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**Review**



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# WELCOME!

## A WORD FROM THE EDITORIAL BOARD

A warm welcome to everybody and thank you for sticking with us. A lot has happened since our first publication: new members joined the Editorial Board, the internal organization changed quite a bit, we received a lot of interesting feedback from you and put it into good use, diligently continuing to work on bringing you the best magazine possible. This second issue of *Honours Review* offers a lot of new content written by RUG students, an updated design (both physical and digital), as well as an exclusive interview with eminent cognitive scientist and philosopher, professor Daniel Dennett. And this is still only the beginning. Who knows what the future holds for our next issues?

If you would like to join the team behind this project, contribute an article or have any kind of comment, make sure to get in touch with us. We truly appreciate every message we get, be it via Facebook, email, or the old-fashioned face to face conversation. After all, this is meant to be an interactive platform organized by and for students.

We hope you enjoy reading the second issue of *Honours Review* as much as we did preparing it for you. But before we begin, let's talk about... criminality. We continue to receive a lot of interesting articles about this topic and felt it would be a good idea to connect the dots between all the different pieces.

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>>> Crime is an act forbidden and punished by a contract accepted and enacted between citizens of a country – the law. Crimes committed by an individual can either affect other individuals, or the community at large, or in some instances even the state or government. Criminality is a characteristic of a person usually applied based on evidence of unlawful actions exhibited by the person, qualified by past interventions of organs responsible for upholding the law. The process of law-breaking usually leads to consequences for the individual such as capital punishment, imprisonment, public service, or monetary penalty. As these consequences, enforced by the state, infringe on personal liberty, most modern societies adhere to well defined standards of investigation and only conclude (or not) with a sentence after a fair trial in a court of law. What exactly constitutes crime is dependent on law that differs from country to country.

Taken literally, criminality as a characteristic ascribed to a person depends on the willful actions *executed* by said individual *in the past*. Consequently, as note of caution, one has to remember that if there in fact existed reliable biomarkers for criminality, they would equal... clairvoyance. This seeming paradox has no resolution – it is indeed impossible to predict future criminal behavior of any individual that could occur at any point over the course of a lifetime. There are simply too many factors that converge to produce a response that could be considered criminal. And it is not only the behavior itself that makes someone criminal, but – perhaps more importantly – if this behavior is seen as criminal and how it is punished by law. An act itself is only rendered criminal depending on the law governing a *specific region*, where it occurred in a *historical context*. To be effective, biomarkers would not only have to predict that an individual would exhibit a particular behavior in the future, but also determine in what situation it would occur. Quite a feat, and practically impossible at that.

Is a woman stealing food to feed her husband and children a criminal? Is a person killing in self-defense a criminal? Indeed, criminality and crime can never be separated from the context they occur in. How we understand crime is context-dependent. Dependent on the situation that evoked the act, gender and age of the supposed criminal, the broadly defined cultural and historical context, and subsequent societal evaluations. There are many examples illustrating that what is considered lawful or criminal differs depending on these factors. For example, in some Islamic countries, such as Somalia, victims of rape are considered criminals and stoned to death in public feasts (1), whereas in other parts of the world it is the rapist that is considered criminal and is imprisoned or sentenced to death. What is considered criminal changes not only with the azimuth, but also throughout history. A prominent example is that from the beginning of human history up till the 18th century, human trafficking and slavery were an integral part of economy and legal in most parts of the world. Only 150 years ago an estimated 55% of population in the state of Mississippi constituted slaves (2), whereas now, although still present, slavery is universally considered a crime across the world.

Many people seem to argue that it is purely an issue of semantics, and what is in fact subject of debate is biomarkers or biodeterminants of *aggression*, and not criminality in itself. Yet the implied link between crime and aggression is not bulletproof logic, as not all acts considered criminal in modern society are violent in nature, and aggression itself is not necessarily a determinant of crime but merely a correlate. In fact it appears that most acts of crime in the western world do not involve any form of aggression. Let us take a closer look at the example of US legal system to further discuss this issue.

The US law recognizes two major types of crime: felonies (violent and non-violent serious crimes, detrimental to public safety) and minor crimes (called misdemeanors and petty crimes). Out of the top 20 most common felony crimes (that is the most serious crimes committed in the country) identified in the FBI Uniform Crime Report (3), the position with highest number of incidents is held by drug abuse violations, with about 2 million annual offenses. The second most common felony is property crime, including car theft, burglary, larceny and arson. The third most common felony is DUI (driving under the influence); the same list also includes felonies such as financial transgressions and forgery. Overall, non-violent crime in the US is around 7.5 times more frequent than violent crime (annually approx. 9 million offenses vs 1.2 million). It is apparent that not all crime is linked to aggression, in fact the opposite seems to be the case. The implications are severe: take homicide, DUI and tax evasion which are not correlated in any meaningful way, and it is easy to see that general biomarkers for criminality can not be reasonably employed in crime prediction. Furthermore, purely on the basis of economic utility, development of potential biomarkers specifically targeting aggression has arguable worth, as most crimes are non-violent.

Another problem is that if biomarkers could somehow identify what (criminal) action an individual would, or was likely to, take in the future, they would still fail to discern between two actions bearing the same characteristics. Which means that punishment, as prescribed by law, would turn into crime detectible by such biomarkers. A simplified example: slavery is illegal, but justified imprisonment is not; yet there are prison guards executing restriction of other people's freedom.

Let's see how our student authors examine these and other topics in this issue of *Honours Review*.

APR

#### References

1. Amnesty International (2008). Child of 13 Stoned to Death in Somalia. Retrieved from: <http://www.amnesty.org/en/news-and-updates/news/child-of-13-stoned-to-death-in-somalia-20081031>
2. Encyclopedia Britannica (2013). Slavery. Retrieved from: <http://www.britannica.com/blackhistory/article-24158>
3. FBI (2012). Crime in the US in 2011. Retrieved from: <http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2011/crime-in-the-u.s.-2011>

# SCREENING FOR CRIMINALITY

## SCIENTIFIC REVOLUTION OR HOKUM?

JUDITH VON PLATO, LAURA SCHELLHAS &  
LISANNE WICHGERS

Imagine yourself sitting in the waiting room of a hospital, surrounded by four white walls. Next to you, a few more people your age are waiting. Quite some time has passed, and it's finally your turn. It is your first time going through an MRI scan. Your palms are sweating. You also have to give a blood sample... No, you're not tested for a life-threatening disease. You are tested for criminality.



>>>What is described above might seem somewhat frightening. Nevertheless, the idea of identifying people's proneness to criminality has become more popular over the last couple of decades (1). After all, criminals are considered a threat to the population. And as Gary Pugh (forensic scientist and spokesman for the UK Association of Chief Police Officers) suggests, we need to take responsibility and protect ourselves from people who might be a threat to the rest of the society. The possibility of screening for criminality, however, has raised a lot of questions. This article is meant to discuss both sides of the debate and give you a chance to form your own opinion about this controversial topic. Should or should we not screen people for criminality in the future? To answer this question, we must first explain what screening for criminality means and what it entails.

The idea of discovering the biological mechanisms of criminality originated in the 19th century, but because the methods were considered insufficiently developed, the concept faded away. Today, scientists are trying to find biological causes of criminality, which are often called biomarkers.

Screening for criminality is proposed to focus not on criminal behavior in general but only particular types of unwanted behavior, such as aggressive or impulsive behavior. As mentioned before, the idea that criminality can be "shown" in the brain is receiving more attention among scientists than it did in the past. But what might cause this criminal behavior? First, researchers suggest that there are broken links between brain regions responsible for guilt and empathy in a criminal's brain (2). The prefrontal cortex, which controls abstract and complex cognitive thinking, is one example of such an area. The amygdala, involved in the experience of fear and anxiety, is another example. Researchers suggest that if there is no communication between these areas, regulation of emotional and social behavior might be suppressed, leading

to criminal behavior. Second, certain neurotransmitters and receptors are associated with examples of problematic behavior. For example, recent research suggests that mutation in the MAOA gene is a predictor of antisocial behavior, which might in turn lead to criminal behavior (3). Screening, Measuring and Storing

### **We need to take responsibility and protect ourselves from people who might be a threat to the rest of the society.**

Gary Pugh has proposed a few ways of screening people for criminality. One of these options is to test children aged 5-11 who show criminal behavior (1). The assumption is that criminal behavior appears at young age and by testing young children, future criminals might be exposed. Children whose parents belong to groups of increased risk (e.g., prisoners or drug addicts) would be screened in order to identify whether they are prone to criminal behavior. An extreme form of this intervention would be screening newborns, as genetic mutations or deviations in the brain are already detectable at that time.

After DNA is collected, brains would be measured or fingerprints scanned to store data in a national database. Children who appear to be candidates for criminal behavior would be actively managed by social services and child youth justice workers throughout their development. In this concept, children are not screened to be imprisoned. Instead, screening is used to detect children who are predisposed for criminality in order to prevent them from exhibiting criminal behavior.

#### The Technique of the Future

Those arguing in favor of screening people for criminality use multiple arguments to support their view. Gary Pugh (1), for example, often presents the issue of safety

as his main argument: "Screening people for criminality before people commit crimes guarantees virtually complete safety for society". What Pugh means is that if we are able to identify people who are likely to become criminals in the future, we might intervene and prevent the act from happening by offering these people proper therapy. "No crime at all or almost no crime will happen anymore since we will be able to minimize the probability for a crime to happen", says Pugh. This is exactly the idea: a matter of simple probabilistic mathematics. Certain brain characteristics should be seen as risk factors that increase the chance of becoming criminal; as soon as a fixed threshold is exceeded, the likelihood of an individual turning to crime is seen as too high and consequently the person is treated like a criminal. What exactly should happen with these persons is another question. It is important to keep in mind the measures that would be adopted to prevent the crime would involve some restriction of an individual's freedom. Opponents may criticize the "greater good" notion of ascribing high importance to the welfare of society at the expense of the individual.

Additionally, not only society could benefit from screening for criminality, but the screened individuals could benefit from it as well. A significant percentage of people found to be prone to involvement in criminal activity may be diagnosed with a psychiatric disorder. This means that the screening technique would enable us to identify people with psychiatric problems during early childhood. To be always in contact with professionals with the knowledge of how to maximize the chance of improvement would increase chances of optimal treatment for these people and help create the best environment to live in. All in all, this would probably lead to greater quality of life for the individual.

Another argument supporting the idea to screen people's brains for criminality derives from an economic perspective. Though screening may seem a significant cost factor, research indicates that immense costs are associated with not intervening. As the National Institute for Mental Health in England reported (4), patients (especially adult) suffering from some kind of personality disorder cause significant costs for society. Mental health care is exceedingly expensive. Doctors, drugs and 24/7 care cost an enormous amount of money, and these costs are usually financed from taxpayer's money. As a consequence, many people are convinced that early interventions may save a considerable amount of money and therefore, screening people for criminality could be a powerful solution, since costs for mental health care could be reduced and potential criminals would have the possibility to be treated (5).

Additionally, proponents of screening for criminality often put forward that risk prevention on a social level already exists. According to them, risk prevention on a biological level would be no different. The kinds of risk prevention on a social level are for example "social support programs" for people with low socio-economic status, which is seen as a social risk factor to become a criminal. Their argumentation is that it is well-known by now that social as well as biological factors play a role in our development. If we already screen on a social level for

people who are likely to become delinquent, it is only a logical consequence to screen on a biological level as well.

#### Fairytales do not Exist

Even though screening for criminality might sound promising, one should not disregard the downside accompanying this issue. Opponents of screening for criminality suggest that even if biomarkers for criminal behavior exist and could be found through screening people's genetic makeup, the identified genes would be nothing but indicators for a possible predisposition for aggressiveness or bad temper. Not for criminal behavior itself (6).

Treating someone as a criminal because of the possession of certain brain characteristics changes our current definition of a "criminal". Being criminal then means being born with brain features that had been calculated to be risky, but not to behave criminally. It is what philosopher Ian Hacking calls *making up people*: creating new kinds of people that did not exist before. By screening people for criminality, the definition of a criminal would change and a new subpopulation would be created. Future criminals therefore would not be the same as criminals of today (7).

### **Risk prevention on a social level already exists, risk prevention on a biological level would be no different.**

Proponents of screening people often disregard the social influence that causes people to turn to crime. For example, level of parent delinquency plays an important role in determining whether the child will show criminal behavior in the future. The parents' socioeconomic status is correlated with child's criminal behavior as well. The poorer the family, the more criminal behavior the child will show. Opponents of screening for criminality argue that, as it can lead to stigmatization, environmental factors should always be taken into account (6). A classic study conducted by Jane Elliot in 1960 demonstrated how easily children can be influenced to discriminate groups which are regarded as inferior (8). In the study, the researchers divided a class of 3rd grade students into blue- and brown-eyed children. Subsequently, Elliot told the students the blue-eyed children are superior to the brown-eyed children. Blue-eyed children were given privileges such as being placed at the front of the lunch line and being praised by the teacher. After a day, Elliot observed blue-eyed children discriminating against brown-eyed children and exhibiting behavior indicating they perceive themselves as superior to brown-eyed children. The researchers coined the term "Pygmalion effect" to describe this phenomenon. This study shows what labeling children as either criminal-prone or not criminal-prone might cause. Children could internalize having a "worse" or "better" genetic makeup than other children and thus perceive themselves as inferior or superior to other children. In turn, this might cause children, labeled as having a criminal predisposition, to adopt the idea that they are predetermined to being limited in their mental capacities and unable to change their situation regardless of their effort.

Furthermore, parents of children who are not

identified to be violent, might foster the segregation by not wanting their children to be associated with children who are identified as future criminals. Consequently, children with “violent genes” would be associated with other children with these genes, which might create an environment that promotes violent behavior. Finally, all these factors combined will lead to the segregation of already marginalized groups and will lead to further divisions in the society. A segregated society will not reduce criminality - segregation often creates tension.

#### An Ongoing Debate

It is evident that proponents and opponents of screening people for criminality put forward legitimate arguments. Simple probabilistic mathematics and economic benefits are arguments used by proponents of the ideas, while opponents suggest the danger of labeling people and ignoring environmental factors might be more important. What do you think? You probably noticed that it is quite hard to choose one side over the other. According to us, the best advice might be that if people decide to use screening, it is important to be careful and to take factors such as social influences and stigmatizing into account as well. Preventing criminal acts from happening could be the next scientific revolution. However, considering the Pygmalion effect, screening could be just another idea blown out of proportion.

#### References

1. Rose, Nikolas. 2010. “Screen and intervene: Governing risky brains.” *History Of The Human Sciences*, no. 23(1), 79-105.
2. Raine, Adrian, Todd Lenc, Susan Bihrlle, Lori LaCasse and Patrick Colletti. 2000. “Reduced Prefrontal Gray Matter Volume and Reduced Autonomic Activity in Antisocial Personality Disorder.” *Arch Gen Psychiatry*, no. 57(2): 119-127.
3. Krimsky, Sheldon and Tania Simoncelli. 2011. *Genetic Justice*. New York: Columbia University Press.
4. Harrington, Richard and Sue Bailey. 2003. “The Scope for Preventing Antisocial Personality Disorder by Intervening in Adolescence.” *Criminal Behavior and Mental Health*, no. 13: 75-81.
5. Fishbein, Diana H. 1996. “Prospects for the Application of Genetic Findings to Crime and Violence Prevention.” *Politics and the Life Sciences*, no. 15(1), 91-4..
6. Fisher, Lisabeth and Irving Gottesman. 1989. “Heterogeneity of causes for delinquency and criminality: Lifespan perspectives.” *Development and Psychopathology*, no. 1: 339-349.
7. Hacking, Ian. 1986. “Making up People.” In *Reconstructing Individualism*, edited by Thomas Heller, 222-236.
8. Elliott, Jane. 2003. *A class divided*. Yale University, WGBH (Television station : Boston, Mass.), & PBS DVD (Firm). New Haven: Yale University Films.

# GOD'S POLITICAL SPEECH

## POLITICS BETWEEN GOOD AND EVIL

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Is it possible to separate religion and politics completely in order to assure a secular democratic state? Many Western countries claim the democratic ideal stipulates that society must consider religious liberty while simultaneously declare governmental autonomy. Thereby, the state is expected to display a neutral attitude towards different religious orientations. However, knowing that the majority of the world's population belongs to one religion, the implementation and realization of the division between faith and politics remains questionable. The usage of religious references in political speeches is, for instance, surprisingly common. Referencing occurs however often in a subtle way and a clear distinction between religious figures and a simple metaphor is not easily made. Prime examples of such use are found abundant in the politics of the United States of America, where the vast majority of people identifies themselves as religious, predominantly Christian of different currents. Although the first Amendment of the Constitution prevents the government from having any authority in religion, the religious affiliation is deeply rooted in the country's tradition. But what is the validity and effect of religious arguments in political deliberation?



>>>We sought answers by analyzing three speeches by George W. Bush, at the time the president of a turbulent State struggling to choose a course of action in the aftermath and shock of the September 11th World Trade Center terrorist attacks. The decisions made, at the time popularly supported, led the USA into two controversial wars that would last for the next decade. Did religion play part in the deliberation that led to those decisions?

### Political Deliberation in the United States of America in regard to Religion

Deliberation, or the thoughtful weighing of options prior to voting is a topic of interest in the current landscape of political philosophy. Especially deliberative democracy, where negotiations play a central role in decision-making, is highly discussed. This form of democracy differs from the traditional theories, as authentic deliberation rather than mere voting is the primary source of legitimacy. Deliberation is both valued and criticized by political theorists (1). On the one hand it was suggested that it is likely to foster and encourage democratic communities by means of promoting mutual respect and a common will. In contrast, opponents argue that it may exclude disadvantaged groups or minorities who, even if included, might not have the sufficient means or resources to participate effectively (1). Generally, democratic deliberation must meet two main criteria. Firstly, it has to be public, meaning that access must be open and public reasons have to be given. Secondly, the criterion of non-tyranny has to be met, concerning both process and outcomes. This implies that discussion and agreement cannot be coerced or illegitimately influenced by powerful groups (2).

### Role of Religion in Politics of the United States

The concept of secularism implies that a country and its government are neutral in regard to religion, not favoring any particular one. The government is not

only expected to treat all citizens equally regardless of their religious preferences, but is also expected to ensure liberty and neutrality towards religion. According to the U.S. constitution, amendment one: "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof." (U.S. Constitution, Amendment 1).

**Maybe religion even aids to shift responsibility, as it implies a power beyond human's control. Ergo, political authorities free themselves from blame for catastrophes such as 9/11, as prevention was beyond their influence.**

However, U.S. politics does not seem to stick to those assumptions in various regards. It is for instance a tradition for elected officials in American politics to swear an oath on the Christian Bible. Additionally, sessions held by the Congress or local councils are often commenced by a prayer. The religious theme is extremely present in American society and is deeply rooted in the national tradition. It reappears in multiple manners and is a highly important and interwoven part of the American cultural spirit. The national motto "In God We Trust", officially adopted in 1956 and in the following years placed on the coins and paper bills, is only one of many examples. Lastly, the National American Anthem stating: "Blest with victory and peace, may the heav'n-rescued land. Praise the Power that hath made and preserved us a nation! Then conquer we must, when our cause it is just, and this be our motto: "In God is our trust"...", is a further example of the omnipresent manifestation of religion in the public sphere of the US. The anthem is learned by most U.S. citizens in childhood and is still sung before

baseball games and after American gold medal wins at the Olympics. These illustrations underline the issue of the deeply rooted religious values and beliefs in the American society. Consequently, it is a highly important tool for speechwriters to include this topic in their talks, as this instrument, combined with reference to patriotism, appeals to the pride of the majority of American citizens and is convincable (3). As a consequence, multiple politicians have used this tool in the past, and still use it today. To give a few examples, it can be found in Lincoln's Gettysburg Address ("...that this nation under God, shall have a new birth of freedom...", 1863), in various speeches by Ronald Reagan (e.g. "Evil Empire" speech, 1983) or more recently in numerous public addresses made by George W. Bush (e.g. "...And I pray they will be comforted by a power greater than any of us, spoken through the ages in Psalm 23:...", Address to the Nation, September 2001). Especially after the incidents of 9/11, the topic of religion was even more prompt. Faith gives people hope and consequently authorities refer to it in order to provide meaning and support. Furthermore, they can rely on a higher power as they may not be able to come up with satisfying explanations or solutions themselves. Maybe it even aids to shift responsibility, as it implies a power beyond human's control. Ergo, political authorities free themselves from blame for catastrophes such as 9/11, as prevention was beyond their influence.

### Analysis of Religious Argumentation in Speeches by George W. Bush

To evaluate the impact of religious argumentative structures, three speeches by George W. Bush during his presidency of the USA between 2001 and 2004 were selected. For this purpose, the logical validity and persuasive language of the religious arguments in the respective situational contexts of the speeches were assessed based on the pragma-dialectic model (argumentation theory used to analyze and evaluate argumentation in actual practice on dialectic and rhetorical basis, includes rules for critical discussion and takes the context of the parties into account). All three speeches were scripted and were held before a passive audience; thus, they did not entail any impromptu argumentative dialogue (i.e. lacking the stages of confrontation, opening, argumentation and closing between parties. In that context, we will look at the validity of religious arguments and analogies.

**The terrorists are traitors to their own faith, trying, in effect, to hijack Islam itself.**

Three aspects of religious arguments will be distinguished in the analysis. Firstly, manifest aspects of religious argumentation, which entail the explicit usage of religious terms or direct references to religious faith and the divine. Secondly, implicit religious references are latent religious content, including hidden biblical quotations and religious concepts, as well as implicit references to God. And thirdly, the semantic rhetoric based on religious convictions, e.g. the distinction between

"good" and "evil" (4). The fallacious or rather valid use of those arguments in the selected speeches will be evaluated.

### Latent and semantic content in Bush's Inaugural Address from 2001

First of all, we are going to look at the Inaugural Address George W. Bush gave on January 20, 2001 at the Capitol, immediately after he had taken his oath of office to become the new American president with the purpose to convince the audience that he is a suitable representative of the country. The speech entails all three aspects of religious arguments. The use of latent and semantic religious content, however, is most striking. One particular example is given in the following paragraph: "Through much of the last century, America's faith in freedom and democracy was a rock in a raging sea. Now it is a seed upon the wind, taking root in many nations. Our democratic faith is more than the creed of our country. It is the inborn hope of humanity, an ideal we carry but do not own, a trust we bear and pass along." The ideals of freedom and democracy are equated with a religious faith. This is emphasized by the analogy of a "rock", which is a common image for an enduring God in the bible (see Psalm 18:2). The seed that is spread throughout the world frequently appears in the biblical context to illustrate the word of God (see e.g. Luke 8:11). It can be presumed that this imagery is familiar to a large part of the American public; as people will easily relate to this kind of analogy, it enhances the rhetoric persuasiveness of the speech for the audience. By giving the US political ideology the status of a religion, loyalty to the inherent values thus seems to equal practicing a religious faith. We argue that this is a breach of the freedom rule\*, as it makes all arguments based on that ideology immune to criticism. Arguments that are based on a religion-like ideology, which is presumed to be the "creed" of a whole country and requires loyalty, can hardly be questioned. Moreover, this kind of argumentation could lead to a decrease in tolerance towards other, different values and ideologies.

### Argumentation in the Face of National Crisis: Bush's Address to the Nation after 9/11

Eight months later, when Bush gave his famous Address to the Nation in response to the 9/11 terrorist attacks, the circumstances in the country had fundamentally changed. The population was still in shock after the apparently religiously motivated attack on their nation. In this context, Bush avoids the use of strong latent religious imagery. Instead, he emphasizes the importance of freedom of religion, equality of all religions and respect for moderate Islam. He clearly distinguishes between the majority of Muslims and radical groups, which he blames for the attacks. In spite of his Christian background, he even dares to assess the religiously motivated violence as blasphemy in the light of Muslim faith: "I also want to speak tonight directly to Muslims throughout the world. We respect your faith. (...) Its teachings are good and peaceful, and those who commit evil in the name of Allah blaspheme the name of Allah. The terrorists are traitors to their own faith, trying, in effect, to hijack Islam itself."

A semantic use of religious arguments still colors the speech, in particular the division of the world in good and evil. On the one hand, it is established that all terrorists are evil and violate religious norms; on the other hand, “America” is presented as the innocent, good side. This division is then used to motivate the rest of the world to show solidarity with the USA as the good side: “Every nation, in every region, now has a decision to make. Either you are with us, or you are with the terrorists.” Therefore, the USA and its allies represent the good side, and the rest of the world embodies evil. Thus, if you want to be on the good side, no deviation from the US position is permissible. This is a clear violation of the freedom rule in argumentation.

At the end of the speech, manifest references to the divine in combination with a latent determinism are used to make the US position stronger. Bush suggests that the war against terrorism is a just cause and that its victory is already determined in favor of the “good” side, supported by God: “The course of this conflict is not known, yet its outcome is certain. Freedom and fear, justice and cruelty, have always been at war, and we know that God is not neutral between them. Fellow citizens, we’ll meet violence with patient justice – assured of the rightness of our cause, and confident of the victories to come. In all that lies before us, may God grant us wisdom, and may He watch over the United States of America.” The appeal to address violence with patient justice may be a latent reference to the Sermon of the Mount (See Matthew 5:38: “But I tell you, do not resist an evil person. If anyone slaps you on the right cheek, turn to them the other cheek also.”), which would reaffirm the Christian concept of justice. The use of this indirect reference again strengthens the argumentative persuasion to an audience with a largely Christian background and confirms the “just” cause of the war. However, claiming that God is in favor of the war is a latent argumentum ad verecundiam\* in this context.

### **Defending the War: Religious Argumentation in Bush’s re-election Campaign of 2004**

About three years later, in July 2004, George W. Bush had to defend the invasion of Iraq in his re-election campaign. In this speech an increase in the manifest use of terms with clear religious connotations, as well as latent and semantic religious references can be identified. In particular the comparison of good and evil becomes evident once again. Most interesting are in particular three aspects that form the red line of the speech. Firstly, President Bush presents himself as some form of savior of the American nation. Secondly, the American people are described as an innocent, deeply religious people with God-given potential that need protection. And thirdly, the USA is depicted as a blessed country, acting under God’s watch.

The description of George W. Bush as some form of savior who brings peace to the USA and the world is repeated at several instances throughout the speech, in particular with reference to the war on terror: “I [Bush] have a clear vision to win the war on terror, and to extend peace and freedom throughout the world. (...) When America gives me four more years, America will be safer, stronger, and better.”

Later, he uses a form of the image of a “good shepherd” in times of danger and uncertainty, implying that he has the power to prevent a lurking tragedy and bring justice: “Regimes in North Korea and Iran are challenging the peace. If America shows weakness or uncertainty in this decade, the world will drift toward tragedy. This will not happen on my watch.” “I remember looking in the eyes of those firefighters and policemen – and a guy looked at me and said, ‘Don’t every let me down.’ (...) I took it personally. I have a responsibility that goes on. I will never relent in bringing justice to our enemies. I will defend the security of America, whatever it takes.” This form of depicting himself as protector, gives him almost messianic features. We think that this can be seen as some form of inverted ad hominem argument. His argumentation is based on the positive traits of his person instead of argumentative strength. It is argumentatively speaking relatively weak, but rhetorically strong. However, in the context of an election campaign, drawing attention to one’s own personality may be justifiable and cannot automatically be rejected as fallacious.

Also interesting is the depiction of the American people as innocent and religious people as opposed to the “enemy”, terrorists who are evil and not religious: “Every terrorist we deal with abroad is one who will never do harm to an innocent American or anyone else. You can’t talk sense to these people. You can’t negotiate with these people. They’re cold-blooded. (...) They’re not religious people.” This dialectic reasoning creates the image that the terrorists can only be fought with violence, as they have lost their religion and thus their reason and ethics. The innocent Americans on the other hand must be protected against the threat by the cold-blooded terrorists.

Lastly, the USA is portrayed as a blessed country representing the ideals of God. “By serving the ideal of liberty, we also serve the deepest ideals of our country. We know that freedom is not America’s gift to the world; freedom is the Almighty God’s gift to each man and woman in this world.” Bush in fact seems to imply that the USA has a divine mandate to bring liberty and morals to the world, in order to give everyone the chance to enjoy God’s gift: “America is leading the world with confidence and moral clarity. And we know that for our blessed country, the best days lie ahead. God bless.”

Even if it is not explicitly stated, the speech conveys the image of Bush as the good shepherd watching over innocent people in a blessed country, eager to protect the religious values against any threats from outside. To see the broader picture, the impact of religious argumentation on public debate in general will be assessed further.

### **Assessing the Impact of Religious Arguments on Public Debate**

As mentioned, religion directly divides people into believers, who share the values of the religion and non-believers who don’t. In a multicultural society, modern religious institutions tolerate the differences out of necessity. However, appealing to faith in political deliberation can lead to exclusion in political debate,

such as imbalanced weighing of counterarguments. Naturally, individuals are defined by various factors besides their religiosity. However, the importance is on the views they perceivably share and aspects they identify with. Focus will be on two problematic aspects that religious arguments potentially pose to deliberation. First, is the tendency of religious standpoints to be inherently divisive and secondly, the unintended consequence of religious and rhetoric arguments, to lock parties to certain positions with difficulties of change.

### **Potential Divisiveness of Religious Arguments**

If an argument is made, which strongly implies that it represents a belief shared by a group, it has the potential of separating supporters from opponents. The problem is that a person identifying with a group, might value his or her membership of a group above the validity of the argument. Moreover, counter-arguments not only have to challenge the original argument, but also the religious belief linked to the argument. A phenomenon known as confirmation bias exacerbates the objective judgment of an argument.

### **Freedom is the Almighty God’s gift to each man and woman in this world.**

Though this is also possible for convictions other than religious ones, a religious setting poses a problem by its unique self-justification. By its very design, religious beliefs are likely to hold more ingrained truth-value to believers than other convictions, as they stem from personal relationship with God. Changing one’s mind on something that should represent the absolute truth necessarily requires re-interpretation of faith to preserve the core belief. Thus, there is an incentive to dismiss the counterarguments to avoid this conflict.

### **Effect of Religious Arguments on Politicians**

This leads to the second problem. Religious arguments may not only influence the public, but they could trap politicians, the most vocal parties within public debates. If religious points of view are drawn in support of an argument, politicians invoke their personal convictions. For example George W. Bush spoke and acted with such an “air of moral certitude, that may reflect his religious convictions, that it left little room for deliberation and possible policy shift” (4). First of all, a politician invoking personal religious convictions at the same time avoids re-examination of his actions, out of reluctance to compromise personal faith. Bush for one cited that the will of God had guided his actions. Admitting that the infallible actions of God had been wrongly interpreted complicates any policy shift.

In addition, the religious argumentation can also bind a politician externally. Part of the appeal of using personal religious conviction as a method of persuasion is that it implies sincerity of politicians, which reflects positively on their credibility. Retrospectively shaking the convictions and retracting actions and testaments done on basis of those convictions would irrefutably shatter that image of sincerity. Thus it might become a politically

more lucrative strategy to stick to the chosen convictions and policy and uphold the image of sincerity, even if further deliberation would prove the policy unfounded.

### **Conclusion**

American politics, despite its originally secular aspirations, is saturated with religion and faith. Analyzing three speeches by Bush, the religiousness is reflected in the strong images used in the language and the overall religious narrative driving the speeches. As to their contribution to deliberative process, religious arguments within the speeches are not without faults when examined through the pragma-dialect model. Due to the strongly religious population and strong rhetoric tradition, this poses potential for at least two aforementioned problems in American politics. There is a genuine danger that religious arguments further polarize an already polarized American population. Arguably, religious standpoints only become problematic once they are invoked with vigor, or when issues are manifestly linked to religious beliefs creating a pressure for a faithful rally in their support. Overall, from Bush’s speeches it appears that religious argumentation and rhetoric have potential to undermine the process of and deliberation and are indeed prone to make it more politicized.

### **References**

1. Conover, J.P., Seargin, D.D., Crewe, I.M. (2002). The Deliberative Potential of Political Discussion, *British Journal of Political Science*, 32, 21–62.
2. Anderson, I. (2005), *American Political Rethoric – An Study of Selected Speeches by Georg W. Bush*.
3. Black A. E. (2004) *With God on Our Side: Religion in George W. Bush’s Foreign Policy Speeches*, American Political Science Association.

*Remaining references available online.*

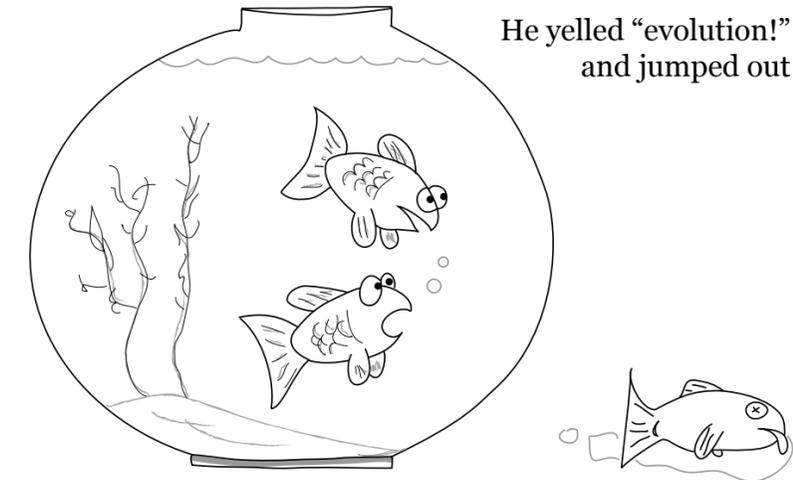
# DENNETT TO OUR RESCUE

## AN INTRODUCTION TO HIS WORK

ANDREA SOTO

**D**aniel C. Dennett is an American philosopher recognized for his controversial and scientific approach to the big topics of our times, such as consciousness and free will. His work is characterized by a mind-shifting perspective, where physical processes occurring in the brain are the main building blocks of our decisions and inner thinking, and philosophy is the basic tool needed to avoid scientific overreach and put neuroscientific discoveries into the right context. Free will is a highly debated topic that is a good example for Dennett's position. While admitting that brain structure and function determines our personality and the way we absorb values from society, Dennett also contends that we have enough self-control to make sense of the difference between psychopathy and self-defense murder (1). Our brain gives direction to our decision-making processes; however, we are not mere puppets dependent on strings pulled by destiny (2). What the brain does is it makes sense of the information we have around us; our whole being is who takes one option or another in a non-deterministic way (1). In short, understanding how the brain works does not take away the sense of responsibility so many scientists and philosophers are worried about losing.

As critical students,  
I expect you  
to believe  
everything I said



>>>Another fundamental topic Dennett has discussed and explained widely is consciousness. He states that consciousness is not located in a particular brain area, but instead it emerges from the interaction of multiple processes occurring in the brain at the same time (3). What the brain is processing, though, accounts only for a minimum part of the reality around us, and everything else we know comes from our own inferences and assumptions. This means that the world we see is more of an inner belief representation (3, 4) than pure reality. When we describe conscious experiences, we describe these beliefs. Neuroscientists exploring consciousness, then, must not take a person's description as literal truth, but rather as ideas embedded in inner states (4). Only by considering these unconscious aspects may it be possible to scientifically describe what consciousness is.

If free will and consciousness were not controversial enough, Dennett has also found himself involved in the hotly debated subject of religion. As a fervent supporter of the "New Atheism" movement and the Clergy Project (5), Dennett urges schools to get over the indoctrination of religion and encourages them to break the taboos surrounding it. He argues that the supernatural quality ascribed to religion prevents any rational discussion of it (2). If this goes on, he says, it will be hard for the world to continue developing in the 21st century.

Dennett explores these and other topics in his writing and public presentations. His latest book *Intuition Pumps and Other Tools for Thinking* is a collection of his "greatest hits". The reader unfamiliar with his work will have a face-to-face encounter with a summary of his main ideas about meaning, consciousness, evolution, and free will; the more experienced reader will enjoy these simpler descriptions and find their concepts refreshed. At the same time, the book offers an accessible toolbox of methods used by Dennett to reason and come to conclusions when facing complex problems. Intuition pumps are informal

thought experiments supposed to provoke a "heartfelt" response (6) when facing an argument, in order to solve it more efficiently. They are not new tools, but they can be misused, so the main intention of this book is to explain how they work and how to use them correctly. The book takes the reader from confusion to realization, bringing a smile with each intellectual challenge. If any feeling can be found at the end, it is the inner sense of awareness about how to use our minds to illuminate the intellectual road better.

Daniel Dennett is not done, of course. His readers are certainly waiting for more, and surely he will continue to open up serious topics in philosophy and science to the general audience. Dennett will continue to present us with questions we should all try to answer, and give us answers... only to encourage us to question them.

### References

1. Barash, D. 2003. "Dennett and the Darwinizing of Free Will". *Human Nature Review* 3: 222-225.
2. Rose, S. 2013. Review *Intuition Pumps and Other Tools for Thinking* by Daniel C. Dennett. *The Guardian* web. Last modified Wednesday 15 May 2013. <http://www.theguardian.com/books/2013/may/15/intuition-pumps-tools-dennett-review>
3. Johnson, G. 1991. "What really goes on in there". *The New York Times* on the Web. <http://www.nytimes.com/books/98/12/06/specials/dennett-consciousness.html>
4. Dennett, D. 2007. "Heterophenomenology reconsidered". *Phenomenology and the Cognitive Sciences* 6, no. 1-2: 247-270.
5. "The Clergy Project". *The Clergy Project* main website <http://clergy-project.org/>
6. Dennett, D. 2013. "Thinking is Hard". Interview to *The Economist* Daniel Dennett on intuition pumps. Accessed June 11, 2013. <http://www.economist.com/blogs/prospero/2013/06/daniel-dennett-intuition-pumps>
7. "Daniel C. Dennett's Home Page". *Tufts University*. <http://ase.tufts.edu/cogstud/incbios/dennettd/dennettd.htm>

In what could well be one of the most powerful moments in film history, Charlie Chaplin exclaims: “Now let us fight to free the world, to do away with national barriers, to do away with hate and intolerance. Let us fight for a world of reason, a world where science and progress will lead to all men’s happiness”. The last scene of *The Great Dictator* (1940) places the artist among many of the greats who not only entertained people but also gave them a glimmer of hope in challenging times and offered remarkable insight into the human condition. Some scientists these days too seem to have an akin message. The parallels are uncanny: bestselling books, TV series and lectures resembling concert tours, which take the performer-scientist from city to city to meet sold out crowds. The latter is precisely what brought the American philosopher, cognitive scientist and author Daniel Dennett to the Netherlands.

It’s a dry, albeit dim day in Groningen. We’re at Hotel de Ville and various people are milling around. The receptionist nods enthusiastically to whatever is playing on the radio. Since we’re early, there is yet no sign of professor Dennett. We decide to ask the hotel staff to call his room – they tell us he’d be down in a minute. When he finally emerges from upstairs, the broad-chested, 6’3” tall philosopher greets us with a broad smile that shines through his white beard and offers a drink. We settle down and ask how he sees the relationship of entertainment and science.

“That’s a great question. I never really thought about it in these terms”, says Dennett, whose charismatic image could stand up to that created by many of the great American entertainers. “As to the entertainment value... well, I think good ideas are entertaining”. He goes on to say what he considers good ideas: they can be startling, wake you up to a new perspective, and everyone wants to repeat them. But what about the performance aspect of it, the spotlight? The philosopher ponders upon the question for a while and remembers how at a recent talk organizers wanted to turn down the house lights. “I was categorically against it! I want to see every face! This is not theater, I don’t want to be on stage. How I’m getting through to people is very different. Even if I do something on television, I want there to be an audience that I am talking to”. Dennett thinks such shift of emphasis from the performer to the interaction with his audience is what helps him fulfill one of his missions – *to make people think they can think*. “Because they can. You don’t have to wait till you have your PhD before you start to be a participant. I often wonder, how do they figure out at some universities that you’re smart enough to profess?”

We talk about how it is sometimes difficult to engage in a dialogue in class, especially with teachers in countries that we’re from (I’m originally from Poland and Andrea is Mexican). He explains there’s a big difference between American and some European academics.

In some countries, like France, Italy or Germany, the professors profess and the students don’t interrupt with questions, whereas in America the tradition is much more egalitarian and encourages to interrupt with questions. “And sometimes it’s terrible! Sometimes you have a loud-mouth student that destroys a class by challenging the professor even though he [the student] has no idea what he’s talking about”, says Dennett. Despite that, he claims, more often such atmosphere brings everyone in the classroom to a deeper understanding and sparks original ideas that later form the basis of some of his talks or books.

He goes on to explain that scientists (especially philosophers) have often made the mistake of writing essays or articles that few would read out of interest. The philosopher talks about how it is entirely different writing for people who don’t have to pay attention and are in your audience only because they want to be. His latest offering, *Intuition Pumps and Other Tools for Thinking*, is even more accessible to the general audience than his previous titles. The chapters are relatively brief, and the bulk of the book is not so much a detailed discussion of a thesis, but rather a plethora of tools readers can use to reason more effectively. Dennett explains that at universities, a lot of

these tools are usually presented in more technical and difficult terms. For his new book, he tried to lift them out and see if they could stand on their own outside of the context. To test the waters, he picked a number of first year undergraduate students to help him write the book.

“Wow, what a great way of writing a book! I got a lot of help this way, and I’m not being gracious. I really mean it. However, I wouldn’t let any graduate student near”. Does he mean that graduate students would likely push for empirical evidence to support the effectiveness of the tools he proposes in the book? We ask him if he ever considered empirical experiments that would test the reliability of intuition pumps. His eyebrows go up a little and a slight expression of surprise crosses his face. “I don’t know how you would measure that”, he says, to which we respond with an example. “Well that’s an interesting idea! The idea of using the experiment for gathering evidence for the effectiveness of intuition pumps, sort of turning it around. That’s a pretty convenient, doable way of tackling this”, Dennett tells us. According to the scientist, the intuition pumps are aimed at getting young people *to think more aggressively about thinking*. Although indirectly, such experiments could already be one way of doing this.

After a while, seemingly prompted by our earlier question, he explains how he tested an intuition pump that was ultimately left out of his new book. Professor Dennett went into a kindergarten class with 5-year-old children. He brought with him some wooden sticks with bolts, and very loosely put the bolts in to form a quadrilateral. The children observed how easily he could change the shape of the figure, create a rectangle or a trapezoid, or even fold it down completely. Next, he took out one of the pieces and tied the remaining three sticks together; then asked the children to – in their imagination – bend it back and forth the way they just saw he did with the quadrilateral and once they’d done it, raise their hand. Many children did in fact put their hands up. “If you think of this as if it were an argument to show that human imagination doesn’t obey Euclid’s law, you’d be making a mistake, but you’d be also making a mistake if you say it does. What’s interesting about this to me is that as soon as you raise this idea, immediately you have people say ‘oh, that’s because the children didn’t understand the instructions completely, otherwise they wouldn’t make the mistake’. Well, if I go out of my way to teach them geometry so that I’m sure they understand it, then I’m throwing away the point. The question is whether

will also touch upon his involvement in programming.

He recalls a fascinating story of how the idea for a piece of software that would help students conceive of something, be it population genetics, statistics or geology, originated. Dennett remembers how he talked about this for the first time with a colleague, and they unexpectedly came to a seemingly dead end. “Let’s see if we can design some software that would help students teach themselves harmony theory, in a way that would be very user-friendly”, Dennett says they planned. “We talked about it for 45 minutes and at the end we laughed. You know what we just did? We reinvented the piano”. It’s easy to see the piano is already a brilliant prosthetic device for music imagination. It’s very user-friendly compared to, let’s say, the violin, and allows the player to start making sounds right away, while it remains extendable up to the level of virtuoso. It also gives two different visual metaphors of the auditory signal and provides very quick and accurate feedback when a note is played. “So after we figured it out and laughed about it, we knew we already had a perfect tool for that; so we decided to do something similar, but in a different field”. And they did. Dennett gives us a fascinating example of a program he designed that prevented students from cheating on their geology homework. The idea was simple: analysis by synthesis. The students had to recreate drawings of their instructor using a piece of software. The twist was that in order to plot the final image, it required them to understand the underlying sequence of geological processes and apply it accordingly. They couldn’t simply copy an image from a textbook.

We already talked for over an hour, and time was running out. We finish the conversation on an interesting note. By the time he was 25, Dan Dennett had already written his first book. Contemporaries such as Carl Sagan or Richard Dawkins were already established names decades ago. Although still in his prime, Dennett is in his 70s and so are many of his colleagues. We wonder what the future of science is. “What is happening with the new generation? Great question. Maybe it’s part of this weird demographic trend where 30 is the new 20. So many students hang around for as long as they can before they venture out and sometimes... it’s quite shocking to me”. But with a mischievous smile, and likely still thinking about the software we just discussed, Dennett recalls: “I remember I’d sit there with the chief research engineers, and we were trying to decide what to do with an idea the hired programmers said would take months to complete. And you know, we had these college kids at the software studio working for student wages, trying to make some money to pay their way through university. So we’d get them a task and they’d just say, ‘if we do it by Friday, would that be OK?’ I’m sure they pulled all-nighters... but we usually had it ready by the end of the week.” I really like his answer.

# IF WE DO IT BY FRIDAY, WOULD THAT BE OK?

ALEXANDER PIETRUS-RAJMAN

in an untutored state, just in their imagination, they will discover the rigidity of the triangle. The more set up you have to do, the more you contaminate the question you ask”.

Dennett considers this story to be a revealing example of what’s wrong with pure imaginability, and why people fall for false ideology about the relationship between conceivability and possibility. This emphasis on rigorous application of science and reason to test the validity of all claims reminds us of how involved Dennett is in the public discussion of religion as well as being a forerunner of the skeptics movement for many years. Despite being immensely valuable additions to the public discourse, his views on these topics are perhaps the most highlighted part of his multidimensional body of work. We want to know more about some of his fascinating ideas that considerably fewer people have been exposed to. Following up on his example of the difference between what one can imagine and what is actually true, we ask him about an article titled “Notes On Prosthetic Imagination” published many years ago in the *Boston Review*, in which he talked about using the computer as an *imagination prosthesis*. By asking him this question, we hope he

# DANCING SPACES

## EXPLORING AND PERFORMING SPATIALIZATION IN CONTEMPORARY DANCE

BRAM VAN LEUVEREN

This article is, admittedly, somewhat conspicuously entitled. The reader may wonder how one could possibly 'explore' and 'perform' a complex meaning-making activity as spatialization – the creation of conceptualizations or representations of space – in an art discipline like dance (2). Do not academic discourses, ranging from spatial sciences to cognitive psychology, have a privileged, purportedly unambiguous say on how we apprehend our environments? It is my take that this hypothetical objection should be answered negatively, for I believe that the distinctive creative frameworks in which contemporary choreographers develop their performances may complement those central to especially experimental academic disciplines. I am thinking, for example, of human geography. Yi-Fu Tuan, arguably the most representative exponent of this scholarly movement, made in his seminal 1974 article 'Space and Place: Humanistic Perspective' a sincere case for the subjective and multifaceted nature of spatial surroundings. In contrast to at that time still prevalent Cartesian conceptualizations, Tuan unfolded that space is not inherently objective or isotropic but necessarily embodied. That is, it can be conceived as both a construct and a product of our past, present, and future engagements with environments. The concept of space thus partakes in a complex nexus of memories, thoughts, conjectures, and feelings wherein the sentient human body performs a pivotal role as meaning-making agent (4).



>>>Similarly, contemporary dance often endeavours to enlarge and heighten our conceptual understanding of space (5). Instead of making dual commitments, it represents environments as primarily rich and multilayered. Its most valuable contribution to more academic perspectives should, however, be sought in its radical performative approach to space. In other words, dance may point to, underline, display – in sum, foreground – the very act of spatialization (6). This implies that a theatregoer can never be seen as a 'spectator' – a 'passive' onlooker bound up in merely observing the action from a single unifying viewpoint – in the strict sense of the word. Considering the fact that modern-day choreographers usually render the old subject-object dichotomy inadequate, theatregoers are not exclusively arrayed in a subject position. On the contrary, as human geography has regularly suggested on a theoretical level (7), current dance performances tend to regard the individual as encapsulated in her environment, or as 'being-in-space' (8). Although dance and experimental spatial sciences obviously operate according to distinct parameters, they both plea for an experiential understanding of our environments. Most intriguingly, the former may do so by energetically embodying the different manners in which space can possibly be constituted. Dance often explores and performs, so to speak, in both a visual and non-visual manner 'space-in-the-making'. From here it follows that scholars and scientists alike may learn from contemporary dance performances as valuable sources of knowledge formation; they can well shed light on environmental issues that have previously passed unnoticed (or less significantly so) in academic ways of reasoning (9). This assumption underlies much of what I will argue in the following paragraphs.

### A Landscape of Spatial Possibilities

Now that I have expounded on the general

characteristics of current dance with respect to issues of space treated in experimental academic discourses, it may be productive to elucidate dance's embodied reflection on environments by focusing on a single production. Although I am well aware that this approach inevitably prevents me from tackling broader developments within the field of dance, I hope it nevertheless gives the reader a profound sense of the innovative and seemingly boundless ways in which contemporary choreographers employ and thematize space. Philipp Gehmacher's *In Their Name*, which premiered in 2010 at the prestigious Austrian performing arts festival *steirischer herbst*, can for that matter be regarded as fairly prototypical (10). The performance critically approaches the activity of spatialization by alternately suggesting or delaying 'senses of place' – an influential notion which I borrow from human geography. It denotes the uniqueness of a locale; the experiential apprehending of space by individuals or social groups (11). Space becomes a place when it evokes a set of often complicated emotions, feelings, expectations, and personal or cultural memories which, accordingly, attributes pregnant meanings to otherwise merely directed or historical spaces. Directed space, a term coined by the phenomenological psychiatrist Erwin Straus, refers to environments which are almost exclusively aimed at organizing intentional and teleological actions. The highway or railroad, for example, primarily facilitates progressive and advanced directions in time and space (12).

In this respect, it is worth mentioning that Gehmacher staged *In Their Name* in a versatile black box. This modern theatre design should be thought of as an 'empty' or liminal space which can be transformed into a wide range of places, shapes, and forms – depending on the imaginative power of the performative devices one makes use of. It may be said that the anti-iconographic scenography of the production, designed by the visual artist Vladimir Miller, deliberately exploits the liminal qualities

of the black box. The latter inhabits ecological cues such as wooden planks, steel plates, a bench, and a kitschy, romanticized picture of an old shed in a virgin forest, attached to the wall of the theatre. Taken together, they seem to resemble a construction site or an industrial area. More interestingly, however, is the idea that the black box is composed of material traces that each allude to so-called ‘offstage’ spaces which are neither completely physically represented or embedded into a coherent choreography. Separate traces may thus capture a particular sense of place, induced by Miller’s foregrounding of the very materiality of an individual object. Similar to the working practice of the Italian art movement Arte Povera, one can argue that ordinary materials such as the wooden planks or the steel plates signal a sense of ruggedness or manufactorial artificiality respectively. The rather traditional painting, on the other hand, possibly calls forth rose-coloured images of unspoilt nature. By doing so, the individual traces take on significant experiential qualities which each elicit different senses of place.

**When I asked the choreographer Philipp Gehmacher what it was he was doing when he worked, he answered by asking me the following question: ‘When you crossed the stage, was it place, or space?’ (1)**

From this perspective, Miller’s design can be most suitably interpreted in light of what modernist writer and playwright Gertrude Stein wrote on her self-styled ‘Landscape Plays’; performances that wilfully abandon teleological time and dramatic forms of storytelling in favour of the ‘here and now’ of the stage. Comparable to our contemplation of real-world landscapes, the respective features of a performance are made equally important and thus suggest an atmosphere rather than a coherent backdrop of a dramatic plot (13). Discussing the setting of *In Their Name* in terms of Stein’s ‘landscapes’, allows for an interpretation that draws attention to the production’s critical treatment of space. Performed by one woman (An Kaler) and two men (Rémy Hérítier and Gehmacher himself), the choreography persistently attempts to circumvent the functionality and teleology of directed spaces. In so doing, it questions conceptual, everyday understandings of environments which are often comprehended or evaluated in terms of their utilitarianism. The disarticulated human body, which almost uninterruptedly refrains from smoothly overcoming distance, reaching clear-cut goals, or even performing coherent actions, plays a distinguished role in this critical inquiry. Fragmented movements and gestures, often the most basic and minimalist ones imaginable, such as simply lifting up a hand, become the embodied tools for highlighting environmental dynamics and complexities. The human body therefore functions as both a conveyor of pregnant meanings and as an instrument for navigating through a landscape of difficult to determine spatial traces.

Let me exemplify the above by focussing on the

opening of *In Their Name*. A curious-looking Kaler slowly lifts up her right arm downstage. Her left arm automatically seems to follow until both are perfectly aligned. One would say that the performer’s body is thus testing out what psychologist James Gibson labelled the “affordances” of space: the possibilities we have for interacting with it (14). Small adjustments to the arm’s gesturing or the body’s posturing bring about alternative spatial framings or reconfigurations that put the performer in different positional relations to her immediate surroundings. This explorational process appears to run quite playfully, until Kaler makes eye contact with the audience in the gallery. At first she performs gentle inviting gestures, but they are soon merely compulsively repeated in a helpless manner. Space now seems to be burdensome and charged with penetrating energies. It may consequently be said that in this act Gehmacher knowingly thematizes mankind’s growing awareness of his individual body and the various means by which it might relate to different ‘centres of energy’ (15) and other beings in space. The body is therefore not unquestionably presented as a unified symbol but rather as an exploring and critical agency. Critical, because it metaphorically cracks open space by, first, questioning is alleged ontological existence (space as such is not primarily given but is called into being time and again by adjusting to different affordances) and, second, by accentuating its constructed experiential nature (the body endows its immediate surroundings with shifting emotive qualities thereby suggesting multiple senses of place). The audience is of particular importance here, for it is deliberately put in an embodied relationship with the performer downstage: Kaler’s ever-repeating gestures not only engender but also define the spatial demarcation between the stage and the gallery. In other words, her gestures refer to the idea that in space the embodied-I always exists in a reciprocal relationship with ‘the other’ (in this case, the audience). Both actors therefore co-constitute their existence in space and, correspondingly, determine the confines of their ‘kinesphere’ or personal realm (16). Gehmacher moreover wittingly plays with the space-time system of the performance in that he interfuses scattered spatial layers with various temporal dynamics. In one of the acts, for example, Hérítier enters the stage and starts to tell the audience a rather remarkable story about three men at three different locations who swear to become ‘better’ human beings. The first man looks towards the sea, the second looks out ‘onto a sea of houses, streets, and buildings’, the third ‘stands in the theatre.’ During his talk, Hérítier constantly marks out an imaginary square with both his hands. The act could be interpreted as a subtle manifestation of Gehmacher’s somewhat ambiguous deployment of the performance’s spatio-temporal coordinates. That is to say, it demonstrates the interpretative oscillation between on the one hand the performer’s ‘real-time’ exploration (the here and now of Stein’s landscape) and on the other the story’s depiction of distant, ‘offstage’ spaces (which space-time system is not shared by the audience). It is my hunch that the square thus epitomizes the very instability of the performance’s shifting deictic centres; it calls the attention

to both the spatial layout of the stage and at the same time creates an imaginative ‘in-between’ which allows for signifiers that may temporarily co-exist with the here and now of the performance. Just like the props of Miller’s scenery, these signifiers cue different understandings of space (memorial, metatheatrical) that question the one-dimensionality of conceptual spatialization.

**Coda**

In the introduction of this article, I suggested that contemporary dance may well complement experimental academic discourses on environmental issues to the extent that it offers embodied forms of knowledge. I hope to have give the reader in the foregoing paragraphs an idea of how one might envisage such an offer. Just as An Kaler and Rémy Hérítier meticulously explore the ‘empty’ space of the black box, a scholar or even a scientist may learn from the incarnated practice of navigating through the environment. What does it actually mean to lift up a hand? What does it touch? Does the space I grope around in still belong to my own body, or does it already permeate the kinesphere of another being? Where does space begin or end? When does it become a place? It is thanks to Gehmacher’s *In Their Name*, and many other dance performances that treat similar questions, that I have come to acknowledge the possibility of an embodied praxis of reasoning about spatialization in which thinking and actively exploring go hand in hand (17). With every step or movement I make, I become aware of the space’s construction and the demands it urges itself upon me. For that reason, spatialization gets critically ‘performed’.

**References**

1. Burrows, Johnata. 2010. *A Choreographer’s Handbook*. New York: Routledge, 158
2. Due to the limited scope of this paper, I decided not to expound on the often hybrid terminological usage of the concept ‘contemporary dance’ and related terms such as ‘performance’ or ‘installation’. In the course of the twentieth century, dance sought to employ features from a number of art disciplines and thus called into question conventional art classifications. I will here simply refer to contemporary dance as the highly crossbreed product of such an endeavour.
3. Tuan, Yi-Fu. 1974. ‘Space and Place: Humanistic Perspective,’ in *Progress in Geography*, 6: 211-252.
4. Tuan, Yi-Fu. ‘Space and Place: Humanistic Perspective,’ 399-400; 389, 409.
5. Briginshaw, Valerie. 2001. *Dance, Space and Subjectivity*. New York: Palgrave.
6. Schechner, Richard. 2002. *Performance Studies. An Introduction*. New York, 28.
7. Warf, Barney. ‘Humanistic Geography,’ in *Encyclopedia of Human Geography*, ed. Barney Warf, 233-236.
8. Hagendoorn, Ivar. 2012. ‘Inscribing the body, exscribing space,’ *Phenomenology and the Cognitive Sciences* 11: 69-78.
9. Sheets-Johnstone, Maxine. 1981. ‘Thinking in Movement’, *The Journal of Aesthetics and Art Criticism*, 4:399-407.
10. 2011 performance at the *Kunstenfestivaldesarts* in Brussels.
11. Kenneth, E., Azaryahu, M. 2009. ‘Sense of Place,’ in *International Encyclopedia of Human Geography*, 96-100.
12. Straus, Erwin. 1966. *Phenomenological Psychology*, New York: Basic Books, 3-37.
13. Stein, Gertrude. 1935. ‘Plays,’ in *Lectures in America* (New York: Vintage Books, 93-131).
14. Gibson, James. 1979. *The Ecological Approach to Visual Perception*. Boston: Houghton Mifflin, 127-143.
15. Schechner, Richard. 1973. *Environmental Theater*. New York: Hawthorn Books, 12.
16. Laban, Rudolf. 1966. *Choreutics*, ed. L. Ullmann, London, 28.
17. I hasten to say that in *In Their Name* Gehmacher does not straightforwardly stage ‘a dramaturgy of the everyday’. As already mentioned, he also reflects on the means by which one can make sense of theatrical spaces.

# GIRL INTERRUPTED

HOW SOUTH KOREA MADE A STAND

CHRISTINA HITROVA

The importance of femicide can be illustrated by the fact that it was recognized by the Commission on the Status of Women in its agreed conclusions on the 15th of March 2013 (1) and was the main topic in the Report of the UN Special Rapporteur on violence against women (2). Femicide refers to a practice, happening especially in Southeast Asia, China, India and Pakistan, in which, due to the different “value” of boys and girls, many girls are mistreated, abused, murdered and even aborted for the simple reason that they are girls. The higher respect and social benefits for having a son, the greater expenditure on daughters with regard to their earning potential later on in life, possible dowries at marriage and taking care of parents at old age, as well as governmental policies such as the one-child policy in China lead to families making this hard decision and have a detrimental effect on the gender ratio in these countries. The combination of social traditions, public policies, economic standards in some cases advanced technology contributes to today’s parents making decisions, which may have detrimental consequences for the societies involved. Not only are practices discriminating between girls and boys at the level of the family unacceptable from a human rights perspective, but also they may contribute to future instabilities in the countries, in light of the vast gender ratio differences. Additionally, femicide is not only an issue in Southeast Asia, but instances of it exist all around the world. This makes the issue important to examine, research and ultimately, solve.

INJUSTICE | TRADITIONAL VALUES | INTERNATIONAL POLICY



>>>Female infanticide refers to murdering of female children and is an especially horrifying manifestation of the lower “value” of women in patriarchal societies. Female infanticide in India and China has received special attention among researchers and activists, as well as, more recently, the wider community through daring documentaries and initiatives by international and non-governmental organizations (30). This interest is especially due to the horrifying statistics that speak of the extent of the phenomenon in these countries. As early as 1995 a study showed that the number of baby girls in India who died soon after birth was three times higher than the number of boys (4).

Female infanticide has been seen in India and the statistics of gender ratio in the country support this. In 2011 the gender ratio for children under the age of 15 years old was 117 boys per 100 girls (5) with the average ratio at birth being between 103 and 108 boys per 100 girls. The cases of infanticide are especially widespread in the “female infanticide belt” in India, stretching from Madurai, through the districts of Dindigul Karur, Erode, Salem, Dharmapuri until the North Arcot districts of Tamil Nadu (6). The sheer horrific nature of the offence is illustrated by the methods applied. In India traditional methods of killing baby girls include feeding babies with salt to raise their blood pressure, milk mixed with poisonous plants or rice with its husk still on which slices the baby’s throat. Recently, to avoid detection, families have started using more torturous methods such as starving or dehydrating the babies or wrapping them in wet towels to induce pneumonia (7). The reasons for female infanticide in India come from the cultural and social background of the country. Once married, the woman becomes part of the husband’s family, thus leaving the parents of the woman alone. Furthermore, at marriage a huge dowry is to be paid by the wife’s family to the husband’s. This dowry tradition has furthermore lead to cases where the

husband’s family uses the life and well-being of the wife as a leverage in “blackmailing” her family into continuous payments, resulting in an increase in the past years of dowry-related deaths (8). These “economic” reasons are based on the social and cultural traditions of the country and play a huge role in the preference for a son.

## Female infanticide refers to murder of female children.

In China, similar son preferences are discovered. Like in India, after marriage the wife traditionally becomes part of the husband’s family. This means that after the wife is married, her parents may be left alone and find it hard to take care of themselves at an old age. The typical social bias against baby girls results in them being abandoned, discriminated or neglected. As in India, in China baby girls do not always receive the necessary nutrition or medical attention. Often their births are not recorded or announced, babies are abandoned or killed (9). More than 95% of orphans in China are abandoned baby girls, forced to live in degrading and unsanitary conditions (10). The “one-child” policy in China plays a major role in the etiology of female infanticide in the country, allowing couples to have only one child. For couples in rural areas, however, the policy states that they are allowed a second child if their first child is a girl. This illustrates that the government took precautions against a foreseeable discrimination against baby girls, especially in rural areas. Nevertheless, the death rate of girls before their fifth year is 12% higher than that for boys (11). Furthermore, the gender ratio for children up to 15 years old is 117 boys for every 100 girls (12). The lack of girls for all the boys has already had some unexpected consequences such as abductions and sale of young girls to secure a wife for a son (13), as well as trafficking of girls from other countries for the same purpose (14).

## Gender Biased Sex Selection and Foeticide

These aforementioned preferences for boys to girls have an effect on the actions of families not only after the birth of a baby. Even before any child is born, the discriminatory practices of sex determination in the womb and gender biased sex selection and foeticide through abortion may take place. Foeticide refers to the killing of a foetus, female foeticide is the killing of a fetus because of its female gender. Such practices have resulted in a changed gender ratio at birth in both India and China. Whereas the natural gender ratio at birth ranges between 102 to 106 boys per every 100 girls (15), in countries where gender biased foeticide takes place numbers show a different story. In Chinese urban areas the gender ratio has continuously been rising with ratios of up to 120 boys per every 100 girls in 2005 and rural areas exhibit an even higher deviation (16). The fact that the one-child policy in China is a determining factor in the enforcement and perpetuation of female foeticide also leads to many pregnancies and births not being documented at all and being kept in secret from the state. In India the statistics are just as shocking with 914 girls being born for every 1000 boys, with the normal ratio being 952 girls per 1000 boys (17). Between 2001 and 2003 the statistics showed that there were 883 girls per every 1000 boys (18), thus there has been certain improvement in the gender ratio. The improvement in India may be due to governmental reactions and the amendment in 2002 of both the Medical Termination of Pregnancy Act, 1971 and the Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994, which outlaw abortion except in certain circumstances and sex determination of a fetus with a view of aborting it, respectively. Nevertheless, it must be mentioned that enforcement of the laws has sometimes been seen as insufficient and public servants have been urged to take action and even take a pledge to the abolition of female foeticide (19). In September 2012 there was even a proposal to treat female foeticide as murder (20), illustrative of the serious nature of the phenomenon in India.

Although India and China may be the most severely affected countries, they are not the only ones. Azerbaijan, Armenia, Georgia, Montenegro, Albania, Vietnam and Pakistan have all showed an unnatural gender ratio at birth in the past 6 years, with numbers ranging from 110 to 118 boys per every 100 girls. Azerbaijan is the leader in this ranking (21). In all affected countries, however, we can observe old-standing traditions and social presumptions of the role and worth of sexes to have a magnified effect after their access to technology and modern medical advances has increased (22). Since the 1970s, many different ways of establishing the sex of a foetus in utero have emerged – blood tests to the mother, ultrasound and amniocentesis chorionic villus sampling. While all of them require different degrees of expert involvement and may, therefore, be expensive, the simultaneous rise of the spread of such techniques and of gender ration inequalities in Asia point to a correlation between the two. It is also important to note that a well-balanced policy in this regard is needed, in order to allow for safe abortion rights of women, while preventing gender selection (23). This

is due to the fact that gender ratio inequalities will have long-term negative consequences on the demographics of the affected countries, contributing to gender instabilities. Whereas it is possible to see a rising of the “worth” of women in the future in societies where they become scarce, it is also possible that the opposite effect will take place, putting women in a more subordinate position to men, who will protect them as a valuable resource.

## Prenatal Sex Selection

Sex selection is even possible before any pregnancy, with the sorting of sperms depending on the chromosomes they bring or through preimplantation genetic diagnosis of embryos in in vitro procedures. These are relatively non-invasive methods of sex selection and are more technologically advanced than the other methods discussed above. They are mostly practiced for sex determination in Western and developed countries because of their price and may also constitute gender-biased sex selection. An example emerged in 2011, as it became clear that some Dutch couples travel to Belgium in an attempt to determine the sex of their baby (24). This emphasizes the nature of female inequality as a truly worldwide problem and sex selection as both a result and a continuation of gender inequality. Furthermore, one needs to consider the implications of such technological advances, the access to these in other less developed countries and what this may lead to (25). The importance of the issue was stressed by the Committee on Equal Opportunities for Men and Women of the Parliamentary Assembly of the Council of Europe acknowledged pre-natal sex selection as a growing phenomenon, which “finds its roots in a culture of inequality and reinforces a climate of violence against women (26)”. The Parliamentary Assembly of the Council of Europe, in its Resolution 1829 (2011) warned of the dangers of sex-imbalances stating: “The Assembly wishes to warn Council of Europe member states against the social consequences of prenatal sex selection, namely population imbalances which are likely to create difficulties for men to find spouses, lead to serious human rights violations such as forced prostitution, trafficking for the purposes of marriage or sexual exploitation, and contribute to a rise in criminality and social unrest. (27)”

Deviations from the average gender ratio at birth have been examined in other countries too. The numbers show 107 boys to 100 girls in, Luxembourg, Portugal and Slovenia, 108 in “the former Yugoslav Republic of Macedonia” and in Kosovo; 109 in San Marino. For other member states of the Council of Europe it is between 104 and 106 (28). Nevertheless, the fact that gender inequality is so great as to facilitate sex selection to such an extent even in Europe should ring a warning bell both for the social norms that we grow up with, as well as for the advancement of technology, which may sometimes precede our own.

## The Success of South Korea

South Korea was the first country to report sex ratio distortions at birth, because the application of sex-selective technology there preceded other Southeast Asian

countries (29). With the wider access to better health care and ultrasound technologies, the sex ratio inequality between girls and boys rose in the country and reached its peak in the 1990s, with the 1991 gender ratio being 117 boys for every 100 girls (30). In the mid 1990s, the South Korean government began a public awareness campaign warning of the dangers of gender ratio inequality, as well as stricter enforcement of laws forbidding sex-selection technologies (31). All governmental policies, ultimately, are aiming not at controlling the population permanently, but at changing social norms. This has successfully happened in South Korea, nevertheless, researchers argue that this development was not so much due to the governmental efforts, but to the policies’ combination with many other factors of development in South Korea.

Some advocate the idea that the road towards balanced gender ratios at birth in South Korea was also taken due to its rising gross domestic product (GDP) and its changing social culture, more readily accepting gender equality and non-discrimination policies (32). An especially important role in the changing social culture is given to the effects of modernity, urbanization and industrialization on social assumptions of genders (33). Despite the fact that these cannot always be controlled, these processes should be recognized for the effects they exert on gender roles and their perception. This is due to the changing of social structures and the importance of family ties, relations and gender for the success of a person later on in life. The urban lifestyle which gives people more freedom of movement and actions, social inclusion and importance has led to women being looked upon more favorably than in rural areas (34). Industrialization and urbanization are thus seen to have molded the social changes that contributed to the normalization of gender ratio in South Korea. It is further argued that anti-discrimination laws and enforcement, female education and equality developments, contributing to female independence, as well as retirement provisions for parents, as not to make them dependent on their children in old age (35), have made the social preference for sons seem outdated and unnecessary (36). However, the high GDP of the country at the time of these developments makes some of the lessons from it not completely applicable to the situations in China and India at the moment (37), but may contribute in the future.

With regard to the possible governmental actions, aside from the enhancing of the strictness of enforcement of laws prohibiting sex-selection related practices and raising the public awareness of the issue, other areas which may have a positive impact on countering foeticide and infanticide may be the provision of free health care, as not to deter parents from taking their daughters to receive the necessary medical attention and the securing of retirement of old families, reducing their dependence on their children (38). Additionally, the education of girls contributes not only to their equality in society, but also to their own preferences for children, with statistical evidence that women with white-collar jobs tend not to exhibit son preferences. A higher age of marriage and prohibition of arranged marriages,

which contribute to the independence of women in the family, also lead to lower son preferences (39).

## Conclusion

Both female infanticide and foeticide are crimes, which, unfortunately, are not merely a thing of the past. Although the most affected countries are predominantly in Asia, and although India and China provide the most extreme area for research on the topic, these issues are not limited geographically. The long-standing traditional “value” of the different genders and their collision with modern technology has contributed to the growth of this problem. It is up to the international community and the different state governments to become aware of this issue and take action, perhaps keeping in mind lessons learned from the successful example of South Korea. In any case, the perpetuation of inequality of girls and boys is unacceptable for any society that believes itself to be modern and, if not countered, this phenomenon may lead to unstable demographic situations in the future and, ultimately, may contribute to criminal behavior as a response.

## References

1. Commission on the Status of Women, The elimination and prevention of all forms of violence against women and girls, E/CN.6/2013/L.5 Draft agreed conclusions submitted by the Chair of the Commission, available online at [http://www.un.org/ga/search/view\\_doc.asp?symbol=E/CN.6/2013/L.5](http://www.un.org/ga/search/view_doc.asp?symbol=E/CN.6/2013/L.5)
2. Human Rights Council, Report of the Special Rapporteur on violence against women, its causes and consequences, Rashida Manjoo, A/HRC/20/16, (2012), available online at [http://www.ohchr.org/Documents/HRBodies/HRCouncil/RegularSession/Session20/A.HRC.20.16\\_En.PDF](http://www.ohchr.org/Documents/HRBodies/HRCouncil/RegularSession/Session20/A.HRC.20.16_En.PDF)
3. Examples of such are the 2013 documentary “It’s a Girl” by Evan Grae Davis and The Symposium on Femicide held in 2012 by the ACUNS Vienna Liaison in the United Nations, Vienna
4. George, S.M. 2013. Female Infanticide in Tamil Nadu, India : From Recognition Back to Denial?, available online at [http://www.womenstudies.in/elib/sex\\_selection/ss\\_female\\_infanticide\\_in\\_tamil.pdf](http://www.womenstudies.in/elib/sex_selection/ss_female_infanticide_in_tamil.pdf)
5. Central Intelligence Agency. The World Factbook, Sex Ratio, last accessed 21.01.2013, <https://www.cia.gov/library/publications/the-world-factbook/fields/2018.html>
6. Chunkath, S.R., Athreya, V.B.. 1997. Female Infanticide in Tamil Nadu: some Evidence, Economic and Political Weekly. Vol. XXXII, No. 17, pp. 22-29.
7. Webster University, Female Infanticide, last accessed 21.01.2013, <http://www2.webster.edu/~woolfm/femaleinfanticide.html>
8. Bedi, R. 2012. Indian Dowry Deaths on the Rise. Last accessed 21.01.2013, <http://www.telegraph.co.uk/news/worldnews/asia/india/9108642/Indian-dowry-deaths-on-the-rise.html>
9. See supra note 7.
10. Woods, B., Blewett, K. 1995. The Dying Rooms. Last accessed 21.01.2013, <http://www.cultureunplugged.com/play/5073/The-Dying-Rooms>,
11. Hays, J.. 2011. Preference for Boys and Missing Girls in China, Facts and Details. Last accessed 21.01.2013, <http://factsanddetails.com/china.php?itemid=126catid=3>.

*Remaining references available online.*

# AGGRESSION ON STEROIDS

## DETERMINANTS OF AGGRESSION

SEBASTIAN SPEER

Aggression is of high prevalence in the news and the media. Lately, the news was covered with a particularly shocking display of violence. In New Delhi a 23 year old woman and her boyfriend, who were at their way home after watching a movie at the cinema, were attacked by six men in a bus. The men knocked out the companion of the young Indian girl and raped and penetrated her with an iron rod. She died after two weeks in the hospital. This horrific act of violence is just one example of the inconceivable aggression and violence present in our world. Most of us have experienced instances even in our close environment in which adolescents engage in violent behavior and seriously harm others. Furthermore, many movies now running in cinemas contain highly aggressive content and depict violence in a trivialized way. Our society is constantly stimulated with a massive amount of aggressive input, which may result in rising crime rates and aggressive potential. Violence in the form of assault, rape and murder and wars and genocide has become a considerable part of our human history and are still present on a large scale. This article focuses on the causes of aggression, on how it develops and what predisposes people to act in a violent and antisocial way. The topic is approached from biopsychological and developmental perspectives. The Triple Imbalance Theory will represent the biopsychological perspective whereas the developmental psychologist explains aggression with Patterson's model of antisocial behavior.



>>>Aggression can be defined as behavior with the goal of harming another living being who is motivated to avoid such treatment. If harm is done accidentally or as a byproduct of helping others, it is not intended and consequently not regarded as an aggressive act. The same applies to sexual practices such as masochism where the victim does not try to avoid the pain delivered. Moreover, there is a distinction to be made between instrumental and hostile aggression. The first type of aggression is motivated by anger and frustration and is characterized as impulsive, thoughtless, unplanned and a reaction to provocation. In contrast, instrumental aggression is often utilized as a means to achieve certain goals and is conducted deliberately. Lastly, violence is conceived as aggression which causes extreme harm. All violence is aggression, but not all instances of aggression can be classified as violence.

The developmental psychologist Patterson (1) explains aggression by means of a model of the development of antisocial behavior. Antisocial behavior, which is a consequence of aggression, begins, according to this developmental model, as a trait in early life and continues into adolescence and adulthood. The first stable manifestations of antisocial behavior can be observed in children in elementary school. If antisocial behavior in early childhood could predict aggressive acts in later life, and if the mechanisms that cause this behavior could be determined, prevention could be applied. The developmental progression for antisocial behavior begins with basic training in the form of child-rearing techniques at home. Antisocial children are found to be raised in families that apply harsh and inconsistent parenting styles. In addition, little parental involvement with the child and poor monitoring and supervision of the child's activities characterize the parents' interaction with the child. There are two ways of interpreting these findings. First, control theory suggests that lack of supervision and harsh discipline results in the failure to establish a secure

parent-child attachment, which has as a consequence that the child is unable to identify with the parental and societal values concerning conformity and work (2). This may lead to loss of internal control in the child. On the other hand, the social-interactional perspective argues that family members directly influence their children and train them to act in an antisocial and aggressive way. In this view, parents of aggressors are inconsistent in their use of positive reinforcement for prosocial behavior and punishment for inappropriate behavior. Instead coercive behavior is directly reinforced such that the intensity of coercion escalates gradually, often resulting in hitting and other physical attacks. Thus, the child learns to use coercive means to control other family members. The essence of both theories is that poor parenting style is an elicitor of antisocial behavior which might initiate the development of an aggressive person. The second step of Patterson's model is concerned with the reactions coercive children trigger in their environment. In most cases there are two implications of the child's conduct problems. First, antisocial children are generally found to have poor academic achievement compared to their counterparts. This might be due to the fact that they spend considerably less time on tasks in school than their non-deviant classmates. Second, antisocial behavior is associated with rejection by normal peers. Research has shown that aggressive behavior is the cause of rejection, and not the reverse.

As a consequence of rejection, antisocial children become committed to a deviant peer group. Another factor that also contributes to this group membership may be the lack of parental supervision. Being part of a deviant group then serves as a major training ground for delinquency and substance abuse (2). The peers committed to the group provide each other with motivation, attitudes, rationalizations and opportunities to engage in antisocial behavior. Aggressive acts are reinforced and socially conforming acts are strictly punished by group members.

This clearly illustrates that commitment to a deviant peer group significantly contributes to maintenance of antisocial and aggressive behavior into adulthood. Progression to this development of antisocial behavior commonly has the following outcomes: School dropout, uneven employment histories, substance abuse, marital difficulties, multiple offenses, incarceration and institutionalization.

To summarize Patterson's (1) model of antisocial behavior, it can be said that poor disciplining in early childhood leads to conduct problems, which then result in rejection by normal peers and academic failure in middle childhood. This affects late childhood and adolescence because the developing antisocial child commits to a deviant peer group, which enhances delinquency, substance abuse and other acts that are linked to aggressive behavior.

An example of a biopsychological approach to the topic of determinants of aggression is the Triple Imbalance Theory (3). It states that hostile (reactive) aggression is caused by an imbalance of steroid hormones. The Triple Imbalance Theory further suggests that this imbalance is an evolutionary relapse into aggressive drives that are adaptive in many reptilian and mammalian species but are maladaptive in modern humans and their society.

In reptilian and mammalian species reactive social aggression is an essential tool to obtain survival-dependent resources such as food, shelter, and mating partners (4), whereas in our modern society the need for aggression has waned and has become maladaptive, since it leads to serious societal punishment such as rejection by peers. However, recent research suggests that the same neurobiological states elicit reactive social aggression in human and nonhuman animals (14). This led to the conclusion that emotive imbalances should be viewed in their current social contexts. The male sex hormone testosterone has appeared to have a significant impact on sex differences in social aggression and on the core brain chemicals involved (5). It enhances aggressive behavior in many reptilian and mammalian species (6). If injected in animals it increases aggression (7). The same applies to humans, although the effect is much weaker, perhaps because of the regulating and inhibiting effects of the prefrontal cortex (8). Another steroid hormone involved in human aggression is cortisol, which is linked in a diametrically opposite manner to antisocial behavior. People with low levels of cortisol have been found to be high in levels of behavioral activation, which can be defined as a tendency to act impulsively, to have socialization problems and to exhibit violent and aggressive behavior (9). Testosterone and cortisol are both end products of Hypothalamic-Pituitary-Gonadal and hypothalamic-pituitary-adrenal axis, two groups of endocrine glands, which have antagonistic and inhibitory effects (10). Whereas high levels of cortisol predisposes one to fear and punishment sensitivity—and behavioral inhibition, low cortisol enhances aggression (11). In contrast, testosterone has behavioral activating, aggression inducing, and reward sensitizing effects, which consequently lead to reductions in fear and social avoidance (12). One well-known experiment, which demonstrates these effects, used the Iowa Gambling Task,

a task in which participants have to gamble to simulate real-life decision-making. Women who were administered testosterone engaged in more risky decision making and heightened reward sensitivity while gambling (13). Another correlational study found that cortisol has the opposite effect on performance on the Iowa Gambling Task.

These findings lead to the conclusion that testosterone and cortisol play key roles in social aggression. To be more specific, low levels of cortisol and high levels of testosterone predispose one toward social aggression. Additionally, the neurotransmitter serotonin may be critically involved in regulating aggressive behavior and antisocial tendencies. Lowered central serotonin transmission combined with high testosterone has been associated with predisposition towards reactive aggression. In brief, a high-testosterone/low cortisol ratio combined with low levels of serotonin transmission potentiates reactive aggression.

**Reactive aggression is caused by an imbalance of steroid hormones. This imbalance is an evolutionary relapse into aggressive drives that are adaptive in many reptilian and mammalian species but are maladaptive in modern humans and their society.**

Whereas the Triple Imbalance Theory mainly focuses on predispositions that are the result of chemical processes, the developmental model of antisocial behavior considers aggression to proceed through different stages and concentrates mostly on the social environment for identifying the determinants of violent tendencies and aggressive behavior. The biopsychologist applies methods such as administering steroid hormones to participants to see which effects this has on the behavior and reaction to the environment and measuring brain activity in response to facial expressions to determine which brain areas are responsible for aggression and antisocial behavior. In contrast, the developmental psychologist compares life-outcome data of individuals with certain characteristics or backgrounds, such as the parenting style the individual received in childhood, to determine which circumstances and environmental factors lead to antisocial tendencies. These different approaches have led to the development of theories that are considerably different from one another and provide different approaches for intervention. To apply the Triple Imbalance Theory, people who are predisposed towards aggressive and antisocial behavior because of their levels of cortisol, testosterone and serotonin, could be medicated to prevent them from engaging in violent acts and committing crimes. Furthermore, obligatory tests could be introduced that assess the levels of cortisol, serotonin and testosterone to identify people who are at risk of developing antisocial tendencies. On the other hand, the model of development of antisocial behavior would suggest intervention in the form of parenting training in which parents are given specific instruction on how to improve their disciplining and family management

skills. This might prevent such children from committing to deviant peer groups, and reduce delinquency and substance abuse in adolescence. In addition, teachers could be made more aware of children with a deficit of academic skills and provide them with special treatment. That way these children could be integrated more efficiently into society, which would also reduce antisocial tendencies, since they would be accepted by appropriate peers.

In conclusion it can be said that the two approaches discussed do not contradict each other, since they focus on different factors of aggression. They both contribute considerably to our understanding of the topic of aggression by providing different perspectives on it. Furthermore, they both offer possibilities for intervention, which could prevent children from developing into violent, antisocial and aggressive individuals. The best way to achieve this would arguably be to integrate the findings of both perspectives to assess the topic most efficiently.

## References

1. Patterson, G. R., De Baryshe, B., & Ramsey, E. (1989). A developmental perspective on antisocial behavior. *American Psychologist*, 44, 329-335.
2. Hirschi, T. (1969). *Causes of delinquency*. Berkeley, CA: University of California Press.
3. Van Honk, J., Harmon-Jones, E., Morgan, B. E., & Schutter, D.J.L.G. (2010). Socially explosive minds: The triple imbalance hypothesis of reactive aggression. *Journal of Personality*, 78, 67-94.
4. Mazur, A., & Booth, A. (1998). Testosterone and dominance in men. *Behavioral and Brain Sciences*, 21, 353-397.
5. Archer, J. (1988). *The behavioral biology of aggression*. Cambridge, UK: Cambridge University Press.
6. Archer, J. (2006). Testosterone and human aggression: An evaluation of the challenge hypothesis. *Neuroscience and Biobehavioral Reviews*, 30, 319-345.
7. Brain, P. F. (1979). *Hormones and aggression*. Montreal: Eden Press.
8. Curley, P. J., & Keverne, E. B. (2005). Genes, brains and mammalian bonds. *Trends in Ecology and Evolution*, 10, 561-567.
9. McBurnett, K., Lahey, B. B., Frick, P. J., Risch, S. C., Loeber, R., Hart, E. L., et al. (1991). Anxiety, inhibition, and conduct disorder in children, II: Relation to salivary cortisol. *Journal of the American Academy of Child and Adolescent Psychiatry*, 30, 192-196.
10. Viau, V. (2002). Functional cross-talk between the Hypothalamic-pituitary-gonadal and adrenal axes. *Journal of Neuroendocrinology*, 14, 506-513.
11. Schulkin, J. (2003). Rethinking homeostasis. *Allostatic regulation in physiology and pathophysiology*. Cambridge, MA: MIT Press.
12. Boissy, A., & Bouissou, M. F. (1994). Effects of androgen treatment on behavioral and physiological responses of heifers to fear-eliciting situations. *Hormones and Behavior*, 28, 66-83.
13. Bechara, A., Damasio, A. R., Damasio, H., & Anderson, S. W. (1994). Insensitivity to future consequences following damage to the human prefrontal cortex. *Cognition*, 50, 7-15.
14. Blair, R. J. (2004). The roles of orbital frontal cortex in the modulation of antisocial behavior. *Brain and Cognition*, 55, 198-208.

# MADIBA

## A REAL-LIFE SUPERHERO

EDITORIAL

**S**hortly before the publication of this edition of Honours Review, a man who left his mark on history passed away. Nelson Mandela lived 95 years of unexpected events, disgraceful incarcerations, and unstoppable tenacity. He gave the world a message of reconciliation and demonstrated that it is possible to change a whole nation's destiny with one determined heart.



>>>Mandela's story began on July 18, 1918 in Mvezo, a tiny village in the hills of the Eastern Cape in South Africa. Named Rolihlahla by his parents, his name was later changed to Nelson as scholar customs required every student to be given a Christian name during the first few days of classes. Years went by quickly, and Mandela soon found himself going to the University College of Fort Hare, full of dreams and expectations. He became involved with the youth league of the African National Congress and started protesting against its simplistic goals and poor performance. Mandela wanted the league to be a radical movement, not only an association of idealists with no influence. With this in mind, he joined

**“Our nation has lost its greatest son. Our people have lost a father,” South African President Jacob Zuma said, “What made Nelson Mandela great was precisely what made him human. We saw in him what we seek in ourselves.”**

other activist groups and participated in a series of protests that led to his expulsion from the University.

As a strong voice in a radical movement against racial separation, he was soon arrested under the charge of treason. The trial began in 1956 and lasted five years, but Mandela was ultimately acquitted. In 1962, he decided to travel through Morocco and Ethiopia to receive military training. The authorities of South Africa found out and, the moment he got back, charged him with illegal exit of the country and incitement to strike. The Rivonia Trial found him guilty of conspiracy to overthrow the state and sentenced him for life. He spent the next 24 years incarcerated on Robben Island.

Mandela did not cease in his search for justice.

Even though he was not allowed to have any means of communication with the external world, his wife Winnie Mandela kept him informed and transferred his messages to the outside. Winnie was the face of the campaign that raised international awareness over Mandela's incarceration and his cause. She convinced foreign government to put pressure upon South Africa to transfer him to a prison with better conditions. He was transferred in 1988 and, finally, in 1990, after 27 years of imprisonment, Mandela was released.

The Africa he re-entered however, was not a welcoming place. The civil strife was already escalating and experts claimed that a civil war was inevitable. Mandela, deaf to these warnings, started a peaceful campaign to abolish the apartheid and establish democratic elections for all races. In 1994, he became the first black president of South Africa and demonstrated that not only democracy, but also a peaceful transition, was possible. In his words, “Not only did we (Africans) avert such racial conflagration, we created amongst ourselves one of the most exemplary and progressive nonracial and nonsexist democratic orders in the contemporary world.”

He stepped down from office in 1999 and continued to be a statesman until his death. He was a strong advocate for social work to combat poverty and the HIV/AIDS epidemic, which will remain the focus of the Nelson Mandela Foundation.

Today, Mandela remains a paradigmatic figure against which all presidents are measured. Africans will probably remember him as Madiba, his tribal name, or as Tata, the word for father in Xhosa. The rest of the world will always remember him as a force of tenacity and strong will. His roller-coaster life is a great example of what a human being can accomplish. Nelson Mandela was not a superhero, nor a divine force. He was just a man, a man who believed in his work and who tried, until he succeeded.