms. Many of these steps might be applicable to increase HIV awareness and condom use in transit groups.

In order to actually improve cost-benefit ratios and understand the general feasibility of any initiative targeted at transit groups, it may be relevant to consider how accessible the respective groups are. People working legally in transit – truckers – might be reachable. Migrants temporarily housed in refugee camps run by international organizations, NGOs or cooperative governments may also be reachable, depending on the circumstances and the entity running the camp. Accessibility is much more difficult in criminalized transit groups, which leads to a final policy recommendation.

The importance of de-criminalizing certain transit groups can hardly be understated. In order to allow for some sort of treatment and prevention campaigns to be accessed by high-risk transit groups such as heroin traffickers, forced prostitutes and illegal immigrants, governments have to take the first steps by allowing for easy and legalized access to clean needles and health care. Griensven (1998) reports anecdotal evidence of the impact of criminalization: While his campaign (see above) was implemented, Thai police raided brothels in the same region. As a result, he and his team quickly lost the painstakingly established contact with the CSW, who disappeared to be out of reach of the police – and thereby out of reach of the HIV campaign. The issue of discrimination and its significance as a hurdle in the struggle against HIV/AIDS is not a new topic. However, understanding that some of the officially or unofficially criminalized groups play an important role in the HIV epidemic puts additional emphasis on the demand to de-criminalize and improve access for these groups. This also means that attempting to prohibit transit in itself may backfire, as it would further remove certain transit groups, who are likely to travel in any case, from the reach of health care and HIV prevention and treatment initiatives.

References

- Ahuja, R. K., Magnanti, T. L., & Orlin, J.B. (2005). *Network flows: theory, algorithms, and applications*. Beijing: Pearson education Asia limited.
- Anarfi, J. K. (1993). Sexuality, migration and AIDs in Ghana – A socio-behavioural study. *Health Transition Review*, 3, 1-22.
- Bendavid, E., Young S. D., Katzenstein, D. a., Bayoumi, A. M., & Sanders, G.D., (2008). Cost-effectiveness of HIV monitoring strategies in resource-limited settings – A Southern African analysis. *Archives of Internal Medicine*, 168(17), 1910-1918.
- Beyrer, C. (2008). Human immunodeficiency virus (HIV) infection rates and heroin trafficking: fearful symmetries. In Y. F. Thomas, D. Richardson & I. Cheung (Eds.). *Geography and Drug Addiction*. London: Springer.

- Brockerhoff, M., & Biddlecom, A. (1999). Migration, sexual behavior and the risk of HIV in Kenya. *International Migration Review*, 33(4), 833-856.
- Caoette, T. M. (2000). *Sexuality, reproductive health and violence: Experiences of migrants from Burma in Thailand*. Bangkok, Thailand: Institute for Population and Social Research, Mahidol University.
- Creese, A., Flyod, K., Alban, A., & Guinness, L. (2002). Cost-effectiveness of HIV/AIDS interventions in Africa: A systematic review of the evidence. *The Lancet*, 359, 1635-1642.
- Del Amo, J., Pérez-Cachafeiro, S., Hernando, V., González, c., Jarrín, I., & Bolúmar, F. (2010). Migrant health: Epidemiology of HIV and AIDS in migrant communities and ethnic minorities in EU/EEA countries. *ECDC Technical Report*. European Centre for Disease Prevention and Control.
- Epstein, H. (2007). *The invisible cure: Africa, the West, and the fight against AIDS*. London: Viking
- Gardiner, R. (2001). AIDS: The Undeclared War. *Towards the Earth Summit 2002: Social Briefing No. 1*. Retrieved on January 25, 2011, from <http://www.earthsummit2002.org/es/issues/AIDS/hiv.pdf>
- Gladwell, M. (2002). *The tipping point: How little things can make a big difference*. New York: Little, Brown.
- Gupta, J., Raj, A., Decker, M. R., Reed, E., & Silverman, J. G. (2009). HIV vulnerabilities of sex-trafficked Indian women and girls. *International Journal of Gynecology & Obstetrics*, 107(1), 30-34.
- Griensven, G. J., Limanonda, B., Ngaokew, S., Ayuthaya, S., & Poshychinda, V. (1998). Evaluation of a targeted HIV prevention programme among female commercial sex workers in the south of Thailand. *Sexually Transmitted Diseases*, 74, 54-58.
- Hakan, S. (2008). *International politics of HIV/AIDS : Global disease, local pain*. London: Routledge.
- Hankins, C.A., Friedman, S.R., Zafar, T., & Strathdee, S. A. (2002). Transmission and prevention of HIV and sexuality transmitted infections in war settings: Implications for current and future armed conflicts. *AIDS*, 16(17), 2245-52.
- Kamalesh, S., Baishali, B., Rita, M., Sekhar, c., Suman, S., Arundhuti, G., & Scott, P. (2008). Sex-trafficking, violence, negotiating skill, and HIV infection in brothel-based sex workers of eastern India, adjoining Nepal, Bhutan, and Bangladesh. *Journal of Health, Population, and Nutrition*, 26(2), 223-31.
- Khin, A. (2008). HIV/AIDS problem of migrants from Burma in Thailand. *Burma Watch International*. Retrieved on January 30, 2011, from <http://www.burmapwatch.org/docs/com-khin-hiv-aids-burmese-migrants-thailand.pdf>
- Knoke, D., & Yang, S. (2008). *Social network analysis*. Los Angeles, CA: Sage.
- Lurie, M. N., Williams, B. G., Zuma, K., Mkaya-Mwamburi, D., Garnett, G., Sturm, A., Sweat, M., Gitelsohn, J., Abdool, K. & Salim, S. (2003). The impact of migration on HIV-1 transmission in South Africa: A study of migrant and nonmigrant men and their partners. *Sexually Transmitted Diseases*, 30(2), 139-156.
- Lurie, M. N., Williams, B. G., Zuma, K., Mkaya-Mwamburi, D., Garnett, G.P. Sweat, M.D., Gittelsohn, J., & Karim, S. S. A. (2003b). Who infects whom? HIV-1 concordance and discordance among migrant and non-migrant couples in South Africa. *AIDS*, 17(15), 2245-2252.

- Orubuloye, I.O., Caldwell, P., & Caldwell, J. (1993). The role of high-risk Occupations in the spread of AIDS: Truck drivers and itinerant market women in Nigeria. *International Family Planning Perspectives*, 19(2), 43-48.
- Oster, E. (2009). HIV and sexual behavior change: Why not Africa? *University of Chicago and National Bureau of Economic Research Working Paper*.
- Peryskina, A., Wirtz, A. L., Baral, S., Sifakis, F., & Beyrer, C. (2010). Epidemiologic links Between drug use and HIV epidemics: An international perspective. *Journal of Acquired Immune Deficiency Syndromes*, 55, S10-S16.
- Pezzoli, M. C., Hamad, I.E., Scarcella, C., Vassallo, F., Speziani, F., Cristini, G., Scolari, C., Suligo, B., Luzi, A.M., Bernasconi, D., Lichtner, M., Giuseppina, C., Manca, N., Carosi, G., & Castellini, F. (2009). HIV infection among illegal migrants, Italy, 2004–2007. *Emerging Infectious Diseases*, 15(11), 1802-1804.
- Phoolcharoen, W. (1998). HIV/AIDS prevention in Thailand: Success and challenges. *Science*, 280(5371), 1873.
- Pyett, P. & Warr, D. (1997). Vulnerability on the streets: Female sex workers and HIV risk. *AIDS Care: Psychological and Socio-medical Aspects of AIDS/HIV*, 5(9), 539-547.
- Ruiz, M., & Briones-Chavez, C.S. (2010). How to improve the health of undocumented Latino immigrants with HIV in New Orleans: An agenda for action. *Revista Panamericana de Salud Pública*, 28(1), 66-70.
- Steinbrook, R. (2007). HIV In India - A complex Epidemic. *New England Journal of Medicine*, 356(11), 1089-1093.
- UNAIDS – Joint United Nations Programme on HIV/AIDS (2010). *Global report: UNAIDS report on the global AIDS epidemic 2010*. Retrieved on January 18, 2011, from <http://www.unaids.org/>
- UNGASS – The United Nations General Assembly Special Session (2001). *Declaration of Commitment on HIV/AIDS*. Paper presented at The UN General Assembly Twenty-sixth Special Session, New York.

TAMIL DISENFRANCHISEMENT AND THE PERCEIVED LOSS OF STATUS

The share of British policies in causing the Sri Lankan Civil War

Kai Schnier

Abstract In past research on the causes of the Sri Lankan Civil War, scholars have repeatedly based their explanations on the ethnic rivalry between Tamil and Sinhalese populations. However, arguments have often lacked an in-depth analysis of the causes of ethnic tension. This paper examines the role that perceived loss of status and humiliation – rooted in British colonization – had in radicalizing the Tamil population against the Sinhalese. It attempts to go beyond arguments that take rivalry as historically axiomatic, by providing a more constructive approach that emphasizes the gradual development of ethnic tension and its direct relationship to distinct colonial policies.

I Introduction

In May 2009, after more than two decades of armed conflict, the Sri Lankan Civil War ended. For a period of twenty-seven years government troops had fought the Liberation Tigers of Tamil Eelam (LTTE) – a separatist organization that aimed to create an autonomous state for the Tamil minority of the island country.

Up to today, scholarly debate has discussed the potential causes of the conflict. Even while it was still in full swing, many theories on the roots of the Civil War were issued. Overall, there is considerable consensus that the repeated disputes and the open rivalry between the Sinhalese majority and the Tamil minority have provided the seedbed for the civil war. In particular, the racial undertone of the tensions and their deeply ethnic background are mentioned as key factors.

The debate often appears to take ethnic rivalry between Tamils and Sinhalese as axiomatic. The two ethnicities are usually pictured as historically opposed forces in Sri Lanka. However, the determination with which the Tamil-Sinhalese divide has been forged into irrevocable certainty can be misleading. In fact, it might be of a historically ethnic nature to a much lesser extent than widely assumed. On the contrary, the ethnic divide can be linked back to distinct events and policies during the British colonization of Sri Lanka. In order to understand the development of Tamil-Sinhalese rivalry and consequentially the initial causes of the Sri Lankan Civil War it is therefore important to understand the origins of ethnic tension in the light of a more constructive approach.

In this paper it is argued that the perceived loss of status of the Tamils and the humiliation it entailed were essential causes of the Sri Lankan Civil War. In making this argument, the paper gives special attention to the part that gradual disenfranchisement – rooted in British Colonial rule – had in radicalizing the Tamil population against the Sinhalese and the unitary state of Sri Lanka itself.

After a brief outline of the Sri Lankan Civil War and the contemporary history of the Island, the analysis will investigate the importance of disenfranchisement and loss of status of the Tamil population in causing armed conflict. Finally, the conclusion will briefly summarize the main arguments of the evaluation.

2 Contemporary history of Sri Lanka and Civil War

Throughout its contemporary history Sri Lanka has been a multiethnic state. The country is home to a majority of Sinhalese people. However, Tamils and Indian Tamils have always made up a considerable minority within Sri Lanka¹. In addition, Sri Lankan Moors and various other indigenous groups inhabit the South Asian island nation.

¹ Census of Population 2001 (Department of Census and Statistics, Sri Lanka): Sinhalese 82%, Tamils and Indian Tamils 10%, Other Ethnic groups 8%. However, due to the inaccessibility of Tamil territory and at times intentional neglect of proper counting methods in these territories, some scholars suggest that Tamils account for up to 18% of Sri Lankan population (Peebles, 1990).

Because of its geographical location and its rich soil that allows for a flourishing plantation economy, Sri Lanka – actually called ‘Ceylon’ before its independence – has repeatedly been subject to European colonialism. Overall, it was dominated by colonial powers for more than half a millennium. First ruled by the Portuguese and later settled by the Dutch, the British East India Company eventually took over the Sri Lankan territories in 1815. It was only after World War II that Ceylon gradually gained independence, first as a British Dominion (1948) and later as the unitary and autonomous state of Sri Lanka (Tambiah, 1986).

In the postcolonial era, the island witnessed repeated struggles between Tamil and Sinhalese populations competing for political power. Eventually, the island’s government became entangled in violent struggles between both Tamil and Sinhalese militant groups. The Liberation Tigers of Tamil Eelam (LTTE), a terrorist group fighting for a separate Tamil state, became the most vicious opponent of the state military.

In 1983, aggression between the two escalated into a civil war. Resulting in severe human rights violations by both parties, between 80,000 and 100,000 deaths and severe damage to the Sri Lankan economy, the war raged across the country for almost three decades (Charbonneau, 2009). In 2009, with the defeat of the LTTE by government forces, the war officially ended.

3 Loss of perceived status and humiliation of Tamils

In analyzing the causes of the Sri Lankan Civil War, scholars have often highlighted the severity of ethnic rivalry between Tamil and Sinhalese populations. The “racist rhetoric” (Peebles, 1990, p. 31) and the irreconcilable “long-standing grievances” (Manogaran, 1987, p. 2) between the two ethnic groups are identified as the most important determinants of the conflict. Indeed, the significance of the tension between the Sri Lankan populations cannot be denied. However, the aforementioned arguments tend to portray the ethnic nature of this tension as axiomatic. They paint a picture of Tamils and Sinhalese as hereditary enemies. Events actually creating ethnic rivalry between the two groups are therefore seen only as the final sparks to ignite an already desperate situation, rather than meaningful causes in and of themselves.

In fact, the portrayal of Tamil-Sinhalese rivalry as an ethnic clash of historical dimensions is an exaggeration. Even though quarrels between Tamil and Sinhalese populations on Sri Lanka have been recorded as early as 500 B.C., they seldomly went beyond minor incidents (Gunasingham, 1999). Furthermore, the major issues at stake were not necessarily of ethnic nature. Rather, societal

tensions were mostly rooted in the inequalities arising from the caste system – which was inherent to both Tamil and Sinhalese tradition – and often occurred within, rather than between the two ethnic groups. To understand the implications that the Sri Lanka's caste system had for the Tamil-Sinhalese rivalry, let us explore this topic for a moment.

In general, the Sri Lankan caste system borrowed most of its features from the alleged Tamil and Sinhalese homelands in South-, respectively North-Eastern-India. With the ethnic migration of both groups between 500 and 200 B.C., the basic forms of organization along caste lines were carried over to Ceylon (De Silva, 2005). The extent of the tensions between the different castes, for example the rivalry between the Sinhalese majority caste Goyigama and the lower Sinhalese caste of the Central Highlands, the Kandyan caste, is debated. While authors like Michael Roberts have argued that the Sinhalese castes engaged in a kind of “caste warfare” (1981, p. 163) in the early 1900's, others have argued that these rivalries can hardly be considered more than the usual challenges of local hierarchy taking place within caste systems (Bayly, 1983). However, what can certainly be assumed is that the existing caste divisions, the socio-political differences and the resulting intra-ethnic rivalries diffused the hostile sentiments between Tamils and Sinhalese. The caste system diverted attention away from conflicts along clear-cut ethnic lines, towards more complex and less coherent controversies between castes.

In fact, not only the Sinhalese were split up into various different castes and sub-castes, but also the Sri Lankan Tamils were divided into a very similar spectrum of social strata. As argued by Tambiah, these divisions resembled the “internal differences in customs, kinship, structure, inheritance practices” (1986, p. 8) and ritual cults within the Sri Lankan Tamil population at the time. Since neither the Sri Lankan Tamils, nor the Sinhalese could be regarded as a “unitary group or collectivity” (Tambiah, 1986, p. 8), it seems obvious that the social stratification due to the caste system hindered the development of ethnic awareness of both groups. As put forward by De Silva, “elite competition in the late nineteenth century and early twentieth had been a matter of caste rivalry among the Sinhalese rather than a conflict between the Sinhalese and the ethnic minorities” (2005, p. 389). In this sense, it seems reasonable to assume that the ethnic identity of Tamil and Sinhalese populations was coined by local belonging, rather than a collective feeling of being integrated into a greater ethnic group. As argued by Tambiah, people at the time “lived their lives as components of local or regional socio-political complexes, rather than as ethnic ‘Sinhalese’ or Tamils’ as they are conceived today” (1986, p. 7).

Against this background, it can be assumed that the preconditions for deep ethnic rivalry were not present at any time before the 20th century. The caste sys-

tem might also be one explanation for the fact that the Sri Lankan Tamil population had not yet gained any nationalistic character on the eve of British colonization. As argued by A.J. Wilson, the Tamils had a certain “group consciousness rather than national awareness” (2000, p. 1). In fact, until the 1930’s no Tamil national movement ever had the broad support of the ethnic group it aspired to represent (Wilson, 2000).

Given the above arguments, it seems necessary to re-examine the causes that led to the Sri Lankan Civil War with an approach that does not take Tamil-Sinhalese rivalry for granted. It is of vital importance to investigate the events that shaped and created the tensions between Tamils and Sinhalese in the first place. Which actions influenced the tensions between the two groups and caused their century-long coexistence on Sri Lanka to turn into one of the most violent contemporary conflicts? Under to the assumption that no major incidents driven by ethnic motivations occurred before the 20th century, the following analysis will focus on the causes of Tamil-Sinhalese rivalry during British colonial occupation.

With the arrival of British colonial forces in the early 19th century, the political experience of the Sri Lankan population changed considerably. While the island had been separated into several territories, each governed by a monarchical leader during the former centuries, the British now aspired to establish a centralized government (Avari, 2007). However, they were not blind to the fact that centralization might foster group rivalry in a highly complex, multiethnic country like Sri Lanka. It was therefore decided to use a system that would not allow for any ethnic group to override the voice of the other. As argued by the then Sri Lankan colonial governor William Manning, it was of vital importance to “balance the ethnic composition of legislature” so that “no single community could impose its will upon other communities” (Wilson, 1988, p. 7). As a result, the British decided to select one representative of each ethnic group into a legislative council that would act as advisor to the British governor (De Silva, 2005).

In retrospect, the magnitude of this event with respect to the Tamil-Sinhalese relationship can hardly be overstated. By appointing only one member per ethnic group, the British had of course succeeded in preventing the political dominance of a specific community. At the same time, however, this system had two major shortcomings that would have a grave impact on the later course of events.

First, the principle of communal representation introduced ethnic representation to the Sri Lankan people. While former disagreements in Sri Lankan society had always revolved around the issue of caste representation, the British chose pragmatically to divide representation along ethnic lines. Since the British legislative council was the first representative experience for the Sri Lankan people,

it can be argued that the introduction of ethnic representation itself constructed national awareness among Tamils and Sinhalese. Where both groups had formerly identified themselves and also their political aspirations in terms of caste, the British concept of communal representation now paved the way for an understanding of politics as ethnic competition. In a sense, the colonizers “encouraged the separation of the different communities by nominating representatives to the legislative Council System from each of the major groups” (Wilson, 2000, p. 2).

Second, communal representation bluntly ignored the demographic reality of Sri Lanka and stood diametrically opposed to a proportional distribution of seats. As a result of British policies, Tamils - who hardly made up twelve percent of the Sri Lankan population – had the same political voice as the Sinhalese, who constituted more than eighty percent of people living on the island (Manogaran, 1987). Naturally, Britain’s decision came under severe attack by the Sinhalese community. It was difficult to understand why the British regarded a Sinhalese majority “as a dreadful evil to be averted even at the cost of justice and fairplay” (Wilson, 1988, p. 8). As a matter of course, the Sinhalese community saw itself as utterly underrepresented and suspected British favouritism towards the Tamils.

On the other hand, the Tamils were of course satisfied with the British government’s decision. Their tremendous overrepresentation guaranteed their political independence of the Sinhalese majority. At the same time, however, it shaped the Tamils’ understanding of political equality and justice. Even though very unjust in the democratic sense, the concept of communal representation was perceived by Tamils as giving them “their fair share” (Wilson, 1988, p. 2). The British administration’s policies shaped the Tamils’ perception of their legitimate political status in comparison to the Sinhalese. In turn, every future amendment of the newly gained status quo would be seen as an act of injustice to them.

Eventually, the initial British government’s policy to favour Tamil representation in order to balance the Sri Lankan ethnic groups would eventually have the opposite effect. In 1921, facing strong pressure from the Sinhalese public to rectify the representative system, governor Manning introduced a reformed legislative council. Instead of direct appointment by the governor, the representatives were now voted into the council by high ranked Sri Lankan officials. The following elections turned out only three Tamil representatives, facing thirteen Sinhalese (De Silva, 2005). Over night, Tamils now supplied barely one fourth of the number of representatives provided by the Sinhalese.

Given that this ratio still overrepresented the Tamil population, one could dismiss the significance of the reform as marginal. However, such a dismissal would underestimate its impact on the Tamil’s self-conception. Since communal representation had been introduced, the concept of ‘50-50 representation’ had deeply

embedded itself in the Tamils' minds. Their perceived status conflicted with the actual demographic status they held. Led by the politician Ponnambalam Arunachalam, the newly founded Ceylon Tamil League proclaimed that the Tamil minority would not be satisfied with being the ethnic 'under-dog' anymore (Wilson, 1988). Their goal was to prevent an institutionalization of the Sinhalese territorial majority in the legislature, which they believed to be highly unjust (Russell, 1982).

Instead of realizing the explosive nature of their political reforms, the British continued to amend the political system. Establishing the so-called Donoughmore Commission, the governor called for research on the possibility of setting in place a new Constitution. The Ceylon Constitution would again reform the representation of ethnic groups in legislature – this time by introducing adult universal suffrage. Obviously this would mean that the Sinhalese majority would gain even more seats in the council.

In 1927, when the British government's plans leaked to Sri Lankan public, the Tamils were outraged. They strongly opposed the new form of representation and still called for what they perceived as "just balance of power" (Russell, 1982, p. 13), namely the communal concept. Arunachalam's brother Ramanathan set up a *Memorandum* to the governor that should address the unwillingness of the Tamils to accept the new Constitution. He claimed that any further change of the Tamil-Sinhalese ratio to the benefit of the Sinhalese would be unacceptable and demonized the Donoughmore Plans as "death to minorities" (Russell, 1982, p. 18).

Against all opposition, the British introduced the new Constitution in 1931. The next elections turned out only 15 Tamil compared to 100 Sinhalese representatives. The gradual degradation of the political status of the Tamils was complete. Ironically, it was the first time that their political representation mirrored demographic reality. Still, Tamil leadership and vast parts of population were more outraged than ever. As argued by Kearney, they were "left dumbfounded by the complete bouleversement of the policies they had pursued for the last decade" (Kearney, 1985, p. 25). The initial overrepresentation of the Tamils introduced by the British, had led to a grotesque overestimation of what the Tamils perceived to be their fair political share. This perception in turn, led to the understanding that every further cut in Tamil co-determination was unjust and constituted a strong devaluation of their ethnic group in comparison to the Sinhalese community.

Some of the Tamil's fears were indeed realized with the implementation of the Donoughmore Constitution. The new electoral system led to a centralization of power in the Sinhalese territories of Sri Lanka. As argued by Russell, the Tamil regions became a political periphery that was exploited "by the merchants and

middlemen of Colombo (authors note: Sri Lankan capital city)" (1982, p. 14). Even the members of the Donoughmore commission admitted that the implementation of the new representative system created a considerable political and economic gap between the Tamil areas and the Sinhalese territories of Sri Lanka (Russell, 1982). Among other factors, the economic inequalities naturally led to an intensified block building of Sinhalese and Tamil populations.

Clearly, the British policies had a definite negative effect on the relationship between two major ethnic groups in Sri Lanka. The connection between mode of representation and Tamil-Sinhalese rivalry becomes even more apparent when analyzing the growth of Tamil nationalism in this period. As they felt gradually marginalized, vast parts of the Tamil community were increasingly "characterized by sharp dissensions, disillusionment and despair" (Shastri, 1990, p. 60). However, instead of accepting their de-facto minority status, Tamil political leaders like Ramanathan reacted with resistance. For them, the disenfranchisement constituted open humiliation by the British and also the Sinhalese majority (Thiruchelvam, 1977).

As argued by Evelin G. Lindner, humiliation is a recurring factor in the causality of civil wars. She describes it as "the enforced lowering of a person or group, a process of subjugation that damages or strips away their pride, honour or dignity" (2002, p. 2). Moreover, she concludes that "to be humiliated is to be placed, against your will in a situation that is greatly inferior to what you feel you should expect" (p. 2). This statement shows perfectly that even the perceived loss of status that the Tamils felt during constitutional reform had the power to significantly enrage them. Their expectations had been bluntly ignored and the political system was, against their will, transformed into an institution of Sinhalese superiority.

Step by step, humiliation turned into anger and transformed the usually passive Tamil community into a force of protest (Thiruchelvam, 1977). First and foremost, this was the result of so-called Tamil "identity entrepreneurs" – political actors who tried to channel the collective anger into a stream of Tamil nationalism and unitary rage against the Sinhalese majority. Tamil leaders like Arunachalam and Ramanathan seized the chance to create a Tamil national identity in order to re-establish themselves as the heads of a strong political force in Sri Lanka. Indeed, they displayed the Sinhalese majority as the root of evil. They were the ones who had profited from legislative reform, so they were the ones who had stolen the Tamil right to co-exist as an equal force on the island. As pointed out by Gunasingham, the "issue of power-sharing was used by the nationalists to create an escalating inter-ethnic rivalry which gained momentum ever since" (1999, p. 76).

In a gradual process, the Tamils' political delusion was "forged into narratives of group-humiliation" (Lindner, 2002, p. 2) with the Sinhalese as the alleged perpetrators. Thus, Tamil agitators used, for example, myths like the Dutugemunu-Elara story² as a historical justification for the "sense of grievances" (Russell, 1982 p. 154) the Tamils should legitimately nurture against the Sinhalese. Not because they had actually nurtured grave grievances against them for a long time, but because Tamil political leaders wanted an outlet to channel the public rage into a nationalistic movement against the Sinhalese. They argued that "too many promises of devolution of power" (Singer, 1992, p. 714) had been made to the Tamils, but had never actually been honoured by the British.

Ramanathan and Arunachalam succeeded in their drive to create a form of Tamil nationalism. By the time that the Donoughmore Constitution was introduced, the Tamil "national awareness had been going through a transformation towards an active national consciousness" (Wilson, 2000, p. 39). This not only led to growing anger towards the Sinhalese, but also drove parts of the Tamil population to turn to more radical political demands. In the 1930's, Tamil leaders for the first time addressed the possibility of a separate Tamil state – the concept of *Tamil Eelam* (Vaitheespara, 2006). Potentially facing political marginalization in a future Sri Lankan state dominated by the Sinhalese, the Tamils made their first secessionist claims.

That these claims originated as a result of disenfranchisement and the Tamils' perceived loss of status is of great importance, because they constituted the core of later civil war. Militant organizations like the Tamil United Liberation Front took up the idea of Tamil Eelam and initiated brutal attacks on Sinhalese members of government in order to be heard (Ponnambalam, 1983). Additionally, the Liberation Tigers of Tamil Eelam, who eventually escalated the conflict, were inspired by the idea of an autonomous Tamil state to escape Sinhalese domination (Ponnambalam, 1983). Thus, British policies provided the seedbed for radicalizing the Tamil demand "from one for regional autonomy to one for the right of self-determination by an ethnic group and seeking to establish a separate territorial state identity" (Shastri, 1990, p. 60).

By 1939, the first Sinhala-Tamil riot made it clear that the tensions among the ethnic groups were mounting. Past feelings of humiliation and disenfranchisement, followed by the establishment of a more coherent national identity, gradu-

² A mystical- historical account that stressed the legitimate presence of the Tamils on Sri Lanka, by linking them back to Tamil monarch Elara who ruled parts of Sri Lanka around 200 B.C.. Elara was later allegedly killed by the Sinhalese king Duttugemunu on the battlefield (Ponnambalam, 1983).

ally turned into brutal resistance against the Sinhalese dominated government. In response to the violence used by Tamil nationalists, Sinhalese politicians took on more radical policies themselves. The Sinhalese parties introduced discriminatory policies against the Tamils in Sri Lankan Congress. Double standards for university admission and hurdles for Tamils who wanted to enter jobs as public servants were introduced (De Silva, 1984). Naturally, these policies again had a catalyzing effect on Tamil nationalism. The Tamils saw their future political self-determination jeopardized by the Sinhalese government. Shortly thereafter, Sri Lanka entered a vicious circle of humiliation, rage and revenge acts that would eventually reach its climax in the outbreak of civil war. As argued by Alain de Botton, the fact that the conflict revolved around issues of status did not mean that it turned out to be a less severe war. On the contrary, “battles over status can be even more intractable than those over land or oil or water” (de Botton, 2004, p. 1).

Of course, it is impossible to predict what might have happened, had the British colonizers not created ethnic representation and a gross overrepresentation of the Tamils at the very beginning of their reign over Sri Lanka. Would the Tamils have accepted their political representation as a minority? Would the absence of a perceived loss of status have been able to prevent the Sinhalese-Tamil ethnic rivalry that eventually caused the bloody clash?

What can be said is that the flawed British approach to establish a legislature in Sri Lanka caused “the dispute between the Sinhalese and Tamils” to become a struggle that began to evolve around “the question of representation” (Thiruchelvam, 1977, p. 20) which in turn provided the explosive basis for the tensions to eventually transform into an ethnic clash. To neglect this fundamental trigger of the Tamil-Sinhalese conflict, is to omit the share that British policies had in provoking a bloody crisis and to shift full responsibility to the allegedly irreconcilable ethnic differences between the two groups. In the words of Amita Shastri, past research on the causes of the Sri Lankan civil war should have paid more attention to “the impact that formats for political participation and representation introduced in the pre-independence periods had for relationships between the two largest communities on the island” (1990, p. 59).

4 Conclusion

As the above analysis has demonstrated, the perceived loss of political status of the Tamils is an essential element within the causality of the Sri Lankan Civil War. This process was rooted in British colonialism. First, the colonizers intro-

duced the concept of ethnic representation and constructed – or at least instituted – the sense of ethnic separation of all Sri Lankan groups. Second, they underestimated the consequences of the communal imbalance that they promoted.

As a result of the initial overrepresentation in government introduced by the British colonizers, the future aspirations of the Tamils constantly suffered from an exaggerated perception of their political significance. Every future degradation of their political voice was regarded by the Tamil community and especially its leaders as a severe blow to fair and balanced representation. Given the distorted Tamil self-perception, the continued British reforms to amend the representational system were not seen as rectifications of a flawed model, but as the humiliating disenfranchisement of their ethnic group. In the same vein, the British government's policies were perceived as favouring the Sinhalese majority and driving the Tamil minority into an inferior political position.

Consequentially, the unrest caused by these events was used by Tamil personalities like Ponnambalam Arunachalam to revive the Tamil's political status in Sri Lanka. In order to create a strong nationalistic movement, they constructed a Tamil-Sinhalese rivalry that could function as a channel for the Tamils to take vengeance for the humiliation they had endured.

Militant groups like the TULF or the LTTE borrowed the nationalistic concepts – and especially the separatist aspirations that developed as a result of Tamil delusion with the representational system – and eventually escalated the tensions. Surely, the perceived loss of status and the humiliation of the Tamils was not the final spark to ignite the Sri Lankan Civil War. However, it was a latent cause of utmost importance because it enabled the Sinhalese-Tamil rivalry to develop into an intractable issue for post-colonial governments. The influence of British policies in creating a seedbed for later ethnic competition must therefore be an essential part of understanding the initial causes of the Sri Lankan Civil War.

References

- Avari, B. (2007). *India: The Ancient Past*. New York: Routledge.
- Bayly, S. (1983). Review: The history of caste in South Asia. *Modern Asia Studies*, 17(3), 519-527.
- Charbonneau, L. (2009). World "may never know" how many died in civil war. *Die Welt*. Retrieved, December 4, 2010, from <http://www.welt.de/englishnews/-article3831743/World-may-never-know-how-many-died-in-civil-war.html>
- De Botton, A. (2004, August 14). *Interview with Andrew Lawless*. Retrieved from <http://www.threemonkeysonline.com/als/Alain%20de%20Botton%20in%20interview.html>

- De Silva, K. M. (1984). *University admissions and ethnic tension in Sri Lanka, 1977–1982. From independence to statehood: Managing ethnic conflict in six African and Asian states*. London: Francis Pinter.
- De Silva, K. M. (2005). *A history of Sri Lanka*. New Delhi: Penguin Books.
- Gunasirigam, M. (1999). *Sri Lankan Tamil nationalism: A study of its origins*. Sydney: MV Publications.
- Kearney, R. N. (1985). Ethnic conflict and the Tamil separatist movement in Sri Lanka. *Asian Survey*, 25(9), 898–917.
- Lindner, E. G. (2002). Humiliation or dignity: Regional conflicts in the global village. *Journal of Mental Health, Psychosocial work and Counselling in areas of Armed conflict*, 4(1), 2-26.
- Manogaran, C. (1987). *Ethnic conflict and reconciliation in Sri Lanka*. Honolulu: University of Hawaii Press.
- Peebles, P. (1990). Colonization and ethnic conflict in the dry zone of Sri Lanka. *The Journal of Asian Studies*, 49(1), 30-55.
- Ponnambalam, S. (1983). *Sri Lanka: The national question and the Tamil liberation struggle*. London: Zed Press.
- Roberts, M. (1981). *Caste conflict and elite formation: The rise of a karava elite in Sri Lanka, 1500-1931*. Cambridge: Cambridge University Press.
- Russell, J. (1982). *Communal politics under the donoughmore commission, 1831-1947*. Peradeniya: Tissara Publishers.
- Shastri, A. (1990). The material basis for separatism: The Tamil eelam movement in Sri Lanka. *The Journal of Asian Studies*, 49(1), 56-77.
- Singer, M. R. (1992) Sri Lanka's Tamil-Sinhalese ethnic conflict: Alternative solutions. *Asian Survey*, 32(8), 712-722.
- Sri Lanka Department of Census and Statistics. (2001) *Census of population, 2001*. National Accounts of Sri Lanka. Statistical Abstract. Annual.
- Tambiah, S. J. (1986). *Ethnic fratricide and the dismantling of democracy*. Chicago: University of Chicago Press.
- Thiruchelvam, N. (1977). The making and unmaking of constitutions: Some reflections on the process. *Ceylon Journal of Historical and Social Studies*, 7(2), 18-24.
- Waltz, K. (1959). *Man, the state, and war*. New York: Columbia University Press.
- Wilson, A. J. (1988). *The break-up of Sri Lanka: The Sinhalese-Tamil conflict*. London: C. Hurst & Co. Publishers.
- Wilson, A. J. (2000). *Sri Lankan Tamil nationalism: Its origins and development in the nineteenth and twentieth centuries*. Vancouver: University of British Columbia Press.
- Vaithespara, R. (2006). Beyond 'benign' and 'fascist' nationalisms: Interrogating the historiography of Sri Lankan Tamil nationalism". *Journal of South Asian Studies*, 29(3), 435–458.

NEGOTIATING GENDER ROLES

Experiences of female Saudi-Arabian
students at Maastricht University

Lisanne Raderschall & Janina Zander

Abstract Maastricht University is a place where students from all kinds of cultural backgrounds meet and study together. Part of the international student body are the Saudi Arabian Students taking part in a preparation program for studying medicine. This study investigates experiences female Saudi-Arabian students have when they leave their familiar cultural background and come to The Netherlands. In particular it focuses on the differences between Dutch and Saudi-Arabian gender roles and inquires how the women experience their new surroundings and change their behavior accordingly. Two concepts can be identified. Firstly, the Saudi-Arabian women experience an increase in self-responsibility and self-determination. Secondly, they try to counter negative stereotypes attached to Muslim women in Dutch society by monitoring their own behavior in public and acting politely and openly towards Western people. The study therefore gives an insight into the adaption of behavior and self-perception resulting from the change in cultural environment and includes the meaning and value attached to these adaptations by the Saudi Arabian students.

I Introduction

Maastricht University is proud of its international student body. Foreign Students contribute different cultural perspectives and thereby enrich academic discussions. The Pre-Med program at University College Maastricht (UCM) promotes this goal; it prepares Saudi Arabian students for studying Medicine in Europe or in the USA. It is a one year program during which students are trained in English and basic natural sciences.

This study specifically focuses on female Saudi Arabian students participating in the Pre-Med program. These women do not only decide to study, they also decide to live and study in a Western European environment in which most students have a different cultural background. As Maastricht University claims on its official website, students from abroad contribute to the University's atmosphere and academic discourse, especially because they are raised in a different value system. However, it is this study's purpose to shift the debate from what the Saudi Arabian students are able to add to Maastricht's study environment, to the experiences these students have when coming to UCM. Entering the Dutch high-quality educational system, open to both sexes, is accompanied by demands and challenges for the Saudi-Arabian women that students who are raised in Western European societies might not recognize. It is our interest to give a voice to the Saudi-Arabian female students.

In particular, the study is based on two assumptions, which are further discussed and validated in the literature review. Firstly, it is assumed that different gender roles prevail in Saudi Arabia and The Netherlands. Those present in The Netherlands are also referred to as Western or European. Secondly, we presuppose that the differences in these gender roles leads the Saudi Arabian students to encounter unfamiliar situations. Consequently, the Saudi Arabian women adapt their behavior. We base this assumption on other studies that discovered that usually migrants from a non-Western background adapt their behavior and negotiate their identities according to their new environment (Alund, 1988; Dwyer, 1999; Dwyer, 2000). In particular, we pose the questions: *How do Saudi Arabian female students adapt their self-perception and behavior when confronted with an environment in which women embrace different roles than in their home country?*

We found the answers to this question by means of semi-structured interviews with female Pre-Med students. Their reports not only provide a new perspective on how the role of Saudi Arabian women changes when they come to Maastricht, but also helped us to get new insights into how these women perceive and react to the way our society views them.

We shall investigate our research question by, firstly, outlining the link between the cultural background and gender roles specific to it. Secondly, Saudi-Arabian female gender roles are discussed and compared, in order to contextualize our research. Further, we will discuss the relevance of other research conducted with female Muslim migrants and their adaptation to a Western environment. Based on the literature review we analyse the data we have gained from our interviews and discuss how the Saudi-Arabian female students adapt their behaviour and change their self-perception when studying in Maastricht.

2 Methodology

The analysis is based on data we gained from six in-depth, semi-structured interviews with female Saudi Arabian students, participating in UCM's Pre-Med program. The interviews took approximately 45 minutes each. Out of the six women, four have been at UCM for one year, one has been at UCM for six months, and one started her studies at UCM one month ago. We found our participants by randomly asking the women to take part in the interviews, partly we also used snowball sampling.¹

3 Contextualization

3.1 Culture and gender roles

The majority of research done in the field of gender roles established the general supposition that there is a commonly accepted knowledge about what it means to be a man or a woman in every society. Thus, individuals possess and share essential ideas of gender roles. However, this gender-related knowledge does not only determine an individual's conception of gender in general – research has shown that people use this knowledge for self-description as well. A crucial study to discover the relevance of gender related knowledge for the self-concept was done by Bem (1974, 1981). Based on her early studies, Bem's Sex Role Inventory was invented. This scale contains socially desirable traits that are either associated with masculinity or femininity (1981). As the scale's objective is to gain individual self-descriptions, it reports on the amount of gender-related knowledge

¹ For further background information on the participants see Appendix.

that an individual integrates into his or her concept of the self. Bem defined the gender-related knowledge as gender schema, that is, gender stereotypes, which consist of societal expectations and beliefs about typical femininity and masculinity. The incorporation of gender-related stereotypes into the self-concept proves the importance societal gender roles have for individual self-knowledge, and led to the establishment of the concept of gender-related self, or gender-role self concept. Referring back to a study done by Hannover (2000), Athensteadt defined the gender-related self as “an intersection in memory between the representation of gender-related knowledge and the self” (2003, p. 309). In addition to the questionnaire Bem invented, she later expanded her theory by introducing the three lenses of gender (1974; 1981; Dahlmann, 1994). The overall idea of the lenses of gender is that there are hidden, and hence mainly unconscious, beliefs about sex and gender that structure social and private life, by defining the general view on and of men and women, as well as their social practices, institutions, discourses and personal identities.

The question of how individuals adopt gender-role related aspects present in society into their own gender-related self has to be posed. The cognitive theory about sex typing developed by Bem in 1981 describes how gender roles come into being and are reproduced. She assumes that children, while growing up, are surrounded by gender schemas and internalize them. Thus, sex typing is a result of the internalization of gender-related stereotypes by children as a part of socialization. As a consequence, children start evaluating themselves and the surrounding world on the basis of criteria that are in line with gender schemas or stereotypes.

“The child also learns to evaluate his or her adequacy as a person according to the gender schema...The gender schema becomes a prescriptive standard or guide, and self-esteem becomes its hostage. Here, then, enters an internalized motivational factor that prompts an individual to regulate his or her behavior so that it conforms to cultural definitions of femaleness and maleness. Thus, cultural myths become self-fulfilling prophecies.” (Dahlmann, 1994, p. 1934)

Once children become sex typed, gender stereotypes or schemas become the basis of categorizing and sorting information as well as making decisions. In this sense, stereotypes define an individual’s understanding of adequate and inadequate masculinity and femininity. Following societal beliefs about what being a woman or a man means becomes a question of an individual’s identity and his or her feeling of being a “right” man or woman.

An important aspect of a further elaborated definition of gender-related identity is the link between the concept of the self and social action.

“Gender related identity is an individual’s structured set of gender-related personal identities. Personal identities are...links between the individual’s self and biological/ physical/ material factors, interests and abilities, relationships with specific other people, social categories and dimensions of affect and personality, and styles of behavior.” (Athenstaedt, 2003, p. 310)

Athenstaedt’s study focuses on the role of behavior in relation to gender role self concept (2003). She claimed that gender-related traits and their internalization is not enough to grasp the complexity of gender stereotypes: these stereotypes can also be distinguished on the basis of role behaviors. Athenstaedt’s and other studies found correlations between self-concepts and socially desirable feminine and masculine gender role behaviors, interests, and traits for both men and women (Archer, 1989; Athestaedt, 2003; Orlofsky, Cohen & Ramsden, 1985; Orlofsky & O’Heron, 1987). From these studies, it can be concluded that two underlying latent self-concept dimensions exist: a female role self-concept and a male role self-concept. These dimensions correspond to Bem’s conceptualization of two independent dimensions, femininity and masculinity. But unlike Bem’s theory, these dimensions are based not only on traits, but also on behavior.

Yet the gender role self-concept does not only depend on the culture in which children are socialized, but also on the context in which people interact later in life. A study done by Pickart and Strough (2003) analyzed to what extent gender-typed behaviors changed according to the social context. In this study, both men’s and women’s femininity scores changed across same-sex and other-sex contexts; masculinity remained stable between contexts. Hence, gender stereotypes and gender-role self concepts are not fixed, but are open to change when an individual comes into a new social context, in which different gender stereotypes prevail. These findings are of special relevance when considering the research question of the presented research and data analysis – it is reasonable to expect that there might be a change in self-concept and behavior in the female Pre-Med students at UCM.

The previously discussed research findings elaborate on the concepts of gender schemas/ stereotypes, gender roles, and gender-role self concepts. Bearing this in mind, the importance of the cultural background for the understanding of gender becomes obvious. Different cultures link different traits and behaviors to either male or female roles. In this light, it seems valuable to highlight the gender roles prevalent in Saudi Arabia and The Netherlands to understand to what extent they differ and why the female Pre-Med students have to change their gender-related self-concept and behavior according to the new cultural surrounding.

3.2 Saudi Arabian gender roles

The Saudi Arabian culture is shaped by Islam, which also prescribes the role women should take in the “Umma”, the Muslim community (Pharaon, 2004). The Quran values family very highly. One of the directives found in the Quran regarding family is that a “Muslim family order rests on the husband’s authority over his wife as occasioned by his economic support and on the wife’s obedience to her husband’s authority” (Pharaon, 2004, p. 355). This illustrates the different roles men and women assume in Saudi Arabian society. Within the family, men’s dominating position has been extended by scholastic interpretation, to such an extent that it has become a legal principle in Saudi Arabia (Pharaon, 2004; Sechzer, 2004).

Consequently, it has become a woman’s role to accept her place and the duties the divine law dictates. This includes the wife’s role as the children’s care provider and her responsibility to pass on cultural and religious traditions to the children by which solidarity and loyalty to the family are maintained. In Saudi Arabian society, it is feared that if women abandon their key role in the family and instead value education, career and independent traveling more, the societal system would collapse (Pharaon, 2004). Nevertheless, Saudi Arabian society is changing because of international influences and liberal forces within the country. More and more Saudi women are discarding the cultural ideal of domestic womanhood and starting to pursue a more publicly oriented lifestyle. Women are undergoing a change in their perception of themselves and their role in society as they gain greater access to education. This self-perception challenges the gender roles prevalent in Saudi Arabia. However, women still face difficulties as they are “far and foremost perceived as mothers and wives and their husbands control their ability to work and travel and hold the right of divorce” (Pharaon, 2004, p. 361).

3.3 European gender roles

In Europe the role of women is different than in Saudi Arabia. Women in Europe are part of public as well as of domestic life. They travel on their own, work in politics, business, media, medicine, arts and follow other professions. They have the right to vote, to divorce their husbands and to drive a car. This European female gender role is the result of the women’s liberation movement (Klausen, 2005). For the last fifty years European feminists have promoted women’s rights and gender equality (Klausen, 2005). They questioned and opposed traditional views on gender roles, which were strongly influenced by the power of the Catholic Church in Europe (Klausen, 2005). Only as the political power of the Church waned reforms were made possible. Heaphy (2007) claims that in a modern individualized society people are detached from traditionally taken-for-granted roles. Thus,

women are liberated from compulsory housework and the economic dependency on their husbands. According to him there is no given set of obligations in our society; rather the relationship between men and women is no longer based on given models of family, marriage or parenthood (Heaphy, 2007). As a result of the European feminist achievements European women enjoy the right of self-determination. They live in an environment in which their rights are in theory the same as for men. Nevertheless it has to be pointed out that in Europe traditional gender roles are still very present in society as men are usually the breadwinners and women take on care provider roles (Roggeband & Verloo, 2007). To summarize, when considering the literature on the two gender roles prevailing in Europe and in Saudi Arabia, it becomes apparent that Saudi Arabian women grow up in a society in which men navigate women's lives: the self-determination of Saudi-Arabian women is culturally and legally restricted. In contrast European gender roles are characterized by more self-determination as legal equality to men is ensured.

Interestingly, the increasing numbers of Muslim migrants in Europe have sparked the discussions on emancipation and gender roles in Europe once again - this time with a different emphasis: Feminists no longer only criticize men but instead criticize Muslim migrant women. From the European feminist standpoint, practices and values that are present in many Muslim migrant minorities seem to increase gender inequality and foster the violation of women's rights (Roggeband & Verloo, 2007). For example, the practice of wearing of headscarves is perceived as a symbol for the repression of women by Islamic cultural rules. Several feminists maintain that Muslim women are not free to decide whether or not they want to wear a headscarf. Further they point out that by wearing a veil these Muslim women function as missionaries of their faith in European societies (Klausen, 2005). Consequently, European feminists fear that the rights they have fought for are threatened by the increasing numbers of Muslims in European society because these migrants do not abide to a woman's right to self-determination and treat women as inferior to men (Klausen, 2005). This debate has found its way into public discourse and an opposing perception of European and Muslim women spread. For example, in The Netherlands gender equality has recently been stressed as a fundamentally 'Dutch' value. Overall, the role of women in The Netherlands is perceived as being opposed to the isolated, private role of many Islamic women. Especially with increasing numbers of Islamic immigrants in Europe, European women tend to stress equal rights, social equality and identify Muslim women as everything they are not. They have found a way of constructing their identity, by distancing themselves from the image of Muslim women. Simultaneously this process has contributed to the application of stereotypes towards Muslim women. Muslim women are

described as 'backward' and 'traditional' as opposed to liberated and emancipated European women.

It is important to note that current research describes this opposition. With the interviews we conducted we want to contribute to these observations and bring to light how the Saudi Arabian women who come to Maastricht experience the expectations connected to the gender roles inherent in Dutch society and how they experience the European stereotypes attached to Muslim women.

4 Literature review

In past decades, the predominant scientific discourse on migrant Muslim women in the West presented them as a stigmatized group. Lutz (1991) accuses the social sciences of having reinforced this picture of Muslim women, because research did not include their perspective. Research was primarily conducted within this western discourse, not taking into account what kind of self-images Muslim women have. Western stereotypes portrayed them as 'victims' of oppression in patriarchal family relations (Ahmad, 2001). It is generally assumed that female autonomy is absent in Muslim women (Lutz, 1991). In a quantitative study Abu-Ali and Reisen (1999) applied the 'Bem Sex Role Inventory' to investigate gender roles among adolescent Muslim girls living in the United States. In this questionnaire, levels of femininity as well as masculinity were established. Thereby, high levels of masculinity were associated with liberal, Western femininity, while high scores of femininity were linked to traditional, 'backward' Muslim female identities. It becomes evident that this form of quantitative research is not suitable to examine the perception and experiences of Muslim women without already implying Western standards and prejudices.

In this light, we prefer a qualitative approach towards the subject, to address stereotypical images during the interviews as well as to be open to the experiences and approaches Muslim women have to our Western culture and related gender schemas. To embed our findings in the already existing body of research on the self-perception of migrant women and their understandings of gender roles, we found several studies that deal with how non-Western migrants adapt to their new cultural environment. The articles conclude that migrant individuals negotiate their identity between the home and the host society; they keep cultural traditions of their home country while adapting these or adopting cultural habits from their new environment. These studies form the basis for our assumption that there is indeed a process of adaptation of behavior and perception by migrants when they enter Western society.

Concerning the experiences of Muslim migrant women in the field of higher education, research has shown that the dichotomous categories implied by Western discourse, distinguishing between 'traditional/ Muslim' and 'Modern/ Western' lifestyles and self-concepts, have to be questioned. Interviewing the second generation of South Asian migrants in Great Britain, Ahmad (2001) asserted that Muslim women do not have to turn their backs towards their cultural and religious roles because of their Western higher education. Rather, ways have to be explored in which these women negotiate their gender role by including factors of both cultures.

Research by Dwyer (2000) in Great Britain on 16-18 year old female Muslim students with Pakistani background found that clothing plays an important role for students negotiating their cultural identity. She found that the students face dilemmas between conforming to their host culture and upholding traditional Muslim values and customs. In the in-group discussions conducted by Dwyer (2000), the females declared that they are confronted with the predominant Muslim stereotypes in society and that they feel judged by others as representatives of an ethnic group and not as individuals. Furthermore, Dwyer found that the women use clothing to negotiate their cultural identity, by finding a way to wear Western fashions while still conforming to Muslim dressing rules. Consequently these women have found possibilities to rework their gender identity. In this sense, dressing in a certain way serves the purpose of constructing a group identity, uniting women with a common religious and ethnic background (Dwyer, 1999).

However, the definition of an own group identity, based on clothing, also means that group boundaries are constructed this way. Hence, dress can be seen as a marker of difference, although female Muslim migrant women form 'hybrid' identities beyond the dichotomous idea of 'Western' styles versus 'Muslim' dressing rules. Dwyer (1999) does not investigate the importance that can be attributed to the construction of group boundaries through dressing styles in depth. Thus, our study includes this issue. Thereby, we focus on the experiences Muslim female students have with regards to stereotypes on clothing.

Another topic reoccurring in research on immigrant Muslim female is the spatial segregation of sexes (Alund, 1988; Dwyer, 2000; Lutz, 1991). In Muslim countries, it is common that spatial segregation between sexes defines private and public spheres to a greater extent than in Western countries. Hence, as research conducted by Alund (1988) suggests, Muslim women have to adapt to new environmental conditions. Thus, their 'new' life requires Muslim women to reorganize sex relations. In our case, we are particularly interested in how Saudi Arabian girls experience mixed studying situations at UCM and how they behave at social activities where women and men are present.

Taking into account the previously discussed research findings, we approached the Saudi Arabian women's negotiation of the female gender role with regards to clothing, education, and spatial sex-separation. In contrast to the prevalent Western scientific discourse, we add to the re-contextualization of the picture of Muslim women. This also implies that we move away from common stereotypes that do not do justice to Muslim women. For these purposes, we chose a qualitative method to investigate how women experience the confrontation with stereotypes, and the conflicts arising from having to negotiate their gender role between different cultures. In addition, we examine how Muslim women perceive themselves in relation to Western women.

Thus, what distinguishes our research from previously conducted ones is that we combine different areas, which are meaningful with regards to the negotiation of female roles. The method of personal in-depth interviews helps us to access the women's personal experiences, especially because we are women ourselves. This facilitates the dialogue with Muslim women, as they are often reserved in conversations with men. Moreover, women participating in our research are coming from Saudi Arabia, a country relatively underrepresented in academic discourse. They are young students, leaving their home country without their families to study at UCM. Thus, they are not immigrants choosing to live in a diaspora, but a group of female students that decided to live in the West to profit from higher education. The previously mentioned research mostly focused on immigrants living in the second or third generation in a Western country. In contrast, the group of women under investigation in this research represents high-educated students that live in direct confrontation with Western students, without their families living with them, but who nevertheless maintain their traditional Saudi Arabian values.

5 Data analysis

In the interviews we conducted, the topics mentioned in the literature review came up again. These were clothing, education, spatial separation and Western stereotypes. However they rather function as sub-concepts to the major themes we identified and will come up in different points of the discussion. Our research aims to discover how Saudi-Arabian women change their behavior and gendered self-perception when entering a society that has different norms with regards to gender roles. From the interviews we conducted we identified two main concepts that came up in all interviews with regards to our research question, namely the behavioral and the perceptive changes of migrant women in their new host society. For

the analysis these concepts function as umbrella terms, which capture the essence of the behavioral and perceptible change experienced by the Saudi Arabian women. The first concept is *Taking Self-Responsibility*. It describes the fact that Saudi-Arabian women are confronted with tasks in their new surrounding which they have never dealt with before. Furthermore the section on *Taking Self-responsibility* includes an analysis on how the self-perception of the women changed after having dealt with new challenges and how the women reflect on this change. The second concept is *Smoothing Differences/ Accommodation of the Other*. It deals with experiences of Saudi-Arabian women with regards to prejudices in Dutch society towards Muslim women. Thereby it picks up on the issue of stereotypes that was outlined in the literature review and gives insight into the experiences of stereotyped individuals. The section on this concept includes an analysis of the reactions of the women when confronted with stereotypes and an analysis on how they reflect on living in an environment that does not grant them very much intellectual ability.

Both concepts are linked to the different gender roles described in the literature review, as many challenges the women are confronted with arise from these two, very different roles. They give valuable insights into how the Saudi-Arabian women deal with the expectations confronted with during their stay at Maastricht University.

5.1 Taking self-responsibility

During the interviews, one fact that caught our attention was that our interviewees changed their behavior towards taking more self-responsibility. We recognized that taking responsibility plays an important role in the participants' female gender-role self concept, and that it was one topic they reflected on a lot since they started studying at UCM.

When the participants described their lives as women in Saudi Arabia, four out of the six women stressed that women are treated unequally compared to men. They have fewer chances than men, regarding education and career. These findings are in accordance with the literature we found regarding gender roles present in Saudi Arabia.

“The women in Saudi Arabia do not have a lot of places to study [...] we do not have many choices as a female, we have just to be teacher or doctors, we [...] cannot work in the shops [...] I cannot open my own company.” (Interview 2)

“Everything, that you need men behind you, if you want to open a shop, or to do your business, you need someone as responsible for you, for example we are studying abroad we need somebody with us.” (Interview 6)

What becomes obvious is that women are generally dependent on men; the dependence is manifested in the official Saudi Arabian laws – which state that women always have to be under the guidance of men – but also in the way the women's life is focused on the private sphere. The participants described that they never interacted with the public sphere or with men that are not part of their families, as these parts of life are exclusively defined as the men's world. Women are more or less completely excluded from the outer world and are used to hand responsibility for their lives over to men.

“I was in Saudi Arabia: everything my father, my mother or my brother were do it for me, for example go shopping, everything, they do that. But that does not mean that I cannot depend on myself, because when I came here they leave me alone and I depend on myself” (Interview 5)

“Our society think the girls should be separate from the guys [...] and these things make us protect from all the environment, we can't face any problem in Saudi Arabia, because my father and brother always solve any problem I face even with my friends [...] but when I came here, I take the responsibility of myself and I be more confident and I be smarter...[...] because now I face all sorts of problems.” (Interview 2)

Our participants showed a high level of reflection about the domination of women by men. When confronted with the Western culture, in which equality between men and women is the ideal, they started to critically think about their past dependence on men.

“You will see a huge difference between female and male [...] They are used to walk, used to be with cars, they don't wear a special uniform like us, they have more freedom in Saudi Arabia [...] When I came here I didn't know a lot of things [...] my father don't teach me how the life is hard, but when I came here I knew all these new things about the life and about myself. [...] I always felt insecure, I always felt afraid from others [...] from the people in general, because as I said before, we used to being protected.” (Interview 2)

What becomes obvious from the presented quotes is that the lack of self-responsibility the Saudi Arabian women experience in their home country and the accompanying dependence on men causes general feelings of fear towards the outer world. The women never interact with the public sphere as they are bound to the house and family. As a result, the women lack experience, which causes them to feel uncertainty about their capabilities.

In contrast, when the women start studying at UCM, they are confronted with completely different expectations. One of the interviewees told us a story about her experiences in Dutch society.

“The lamp in our home is broken, so we have to change it, and we call the owner and he came with a new one and he gave it to us and said: Okay, do it. We: What? I never do such things. And he said: You are in Netherlands, Dutch women do everything [...] But I don’t know how! And he said: Okay, bye bye, and leave you with this...and I tried and tried and I fixed it! [...] I feel so happy that I do something, it’s like something big.”(Interview 2)

In this story, it becomes obvious that the Saudi Arabian students in Maastricht are confronted with expectations, which they are challenged to fulfill. As our participant told us, she felt overwhelmed by the tasks she was faced with, but when she managed to solve the problem on her own, she experienced something very new to her – she recognized that she could take care of herself and that she did not have to depend on others. These insights into her own capabilities caused her to feel much more self-confident and very happy. In conclusion, the presented quotes show that the Saudi Arabian women are used to being dependent on men; a consequence of the traditions and laws that determine women as the dependent ones and men as the protective ones in charge is a general feeling of fear towards the outer world. By taking self-responsibility in Maastricht, the women acquire independence and become less fearful. What becomes obvious is that the women have a concept of themselves that is shaped by the gender stereotypes they internalized from Saudi Arabian society – they feel dependent on men and, although not consciously aware of it, are convinced that this is the way they *are*. They feel afraid of the outer world and are convinced that they are not capable of taking responsibility for themselves because this self-concept is in line with the societal ideas of what being a woman means. However, this gender-role self-concept is not fixed. The confrontation with very different gender schemas at UCM causes the Saudi Arabian women to firstly become aware of their gendered self-concept; secondly, to recognize that their ideas of what being a woman means is not determined by nature, and that there are consequently alternative ways of defining themselves. The Saudi Arabian women’s self-concept becomes questioned, and the changes in self-concept concerning traits are accompanied by changes in behavior.

A special example that stresses the way in which the unequal relationship between men and women is manifested is spatial separation between the sexes, which predominates in Saudi Arabian society. Our participants who were inex-

perienced regarding interaction with non-family men reported difficulties when confronted with the mixed sex situation at UCM.

“It is the biggest problem I faced in my life, because we never study with guys, we never live with guys in education field, so when I first came here and I sit with four guys I feel afraid and I feel insecure, I don’t know what I should say or how I have to, to treat them.”(Interview 2)

In this quote, it also becomes clear how spatial separation promotes the insecurity of women towards the public sphere. The situation at UCM was a great challenge, but with time, the participants got used to the situation. Now, they appreciate the mixed situation as it supports their increased self-confidence. Their fears towards men and public situations decreased.

“Now, I feel comfortable, ... home in Saudi Arabia in the Christmas all my family look, yeah they notice the difference in my personality. I can now understand how the men can think and work. I can notice why they feel like this or act like this. [...] I feel more confident.” (Interview 2)

Interestingly, these findings can be linked back to the study done by Pickard and Strough (2003), who examined the effects of same-sex and other-sex contexts on masculinity and femininity. As previously discussed, they found that femininity scores changed regarding the context the participants acted in. Our data supports a similar conclusion, that is, self-concepts defined by feminine as well as masculine traits and behaviors can change depending on same-sex or other-sex contexts, or whether there is spatial separation between men and women or not.

From the presented quotes so far, one can see that the Saudi Arabian women highly appreciate the possibilities UCM offers. However, it is not primarily the quality of education that they value the most, but the possibilities they discover for themselves as women. They experience a possibility to step out of the assigned gender roles that are familiar to them, and value it as a personal growth that they would not have experienced without the demands the Dutch society has on women. They have the chance to broaden their self-concepts as women, and to include very new and different traits and behaviors into the range of opportunities for themselves.

“It was two weeks or something and I was alone [...] and I felt like: thanks my mother, thanks my father to help me to better myself. I discover a lot of things of myself that I did not realized before.” (Interview 5)

“The scholarship help us to improve our personality more than about our education.” (Interview 6)

“We are more confident now and more stronger.” (Interview 6)

What can be seen from our interviews is the change in responsibility the Saudi Arabian women experience, which is related to other gender schemas they face in The Netherlands. When the women came to Maastricht, they are confronted with unfamiliar expectations, of which taking *self-responsibility* seems to be important. The Saudi Arabian women first feel afraid by the tasks they have to deal with, as their internalized gender roles and congruent self-concepts do not match with the new tasks. With the time they spend in Maastricht, the traditional schemas become challenged by the ones that the women experience in their new surroundings. While their concept of femininity implied a certain feeling of insecurity towards other people and the outer world, which was based on dependence and a lack of self-responsibility, the change in this concept is accompanied by taking self-responsibility and feelings of independence and self-confidence.

5.2 Smoothing differences /Accommodation of the other

The Saudi-Arabian students value their gained self-responsibility positively. In opposition, the effects entailed by classifying Muslim women as victims of a male dominated culture has rather negative, restricting characteristics, which our interviewees struggle with. The following section discusses the consequences of Western stereotypical images of Muslim women on the lives of the Pre-Med students. Further it discusses their reaction to this environment.

The analysis of the interviews shows that there are similar opinions and behaviors regarding the way the Saudi Arabian women experience the views present about Muslim women in Dutch society. They all agreed that Europeans often see Muslim women as disadvantaged and victims of their cultural heritage, which is generally perceived to be discriminating and repressive towards women (Lutz, 1991). Their cultural heritage is the main focus of definition for the Dutch, which causes a problem for the Saudi women, because they want to show that they are much more than what the stereotype allows them to be. The women describe that they are perceived as dependent on men and without goals and a will of their own. Crucial for defining who is a Muslim woman is the headscarf worn by the majority of the Pre-Med women. It is perceived as being a marker that identifies them as a group by drawing a boundary.

“Yeah, it is absolutely a symbol (the scarf)” (Interview 3)

According to the statements of the girls, all Saudi Arabian women, who cover their hair are pushed into the picture Europeans have of the roles Saudi Arabian women take on in their home society, while the women that do not wear a headscarf, one of our interviewees, did not have to face these expectations. This confirms the findings of the literature review that also identify the veil as a symbol and gives the opposition made between Muslim and Western women a physical presence.

The responses in the interviews all showed that there is a strong consciousness about what other people think of them as Saudi Arabian women and that they are not comfortable with the image people have about them. Most impressive is a quote from a girl that states very clearly how she perceives the situation:

“Yeah actually, I found a lot of people, they have a wrong view of women in Saudi Arabia, they thought that we are cover our head with a scarf that we close our minds, but that’s not true.” (Interview 5)

Interesting about this quote is firstly, that she reaffirms what previous interviewees also told us; that the headscarf functions as a signifier. Secondly, she mentions that this marker goes hand in hand with the idea that all Saudi Arabian women who cover their hair are stigmatized as backward. Their intellectual abilities and their personality stay unnoticed as they are reduced to the dominant view of Muslim women present in Europe.

According to the interviewees, one of the sources for the negative image of Muslims in the Dutch society is the media.

“Here a lot of people they did not know anything about Muslim women or Arabic women, they have really, the wrong idea just from the media.” (Interview 5)

“Sometimes they (the non-Saudi Arabians) just ignore us...maybe they are afraid of things they hear, around them, in the Media, in the TV and then they just don’t want to know us more” (Interview 3)

This negative presentation of Saudi Arabian women, or Muslim women in general does not only present a one-sided picture, it also seems to inhibit people from getting to know the Saudi Arabian women, which causes a lack of knowledge and makes them seem foreign. This process is exactly what the women regret and complain about because they feel like they are not given a chance to explain their cultural background and to show their intellectual potential.

Instead of showing interest in the cultural differences and getting to know the Saudi Arabian women, the women experience sharp rejection from society:

"They did not, like a lot of them they think I am really a strange person (...) sometimes some people like some Dutch people say to us "go home!" and you feel you are not welcome in this place..." (Interview 5)

When faced with this rejection they feel hurt because there is no effort made to get to know them and to see beyond what is presented in the media and the stereotypes that are connected to them because of them wearing a headscarf. One of the girls describes her reaction to a comment like "go home" as the following:

"It was okay, because I just smiled back to him, I am not going home, I am staying! It's okay. If they knew us, or maybe knew me, (...) but...it hurt. I didn't do anything" (Interview 3)

She expresses a deep disappointment that society only relies on superficial knowledge when judging them, but she knows for herself that she did not do anything wrong. Instead of shying away or even reacting with anger she smiled at him, which shows the confidence she has in herself and that by being nice to him, she tries to combat the negative image.

It seems that this atmosphere in society leads the Saudi Arabian women to try to accommodate the Europeans and smooth over the differences between the cultures with their presence. In order to do that they are changing their behavior e.g. they dress according to the European style, they are trying to appear as friendly as possible and they are eager to explain their cultural background to as many people as possible in order to resolve the misunderstanding and broaden the negatively tainted picture of Saudi Arabian women.

"But by time we used to pretend we are a nice person, people and this scarves not, nothing, just a symbol that I am a Muslim." (Interview 2)

"Yeah. We have to. We have to follow the rules (present in Dutch society), we have to, I mean many rules are not the same in our country and here, many things, people are different." (Interview 3)

"It is so difficult for us because every, every time we have to smile all the time, we have to be good people, because to give the people the right idea." (Interview 2)

We also experienced this *accommodation* of “*the other*” while doing the interviews. Generally the girls were very open to talk about the cultural differences between Saudi Arabia and the Netherlands and they thanked us for showing interest in their culture.

While trying to integrate European aspects of behavior, many of the women are still very cautious about not breaking any of the rules Islam prescribes them to follow. A good example is the change in the way they dress - all of them stopped wearing the Abaja, the traditional Saudi Arabian dress, and started to wear jeans and shirts, while at the same time they cover the body parts that should not be shown in public according to Islam. This behavior is a good example for how the differences are smoothed over in order to fit into Western society better.

“I think we should do it (change the clothing) because we are here. But we need also to follow our rules, for example we have to, it should be long.” (Interview 6)

Moreover, a woman described that one of her fellow students covered her face during the first days at UCM, but after one week she took it off, because the other Saudi Arabian women brought to her attention that this is not the way to dress in The Netherlands:

“The first time I saw her, come on! We are not in Saudi Arabia to wear this.” (Interview 4)

They mix Saudi Arabian and European styles and construct a different gender role that diverges from that present in Saudi Arabia and is yet different from that in Europe. As they adapt their behavior to their surroundings they become cultural hybrids (Dwyer, 2000).

What is interesting about this way of accommodating “*the other*” is that similar behavior has been observed in other marginalized groups. In “Black Men and Public Space” Staples (Axelrod & Cooper, 2002) describes how he as a black man has come up with what he calls “tension-reducing measures” (Axelrod & Cooper, 2002. 136) to alleviate the fear many white women show when they meet him on the streets at night. It becomes clear that Staples, just like the Saudi women, reflects very much about how other people perceive and react to him. He tries to make them feel more comfortable around him by for example whistling classical music pieces when walking the streets at night. Similar behavior is also very much present in disabled people, who also develop their own techniques to not appall people around them but to accommodate them so that there

is less tension (Davis, 2006). It seems like this kind of behavior is also present in the Saudi Arabian women who feel that they have to make the dominant group around them comfortable with their presence: On the one hand by incorporating other cultural behavior in their action, e.g. clothes, and on the other hand by being very friendly and open to explaining their culture.

Instead of wanting to being perceived as pitiful, many of the girls wanted to show the positive side of their country and its culture.

“They (the Dutch) always feel I am poor because I do not have a lot of freedom to act, but no (...) I am happy, also I am proud to be a Muslim (...) I felt depressed because we have a great country we have a great society” (Interview 2)

The female Saudi Arabian Pre-Med students reinterpret their role as women, when they are here, moving away from what they perceive as traditional restrictions based on certain interpretations of Islam in Saudi Arabia, while still holding on to their understanding of Islamic rules. They negotiate a new role for themselves that lies between the culture they grew up in and the one they are confronted with here. By doing so, they take the position of explaining themselves and comfort those who do not know them. At the same time they try to counteract the stereotypes that are spread by the media, which victimize and do not see their personality behind the veil. Yet, they do not do this in a very outgoing way; rather they monitor their own behavior in public and try to act as friendly, polite and open towards Western people as possible. This behavior entails that the women restrict themselves and develop a self-surveillance. In a non-Western society they are thus put into a position in which constant self-explaining is needed if they want to avoid to be classified according to the stereotypical idea of Muslim women.

6 Conclusion

This research sheds a new light on the prevalent female gender roles in Saudi Arabia and The Netherlands. In this regard, it is not the purpose to identify universal gender roles, but rather to investigate how these gender roles are perceived and experienced by the female Pre-Med students at UCM. A qualitative approach was used to provide the space needed for the interviewees to report their personal experiences. In this way, the study focused on identifying the ways in which the Saudi Arabian women change their behavior in order to deal with occurring differences in their new life situation.

During the interviews, we recognized two concepts which seemed to be crucial for the understanding of the Saudi Arabian women. Firstly, one essential difference between the female gender roles is based on a difference in self-responsibility. In Saudi Arabia, women are excluded from public sphere and are defined as vulnerable. The consequence is dependence on men as well as general feelings of uncertainty and fear. When they come to UCM, the women are confronted with quite different expectations, because of another concept of femininity. These expectations lead them to change their behavior and to actively *take self-responsibility*. The change in behavior is accompanied by increased feelings of independence and self-confidence, which are highly appreciated by the Saudi Arabian women. They value the educational possibilities at UCM, but most of all they attach importance to the development they report of themselves as women.

Secondly, the women's experiences are influenced by the Western stereotypical image of Saudi Arabian gender roles. Especially the headscarf functions as a marker, which is used as a stereotype to identify Saudi Arabian women. The reaction of the Saudi Arabian women towards stereotypes and even racism seems remarkable to us: they show a high level of reflection on the possible sources for stereotypes as well as a great readiness to explain the differences in culture to Western people to minimize conflict potential. They adapt to Western norms to a certain extent, e.g. they change the way they dress while still conforming to Islamic rules, to *smooth the differences*. In addition, they monitor their own behavior in public and try to act as friendly, polite and open towards Western people.

In conclusion, the interviews supported our assumptions concerning the differences that exist between Saudi Arabian and Western female gender roles. The Pre-Med students' experiences provided an interesting insight into the way they change their behavior at UCM, as well as into the meaning and value they attach to these changes.

References

- Abu-Ali, A., & Reisen, C. (1999). Gender role identity among adolescent girls living in the U.S. *Current Psychology: Developmental, Learning, Personality, Social*, 18(2), 185-192.
- Ahmad, F. (2001). Modern traditions? British Muslim women and academic achievement. *Gender and Education*, 13(2), 137-152.
- Alund, A. (1988). The power of definitions: Immigrant women and problem-centered ideologies. *Migration*, 4, 37-56.
- Archer, J. (1989). The relationship between gender-role measures: A review. *British Journal of Social Psychology*, 28(2), 173-184.

- Athenstaedt, U. (2003). On the content and structure of the gender role self-concept: Including gender-stereotypical behaviors in addition to traits. *Psychology of Women Quarterly*, 27(4), 309-318.
- Axelrod R. B., & Cooper C. R. (2002). *Reading critically writing well – A reader and guide*. Boston, New York: Bedford/St. Martin's.
- Bem, S. L. (1974). The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology*, 42(2), 155-162.
- Bem, S. L. (1981). Gender schema theory: A cognitive account of sex typing. *Psychological Review*, 88(4), 354-364.
- Dahlmann, J. M. (1994). [Review of the book *The lenses of gender: Transforming the debate on sexual inequality*]. *Michigan Law Review*, 92(6), 1929-1942.
- Davis, L. (2006). *The disability studies reader*. New York: Routledge.
- Dwyer, C. (1999). Veiled meanings: Young British Muslim women and the negotiation of difference. *Gender, Place & Culture*, 6(1), 5-26.
- Dwyer, C. (2000). Negotiating diasporic identities: Young British South Asian Muslim women. *Women's Studies International Forum*, 23(4), 475-486.
- Hannover, B. (2000). Development of the self in gendered contexts. In T. Eckes & H. M. Trautner (Eds.), *The developmental social psychology of gender* (pp. 177-206). Mahwah, NJ: Lawrence Erlbaum.
- Heaphy, B. (2007). *Late modernity and social change reconstructing social and personal life*. New York: Routledge.
- Lutz, H. (1991). *Migrant women of "Islamic Background": Images and self-images*. Amsterdam: Middle East Research Association. Occasional Paper 11.
- Klausen, J. (2005). *The Islamic challenge: Politics and religion in Western Europe*. Oxford: Oxford University Press.
- Orlofsky, J. L., Cohen, R. S., & Ramsden, M. W. (1985). Relationships between sex-role attitudes and personality traits and the revised sex-role behavior scale. *Sex Roles*, 12(3-4), 377-391.
- Orlofsky, J. L., & O'Heron, C. A. (1987). Stereotypic and nonstereotypic sex role traits and behavior orientations: Implications for personal adjustment. *Journal of Personality and Social Psychology*, 52(5), 1034-1042.
- Pharaon, N. (2004). Saudi women and the Muslim state in the twenty-first century. *Sex Roles*, 51(5-6), 349-366.
- Pickard, J., & Strough, J. (2003). The effects of same-sex and other-sex contexts on masculinity and femininity. *Sex Roles*, 48(9), 421-432.
- Roggeband, C., & Verloo, M. (2007). Dutch are liberated, migrant women are a problem: The evolution of policy frames on gender and migration in the Netherlands, 1995-2005. *Social Policy & Administration*, 41(3), 271-288.
- Sechzer J.A. (2004). Islam and women: Where tradition meets modernity: History and interpretations of Islamic women's status. *Sex Roles*, 51(5/6), 263-272.

Appendix

Participant background

All women were between 19 and 21 years old and came from different regions in Saudi Arabia, but mostly from the Western part of the country. They had very different backgrounds regarding their knowledge about Western culture, two of them had already traveled or studied outside the Middle East and did not experience something like a culture shock, but felt they were well prepared to what they had to face when they came to Maastricht. Concerning the educational level of their family members, there were also some differences. Some of the interviewed women have siblings that also study abroad, or fathers that studied in the West. All of the fathers had an academic background and followed well-paid careers. Some of the women's mothers have a University degree, and work as teachers, while the others focused on being housewives and mothers.

THE FRANCO – PRUSSIAN WAR OF 1870/71

A diversionary conflict

Michael Schulze

Abstract This paper analyzes the Franco-Prussia War of 1870/71 using the diversionary theory of war. The theory maintains that political leaders might initiate wars in times of internal problems and waning public support and thereby divert attention from domestic problems to an outside enemy, and so increase national unity and support for the leadership. Applying the theory, it is argued that the Franco-Prussian War was initiated by Napoleon III, in order to distract attention from the increasing domestic social and economic problems in France. Further, the paper acknowledges that the failure of the European balance of power and Bismarck's willingness to engage in a conflict have to be taken into consideration as permissive causes for the conflict.

I Introduction

Henry Kissinger supposedly once said that the Franco-Prussian War of 1870/71 was the beginning of the modern Hundred Years War that did not end until 1945 (Pflanze, 1990). With this he rightly captured the importance of this conflict for the 20th century. By the end of the war Otto von Bismarck, at that time

the Prussian Prime Minister, had managed to create a unified Germany under Prussian leadership. Thereby, he had established Germany as a dominant power in continental Europe. This can be seen as a vital factor in the developments that eventually culminated in two World Wars. Many accounts of the war talk about the Ems Dispatch as the reason for the war. However, this is a profoundly reductionist view of the causes. In the following, this paper will seek to illuminate the deeper causes that have led to the Ems Dispatch, which only provided the final spark to ignite the war. In order to do so, it will be argued that the Franco-Prussian War can be explained as a diversionary action by Napoleon III. The emperor's aim to reestablish his legitimacy and distract attention from internal problems can be seen as a necessary cause of the war. Further, the role of Otto von Bismarck and the situation in the international system will briefly be taken into account as they should be regarded as permissive causes for the conflict. Thus, the paper will be structured as follows: Initially, a short account of the diversionary theory of war will be given. In the following, the growing problems Napoleon III faced in the 1860's will be elaborated on to illustrate what motivated him to initiate a diversionary war. Thereafter, it will be explained why the emperor could select Prussia as a target for his distractive plans. Before concluding, the role of Bismarck and the international system as permissive causes will be very briefly considered.

2 Diversionary Theory of War

Already Shakespeare advised his contemporaries to “busy giddy minds with foreign quarrels” and Jean Bodin similarly maintained that “the best way of preserving a state, and guaranteeing it against sedition, rebellion and civil war is to [...] find an enemy against whom [the populous] can make common cause” (Levy, 1988, p. 667). In International Relations literature this later became to be known as the diversionary theory of war. The first one who applied the psychological in-group/out-group phenomenon, which is exactly what the preceding quotes allude to, systematically to international relations was George Simmel in 1898 (Levy & Tompson, 2010). He stated that conflict with an out-group usually strengthens in-group cohesion and political centralization and added, with regard to international relations that “war with the outside is sometimes the last chance for a state ridden with inner antagonisms to overcome these antagonisms, or else to break up definitely” (p. 663). This phenomenon, the provocation of hostilities, can be employed by political leaders to override internal differences, distract public attention from domestic issues, and restore or maintain legiti-

macy. In the event that the leadership succeeds in this endeavor a ‘rally around the flag’ and a surge in national unity should be the result. This implies the existence of a hierarchy of loyalties and values, in which membership in a state or nationality is, in the advent of outside threats, more important than domestic issues (Watman, 2003). It is worth mentioning that Levy and Vakili (1992) point out a high probability for authoritarian regimes to resort to diversionary actions. The authors attribute this to the regimes’ lack of traditional legitimacy; authoritarian regimes do not have a ‘social contract’ with the population.

Coser (1956) modified the argument through the addition of some qualifications. He states that a belligerent foreign-policy will only increase in-group cohesion if certain conditions are fulfilled. Firstly, the out-group has to be perceived as an issue beforehand. Secondly, a minimal level of cohesion has to be present in the in-group, so that, thirdly, it views itself as a group that, fourthly, is worth being protected and maintained. Lastly, the out-group threat has to be considered as a peril to the complete group. If these conditions are not met, it is probable that resorting to an external menace will exacerbate the internal problems, instead of ameliorating them. Mayer (1969) further adjoined that only a victory will strengthen the position of leaders. A failure, on the contrary, will increase internal problems. Moreover, Mitchell and Prins (2004) draw attention to the fact that the selection of the out-group is important. While scholars agree that there are more and less useful out-groups, there is dissent on the decisive features. Some advance the argument that militarily weaker states are preferable targets as a lost war exacerbates domestic problems. Others, per contra, maintain that a weak target does not arouse sufficient internal unity (Levy & Thompson, 2010). Overall, it seems that historical rivals constitute particularly well-suited targets for making scapegoats of since they stir up deep emotions and revulsion among the populace (Mitchell and Prins, 2004). Having outlined the diversionary theory of war, the following will scrutinize the development of the problems Napoleon III faced in the 1860’s and why they had such a profound impact on his actions.

3 France in the 1860’s

Initially, it is important to consider the origins of Napoleon III’s reign. In 1848, in the direct aftermath of the revolutionary events, he returned from England where he had fled to after two failed *coups d’état*. Riding the revolutionary tide, Napoleon III managed to seize the French presidency through the extensive support of the peasantry. With the end of his second term approaching in 1851, he once again attempted a *coup d’état* and this time he was successful and prevailed.

Shortly after the coup, he retroactively legitimized his power through a plebiscite, which endowed him with dictatorial powers. About a year later the Empire was re-established through another plebiscite and the revolutionary demands for parliamentary and liberal institutions were crushed (Palmer, 2007). The revolutionary-plebiscite based foundation of Napoleon III's system of Bonapartism turned out to be consequential for developments to come. As the emperor's reign was not based on traditional or natural legitimacy, but rather on a volatile and temporary sentiment within the population, it was rather susceptible to crisis. Hence, the emperor's base of support was considerably volatile and hinged on his political performance (Baumgart, 1999). This internal trait was further amplified through the emperor's system of Bonapartism. It is described by Erbe (1994) as a dictatorial system in a monarchical guise that is characterized by its recurrent resort to the will of the people. Thereby, the system reinforced the significance of public support for the emperor. Moreover, as Nipperdey (1992) explains, the way the Napoleonic system was constituted, it was highly dependent on successes in the foreign-policy realm. It is obvious that a stable and peaceful international system was not valued as such in times of nationalism and desire for national prestige. Only gains in power, prestige and territory were credited as accomplishments. Here it is important to note that the ones who measured success and prestige were the contemporary opinion leaders that were driven by a temperate nationalism, which, once again, raised the bar (Wawro, 2003).

So, overall, from the beginning of the Second Empire on, as a result of the way he had come to power, Napoleon could not be entirely sure of his position. The lynchpin for his support and thus legitimacy was his ability to deliver. On the one hand he had to ensure domestic development and the satisfaction of his supporters, on the other hand the prevalent French nationalism made foreign-political successes a necessity. Yet, at the same time, the high importance of foreign-policy presented an opportunity as well. It put Napoleon III in the position to resort to diversionary policies. While this aspect will be elaborated on at a later point, the following will scrutinize both the internal and external problems the emperor faced in the course of the 1860's, which led Napoleon to resort to diversionary policies. All in all, this concurs with the tendency of authoritarian regimes to make use of distractive wars that Levy and Vakili (1992) describe.

In order to really understand why the negative developments in the 1860's had such a profound impact on Napoleon's position, it is important to view them in the context of the achievements, both externally and internally, of the initial years of the Second Empire (Caron, 1991). In 1854, France had led the anti-Russian alliance in the Crimean War and successfully inhibited Russian expansion. In addition, due to Napoleon III's skillful maneuvering during the peace talks,

France replaced Russia as the leading power in continental Europe. Similarly, France had prevailed over Austria in 1859 after proclaiming itself as the patron of a unified Italy. Domestically “France entered into a new phase of economic development” (Palmer, 2007, p. 513) and the money supply steadily grew; railroad mileage profoundly increased, resource industries ran to capacity and trade flourished (Palmer, 2007). By and large, welfare increased considerably throughout all social classes and all parts of the country (Caron, 1991). These economic achievements increased the population’s expectations about the future and they would prove to be the point of reference in evaluating their situation in the future.

Yet, with the commencement of the new decade, the prospects became less bright (Palmer, 2007). The Empire faced growing economic, social and external problems, all of which eroded the emperor’s power base. He was neither able to deliver domestically nor did he manage to continuously satisfy the French lust for pride and glory. Napoleon’s legitimacy waned. As mentioned above, the impact of the public’s reaction regarding those developments can only be comprehended if the positive trends in combination with the exaggerated and overly sensitive national pride are taken into account. Additionally, the bloodshed of the 1848 revolution and the fear of extremism seemed to be far away (Wawro, 2003). Baumgart (1999) describes the situation as so tense that “France seemed intent on weakening his [Napoleon III’s] throne or voting it out of existence” (p. 24). By 1860/61, however, it was enough to soothe the masses by adopting a more liberal style of government. The parliament was endowed with more rights, freedom of press was increased and unions were permitted. At the same time, the Napoleon III’s more liberal style, which is to be understood in a relative sense, would only magnify the intensity of future protests. It opened up more forums to express discontent and to stir up public opinion.

It was not until 1869 that the social crisis erupted once again. After the emperor had failed to pass important educational and military reforms, an increasingly morose legislative body pushed for new elections. While Napoleon III had expected the same staged elections as usual, he was to be proven wrong. The increased freedom of press allowed for over 120 opposition news papers to publish in the pre-election time, which made the atmosphere more aggressive. Rioting workers demonstrated for the registration of socialist-revolutionary candidates. In spite of massive fraud, the elections turned out to be a disaster for Napoleon III. The number of opposition seats in the legislative body quadrupled. When he tried to simply ignore the results, public violence broke loose. The smell of revolution was in the air and the emperor was determined to “save the dynasty” (Wawro, 2003, p. 28). Eventually, Napoleon III managed to calm

the masses once again with a relaxation of repressive policies; allowing for more civic freedom and granting more rights to the legislative body (Waldersee, 2009). Nevertheless, this is not to say that the underlying problems changed or public approval fundamentally increased. Napoleon III only managed to calm the masses under the critical threshold where protests turned violent. At this point it is important to mention that the protesters were not only members of the working class; they also came from other political camps. Liberals deemed him too conservative and the conservatives deemed him too liberal (Caron, 1991). This in turn made it more complicated for the emperor to reach a lasting political solution for the problem. A solution that would have satisfied one party would have incensed another. Based on this, the idea to resort to an external conflict to restore public support matured in Napoleon III's mind (Caron, 1991).

Nevertheless, in 1870, Napoleon initially made use of a peaceful measure to realign the public. He conducted a cleverly formulated plebiscite, in which he did not ask the populous to express its opinion on himself but merely on the "liberal changes" he had conducted. As it was difficult for most people not to endorse these, the ballot turned out was as successful as Napoleon had hoped it would be. Nevertheless, even though 7.3 million voted with 'yes', the turnout hit a sour note. 1.5 million voted with 'no' and 2 million had abstained (Wawro, 2003). More worrisome, however, was the fact that 20 per cent of the army, which was allowed to vote for the first time, in order to bolster Napoleon III's majority, had voted with 'no'. The emperor soon reached the conclusion that it would be "the best way to distract the army from demoralizing political questions" by employing it in combat (Waldersee, 2009, p. 68). This further added to the idea of employing diversionary policies.

Apart from the social crisis, the emperor was as well under pressure for other reasons. As was pointed out above, Napoleon III's legitimacy was, apart from his domestic performance, highly dependent on his ability to make foreign-policy successes happen, in order to satisfy French nationalist desires. However, he increasingly failed to do so, which undermined his legitimacy. In 1863, the emperor had failed in his endeavor to reestablish an independent state of Poland. Subsequently, in 1866, Napoleon III had failed to obtain Luxemburg from Prussia and his effort to establish a French satellite state in Mexico resulted in a political and financial disaster. Maximilian I, who was put in place as the 'Emperor of Mexico', lost his head and France some 360 million francs.

4 Prussia as a target for the diversionary war

As Mitchell and Prins (2004) have pointed out, the selection of the out-group is important as some serve the purpose better than others and Coser (1956) specifies this by stating that the diversionary target has to be perceived as a threat to the in-group beforehand. Most preferably, for the action to be successful, the target should be a historical enemy. While it is inappropriate to claim that Prussia was already seen as the 'hereditary enemy' at this point, it is valid to say that since the battle in Königgrätz in 1866, Prussia had been a thorn in the side of the French. The pressure on Napoleon III to teach Prussia a lesson had grown continuously as both the French populace and members of the government felt humiliated by Prussia and perceived it as a tangible threat to the French position in continental Europe (Nipperdey, 1992). The victory at Königgrätz and the following foundation of the North German Confederation had been perceived as an insult, as France had controlled German affairs for a long time (Wawro, 2003). At this point Napoleon III was already aware of the pressure to act, in order to secure his power, but at the same time he knew that important reforms of the army had to be completed beforehand.

Therefore, he had tried to pour oil on the troubled waters through an attempt to obtain the fortified city of Luxemburg (Pflanze, 1990). The city had belonged to the German Confederation and was under Prussian protection. However, after the dissolution of the German Confederation, its status had to be renegotiated. Napoleon III was confident that, in the tradition of compensation for other states' territorial gains, he could succeed with his demands. While it has to be acknowledged that his hopes were not without reason, the acquisition would have had no higher value than to save Napoleon III's face. It was not a particularly ambitious claim (Caron, 1992); nevertheless, Bismarck had decided to repudiate the demands, partly because he felt that it would benefit the German national movement. The debacle Napoleon III experienced with the Luxemburg affair was exacerbated by the fact that he had bragged in the lead up to the Austro-Prussian War that he would make use of the situation for territorial acquisitions (Wawro, 2003). As the laugh is always with the loser, the emperor's critics did not hesitate to twist the knife in the wound. Adolphe Thiers, for instance, had increased the pressure on Napoleon III by railing in the legislative body that "when a hunter is ashamed of returning from the chase with an empty bag, he goes to the butcher, buys a rabbit, and stuffs it into his bag, letting the ears hang out. *Voilà le Luxembourg!*" (Gregorovius, 1907, p. 275) Thus, overall, the attempt to obtain Luxemburg had backfired and further undermined Napoleon III's position. At the same time it is important to note that Napoleon III himself did not see the

failure as too problematic. It was rather the public pressure that made future compromises with Prussia impossible. Subsequently, containment became the order of the day for Napoleon to restore legitimacy, national unity and his power (Baumgart, 1999).

In each of the following years a crisis occurred between France and Prussia, each one bringing the two countries to the brink of war. However, eventually one side always backed down. From Napoleon III's point of view it was not yet possible to start a unifying campaign against Prussia as he still had not completed army reforms (Erbe 1994).¹ Furthermore, large parts of the army were engaged in distant parts of the world. Besides the already mentioned activities in Mexico, the emperor had considerable parts of his forces committed on a mission in Vietnam. When war eventually broke out in 1870, as described below, the internal situation in France was tenuous. Napoleon III was "under constant attack in the press, streets, and legislature" (Wawro, 2003, p.25) and faith in the Second Empire was "dwindling fast" (ibid., p.25). Further, the Hohenzollern crisis that culminated in what came to be known as the Ems Dispatch evolved into the perfect *casus belli*. Yet, as was pointed out at the beginning, these events should not be seen as the reason of the war but rather as the final spark that ignited the conflict. The events developed as follows: The Spanish throne became vacant and was offered to Prince Leopold, who happened to be a nephew of the Prussia king. For France an acceptance would have been completely impossible as this would have resulted in a two-front situation. It thus vetoed the offer. In order to reach a meaningful foreign-policy success, Napoleon III exerted a lot of pressure on the Prussian government. For Napoleon himself a diplomatic solution to the problem would have been feasible. However, he felt that this would not suffice to soothe the public, satisfy its desire for prestige and recover national pride (Baumgart, 1999). Therefore, the demand was uttered that Prussia should guarantee that no Prussian would ever succeed to the Spanish throne. The Prussian king's reply to this, however, was manipulated so extensively by Bismarck that Napoleon III declared war on Prussia. The diversionary war to reestablish public confidence in the emperor and his legitimacy could begin. Nevertheless, it ended rather quickly with a devastating defeat of the Second Empire and the establishment of Prussia as the most powerful country in continental Europe. Yet, the reasons for this are beyond the scope of this paper.

The fact that the war did not break out until 1870 due to the opinion of the leadership that the army was not ready shows that feelings of humiliation and

¹ These reforms were the very reforms that led to the elections in 1869, in which the emperor experienced a bitter defeat.

mortification on sides of the French populace cannot be viewed as the root cause for the outbreak of the war. If they were, war would have already broken out as early as 1867 after the Austrian defeat at Königgrätz. During that time even rather moderate critics, such as Adolphe Thiers promulgated that “the way to save France is to declare war on Prussia *immediately*” (Wawro, 2003, p. 17). Hurt national pride should rather be viewed as fulfilling the condition Coser (1956) introduced, namely, that the target of a diversionary war has to be conceived as a threat to the existence of the in-group beforehand. Thus, it is more correct to assess the strong anti-Prussian sentiments as the condition that made it possible for Napoleon III to eventually declare war on Prussia and realign the public behind him with this as it was virtually the only thing that all his critics agreed on. Further, the strong French nationalism and the fear of the rise of Prussia can be valued as satisfying the other conditions Coser (1956) developed: Firstly, French nationalism satisfies the condition of an ‘in-group’ perceiving itself as worth sustaining. Secondly, the threat of a more powerful Prussia was perceived as a threat to the French nation. Thus, the threat was perceived as a threat to the ‘in-group’ as a whole.

4.1 Permissive causes

Having identified Napoleon III’s diversionary intentions as the necessary cause of the war, it is necessary to briefly take the role of Bismarck and the general situation in the international system into account. Both have to be seen as permissive to the conflict. While neither of the two could have triggered the war, they provided the necessary framework for the escalation. Bismarck, naturally influenced by the prevalent upsurge of nationalism in his time, had been aiming for a unified German nation-state under Prussia leadership since he had come into office. While he never abandoned the possibility of an evolutionary unification of Germany, he was very well aware of the deep anti-French sentiment in nearly all German states. From the German point of view, in contrast to the French, the idea of ‘hereditary enmity’ had already been present among the population for some time. In the last 200 years France had declared war to the German states some 30 times and memories of the Napoleonic wars were still present in people’s minds (Howard, 1961). He therefore knew that “war with France could accomplish with one blow what might normally take a generation” (Pflanze, 1990, p. 451). At the same time it would be wrong to conclude that Bismarck had any concrete long-term plans for a military escalation between the two countries. As with the case of the Ems Dispatch, it was rather a spontaneous decision to alter it in such a profound manner. Furthermore, from his point of view, it was not a necessity that war had to erupt from this, even though it has to be clear

that he was aware of the tangible possibility. As stated above, a French declaration of war was very much in his interests to trigger a surge of nationalist feelings in Germany, in order to advance German unification. However, in the end it was the decision of the French emperor to escalate the incident into a war, in order to realign his own people with him (Waldersee, 2009).

With regard to the international system it should be said that the functioning of balance of power that had been established at the Congress of Vienna had altered considerably in the course of the revolutionary events in 1848. The trust in the system's structures had dwindled substantially. *Realpolitiker*, such as Bismarck or Napoleon III definitively made their contributions to this. As of 1856, only Austria and Great Britain remained as supporters of the old balancing system. Britain, however, retreated to an isolationist position after the Crimean War. The remaining powers could all be considered as revisionists (Craig & George, 1995). Thus, at the outbreak of the Franco-Prussian War the European balance of power did not function anymore (Lowe, 1997). There were no powers that made an effort to balance either France or Prussia and thus prevent an escalation. Hence, the situation of the international system in 1870 can be regarded as a permissive cause for the Franco-Prussian War. Yet, as with Bismarck, it does not constitute a necessary cause for the war.

5 Conclusion

In this paper it has been shown that the Franco-Prussian War of 1870/71 can be explained by the diversionary theory of war. The necessary cause of the war is Napoleon III's decision to realign the public with him by means of a diversionary war. In the 1860's Napoleon III increasingly came under pressure due to internal social and economic problems. Furthermore, he failed to deliver foreign-political successes. However, due to his lack of traditional legitimacy these were of great importance for his power base and support among the people. Of the external problems the rise of Prussia was especially important as it evoked strong emotions in France. Therefore, Napoleon III came to the conclusion Prussia would be the most suitable target for his plans. With the Ems Dispatch the final spark was provided by Bismarck and the war began. Nevertheless, to accurately account for the war Bismarck and the failed balance of power in Europe have to be considered as permissive causes.

References

- Baumgart, W. (1999). Europäisches Konzert und nationale Bewegung: internationale Beziehungen 1830 – 1878. In Durchhardt, H. & Knipping, F. (Eds.), *Handbuch der Geschichte der Internationalen Beziehungen in 9 Bänden*. (Vol. 6-9). Paderborn: Schöningh.
- Caron, F. (1991), *Frankreich im Zeitalter des Imperialismus 1851 – 1918*. Stuttgart: Deutsche Verlags-Anstalt.
- Coser, L. (1956). *The function of social conflict*. New York: Free Press.
- Craig, G. A., & George, A. L. (1995). *Force and statecraft – Diplomatic problems of our time*. Oxford: Oxford University Press.
- Erbe, M. (1994). Napoleon III. 1848/52 – 1870. In Hartmann, P. (Eds.), *Französische Könige der Neuzeit. Von Ludwig XII bis Napoleon III. 1498 – 1870*. Munich: C. H. Beck.
- Gregorovius, F. (1907). *The Roman journals, 1852–74*. London: -.
- Howard, M. (1961). *The Franco-Prussian War*. London: Routledge.
- Levy, J. S. (1988). Domestic politics and war. *Journal of Interdisciplinary History*, 18(4), 653-673.
- Levy, J. S., & Vakili, L. I. (1992). Divesionary action by authoritarian regimes: Argentinian in the Falklands/ Malvinas Case. In M. I. Midlarsky (Ed.) *Internalization of Communal Strife*. London: Routledge.
- Levy, J. S., & Thompson, W. R. (2010). *Causes of war*. Chinchester, West Sussex: Wiley-Blackwell.
- Lowe, J. (1990). *The concert of europe: International relations 1814 – 70*. London: Hodder Arnold.
- Mayer, A. J. (1969). Internal causes and purposes of war in Europe, 1870-1956: A research assignment. *The Journal of Modern History*, 41(3), 291-303.
- Mitchel, C., & Prins, B. (2004). Rivalry and diversionary uses of force. *Journal of Conflict Resolution*, 48(5), 937-961.
- Nipperdey, T. (1992). *Deutsche Geschichte 1866 – 1918*. Munich: C. H. Beck.
- Pflanze, O. (1990). *Bismarck and the development of Germany*. (Vol. 1-3). Oxford: Princeton University Press.
- Schivelbusch, W. (2001). *Die Kultur der Niederlage: der amerikanische Sudan 1865, Frankreich 1871, Deutschland 1918*. Berlin: Alexander Fest Verlag.
- Simmel, G. (1898). The persistence of social groups. *American Journal of Sociology*, 3(5), 662-698.
- Waldersee, A. (2009). *Aus dem Briefwechsel des Alfred von Waldersee*. Berlin: Deutsche Verlags-Anstalt.
- Watman, K. H. (2003). *The relationship between regime strength and the propensity to engage in armed interstate conflicts*. Doctoral dissertation, Ohio State University, Columbus.
- Wawro, G. (2003). *The Franco – Prussian War: The German Conquest of France in 1870 – 1871*. Cambridge: Cambridge University Press.

HUMAN PHEROMONES

Theory or fact?

Willem Nuijen & Pieter Verhallen

Abstract As the existence of human pheromones has proven to be a subject of intense discussion in the biological and biopsychological spheres of academics, this paper tries to enumerate and clarify the progress that has been made on the issue so far. In particular, after the introduction of an unambiguous definition of the term “pheromone”, several genes that relate to the human vomeronasal organ and the possible reception of pheromones will be discussed, backed by several prominent studies. Supported by the inactive state of studied genes in humans, there can be no conclusive evidence towards a remainder of actually functional pheromones in human beings.

I Introduction

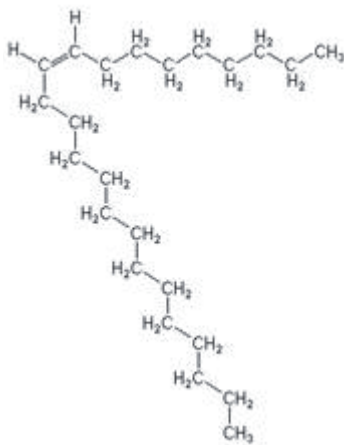
The existence of human pheromones has been a controversial topic – especially in the last few decades – ever since the vomeronasal organ was discovered in humans and documented by Ludvig Jacobson, a Dutch anatomist, in 1813. Although the use of pheromones is proven and clearly understood for a multitude of species, including mammals, there is little conclusive evidence for the significance of human pheromones. Regardless, commercial pharmaceutical companies

consistently provide us with plenty of different pheromone products, claiming that these have a positive effect on the attractiveness of the opposite sex due to the inclusion of human pheromones.

In this paper, the existence of human pheromones is challenged by reviewing some of the most prominent studies in this area (Dixon, 1983; Meredith, 2001; Mitropoulos, 2007). Furthermore, the issue of whether humans are actually capable to detect pheromones is challenged and their use to control certain human developmental processes or alter (sexual) behavior. Emphasis is first placed on the definition of pheromones. Second, the vomeronasal organ is explained as well as its function in human beings. Third, the McClintock effect is defined and analyzed. Next, the VR1L1 gene is identified and examined. Subsequently, a focus is placed on the TRP2 gene and its suggested relation to the emergence of color vision (Zhang & Webb, 2003). Lastly, an overview is provided on two remaining studies that support the belief of pheromone use by humans, and a short conclusion is supplied with the findings.

2 What are pheromones?

The term 'pheromone', introduced in 1959 by Karlson and Lüscher, is derived from the Greek words phero, to carry, and hormone, to excite (Sadava et al., 2006). Pheromones are chemical substances that are secreted to the outside of



(Z)-9-tricosene ($C_{23}H_{46}$)

Source: pherobase.com (2007)

an individual with the aim to communicate with another individual of the same species, to their mutual benefits (Meredith, 2001; Mitropoulos et al., 2007). The unconscious reception of pheromones by such an individual induces a specific reaction, e.g. a definite behavior or a developmental process (Karlson and Lüscher, 1959). For instance, in ant colonies pheromones are used to alarm nestmates in case of danger (Yamagata et al., 2007). In most cases, pheromones are concerned with the stimulation of sexual processes in the body of the receiving individual, e.g. inducing estrous cycles in mice (by male pheromones). In addition, the same substances cause territorial avoidance among the males (Ma et al., 1999). Also, tracking a

mating partner is one of the objectives for which pheromones are used in several species, e.g. the housefly. Carlson et al. isolated the substance (*Z*)-9-tricosene as early as in 1971, a pheromone excreted by the female housefly through feces and skin in order to attract males.

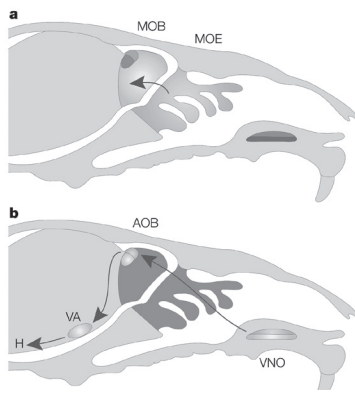
Pheromone communications were later classified into two types: priming pheromones and signaling pheromones, where the priming types stimulate a change of (sexual) state in the receiver, and the signaling types stimulate behavioral responses (Meredith, 2001).

3 Vomeronasal organ

The olfactory system in mammals, enabling the sense of smell, consists of two parts, namely the main olfactory system and the accessory olfactory system. The main olfactory system detects volatile small odor substances. These are received by sensory cells in the main olfactory epithelium, through which the chemicals are transduced into neural signals. These are fired to the main olfactory bulb, a

layered structure that is believed to have a filtering function, in order to enhance the discrimination between different odors. From here, several neural structures that form the primary olfactory cortex can be activated (Dulac & Torello, 2003).

Sensory cells in the accessory olfactory system, on the other hand, are concerned with the reception of pheromones. The accessory olfactory system essentially creates a pathway from the periphery of the animal to the hypothalamus. The receptive organ in this system is the vomeronasal organ, also called Jacobson's organ, after its discoverer. It is a tubular, bilateral symmetric chemoreceptor organ, positioned either at the base of both sides of the nasal septum or in the roof of the mouth. The organ is believed to be the primary locus concerned with pheromone reception, although it is also involved in other sorts of chemical communication. For instance, snakes may use vomeronasal



Olfactory systems in mammals

MOB: Main Olfactory Bulb

MOE: Main Olfactory Epithelium

AOB: Accessory Olfactory Bulb

VA: Vomeronasal Amygdala

H: Hypothalamus

VNO: Vomeronasal Organ

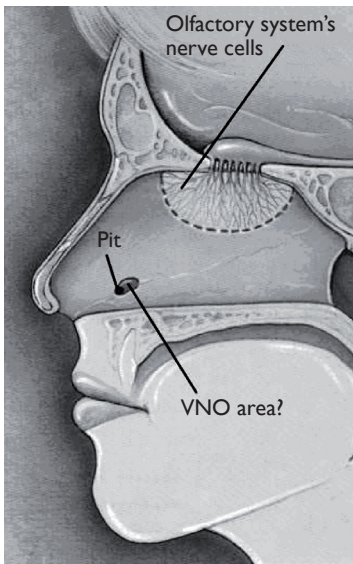
Source: Dulac and Torello, 2003

chemoreceptors when tracking a prey, an interaction between two different species. Furthermore, several behavioral or physiological reactions seem to depend largely on the main olfactory system instead of the AOS, or on both systems (Meredith, 2001).

From the vomeronasal sensory neurons, the signals are passed through bundled axons to the accessory olfactory bulb. From here, the signals will further be filtered by the vomeronasal amygdala, which, it is suggested, combines information from both olfactory systems. The signals originating from the vomeronasal organ are then mainly distributed to the areas of the hypothalamus concerned with the regulation of reproductive and aggressive behaviors (Dulac & Torello, 2003).

The function of the human vomeronasal organ is controversial, let alone its existence. Recent observations give evidence for the assumption that most adults have such an organ on at least one side (unilateral) of the nasal septum. The existence of a vomeronasal organ in human fetuses is generally acknowledged. It consists of bipolar cells similar to those becoming vomeronasal sensory neurons in other species. Furthermore, as in other species, it contains cells that release luteinizing-hormone releasing hormone, which in turn is responsible for the release of follicle-stimulating hormone and luteinizing hormone, which both play

a crucial role in the regulation of the development and reproductive processes of the body (Meredith, 2001). The human vomeronasal organ will, however, not develop any further after the fetus stage; in fact, its structure becomes more simplified. An increase in size is only observed until, at most, the 30th week (Boehm and Gasser, 1993). In addition, the accessory olfactory bulb, as identified in other species, has not been found in adult humans. Even though explicit research by Meisami and Bhatnagar (1998) has had no success in the discovery of this structure, it is important to note that in other species, the accessory olfactory bulb can also easily be misidentified or go undetected. This is due to possible distortion of the bulb by stretching during development (Meredith, 2001).



Human Vomeronasal Organ (VNO)

Source: www.sfn.org (2007)

What further negates the function of the vomeronasal organ in humans, is that current

research shows a limited connection to the brain. Studies by Trotier et al. (2000) scanned for the protein S100, a marker for axon bundles. They have had no results within the vomeronasal organ. Meredith (2001) states that only two pathways remain for vomeronasal sensory neurons to connect to the brain: either a small number of individual axons – instead of bundled – which would not be discovered by Trotier’s studies, are present, or another nerve is carrying the axons of the vomeronasal sensory neurons. There have been no conclusive studies on this.

4 McClintock effect

The first scientific evidence that led to the presumption of the existence of human pheromones was presented in 1971 by Martha McClintock. As a junior student, just 20 years old, she was invited to a conference at Jackson Laboratory in Maine, where top biologists were gathered to discuss the phenomenon of mice synchronizing their menstrual cycles by means of pheromones. McClintock had already observed this phenomenon in humans, while in her dormitory at Wellesley College, U.S.A. The biologists at the conference, all male, had never heard of this and challenged McClintock to provide them with scientific evidence (Horn, 1999). In 1971, a statistical analysis with 135 women of the dormitory she lived in was published in *Nature*.

The synchronization of the menstrual cycle of women who live in close proximity, now known as the McClintock effect, was further analyzed by McClintock and Stern (1998), leading to “definitive evidence of human pheromones” (p. 177). Substances excreted in the armpit of 9 donor women were isolated at two stages in the ovulation cycle and conserved (frozen). Afterwards, they were administered to the upper lips of 20 women. One of the substances, secreted in the late follicular phase of the donors’ cycles, “accelerated the preovulatory surge of luteinizing hormone” (p. 177) and shortened the menstrual cycles of the subjects. The second axillary (underarm) compound, isolated at times of ovulation of the donors, delayed the luteinizing hormone production and lengthened the ovulation cycles. McClintock’s conclusion was that among the retrieved chemicals from the donors’ armpits, there had to be pheromones influencing the menstrual cycles of the subjects. The substances are yet to be identified.

In reaction to these findings, an increasing number of studies on this phenomenon were published since, but significant results failed to appear. For instance, while studying 186 Chinese women in dormitories for a duration of five months, Yang and Schank (2006) found that the women did not synchronize their menstrual cycles. Furthermore, McClintock’s first study of menstrual synchroniza-

tion (1971) was reviewed, concluding that group synchrony was at the level of chance (Ziomkiewicz, 2006; Yang & Schank, 2006). Moreover, there seems to be no reasonable evolutionary explanation for the synchronizing of menstrual cycles (Ziomkiewicz, 2006). The growing evidence for the absence of menstrual synchronization in women implies that there is no underlying mechanism for it, either. The only mechanism proposed was the presence of pheromones controlling the length of the menstrual cycle. Therefore, the existence of pheromones inducing the McClintock effect, the phenomenon regarded as the most prominent in advocating the possible existence of human pheromones, is now heavily disputed (Schank, 2006).

5 Evidence in favor of a human pheromone system

Correlational evidence suggesting the existence of human pheromones with the male as the receiving party can be found in research from Savic et al. (2005) and Olsson, Lundström, Diamantopoulou, and Esteves (2006). Savic et al. (2005) conducted a study in which both heterosexuals and homosexual men were exposed to the *putative* pheromone 4,16-androstadien-3-one (AND), a testosterone derivative. Activity was observed in hypothalamic areas involved in sexual behavior for both heterosexual women and homosexual men, while absent in heterosexual men. In contrast, common odors were processed similarly in all subjects. In a similar study, Olsson, Lundström, Diamantopoulou, and Esteves (2006) tested whether the alleged female pheromone estratetraenol had the same effect on men as the putative pheromone androstadien-3-one had on women, with an added variable, the sex of the person running the experiment. It was found that the pheromone had a greater effect on males when a female was running the experiment in comparison to when a male was running the experiment. While both are merely correlational studies with alleged pheromones, they do suggest that human pheromones may indeed have an effect on humans.

6 The VIRLI-gene

In rodents, there are a number of genes coding for three types of chemosensory receptors: odorant receptors, vomeronasal type 1 receptors (V1Rs) and vomeronasal type 2 receptors (V2Rs). The latter two are expressed by vomeronasal sensory neurons that respond to pheromones. In humans, some 200 V1R-like (V1RL) genes were found, but only one (hV1RL1) is found to potentially code

for a receptor function, while the others are non-functional pseudogenes: genes that lost their ability to code for proteins (Rodriguez & Mombaerts, 2002). The (mRNA) transcripts of the V1RL1 gene are found in the human olfactory mucosa (Rodriguez et al., 2000), a mucus-secreting membrane lining the olfactory organs (WordNet, 2007). Both alleles of this gene are found equally dispersed in males and females, so it is unlikely that the gene contributes to gender-specific behavior (Mitropoulos et al., 2007). The above is significant evidence for the lag in development of humans compared to mammals known to use pheromones to influence e.g. sexual behavior (Dulac & Torello, 2003).

7 TRP2-gene deterioration and the emergence of color vision

The TRP2-gene, pronounced ‘Trip-2’, is part of the transient receptor potential family of genes likely expressing Ca^{2+} -permeable cation channels (Vannier et al., 1999), and is unique to the pheromone signal transduction pathway. It was first discovered in mice by Catherine Dulac and her team (1998), and later published in more detail by Liman et al. (1999). It was found to be a pseudogene in humans, and it is also occasionally called the TRPC2 gene (Zufall, Kelliher, & Leinders-Zufall, 2002). Its inactivity in humans is additional evidence that the pheromone communication system through the vomeronasal organ is not functional in humans. The TRP2 gene was also used to track the evolution of the vomeronasal organ – through a random gene decay computer simulation – to discover the reasons behind its cessation in humans (Zhang & Webb, 2003).

Nearly 30 years ago, Dixson introduced the theory that the lack of a functioning TRP2 gene and pheromone system in certain primates, including humans was caused by the evolutionary introduction of full trichromatic color vision (1983). Photopigments form the foundation of color vision, and each photopigment consists of an opsin protein and a 11-cis retinal chromophore (Nei, Zhang & Yokoyama, 1997), which is a color-producing chemical. Most mammals have dichromatic color vision with two opsin genes, a short wavelength blue-sensitive opsin gene as well as a middle green- to long blue-sensitive wavelength opsin gene. For higher primates, color vision evolved for both the New World monkeys family, and the Old World monkeys and hominoid families, in two different ways. New World monkeys, originating from Central and Southern America with characteristic flat noses, have only a single X-linked locus encoding the green and red-sensitive opsins besides the autosomal blue gene (Mollon, Bowmaker & Jacobs, 1984). Hence, New World monkey males are dichromatic, and females can be either dichromatic or trichromatic depending on the genotype, due to

having two X-chromosomes. Old World monkeys, native to Asia and Africa today with distinctive narrow noses, and hominoids, on the other hand, have an autosomal gene that encodes the blue-sensitive opsin, as well as two genes on the X chromosome encoding both the green- and red-sensitive opsins (Nathans, Thomas, and Hogness, 1986). Therefore, both males and females of Old World monkeys and hominoids have full trichromatic vision, thanks to all three color vision genes. According to Nei, Zhang, and Yokoyama, who did a study on the evolution of color vision of higher primates (1997), color vision emerged in Old World monkeys after they diverged from New World Monkeys – approximately 35 million years ago (Webb, Cortes-Ortiz & Zhang, 2004). It is proposed that trichromacy evolved first in New World monkeys as a polymorphic form before the digression of Old World monkeys from the New World monkeys occurred, after which unequal crossing over resulted in duplicate red and green genes in Old World monkeys (Dulai et al., 1993; Hunt et al., 1993). In higher primates, trichromacy “is believed to have evolved to facilitate the detection of yellow and red fruits against dappled foliage” (Nei, Zhang, & Yokoyama, 1997, p. 611). Around the same time that trichromacy appeared, between the divergence of hominoids and Old World monkeys, which occurred approximately 23 million years ago, and the branching of New World and Old World monkeys at circa 35 million years ago, the TRP2 gene was estimated to have shut down (Zhang & Webb, 2003). Zhang and Webb (2003) used a computer simulation to estimate the pseudogenization of TRP2 in primates, which led to this estimation. It is believed to have been the predecessor to the pseudogenization of most of the V1R genes that are also part of the pheromone chemical-based communication system, as mentioned previously (Zhang & Webb, 2003). Moreover, it is hypothesized that color vision was a better vision-based signaling system than the pheromone chemical-based system, hence replacing the latter. As Zhang and Webb (2003) emphasized, in New World monkeys males and some females are lacking full trichromatic vision yet feature a fully functional pheromone signaling system, whereas in Old World monkeys and hominoids, full trichromatic vision is present while a pheromone system is lacking. As described by Dixson (1983), the sexual skin near the perineum of females of Old World monkeys and hominoids with trichromatic vision started to develop evident reddening and swelling during the time of ovulation. This evolution is thought to have been facilitated by the improvement of trichromatic color vision (Zhang & Webb, 2003), and allowed mate selection through vision rather than automatic scent, making the pheromone communication system no longer a necessity.

However, recent findings have proven otherwise – that the genes for pheromones and the genes for color vision are not mutually exclusive. Webb, Cortes-

Ortiz, and Zhang (2004), have discovered a species of New World monkeys, the Howler monkey, that carries both the genes for full trichromatic color vision as well as the genes for a fully functional pheromone system. Apparently, this species of New World monkey developed trichromatic vision through independent duplication of an opsin gene on the X-chromosome in recent evolution, and hence leaves the conclusion that “the emergence of full trichromacy does not make the pheromone communication dispensable in howlers” (Webb, Cortes-Ortiz, & Zhang, 2004, p. 701).

8 Conclusion


The findings of this paper do not sway the controversy in any one direction or the other. As more facts and theories emerge, others are negated. The vomeronasal organ and the genes that encode for its function, VR1L1 and TRP2, are clearly no longer fully functional in human beings. This does not necessarily imply that humans and their subsequent behavior are not affected by pheromones. There are studies that show a correlation between certain human pheromones and behavior. Nevertheless, these studies lack a solid biological background. Consequently, the chance of sexual pheromones playing a role in human behavior is only slight, as the vomeronasal organ is clearly inactive in humans. All current evidence show that this organ and its respective genes are the key in pheromone activity linked to sexual and aggressive behavior in mammals. More studies are therefore needed to solidify any claim of the existence of an active human pheromone system.

References

- Boehm, N., & Gasser, B. (1993). Sensory receptor-like cells in the human fetal vomeronasal organ. *Neuroreport*, 4, 867–870.
- Carlson, D. A., Mayer, M. S., Silhacek, D. L., James, J. D., Beroza, M., & Bierl, B. A. (1971). Sex attractant pheromone of the house fly: Isolation, identification and synthesis. *Science*, 174(4004), 76-78.
- Dixson, A. F. (1983). Observations on the evolution and behavioral significance of “sexual skin” in female primates. *Adv. Study Behav.*, 13, 63-106.
- Dulac, C., & Torello, A. T. (2003). Molecular detection of pheromone signals in mammals: from genes to behaviour. *Nature Reviews Neuroscience*, 4, 551-562.

- Dulai, K. S., Bowmaker, J. K., Mollon, J. D., & Hunt, D. M. (1994). Sequence divergence, polymorphism and evolution of the middle-wave and long-wave visual pigment genes of great apes and old world monkeys. *Vision Res.*, *34*, 2483-2491.
- Horn, M. (1999). *Rebels in White Gloves: Coming of Age with Hillary's Class - Wellesley '69*. New York: Times Books.
- Hunt, D. M., Dulai, K. S., Bowmaker, J. K., & Mollon, J. D. (1995). The chemistry of John Dalton's color blindness. *Science*, *267*, 984-988.
- Karlson, P., & Lüscher, M. (1959). 'Pheromones': a new term for a class of biologically active substances. *Nature*, *183*, 55-56.
- Liman, E. R., Corey, D. P., & Dulac, C. (1999). TRP2: A candidate transduction channel for mammalian pheromone sensory signaling. *Proc. Natl. Acad. Sci. U.S.A.*, *96*(10): 5791-5796.
- Ma, W., Miao, Z., & Novotny, M. V. (1999). Induction of estrus in grouped female mice (*mus domesticus*) by synthetic analogues of preputial gland constituents. *Chem. Senses*, *24*, 289-293.
- McClintock, M. K. (1971). Menstrual synchrony and suppression. *Nature*, *229*, 244-245.
- Meisami, E., & Bhatnagar, K. P. (1998). Structure and diversity in mammalian accessory olfactory bulb. *Microscopic. Research Technology*, *43*, 476-499.
- Meredith, M. (2001). Human vomeronasal organ function: A critical review of best and worst cases. *Chem. Senses*, *26*, 433-445.
- Mitropoulos, C., Papachatzopoulou, A., Menounos, P. G., Kolonelou, C., Pappa, M., Bertolis, G., Gerou, S., & Patrinos, G. P. (2007). Association study of human VN1R1 pheromone receptor gene alleles and gender. *Genetic Testing*, *11*(2), 128-132.
- Mollon, J. D., Bowmaker, J. K., & Jacobs, G.H. (1984). Variations of color vision in a New World primate can be explained by a polymorphism of retinal photopigments. *Proc. R. Soc. London. B*, *222*, 373-399.
- mucosa. (n.d.). WordNet® 3.0. Retrieved October 22, 2007, from World Wide Web: <http://dictionary.reference.com/browse/mucosa>
- Nei, M., Zhang, J., & Yokoyama, S. (1997). Color vision of ancestral organisms of higher primates. *Molecular Biology and Evolution*, *14*, 611-618.
- Olsson, M. J., Lundström, J. N., Diamantopoulou, S., & Esteves, S. (2006). A putative female pheromone affects mood in men differently depending on social context. *Revue europeenne de psychologie appliqué*, *56*, 279-284.
- Rodriguez, I., Greer, C. A., Mok, M. Y., & Mombaerts, P. (2000). A putative pheromone receptor gene expressed in human olfactory mucosa. *Nature Genetics*, *26*, 18-19.
- Rodriguez, I., & Mombaerts, P. (2002). Novel human vomeronasal receptor-like genes reveal species-specific families. *Current Biology*, *12*(12), R409-R411.
- Sadava, D., Heller, C., Orians, G., Purves, B., & Hillis, D. (2006). *Life: The science of biology (Eight Ed.)*. Virginia: Sinauer Associates.
- Savic, I., Berglund, H., & Lindström, P. (2005). Brain response to putative pheromones in homosexual men. *PNAS*, *102*(20), 7356-7361.

- Schank, J. C. (2006). Do human menstrual-cycle pheromones exist? *Human Nature - An Interdisciplinary Biosocial Perspective*, 17(4), 448-470.
- Stern, K., & McClintock, M. K. (1998). Regulation of ovulation by human pheromones. *Nature*, 392, 177-179.
- Trotier, D., Eloit, C., Wassef, M., Talmain, G., Bensimon, J. L., Doving, K. B., & Ferrand, J. (2000). The vomeronasal cavity in adult humans. *Chem. Senses*, 25, 369-380.
- Vannier, B., Peyton, M., Boulay, G., Brown, D., Qin, N., Jiang, M., Zhu, X., & Birnbaumer, L. (1999). Mouse *trp2*, the homologue of the human *trpc2* pseudogene, encodes mTrp2, a store depletion-activated capacitative $CA2^+$ entry channel. *Proc. Natl. Acad. Sci. U.S.A.*, 96(5), 2060-2064.
- Webb, D., Cortes-Ortiz, L., & Zhang, J. (2004). Genetic evidence for the coexistence of pheromone perception and full trichromatic vision in Howler monkeys. *Molecular Biology and Evolution*, 21(4), 697.
- Yamagata, N., Nishino, H., & Mizunami, M. (2007). Neural pathways for the processing of alarm pheromone in the ant brain. *The Journal of Comparative Neurology*, 505, 424-442.
- Yang, Z., & Schank, J. C. (2006). Women do not synchronize their menstrual cycles. *Human Nature - An Interdisciplinary Biosocial Perspective*, 17(4), 433-447.
- Zhang, J., & Webb, D. M. (2003). Evolutionary deterioration of the vomeronasal pheromone transduction pathway in catarrhine primates. *Proceedings of the National Academy of Sciences*, 100, 8337-8341.
- Ziomkiewicz, A. (2006). Menstrual synchrony: Fact or artifact? *Human Nature - An Interdisciplinary Biosocial Perspective* 17(4), 419-432.
- Zufall, F., Kelliher, K. R., & Leinders-Zufall, T. (2002). Pheromone detection by mammalian vomeronasal neurons. *Microsc. Res. Tech.* 58: 251-260.



The Maastricht Journal of Liberal Arts is published annually by University College Maastricht – Maastricht University

The journal applies the stringent requirements of a double blind, peer-review process to the selection of papers to be published.

52 submissions were received from which
39 were rejected

13 passed initial review by the editorial board and were submitted to experts for assessment
7 were sent back to their authors for review and resubmission and
7 were selected for final publication

Editorial Board

Harm Hospers
Mark Stout
Lonneke Bevers
Jenny Schell

Professor, Dean of UCM
Assistant Professor
Assistant Professor
Lecturer

Astrid van den Bossche
Lukas Fesenfeld
Willem de Haan
Emily Kelling
Lennart Kuntze
Antonia Lagemann
Wannes Lint
Katharina Ohrnberger
Laurens Rutten
Varinka Voigt
Nina Weser
Jorina von Zimmermann

Alumni Tutor
Student UCM
Alumni Tutor
Student UCM
Student UCM
Student UCM
Student UCM
Student UCM
Student UCM
Student UCM
Alumni Tutor
Student UCM

Design and Lay-out

Nora Oosting

[graphic design]

Design cover and Printing

Océ Business Services, Maastricht

The Maastricht Journal of Liberal Arts is a peer-reviewed journal which encourages and rewards excellence in bachelor research. The articles in this edition were carefully selected from a large number of submissions and represent the best research conducted by University College Maastricht students. The topics tackled in the published papers are wide ranging, as is to be expected of a multi disciplinary journal and their scope and methodologies reflect the different disciplines studied at the college.

Submitting an article to a peer reviewed academic journal is usually an intimidating undertaking for the most seasoned of researchers, for bachelor students it is an especially daunting prospect. Every researcher knows that criticism and praise from the academic community is both a challenge and a spur to greater achievements. The earlier a scholar can experience this vital element of academic endeavor, the better they will be prepared for a future career in research. The editors were convinced that UCM students would more than meet this challenge and we have pleasure in stating that our expectations have been met.

Students are fully represented on the editorial board and have carefully performed their tasks as editors in maintaining academic standards and selecting the very best papers for publication. Any journal needs to also be formatted and praise must be given to the members of the board who provided their expertise in this time consuming part of the process. Thus the journal both provides students with the invaluable experience of submitting papers to peer review and also allowed them to participate fully in the editing process.

The third edition of the Maastricht Journal of Liberal Arts sets out to demonstrate the academic prowess of both University College Maastricht and its students. Not only are the students of the college hard working scholars but they are also diligent and inspired researchers. Therefore the editorial board is proud to present the third edition and is sure that the academic community will recognize the added value that the published papers make to the subjects they discuss and analyze. It is the goal of every academic journal to promote the highest standards of research and to promote originality and excellence to the wider academic audience and the Maastricht Journal of Liberal Arts follows in this tradition.