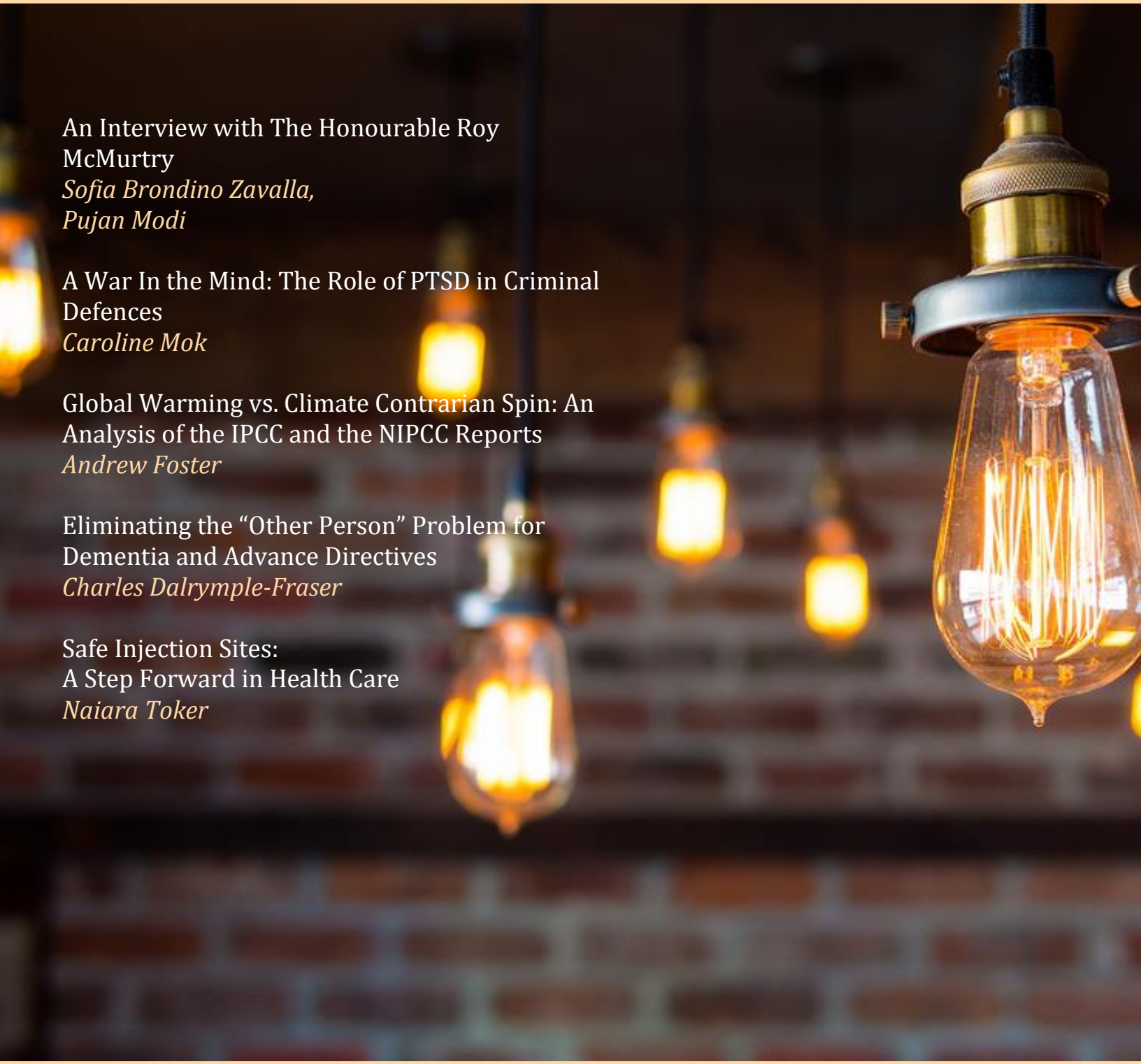
mindful

Journal of Ethics, Society & Law
Trinity College, University of Toronto



Issue Six, Autumn 2014

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EDITORS' INTRODUCTION

We are pleased to present the sixth edition of *Mindful: Journal of Ethics, Society, and Law*. The uniquely interdisciplinary nature of the Ethics, Society, and Law program is reflected in this issue. We are proud to be able to showcase undergraduate papers that represent varied lines of investigation from numerous academic disciplines. The range of perspectives present in this issue allows us to engage with the theoretical and practical components of the ethical challenges faced by contemporary society.

This edition of *Mindful* opens with an interview with the Honourable Roy McMurtry. In the interview, the former Chief Justice of Ontario, High Commissioner to Great Britain, and Attorney General of Ontario shares his unique perspective on law and politics, and discusses his renowned career.

The four undergraduate papers featured in the issue represent four distinct contemporary ethical challenges. In *A War in the Mind: The Role of PTSD in Criminal Defences,* Caroline Mok explores post-traumatic stress disorder through sociological and legal frameworks to determine the adequacy of PTSD-based defences in criminal trials. This paper identifies the growing ethical, legal, and social challenges that a society increasingly exposed to war and violence faces when determining criminal responsibility.

The exploration of contemporary ethical challenges continues in Andrew Foster's *Global Warming Science vs. Climate Contrarian Spin: An Analysis of the IPCC and NIPCC Reports,* in which arguments supporting and refuting anthropogenic global warming as well as their scientific bases are reviewed.

Naiara Toker, in *Safe Injection Sites: a Step Forward in Health Care,* engages with the ethical and legal challenges facing safe injection sites through her analysis of the services provided by Insite in Vancouver's downtown-eastside community.

We conclude this edition of *Mindful* with an examination of advance directives in cases of dementia. In *Eliminating the "Other Person" Problem for Dementia and Advance Directives*, Charles Dalrymple-Fraser engages with the practical and ethical concerns relating to the validity of advance directives in the face of recent advances in the field of medicine.

We would like to thank all those individuals who made this edition of *Mindful* possible. We are grateful to the Honourable Roy McMurtry for taking the time to meet with *Mindful* to share his knowledge and insights. We would also like to thank our contributors who have allowed us to share their work with our readers. Their papers have resulted in an insightful and engaging edition of the journal. This edition would not have been possible without the hard work and dedication of *Mindful's* many editors. They have done a terrific job editing the undergraduate submissions. Finally, we would like to thank our faculty advisor Professor John Duncan. Professor Duncan's help and guidance was vital to the production of this edition.

We hope that *Mindful* will continue to grow as a forum for the discussion and exploration of contemporary ethical challenges. We hope you enjoy the sixth edition!

"Human progress is neither automatic nor inevitable . . . Every step toward the goal of justice requires sacrifice, suffering, and struggle; the tireless exertions and passionate concern of dedicated individuals."
– Martin Luther King, Jr.

Photo Credit: Natalia De Frutos

INTERVIEW

AN INTERVIEW WITH THE HONOURABLE ROY MCMURTRY

The Honourable Roy McMurtry graduated from Trinity College in the University of Toronto in 1954 and went on to become Attorney General for Ontario (1975-1985), Solicitor General for Ontario (1978-1982), Canadian High Commissioner to Great Britain (1985-1988), Associate Chief Justice and Chief Justice of Ontario Superior Court (1991-1996), Chief Justice of Ontario (1996-2007), and the twelfth Chancellor of York University (2008-2014). He has made a significant and enduring contribution to Ontario and Canada during a remarkable career.

In the spring of 2014, Mindful*'s Sofia Brondino Zavalla and Pujan Modi met with Mr. McMurtry to discuss his time at Trinity College, his influential career, and Canadian politics.*

Pujan Modi: Thank you for meeting with us today, Chief McMurtry. You dedicate a chapter of your book, *Memoirs and Reflections*, to discussing your time as a university student. What do you recall most about being a student at Trinity College in the University of Toronto?

Roy McMurtry: Certainly, these are sort of two separate questions because Trinity had a very different culture in a way, and the student population was the smallest of the four Arts Colleges. I remember it being a very collegial place and most of us knew each other. I don't think there were more than 400 students. I remember it mostly as a cordial and easy place to make friends. I had gone to boarding school before that and yet I keep more in touch with my Trinity friends, of those that are still alive!

Trinity in those days did not represent the community as a whole, to the extent it does today. In the 1950s, a much smaller percentage of people went to university from high school, and Trinity had a significant percentage of students coming in from independent schools. So although I enjoyed my time there thoroughly, it was not representative of the university community as a whole.

One thing that I enjoyed very much was that during my years I was very active in the University football program, and I believe I was one of the only members from

Trinity. This gave me the opportunity to meet with students from a number of different faculties and colleges. So it helped create a good balance. I'm not suggesting that Trinity was in any way snobbish, but it just wasn't as diverse as it is today. Today I sense a lot of students from different cultures. Trinity and the University were pretty "WASP" in my day. The University was also much smaller, around 10,000 students, so I find myself to be kind of an antique from another age!

Sofia Brondino Zavalla: How do you think Trinity and the University of Toronto helped shape you as a person and a professional?

RM: Well, I met some people at Trinity who went on to very good careers and many in education. One of my fellow students was Ron Watts who became the President of Queen's University later on. Tom Simon was the founding president of Trent University. There were a lot of people who went into education and public service. There was a feeling about public service that was actually very positive.

Ron Watts interested me to work for Frontier College. Don't blame yourself if you don't know about it! There's something about Canadians; we keep our light hidden under the bushel. We are very modest about our accomplishments as a country and people. Frontier College was founded in 1899, and is still open. Ron Watts persuaded me to become a labour teacher there. A lot of my friends thought I was crazy because a lot of people would work for the Naval Training Division, but I went working for Frontier College on one of their important and significant initiatives for adults in the frontiers. I spent two summers going out as the labour teacher, which meant I had the pleasure of working ten hours a day, six days a week at hard labour on the railway and taught at night, mostly English, to new Canadians. To me, that Frontier College experience was one of the most valuable experiences of my life. Ron Watts and I have remained friends over the years and I just think there was an atmosphere that was conducive to the concept of public service.

PM: Do you continue to have connections with Trinity or Trinity alumni?

RM: Yes, to some extent. I would like to have more connections, but I do see Trinity alumni from time to time. I've spoken at Trinity, and I received a Doctorate of Scared Letters several years ago. I know the new Provost, Mayo Moran, reasonably well. She's a very bright person, and a good fit. I know her instincts will suit her very well. And the Provost who is back in England, Andy Orchard—I got to know him fairly well. I also got to know another outstanding Provost, whose book I'm in the middle of reading, Margaret MacMillan, one of Canada's great historians. I was up there recently, invited by a new club. The event was in the Rigby Room, and we had a good session.

My late younger brother Bill coached the Trinity Black Panthers football team, and I recall not too long ago there was a very nice 50th anniversary event for the 1957-58 intramural championship the Panthers won while Bill was coach. People came from all over North America. My brother didn't live to see the 50th anniversary but that event was very special and I have warm feelings about Trinity. [In the fall of 1957 Bill McMurtry coached the "no-hope" Trinity Black Panthers to a "Cinderella" undefeated season that culminated in a victory over Victoria College to win the coveted and historic Mulock Cup—ed.]

PM: You considered the field of medicine when you were starting out, but decided against it. Do you have any advice for students trying to make difficult academic and career choices in what seem to be uncertain times.

RM: Yes, we live in uncertain times. It was much easier for my generation. There was absolutely no competition to get into Law School. Now you have the LSATs, and seven law schools in Ontario alone. Back then there were only two law schools, the big one at Osgoode Hall, and a smaller one in UofT. I was working for Frontier College in the summer, when I got the romantic idea that I'd like to be a doctor. My father was a prominent lawyer who I admired greatly, but I didn't want to be seen as following in daddy's footsteps. I was allowed into the Faculty of Medicine but I had to do a make-up year in sciences. But again, there was no competition. I was captain of the University football team and that was all the Dean needed. I think he also liked the idea of people coming in that had broader arts

education. I became a high school football coach at Upper Canada College and I realized a couple of months into the make-up year that the sciences and I were not comfortable companions. So I went down to see the Dean of the Law School and didn't really expect to get in. This was the third week of November, and he said "Why don't you start tomorrow? Just study for the two Christmas exams, which are not too burdensome, and pick up the rest after Christmas!" It was that easy, so I feel guilty when I think about what students have to go through today. Still, I had a strange route to become Chief Justice of the Province!

SBZ: In a long and distinguished career as a leading public servant you have held positions of the highest legal authority in Ontario. You have been involved in many important cases. Which ones stand out as you reflect back?

RM: The most important case I was involved in as Attorney General of Ontario led to the patriation of the Canadian constitution. That was a very complex case with a lot at stake. I argued in that case, and hardly anybody expected the result, which was a good one. That was a very exciting experience. [On which see more below—ed.]

I can't remember many cases as a trial judge; the odd murder case sticks out, but there was nothing special. Then I think the most important decision I sat on and wrote was the same-sex marriage case, Halpern v. Attorney General of Canada. As a result of that case, the *Globe and Mail* made us the Nation Builders of the Year in 2003. To me, that was an important issue, an important equality issue. I also sat on the longest criminal law case in the history of Canada, the Steven Truscott case. That case came back to the Court of Appeal to be eventually overturned more than 40 years after the 14-year old Truscott had been convicted in 1959 for the murder of a classmate. Those are two cases that stick out in my mind in particular.

PM: As you mentioned, you played an important role in patriating the Canadian constitution. How would you characterise those times?

RM: That was a fascinating adventure! I was just on the phone this afternoon with my good friend Roy Romanov who I worked closely with in conjunction with John

Chretien. Through our friendship we were able to hammer out a proposal, a large part of which was eventually accepted. It was difficult because Prime Minister Trudeau had very strong ideas. I had to convince him that some concession had to be made to the eight provinces that were opposed to the idea of having an entrenched Charter, since some of the Premiers believed in the British Parliamentary system, and in the role of elected representatives rather than appointed judges. But, there were no judges in Canada that were pushing for entrenched Charter rights. Elected representatives, starting with Mr. Trudeau himself, initiated it. What he didn't like about our compromise, and he never liked it until the day he died, was the notwithstanding clause. It was arrived at after I spoke to many Premiers and cabinet ministers over many months who agreed that there had to be a compromise for the opposing provinces. This clause meant that if the Federal Government wanted to pass legislation, it was notwithstanding the acceptance of the provinces. It was called the notwithstanding clause or the overriding clause. I supported it because it was a fair compromise. It has been rarely used, and the use is valid only for five years, after which it must be renewed by the provincial legislature or parliament for another five. Mr. Trudeau realized and I was able to convince him that this would be the only way to gain the favour of the opposition. We started meetings on the Constitution in 1976 but didn't have the agreement until 1981. So those were pretty exciting times and I feel pretty lucky to have been given the chance to provide service at important moments in our history.

SBZ: Your involvement with young offenders and contributions to the area of youth justice are widely known especially through the Ontario Justice Education Network. Mandatory minimum sentencing will likely affect this demographic more than any other. What are your views on mandatory minimums, as a retired judge and policy maker?

RM: What I have been saying for years is that the trouble with the young offender system is that traditionally it has been treated as simply an add-on to the adult system. I believe it should be treated as an absolutely separate institution. Governments over the years have not treated the whole issue of young offenders

seriously. It is still not treated seriously. In my view, the young offender system should be a highly specialized system because time-lines in young people's lives are far different from those of adults. Life changes at much faster rates during childhood and adolescence. I used to get very angry or irritated when for a long time they would refer to the Crown Attorneys in the youth courts as being "Baby Crowns" and the courts as "kiddie courts." They had it all backwards because the potential of rehabilitating a young offender is much greater than somebody who has been in trouble with the law over a lengthier period of time in their adult life.

As far as the imposition of mandatory minimums is concerned, I think we have a federal government that is out of touch with the majority of the issues facing Canadian society, and the issues facing young offenders are among them.

I used to be a Progressive Conservative. Today, I would not give a nanosecond of support to the Harper government. They are very vindictive, collectively as a government. They don't tell the public the truth.

The reality is that crime rates have been falling and youth crime has been falling quite dramatically in recent years. The Harper administration is using the old political gimmick of knowing that people get upset about crime, naturally of course, and they are using that as a political platform to gain supporters. To me, a law and order political platform in Canada is the last refuge of a political scoundrel and I simply don't agree with it and neither does the Supreme Court of Canada. Quite frankly, I think they are a dishonest government because they don't seem to respect the political system and all the various offices of parliament. They have introduced and embraced political attack ads, making them a large part of their strategy. As a result of these tactics, in the last federal election, only 61% of eligible people voted, which I am told is one of the lowest in recorded history in Canada.

PM: What was it like to be Canada's High Commissioner to the U.K.?

RM: I enjoyed it very much. It was certainly a nice decompression process from being a full time Attorney General and politician. It was a very interesting time because Margaret Thatcher was the Prime Minister and she was a very interesting

personality, a very strong personality. It was wonderful to have served as ambassador during her time. Our principal battle was over apartheid in South Africa. I believe Canada played a major role in organizing the Commonwealth and other countries to fight apartheid. Margaret Thatcher, along with Ronald Reagan, truly believed that there could not be democratic change in South Africa without a bloody civil war. They may have been correct. I personally believe that Nelson Mandela is the person who prevented a civil war from occurring. In addition, Mrs. Thatcher had problems with the fact that there were a million white South Africans who had British passports. She was concerned with the possibility that they would want to move to Britain in the event of a civil war.

When Margaret Thatcher died, I went back to reflect on her life since I had come to know her fairly well, and I can say that she was a remarkable and complex person. What she accomplished as a woman in the United Kingdom at that time is absolutely incredible. For her to become leader of the Conservative Party in 1975 was truly an incredible political accomplishment. At the same time, she didn't reach out to battle on behalf of women to the extent that she should have in Britain to ameliorate the discrimination against women in business and industry. The reason for that was that she truly believed—as she said quite loudly once during dinner—that women are twice as tough as men. And I agree with her, by the way! Margaret Thatcher felt that there was no need for programs to help advance the cause of women because she believed that women were unequal to men in that they were twice as tough. I recall going to her office to see her and would often see cabinet ministers waiting outside and they looked like little boys waiting to see the school principal! She was quite remarkable, as were her accomplishments. I do not necessarily agree with everything she did but I certainly have great respect for her. It was a fascinating time and certainly an exhilarating experience.

SBZ: You have had a life-long interest in painting. How are art and the creative imagination important to you?

RM: As landscape painting is my hobby, art has been a very important part of my life. I lucked into it in the sense that I had quite literally no natural talent! I was

working for Frontier College in the Rockies and in one of my weekly letters home I mentioned to my parents how beautiful the landscape was and I included the line "so beautiful I wish I knew how to paint." My parents, being good parents, sent me oil paints three weeks later. I was fortunate to have developed a friendship with the last living member of the Group of Seven, A.J. Casson, and I would go on painting trips with him. I also took drawing classes. It has been a very important part of my life because I think it trains you to look at things differently. I believe hobbies are important. I always wish I was more musical. My wife is an extremely talented classical pianist while I have no musical ear at all. But painting for me is collecting memories. I think being creative adds a very important dimension to life. [A collection of Mr. McMurtry's paintings can be viewed at: http://www.osgoodehall.com/mcmurtry4.html—ed.]

PM: Sport has been an important part of your life, and you were involved in trying to do something about violence in professional hockey. Do you think violence in hockey takes away from everything else that is great about the sport? Why are laws regarding assault suspended on the ice?

RM: This is an issue I feel very strongly about. My late brother Bill did the original report on excessive violence in hockey. There had been some ugly incidents including one in which a young teenager died as a result of a hockey fight. As a response, the Davis government asked him to commission the investigation and inquiry into violence in hockey in 1974. My brother released his report, Investigation and Inquiry Into Violence in Amateur Hockey, in 1974 and just by happenstance I became the Attorney General less than a year later, and during my first week I wrote the presidents of the NHL and the WHA telling them that the Criminal Code did not cease to function at the entrance of the arena and that if there was clear evidence of criminal assault taking place during games, charges would be laid. The sporting establishment simply went nuts! They seemed to think that everything was fair in a hockey game.

In the fall of 1975, we charged two players and then in April 1976, a huge fight broke out during a game between the Philadelphia Flyers and the Toronto Maple Leafs. I had arranged for police officers to be at Maple Leaf Gardens every game to

observe what happened on the ice. The police called me and I told them that they had to decide whether there was evidence to charge them. They said yes, and I thought it would be a good idea to arrest them. So four Philadelphia players were arrested and brought into the local police station and photographed and fingerprinted. The NHL went nuts! The arrests sent a message, and things cooled down at Maple Leaf Gardens because Clarence Campbell knew that as long as they had this crazy young Attorney General in Toronto the teams were going to have to behave.

I'm still involved in this issue. I'm working quietly in the background with a distinguished, internationally renowned neurosurgeon by the name of Charles Tator, along with Ken Dryden, the former famous goalkeeper for the Montreal Canadiens who is also a lawyer, and we're trying to arrange a conference about sports concussions mainly in hockey. My concern is the kids. I'm concerned with the youngsters. There are tens of thousands less children playing organized hockey in Canada today than there were thirty years ago and it is in part because many parents don't want their children to risk these injuries. The NHL is not concerned with this. They're confident that they will always have a new supply of elite players so they don't care about the number of kids who are not getting the pleasure of playing the game. I enjoy the game. I played recreational hockey into my fifties. But again, my concern is the kids. Team sports are a healthy way to develop self-confidence, self-respect, and children should not be missing out on these opportunities.

SBZ: Prime Minister Harper has referred to you as “not a true conservative.” Would you agree with this accusation, and what does being a “true conservative” mean to you?

RM: To me, political parties have always been a matter of personalities. I got involved in Conservative politics because of my friendship with Bill Davis but early on in my career as a lawyer I wasn't interested in it. Conservative means one thing to Harper and something else to me and many different things to the Republicans of the U.S. I never worried too much about the definition of Conservative. To me, being a Conservative was being sensible about expenditure of public funds, but

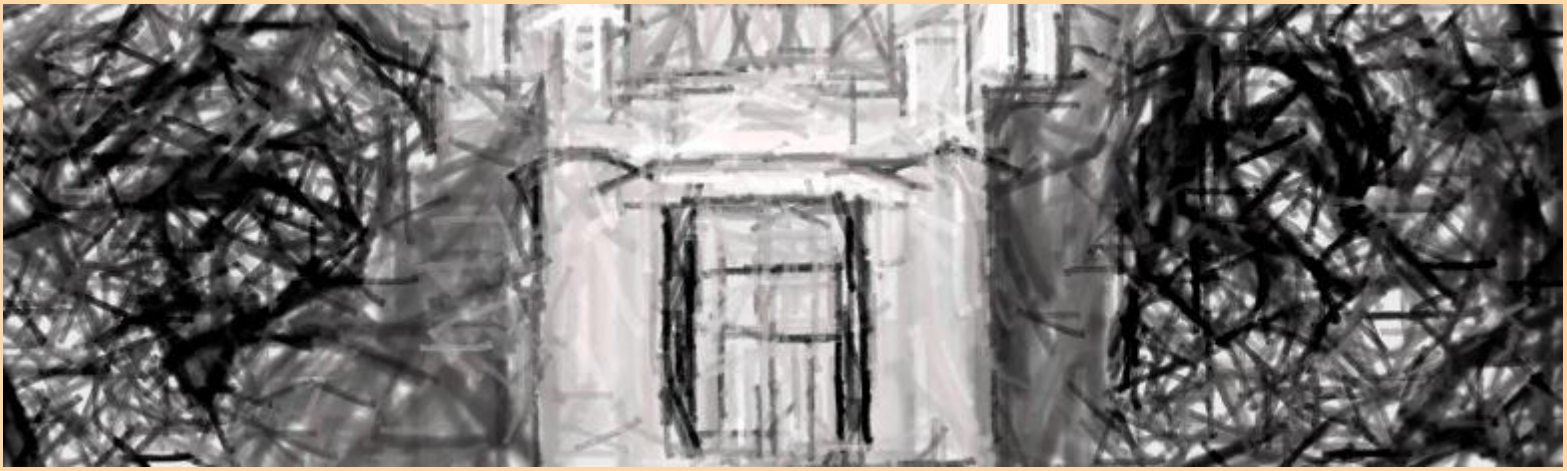
politics was about social issues more than economic issues. Social issues have always been important to me. I don't regard myself as a Conservative any longer. I'm no longer a member of any political party and have not been for a number of years.

PM: David Miller asked you to place the chain of office around his neck when he became Mayor of Toronto. When Rob Ford became Mayor, he asked Don Cherry to do the honour. In Cherry's official remarks at the event, he said, "I say he's [Rob Ford is] going to be the greatest mayor this city has ever, ever seen, as far as I'm concerned—and put that in your pipe, you left wing kooks." What has happened to politics in this city?

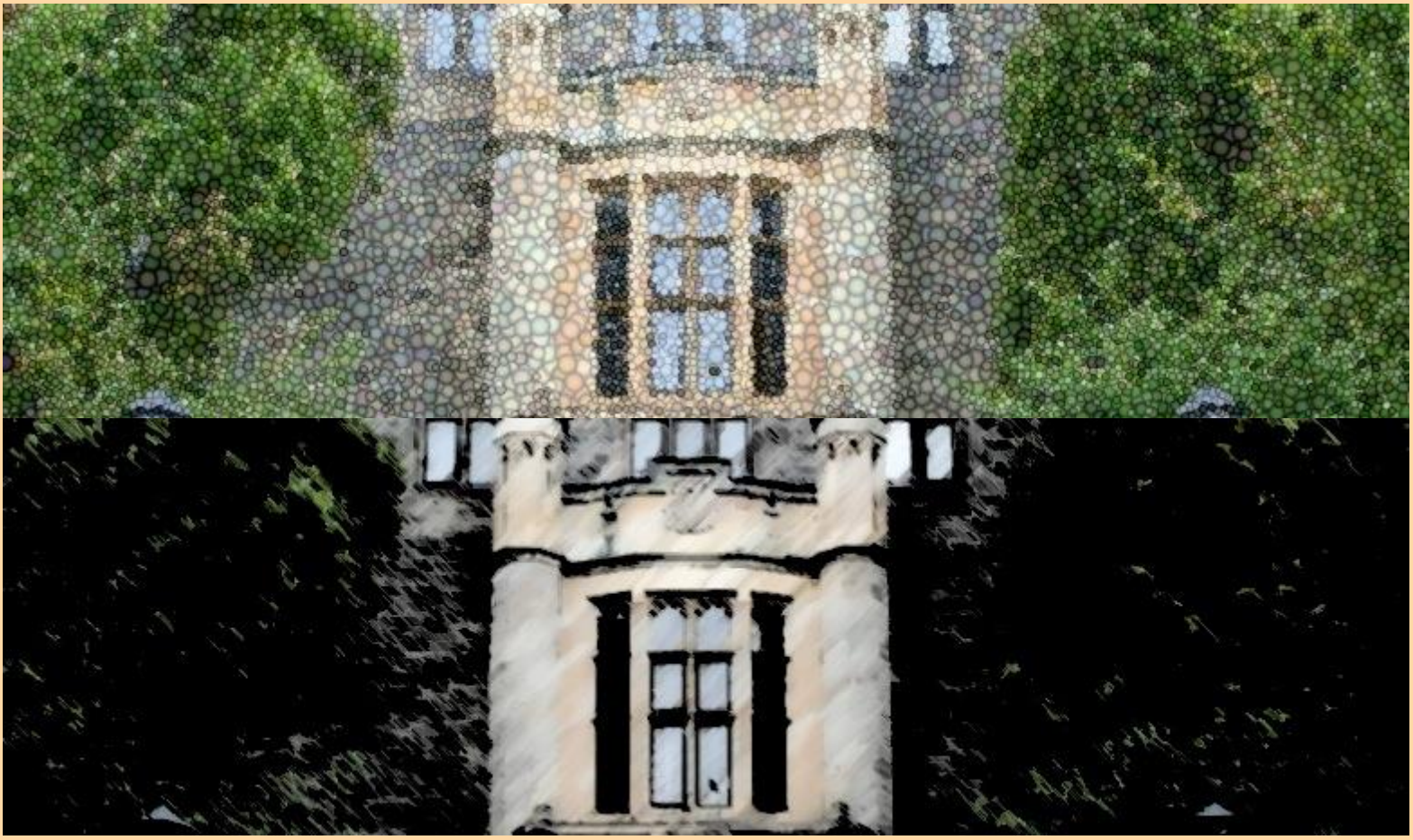
RM: To me, it has been the most bizarre chapter of political history in Canada. I don't know Rob Ford personally, but Don Cherry and Rob Ford seem to be a pretty good partnership!

SBZ: What is most hopeful in what you see coming for Canada?

RM: I think economically, it's going to be a little tougher for my children and my grandchildren in particular. But I have to say I am very impressed by the quality of university students I have encountered. So I'm pretty optimistic. There will be rough patches but I think despite my complaints about the Federal government (and they're numerous), I have to admit that compared to the rest of the world we're pretty lucky. I see this reflected in the many thousands of university students I have met in York University over my six years as Chancellor. I think we Canadians have found a degree of unity in our diversity that is truly the envy of the world. I'm simply impressed by the quality of young people that I meet so I feel very confident in Canada's future.



Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has."
– Margaret Mead



A WAR IN THE MIND

Caroline Mok

Since the formal recognition of post-traumatic stress disorder (PTSD) by the American Psychiatric Association in 1980, combat-related trauma disorders have played a controversial role in American jurisprudence as a basis for criminal insanity defences. As a result of the 9/11 terrorist attacks, televised wars and the broadening of formal psychiatric definitions of trauma, 'trauma' has become a "household [word]".[1] Considering that nearly eight percent of Americans will have PTSD during their lifetime,[2] it comes as no surprise that discussions and skepticism about the role of PTSD in the criminal law have been renewed as the United States increasingly becomes a "nation under therapy".[3] However, as I will argue from both sociological and legalist perspectives, PTSD-based insanity defences can be appropriate if adequate attention is given to issues of malingering and causation; such qualifications on the use of PTSD in an insanity defence allow for the recognition of trauma-induced psychological issues without undermining the principle of conscious criminal intent or *mens rea* that is necessary for establishing criminal responsibility.

I will begin with a historical overview of PTSD and its etiological connections to traumatic combat situations. Then, I will discuss the various ways in which different typologies of PTSD can be used to form an insanity

[1] Ralph Slovenko, "The watering down of PTSD in criminal law", *The Journal of Psychiatry and Law,* 32 (2004): 419.
[2] U.S. Department of Veteran Affairs, "How Common is PTSD?" http://www.ptsd.va.gov/public/PTSD-overview/basics/how-common-is-ptsd.asp
[3] Mary Tramontin, "Exit Wounds: Current Issues Pertaining to Combat-Related PTSD of Relevance to the Legal System", *Developments of Mental Health Law,* 29, (2010): 23.

defence, more formally known as a plea of not guilty by reason of insanity (NGRI). Finally, I will discuss certain issues that have been raised with regards to PTSD-based insanity defences, such as malingering and establishing causation. In doing so, I hope to contribute to the discourse by offering a contemporary perspective that combines legal, sociological, and psychological considerations, and supports the qualified role of PTSD in insanity defences and the criminal law.

The History of Post-traumatic Stress Disorder

The history of combat-related stress in the United States is almost as old as the history of US military conflict[4] and is relevant to understanding the role of PTSD in present-day America. From findings of "soldier's heart" in the American Civil War, to diagnoses of "shell shock" or "battle fatigue" during the wars of the 20th century, the effect of war upon the bodies and minds of soldiers was perceived by most to be a genuine crisis that required psychiatric intervention. This was in spite of the minority opinion that these problems were the result of sheer cowardice.[5]

While the general perception of trauma as a legitimate problem existed throughout the 20th century, it was not until the peak of the Vietnam War in the 1960s and 1970s that the psychiatric community first formally recognized PTSD. The Vietnam War has been distinguished from preceding wars as being uniquely conducive to combat related trauma. Vietnam's guerilla-style warfare and attendant experiences of isolation made soldiers more susceptible to

[4] Daniel Burgess, Nicole Stockey and Kara Coen, "Reviving the 'Vietnam Defence': Post-Traumatic Stress Disorder and Criminal Responsibility in a Post-Iraq/Afghanistan World", *Developments in Mental Health Law,* 29, no.1, (2010): 60.
[5] Ibid., 61.

psychological trauma.[6] This was evidenced by the increasing proportion of soldiers who returned home exhibiting psychological reactions to the war.[7] In addition, pressures from veteran advocacy groups increased public sympathy for war veterans. Finally, the derision of a politically and morally divisive war helped prompt the APA's recognition of PTSD as a legitimate psychological ailment in 1980.[8]

As a result, PTSD is now officially recognized as a mental illness "characterized by the re-experiencing of an extremely traumatic event accompanied by symptoms of increased arousal and by avoidance of stimuli associated with the trauma".[9] This definition of PTSD, which appears in the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) published in 1998, does not differ greatly from the original formulation and there have been very few challenges to its validity.[10] The most notable change has been the broadening of the criteria for what can be considered a traumatic stressor. According to the criteria in the DSM-V, a traumatic stressor can occur directly by experiencing a traumatic event, or indirectly by either witnessing another person undergo a traumatic event, or by learning about events experienced by close relatives or friends.[11] The APA's non-exhaustive list of possible traumatic stressors includes direct or indirect experiences of sudden, uncontrollable, and negative events such as military

[6] Samuel Pyeatt Menefee, "The 'Vietnam Syndrome' Defence: A 'G.I. Bill of Criminal Rights*?", The Army Lawyer*, 27, (1985): 4.
[7] Burgess, Stockey and Coen, "Reviving the Vietnam Defence", 60.
[8] Ibid., 62.
[9] American Psychiatric Association, *Diagnostic and statistical manual of mental disorders: DSM-IV – 4th ed* (1994): 393.
[10] Burgess, Stockey and Coen, "Reviving the Vietnam Defence", 63.
[11] American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition. Arlington, VA, American Psychiatric Association, 2013. Web. [access date: 1 June 2013]. dsm.psychiatryonline.org; Barbara Bottalico and Tommaso Bruni, "Post traumatic stress disorder, neuroscience and the law", *International Journal of Law and Psychiatry,* 35 (2012): 113.

combat, violent assaults, inappropriate sexual experiences, manmade or natural disasters, severe car accidents, or being diagnosed with a fatal illness.[12] The broadness of this "known etiological component" of PTSD, distinguishes it as a particularly unique disorder. [13]

Post-traumatic Stress Disorder and the Criminal Law

It is a basic principle of the American legal system that, in order to be guilty of a crime, there must be proof that the defendant actually committed an offence (*actus reus)*, and that he possessed conscious and purposeful criminal intent to commit the offence in question (*mens rea).*[14] For the purposes of forming a criminal defence of insanity, PTSD can be used to challenge the presence of *mens rea.* More specifically, American appellate case law indicates that a successful insanity defence based on PTSD is more likely when the defence provides evidence that an expert found a "clear and direct connection between the defendant's PTSD symptoms and the criminal incident".[15] Symptoms of PTSD include "persistent re-experiencing of the traumatic event", "avoidance of stimuli associated with the trauma", "numbing of general responsiveness" and "persistent symptoms of increased arousal".[16] However, as these symptoms can be experienced in various ways, three typologies relevant to criminal behaviour of PTSD sufferers have been developed. These

[12] Constantina Aprilakis, "The Warrior Returns: Struggling to Address Criminal Behavior by Veterans with PTSD", *Georgetown Journal or Law & Public Policy*, 3 (2005): 542.; DSM-IV, 424.; Tramontin, "Exit Wounds", 24.
[13] Slovenko, "Waterin down of PTSD", 414.
[14] Laurence Miller, "Posttraumatic stress disorder and criminal violence: Basic concepts and clinical forensic applications", *Aggression and Violent Behavior,* 17, (2013): 359.
[15] Berger, McNeil and Binder, "PTSD as a Criminal Defence", *The Journal of the American Academy of Psychiatry and the Law*, 40, (2012), 519.
[16] American Psychiatric Association, *DSM-IV*, 424.

are *dissociative reactions*, *sensation-seeking syndrome*, and *depression-suicidal syndrome*.[17]

Let us briefly look at these typologies. During *dissociative reactions* individuals grossly misinterpret their surroundings and a triggering event causes them to wrongly believe that they are in a traumatic situation.[18] Sufferers with *sensation-seeking syndrome* compulsively seek out dangerous, sensational activities in order to re-experience arousal and feel more animate.[19] Finally, people with *depression-suicide syndrome* tend to feel guilty, hopeless and depressed, experiencing suicidal urges which the individual may attempt to act out through criminal behaviour.[20] These symptoms have been used to establish a number of different criminal defences, including defences of diminished capacity, automatism, and self-defence.[21] However, due to the public notoriety attached to the insanity defence,[22] more formally known as entering a plea of not guilty by reason of insanity (NGRI), this will be the focus of our discussion.

In the US, the success of an insanity defence based on PTSD has varied by state jurisdiction, depending on whether the state has elected to adopt the M'Naghten test or the American Law Institute (ALI) test for insanity.[23] Both the ALI standard and the stricter, more widely used M'Naghten test require the defence to show that, due to the symptoms of PTSD, the defendant did not

[17] John P. Wilson and Sheldon D. Zigelbaum, "The Vietnam Veteran on Trial: The Relation of Post-Traumatic Stress Disorder to Criminal Behavior", *Behavioral Sciences & The Law*, 3, (1983): 73-75.
[18] Elizabeth Delgado, "Vietnam Stress Syndrome and the Criminal Defendant", *Loyola of Los Angeles Law Review*, 19 (1986): 474.
[19] Burgess, Stockey and Coen, "Reviving the Vietnam Defence*",* 67.
[20] Ibid.
[21] Landy F. Sparr, *"*Mental Defences and Posttraumatic Stress Disorder: Assessment of Criminal Intent*", Journal of Traumatic Stress,* 9, no.3, (1996): 496.; Berger, McNeil and Binder, "PTSD as a Criminal Defence"*,* 512.
[22] Sparr, "Mental Defences", 407.
[23] Delgado, "The Vietnam Stress Syndrome", 474.

understand the wrongfulness of their act, or that they misunderstood the nature and quality of their act.[24] However, jurisdictions that adopt the ALI test offer greater chances of securing a successful plea of insanity because the test incorporates the M'Naghten rightfulness/wrongfulness distinction but has an additional volitional prong whereby the defence can also show that the symptoms of PTSD undermined the defendant's capacity to conform with the law even if they were able to appreciate the criminality of their act.[25] This is supported by analyses of published jury verdicts which suggest that, under the ALI standard, defendants who present an insanity defence based on dissociative symptoms have been successful.[26]

For the purpose of using PTSD to form an insanity defence under M'Naghten, the defence must meet a higher standard of proof when demonstrating proof of insanity in order to be found not guilty.[27] In combat-induced PTSD cases where an NGRI plea was successfully entered, case law shows that most defendants claimed that they were in a dissociative state at the time of committing the act – they believed that they were back in a combat situation and acted accordingly.[28] Dissociative reaction is arguably the only PTSD symptom that can lead to NGRI under the M'Naghten test because it is the only symptom which involves the impairment of the sufferer's ability to appreciate the nature, quality, or wrongfulness of their act.[29] However, contrary to initial fears amongst legal and psychiatric communities about

[24] Delgado, "The Vietnam Stress Syndrome", 483.
[25] Burgess, Stockey and Coen, "Reviving the Vietnam Defence", 70; Berger, McNeil and Binder, "PTSD as a Criminal Defence", 512
[26] Berger, McNeil and Binder, "PTSD as a Criminal Defence," 512
[27] Ibid; Sparr, "Mental Defences", 409.
[28] Slovenko, "The watering down of PTSD in criminal law", 414.
[29] Burgess, Stockey and Coen, "Reviving the Vietnam Defence", 69-70; Delgado, "The Vietnam Stress Syndrome", 483.

"[pushing] a mental disorder diagnosis to its outer limits to secure legal relief",[30] the disorder has not been open to widespread abuse in forming insanity defences in the immediate years since its official recognition.[31] Berger, McNeil, and Binder attest to this by highlighting that, out of fifteen published cases in which PTSD was used in an insanity defence, only two cases successfully entered a plea of insanity.[32]

The Problem of PTSD's Historical and Political Origins

However, the etiology of PTSD has led some to argue that the disorder "emerged as much from politics as from medicine."[33] In his sociological critique, Lembcke argues that PTSD is a textbook example of the medicalization of deviant behaviour by the media and the psychiatric profession.[34] In particular, Lembcke analyses how the *New York Times* covered anti-Vietnam War movements in 1972, arguing that the *Times* outwardly supported anti-Vietnam war movements but framed the issues within a mental health discourse so as to pathologize the veterans' legitimate political behavior and vilify their public image.[35] He contends that the media`s portrayal of the tormented war veteran had a collateral effect on the subsequent conceptualization of PTSD by the psychiatric profession, and that this medical definition of PTSD served a political purpose: it undermined anti-war

[30] Paul S. Applebaum, Rose Zoltek Jick, Thomas Grisso, Daniel Givelber, Eric Silver and Henry J. Steadman, "Use of Posttraumatic Stress Disorder to Support an Insanity Defence*", The American Journal of Psychiatry* 150, no. 2 (1993): 230.
[31] Ibid., 232.
[32] Berger, McNeil and Binder, "PTSD as a Criminal Defence", 511; See United States v. Rezaq, 918 F. Supp. 463 (D.D.C. 1996) and Commonwealth v. Tracy, 539 N.E.2d 1043 (Mass. App. Ct.1989).
[33] Katherine Boone, "The Paradox of PTSD", *The Wilson Quarterly* 35, no.4(2011): 19.
[34] Jerry Lembcke, The "Right Stuff" Gone Wrong: Vietnam Veterans and the Social Construction of Post-Traumatic Stress Disorder, *Critical Sociology* 24 (1998): 46.
[35] Ibid., 43.

movements, increased tensions between liberal and radical factions of these same movements, and created "a more humanistic way of thinking about Vietnam veterans and their home-coming experiences".[36]

However, Lembcke arguably overstates his critique of PTSD as being a product of political and sociological factors at a specific historical moment. Physiological and empirical evidence gathered over the years support a relation between other traumatic events besides war, such as subjection to Holocaust, rape, motor vehicle accidents and PTSD symptoms, specifically dissociative states.[37] Furthermore, biological analysis suggests that repeated exposure to trauma, like in cases of war or abuse, can have a taxing effect on an individual's mental, emotional and physical wellbeing.[38] Thus, contrary to sociological arguments such as Lembcke's, PTSD is arguably more than just a socio-political construction. Victims of trauma can experience legitimate emotional and behavioral disturbances that manifest in significant symptoms of stress.[39] Therefore, there is a pressing need for the legal system to recognize the well-documented psychological reality of reactions to trauma.[40]

The Problem of Causation

That being said, the role of PTSD in insanity defences is not without complications and there are certain qualifications on its use that are essential to balance the concerns of legal theorists, psychologists, and sociological

[36] Ibid.
[37] Karni Ginzburg, Cheryl Koopman, Lisa D. Butler, Oxana Palesh, Helena C. Kraemer, Catherine C. Classen and David Speigel, "Evidence for a Dissociative Subtype of Post-Traumatic Stress Disorder Among Help-seeking Childhood Sexual Abuse Survivors", *Journal of Trauma & Dissociation* 7 no.2 (2006): 9-10.; State v. Felde, 422 So. 2d 370, 378 (La. 1982).
[38] Aprilakis, "The Warrior Returns", 546.
[39] Richard J. McNally, "Progress and Controversy in the Study of Posttraumatic Stress Disorder," *Annual Review of Psychology, 54,* (2003): 230-231
[40] Tramontin, "Exit Wounds", 23.

thinkers. From the perspective of legal theory, one challenge of using PTSD to form an insanity defence is that it requires the defence to prove two levels of causation.[41] First, there must be evidence of a causal link between the traumatic stressor and the PTSD symptoms. Secondly, the defence must show a clear connection between the PTSD symptoms and the criminal act.[42] The problem lies in the fact that evidence of a causal link often depends heavily on the defendant's own testimony and that this in turn creates the potential for PTSD to become a "get out of jail free card".[43] This would have an injurious effect on the repute and efficiency of the criminal justice system.

The first level of causation is arguably less contentious than the second because expert testimony is acceptable on both the Frye and Daubert standards of admissibility[44] and can be used to confirm the connection. Under the Frye standard, it is required that testimony be "sufficiently established to have gained general acceptance within the relevant scientific community".[45] This criterion of general acceptance has now been incorporated into the Daubert standard. The difference is that, under the Daubert standard, the trial courts must establish that expert witness testimony is both reliable in the sense that it is scientifically valid and relevant to the case in question.[46] This can be demonstrated through evidence that the techniques used for diagnosis were reliable, or that the relevant professional and academic community generally accept the experts views. Under this standard, case law has

[41] Sparr, "Mental Defences", 418.
[42] Andrea Friel, Tom White and Alastair Hull, "Posttraumatic stress disorder and criminal responsibility", *The Journal of Forensic Psychiatry and Psychology* 19, no.1 (2008): 76.
[43] Burgess, Stockey and Coen, "Reviving the Vietnam Defence," 74-76.
[44] Berger, McNeil and Binder, "PTSD as a Criminal Defence", 510.
[45] Pamela J. Jensen, "Frye Versus Daubert: Practically the Same," *Minnesota Law Review,* 87, (2003): 1581
[46] Ibid. 1583

established that there is a "large and growing research base supporting the diagnosis of PTSD … [as well as its] widespread acceptance in the mental health professions".[47] This widespread agreement also satisfies the *Frye* standard of admissibility[48] and appellate courts in numerous jurisdictions have favorably regarded[49] the evaluation of the defendant by medical experts who can confirm the causal link between the trauma-inducing event and PTSD symptoms.[50]

The second level of causation is more contentious. From the perspective of legal theory, it is important that causation between PTSD symptoms and the criminal act be disentangled from criminal acts caused by other factors, such as substance abuse. As mentioned, in order for the defendant to form a successful insanity defence based on PTSD, an expert must testify to a direct connection between the criminal incident and the PTSD symptoms. However, there is strong evidence to support the high comorbidity between PTSD and alcohol problems, which in turn implies a strong risk for aggression.[51] For example, in their study of over a thousand Vietnam veterans, Taft et al. found that symptoms of PTSD, such as hyper arousal, were correlated with a particularly high frequency of aggression amongst those with alcohol problems.[52] The high comorbidity of PTSD, substance abuse and even depression[53] renders the

[47] Berger, McNeil and Binder, "PTSD as a Criminal Defence," 510
[48] Ibid, 511.
[49] Ibid., 519.
[50] Ibid.
[51] Casey T. Taft, Danny G. Kaloupek, Amy D. Marshall, Jeremiah A. Schumm, Jillian Panuzio, Daniel W. King and Terence M. Keane, "Posttraumatic Stress Disorder Symptoms, Physiological Reactivity, Alcohol Problems, and Aggression Among Military Veterans," *Journal of Abnormal Psychology,* 116 (3), (2007): 499; Friel, White and Hull, "Posttraumatic stress disorder and criminal responsibility," 81.
[52] Taft et al., "Posttraumatic Stress Disorder Symptoms," 504.
[53] Tramontin, "Exit Wounds," 40.

determination of criminal responsibility a complex task because of the implied difficulty in isolating PTSD as the direct cause of a violent criminal act.[54]

What is also problematic about establishing the second causal criterion is that it relies even more heavily than the first on subjective witness testimony. In their review of American case law, Burgess, Coen, and Stockey highlight cases where witness testimonies supported a diagnosis of PTSD but failed to establish that PTSD caused the defendant to commit the offence in question.[55] In the case of *State v. Simonson* (1983), the defence presented testimonies from family members, co-workers and two psychologists, all of whom testified that the defendant either had post-traumatic stress disorder or displayed symptoms indicative of PTSD.[56] However, despite strong evidence that PTSD symptoms were present, testimonies from two other co-workers challenged the defence's argument that the accused was insane at the time of the incident. In other words, while witness testimony on behalf of the defence strongly supported the defendant's diagnosis of PTSD, it was ultimately insufficient to prove that his PTSD caused him to commit the offences in question. Simonson was ultimately found guilty on two counts of murder and one count of attempted murder.

The same issue of causation arose in *State v. Felde* (1982) when the defence tried to demonstrate a causal link between the defendant's PTSD and the shooting of a police officer whilst the accused was escaping from prison. As in the Simonson case, multiple psychiatrists testified on the accused's behalf,

[54] Friel, White and Hull, "Posttraumatic stress disorder and criminal responsibility," 81.
[55] Burgess, Stockey and Coen, "Reviving the Vietnam Defence," 75-76.
[56] State v. Simonson, 100 N.M. 297, 301, 669 P.2d 1092, 1096 (1983).

asserting that Felde had a "chronic form of post-traumatic stress disorder".[57] However, one of the experts supporting Felde's insanity defence conceded that the accused could have committed the crime in order to avoid going back to prison.[58] With this alternative explanation in mind, the jury ultimately decided that the accused was not insane at the time of the incident. In their analysis, Burgess et al. highlight these cases to illustrate how expert testimony and witnesses' descriptions of PTSD can be insufficient to establish a causal link between the PTSD symptoms and the offence that would otherwise yield a finding of NGRI.[59] In sum, these cases illustrate the difficulty of establishing causation between PTSD symptoms and the criminal act in question.

That being said, proving a causal link between a dissociative state and a crime is not impossible, and the prevalence of dissociative symptoms speaks to the importance of being receptive to the possibility of an insanity defence based on PTSD.[60] In terms of prevalence, numerous studies highlight dissociative symptoms of PTSD in veterans of recent wars as well as victims of physical and sexual abuse, particularly when the abuse occurs during childhood.[61] Moreover, there is also evidence to suggest that many experiences of PTSD symptoms are chronic.[62] Because PTSD is both a prevalent and chronic disorder, it would be improper, from a psychological point of view, for the legal system to harbour unnecessary bias against PTSD-based defences.

[57] State v. Felde, 422 So. 2d 370, 378 (La. 1982).
[58] Ibid.
[59] Burgess, Stockey and Coen, "Reviving the Vietnam Defence," 76.
[60] Ibid.
[61] Gover, "Iraq as a Psychological Quagmire," 561; Friel, White and Hull, "Posttraumatic Stress Disorder and criminal responsibility," 65.
[62] Ibid.

Furthermore, there are also objective methods of forensic analysis that arguably help solve the issue of determining causation. While some may point to newly developed neuro-imaging techniques as diagnostic tools for determining causation, the reliability of such technology has yet to meet the relevant national standards.[63] Instead, Sparr recommends a process of nondirective interviewing followed by a more specific secondary inquiry into each PTSD diagnostic criterion in order to ascertain the sincerity of claims regarding dissociative and other PTSD symptoms and specifically their relation to the criminal act in question.[64] In addition, Sparr identifies eleven factors that increase the likelihood of a defendant's criminal act being genuinely caused by their PTSD-symptoms, including a fortuitous choice of victim, lack of motivation, lack of a criminal record, and a possible presence of amnesia.[65]

The Problem of Malingering

A related issue is that of malingering, where defendants intentionally reproduce posttraumatic symptoms with the specific aim of diminishing their criminal responsibility. Unfortunately, malingering is endemic to the nature of PTSD and reflects a tension that is inherent to forensic enterprise because there will always be an incentive for defendants to lie.[66] From legal and sociological perspectives, newer subset syndromes of PTSD such as Battered Women syndrome pose a particular concern with regards to malingering. This is because syndromes are constantly being invented while old ones are

[63] Bottalico and Bruni, "Post traumatic Stress disorder, neuroscience and the law," 119.
[64] Sparr, "Mental Defences," 419.
[65] Ibid., 420.
[66] Applebaum et al. "Use of Posttraumatic Stress to Support an Insanity Defence," 230.

constantly being rediscovered without being formalized in the DSM, making it more difficult for experts to ascertain whether a patient has a genuine trauma disorder or not.[67] Particularly after the extensive media coverage of the 9/11 terrorist attacks, the public's knowledge and understanding of trauma has been enhanced, making it more likely for individuals to be able to learn and reproduce the textbook symptoms of PTSD in order to secure an NGRI plea.[68] This puts an enormous responsibility upon the psychiatric community to be vigilant when diagnosing accused persons of PTSD, particularly with subset syndromes. Otherwise, both the psychiatric community and the judicial system stand to lose their accuracy and credibility.[69] Indeed, failing to accurately diagnose offenders may lead the public to perceive the judicial process as procedurally unfair, which would in turn corrode the legitimacy and stability of the justice system as a whole.[70]

In addition, increased public awareness makes it more likely that jurors will be familiar and sympathetic to a defendant claiming PTSD.[71] Malingering has particularly pertinent implications for the legal system because it threatens the justice system's ability to reliably determine guilt. The overtly social and environmental etiology of PTSD indicates a broader challenge as well: allowing social or biological circumstances to account for individual behavior would arguably pose a threat to the underlying legal principle that individuals are morally and legally culpable agents, capable of autonomous action.[72]

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[67] Slovenko, "Watering down of PTSD", 420.
[68] Sparr, "Mental Defences" 419.
[69] Slovenko, "Watering down of PTSD", 420.
[70] Lauren M. Ouzeil, "Legitimacy and Federal Enforcement Power," *The Yale Law Journal,* 123(7), (2014)
[71] Burgess, Stockey and Coen, "Reviving the "Vietnam Defence", 73.
[72] Aprilakis, "The Warrior Returns," 561.

However, there are also objective ways of assessing suspected malingering so as to address these concerns about criminal responsibility while respecting the reality of dissociative-state PTSD symptoms in the public domain. For instance, clinical examination can focus on the consistency, language, emotional congruence, or nature and pattern of reported symptoms in the individual's self-report and presentation.[73] Accounts that come naturally and spontaneously, are consistent with external reports, and contain mentions of fluctuating symptom severity, are likely genuine symptoms of posttraumatic stress.[74] There are also numerous psychological measures that can be used to ascertain malingering. Of these, the Structure Interview of Reported Symptoms offers the most standardized means of determining malingered symptoms.[75] In fact, the methods for identifying PTSD symptoms and their severity are not only well established but have undergone exponential improvements over the years.[76] Thus, objective, established forms of forensic evaluation, when correctly applied, offer means around the obstacles associated with using PTSD as a basis for insanity defences.

Concluding Remarks

Finally, although non-combat related PTSD symptoms are widely prevalent, the role of PTSD in insanity defences seems most viable in cases where PTSD is induced from combat-related trauma. Subset syndromes of PTSD such as Battered Woman or Child Abuse syndrome are also characterized

[73] Gillian Mezey, "Post-traumatic stress disorder and the law," *Wider Clinical Issues* 5, no. 7 (2010): 245.
[74] Ibid.
[75] Ibid.
[76] Blair E. Wisco, Brian P. Marx, Terence M. Keane, "Screening, Diagnosis, and Treatment of Post-Traumatic Stress Disorder," *Military Medicine, 177,* 8:7, (2012); 11.

by PTSD symptoms. Currently, expert testimonies on these non-combat trauma syndromes do not possess the same widespread medical consensus that would allow them to meet the requisite legal standards for insanity defences. However, with greater effort from the psychiatric community, these subset syndromes can and should garner the same psychiatric recognition that would enable such syndromes to form a more effective criminal defence of insanity.

In conclusion, there are serious and valid issues concerning the use of PTSD symptoms as a basis for insanity defences, namely the problems of establishing causation and malingering. However, although these problems are formidable, they are not insurmountable. Mental health professionals who provide testimony in insanity defences can play a significant role in overcoming these challenges. They have a responsibility to be constantly perceptive to malingered PTSD symptoms in order to uphold fundamental principles of legal culpability and should provide specific evidence of causation between traumatic stressors, dissociative stressors, and the criminal act.[77] It is also important to consider that combat-related dissociative symptoms are most applicable to insanity defences. Awareness of potential limitations will allow medical and legal professions to form more accurate and reliable insanity defences based on PTSD symptoms; this is imperative in an age where exposure to trauma and life stressors has grown, and there is a growing need to recognize the effects of such trauma on individual human behavior.[78]

[77] Sparr, "Mental Defences," 421.
[78] Ibid.; Thomas L. Hafemeister and Nicole A. Stockey, "Last Stand? The Criminal Responsibility of War Veterans Returning from Iraq and Afghanistan with Posttraumatic Stress Disorder," *Indiana Law Journal*, 85 (2010): 97.

In a few decades, the relationship between the environment, resources and conflict may seem almost as obvious as the connection we see today between human rights, democracy and peace."
– Wangari Maathai

Photo Credit: Jonas Nilsson Lee

GLOBAL WARMING SCIENCE VS. CLIMATE CONTRARIAN SPIN: AN ANALYSIS OF THE IPCC AND THE NIPCC REPORTS

Andrew Foster

INTRODUCTION

In the documentary *Climate of Doubt*, PBS's *Frontline* exposes the institutions and scientists who dispute anthropogenic global warming. This essay focuses on The Heartland Institute and Fred Singer, both featured in the *Frontline* documentary. Together, The Heartland Institute and Singer publish the Nongovernmental International Panel on Climate Change (NIPCC) report, in opposition to the United Nations' (UN) Intergovernmental Panel on Climate Change (IPCC) report. The IPCC's 1990, 1995, 2001, 2007 and 2013 reports are considered the definitive word on anthropogenic global warming, while the NIPCC's 2009, 2011 and 2013 reports represent the climate contrarians' most organized response. The vast majority of scientists (approximately 97%) agree that anthropogenic global warming is problematic. Despite this virtual consensus, climate contrarians such as Singer have managed to gain a disproportionately large media presence. They have also been successful in influencing government environmental policy. Whether these climate contrarians deserve this attention is a topic of this essay, which will ultimately be determined based on the veracity of their claims. This paper focuses on the biases of the IPCC, The Heartland Institute, Singer, and the verifiable evidence produced by each side. It is the conclusion of this essay that the work of The Heartland Institute and Fred Singer is highly partisan - that they single out

studies to promote an agenda driven by greed and ideology. Although there are weaknesses in the evidence produced by both groups, the IPCC builds a more convincing case.

I. THE IPCC INVESTIGATED

Established by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO), the IPCC is charged with assessing climate change. It receives its funding from UNEP and the WMO, as well as from various governments. It should be noted, however, that the UNEP and WMO are UN bodies that produce environmental reports independent of one another. Their reports are well respected and used by other agencies, such as NASA.[1] The IPCC does not conduct research itself; instead, it reviews recent studies produced by scientists from around the world. With 195 member countries and thousands of contributing scientists, the IPCC has a wealth of information at its disposal. All of the studies are contributed on a voluntary basis and the findings are condensed into one report.[2] For its 2007 report, the IPCC won a joint Nobel Prize alongside Al Gore. [3]

Many accusations of bias have been levelled against the IPCC, ranging from questions about their review process to basic truthfulness. In 2010, following a mistake regarding the Dutch sea level in the 2007 IPCC report, the Dutch environment minister Jacqueline Cramer called on the Netherlands Assessment Agency (PBL), an independent body, to review the IPCC's reports for flaws. In its audit, the PBL found only one error that it deemed serious. The

[1] "National Aeronautics and Space Administration." *WMO UNEP Ozone Assessments and Related Documents*.
[2] "Organization." *IPCC - Intergovernmental Panel on Climate Change*.
[3] "The Nobel Peace Prize 2007." *The Nobel Peace Prize 2007*.

mistake was in a statement about African fisheries, which had been over-generalized.[4] While such errors are unfortunate, they are inevitable in large-scale reports. And, ultimately, the productivity of fisheries in Africa was not highly relevant to the conclusions drawn. The PBL, having reviewed the IPCC reports, still uses them as a valuable resource of information for its own publications to this day.[5]

In 2007, it was also reported that the IPCC did not properly review the information that it released. In response, the reviewers' comments and editors' responses were made public. Over 2,400 experts reviewed the 2007 IPCC report, which had a core writing team of 40 authors.[6] Below is a chart showing the number of reviewers' comments made for each chapter of the report.[7]

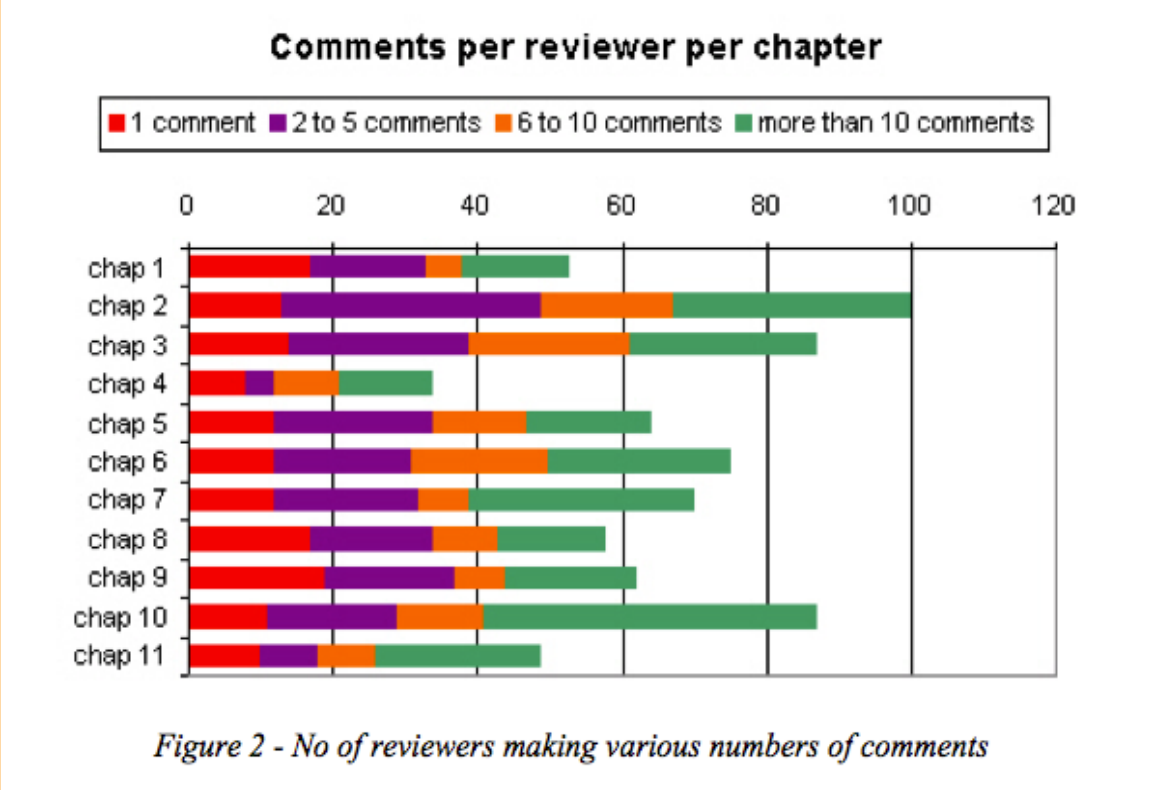

Figure 2 - No of reviewers making various numbers of comments

[4] The Economist Online. "Bias and the IPCC Report Accentuate the Negative." *The Economist.*
[5] MTJ, Kok, Bakkes JA, and Eickhout B. "Lessons from Global Environmental Assessments." *PBL Netherlands Environmental Assessment Agency*.
[6] Solomon, S., D. Qin, M. Manning, and Z. Chen. "III.3 Country Groupings." *AR4 SYR Synthesis Report Annexes.*
[7] McLean, John. "An Analysis of the Review of the IPCC 4AR WG I Report."

In the above graph, Chapter 4 appears to be comparatively poorly reviewed. However, this chapter concerns changes in snow, ice and frozen ground, a new field of study for which information is limited. A similar list of editors and reviewers has not been released for the 2013 report, although a breakdown of the number of experts who reviewed each draft as well as the number of comments made by them is available on the IPCC's website. This website shows that a minimum of 1,000 reviewers and a maximum of over 1,400 reviewers made a total of 136,706 comments on the six drafts of the 2013 report.[8] Moreover, the IPCC is known to include prominent global warming contrarians on its review board. For instance, Patrick Michaels is a contributing author and reviewer of the IPCC report while also acting as a notable climate contrarian and as the director of the Centre for the Study of Science at the Cato Institute, a libertarian think tank.[9] Thus, findings from both sides of the climate debate are included in the IPCC's models.

II. AN INQUIRY INTO FRED SINGER, THE HEARTLAND INSTITUTE AND THE NIPCC

In contrast, of the 35-50 reviewers of the NIPCC reports, most, if not all, are climate skeptics – although it is not definitive that they are all climate skeptics because some of the reviewers have chosen to remain anonymous.[10] This immediately lends bias to the report's findings, as the information is not balanced. In addition to the problems of credibility within the reports, there are problems of credibility with the NIPCC's founder, Fred Singer. A review of

[8] "IPCC - Activities." *IPCC - Activities*. Intergovernmental Panel on Climate Change.
[9] "Patrick J. Michaels." *Cato Institute*.
[10] Cook, John. "Climate Science Glossary." *Skeptical Science*.

Singer's resume reveals a history of "professional contrarianism."[11] For example, memos have been discovered in which Singer solicited $20,000 from the Tobacco Institute to fund his research into discrediting the science that shows smoking is harmful.[12] Singer's past interviews and publications also suggest that he is a "free-market environmentalist." In articles published over the course of his career, Singer expresses the belief that environmental conservation will occur naturally as a result of increased oil prices which lower demand, thus forcing the adoption of alternative energy sources. In the 1990s, during an interview, he asserted that "the underlying effort [of most climate scientists] seems to be to use global warming as an excuse to cut down the use of energy." He went on to say, "It's very simple: if you cut back the use of energy, then you cut back economic growth. And believe it or not, there are people in the world who believe we have gone too far in economic growth."[13] Singer's quotes subjugate the environment to the economy. He implies that the health of the world is secondary to the wealth of a country. This ideology puts Singer at odds with the majority of scientists who fear that the health of the world is in serious and immediate danger.

The Heartland Institute has a similar history of contrarianism. From an ideological perspective, The Heartland Institute is libertarian. Libertarian ideology dictates the promotion of individual liberty, which is liberty that is inextricably connected to limited government and free enterprise. While liberty is undoubtedly a good thing, it can be dangerous when lies and false information are disseminated to take this good to an extreme. For example,

[11] Frontline, Climate of Doubt
[12] Hoggan, Jim. "No Apology Is Owed Dr. S. Fred Singer, and None Will Be Forthcoming." *DeSmogBlog*.
[13] Scheuering, Rachel White. *Shapers of the great debate on conservation: a biographical dictionary.*

The Heartland Institute has been linked to those attempting to show that smoking does not cause cancer. The Heartland Institute even has a "smokers lounge" on its website where people can go "for sound science, economics, and legal commentary on tobacco issues."[14]

As for issues surrounding funding, it has been discovered that Singer was a paid consultant for ARCO, ExxonMobil, Shell Oil Company and the Unocal Company. Additionally his organization, the Science & Environmental Policy Project (SEPP), has received grants from ExxonMobil. Similarly, The Heartland Institute has been paid at least $675,000 by ExxonMobil since 1998 (but was dropped by the company in 2007 because of bad press).[15] It has become harder to track the source of Singer and The Heartland Institute's funds as they now keep their donor lists anonymous. Donor middle-organizations have developed, allowing the transfer of funds to occur anonymously, which encourages larger donors who may otherwise be embarrassed to associate themselves with Singer and The Heartland Institute. However, from time to time documents listing donors are leaked, revealing donations from General Motors, Microsoft, Koch Industries, and Altria (the parent company of cigarette manufacturer Philip Morris).[16] Funding from such companies, whose profits are so inextricably tied to environmental policy, is a serious bias, especially as Singer and The Heartland Institute disseminate information so obviously beneficial to these big businesses' profits.

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[14] "Welcome to Heartland's Smoker's Lounge!" *Home*.
[15] "Dealing in Doubt." *Greenpeace*.
[16] DEMELLE, BRENDAN. "Heartland Institute Exposed: Internal Documents Unmask Heart of Climate Denial Machine." *DeSmogBlog*.

In short, Singer and The Heartland Institute have a history of spreading dangerous and misleading information - in addition to a controversial donor relationship - influencing their perception of what a healthy society is.

III. THE IPCC's SCIENTIFIC EVIDENCE

Now that the relevant biases of each side have been addressed, the science of global warming must be investigated. In its reports, the IPCC creates global averages of important changes. These averages are useful because they eliminate misleading information collected on a regional basis that does not in fact reflect the true state of the global climate – the IPCC points out that regional differences may differ as much as 100% from the global average.[17] The IPCC also focuses on a much larger time frame than the 20 years during which it has been producing its reports. For non-scientists, seeing these averages does two things. First, a general trend of warming becomes apparent. Secondly, flaws in the report, due to a lack of research and other difficulties associated with measuring the climate, become clear. Thus, I have created four charts (set out below) that contain important measurements from the 1990, 1995, 2001, 2007 and 2013 reports. These measurements are: greenhouse gases in the atmosphere; global mean temperature increases; average rate of global mean sea-level rise; and thinning of Arctic ice.

[17] Stocker, T. F., D. Qin, and G. K. Platner. "Climate Change 2013: The Physical Science Basis." *Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Summary for Policymakers (IPCC, 2013)* (2013). Page TS-5.

Greenhouse Gases in the Atmosphere:

	Carbon Dioxide (CO2) (levels were at 280 ppm from 1000-1750)	Methane (CH4) (levels were at 700 ppb from 1000-1750)	Nitrous Oxide (N20) (levels were at 270 ppb from 1000-1750)
1990	353 ppm	1720 ppb	320 ppb
1995	365 ppm	1745 ppb	314 ppb
2001	368 ppm	1750 ppb	316 ppb
2007	379 ppm	1,774 ppb	319 ppb
2013	390.5 ppm	1803 ppb	324.2 ppb

Sources:
(http://www.ipcc.ch/ipccreports/far/wg_I/ipcc_far_wg_I_chapter_01.pdf,6);
(http://www.ipcc.ch/publications_and_data/ar4/wg1/en/ch2s2-3.html#2-3-1,table2.1);
(http://www.ipcc.ch/pdf/climate-changes-2001/synthesis-syr/english/summary-policymakers.pdf,5);
(http://www.ipcc.ch/ipccreports/tar/wg1/221.htm);(http://www.climatechange2013.org/images/uploads/WGIAR5_WGI-12Doc2b_FinalDraft_Chapter02.pdf).

Global Mean Temperature Increase (per decade):

1990	1995	2001	2007	2013
0.3°C	0.3 - 0.6°C	0.4 - 0.8°C	0.74°C	0.05°C

In 2013, these numbers were updated reflecting much slower warming than previously predicted: From 1951-1998 the Earth warmed at a rate of 0.12°C [0.08 to 0.14] per decade. From 1998–2012 the rate of warming slowed to an average of about 0.05°C [–0.05 to +0.15] per decade (2013 Report, 2-4).

Sources:
(http://www.ipcc.ch/pdf/climate-changes-2001/synthesis-syr/english/summary-policymakers.pdf,5);
(http://www.ipcc.ch/publications_and_data/ar4/wg1/en/ch2s2-3.html#2-3-1);
(http://www.ipcc.ch/pdf/climate-changes-2001/synthesis-syr/english/summary-policymakers.pdf);
(http://www.climatechange2013.org/images/uploads/WGIAR5_WGI-12Doc2b_FinalDraft_Chapter02.pdf, TS-26).

The Average Rate of Global Sea Level Rise (per year):

1990	1995	2001	2007	2013
10 - 25 cm	10 - 25 cm	10 - 20 cm	17 cm	18 ± 0.05 cm

Sources:
(http://www.ipcc.ch/ipccreports/far/wg_I/ipcc_far_wg_I_chapter_09.pdf,274);
(http://www.ipcc.ch/publications_and_data/ar4/wg1/en/ch2s2-3.html#2-3-1);
(http://www.ipcc.ch/pdf/climate-changes-2001/synthesis-syr/english/summary-policymakers.pdf);
(http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1-spm.pdf,7);
(http://www.climatechange2013.org/images/uploads/WGIAR5_WGI-12Doc2b_FinalDraft_Chapter13.pdf, 14-59).

Arctic Ice Thinning - Summer and Winter (by percentage since 1978, per decade):

1990	1995	2001	2007	2013
N/A:	N/A	Summer: 15% Winter: 10%	Summer: 7.4% Winter: 2.7%	Summer: 11.5% Winter: 3.5-4.1%

It should be noted that in 1990 and 1995 the Arctic ice sheets were not well observed or understood.[18]

Sources:
(http://www.ipcc.ch/pdf/climate-changes-2001/synthesis-syr/english/summary-policymakers.pdf,6);
(http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1-spm.pdf,7);
(http://www.climatechange2013.org/images/uploads
WGIAR5_WGI-12Doc2b_FinalDraft_TechnicalSummary.pdf, TS-8).

The above charts clearly indicate that greenhouse gases in the atmosphere are increasing and that sea levels are rising. As well, it is clear that the projections of future temperature rises are subject to fluctuations (although the temperature is still rising). Finally, it is apparent that there may be problems with the Arctic sea ice projections due to limited data, given that

[18] Houghton, John T., ed. Climate change 1995: The science of climate change: contribution of working group I to the second assessment report of the Intergovernmental Panel on Climate Change.

this issue is relatively new. The information in the charts does not in itself explain global warming. Fortunately, the IPCC is able to give this data context.

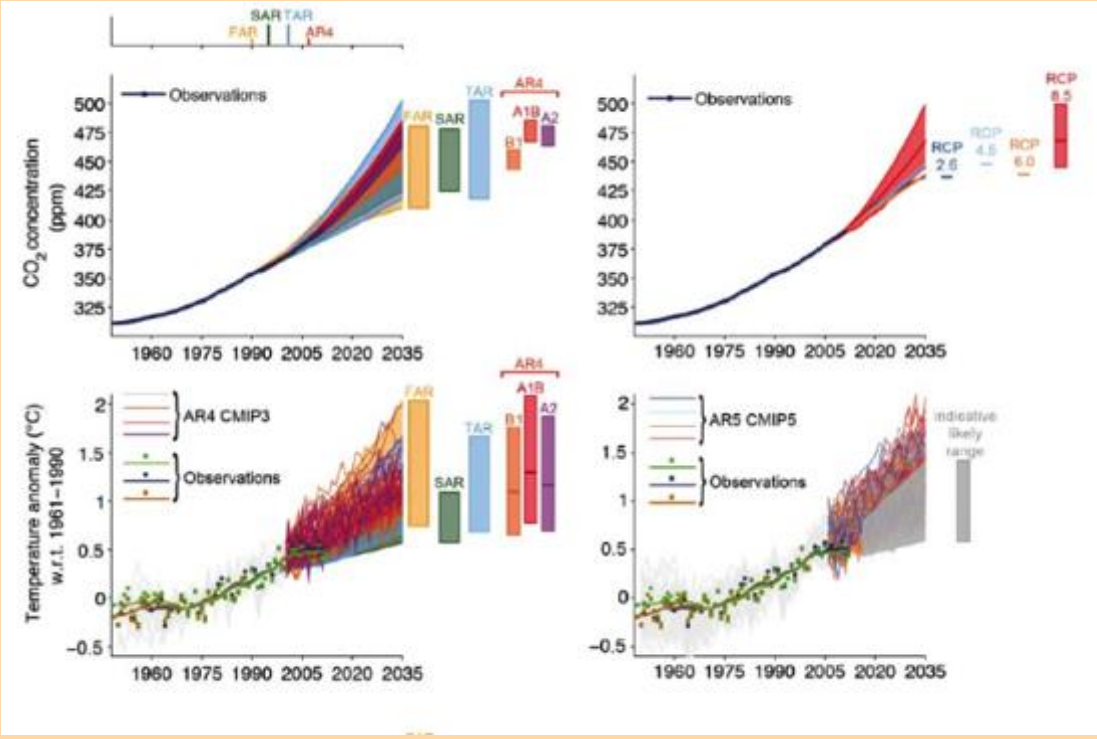
Based on the greenhouse gas chart above, the concentrations of carbon dioxide, methane, and nitrous oxide in the atmosphere today exceed concentrations recorded over the past 250 years. This information is derived from recorded levels as well as from other scientific techniques for determining gas concentrations, such as reading ice cores. Ice cores are most effective at recording gas concentrations at higher altitudes and they are generally the only proxy data available to scientists. There are timescale uncertainties, diffusion uncertainties (meaning chemicals can enter ice as a result of run-off) and sampling uncertainties (due to a non-continuous rate of snowfall); however, all of these uncertainties may be reduced with a careful selection of ice cores, multiple samples of ice cores, and the use of simulations.[19] Looking at ice cores allows scientists to study gas concentration levels of the past. When this technique is applied, it is revealed that the current concentrations of greenhouse gases in the atmosphere exceed the levels during every other period over the last 800,000 years.[20]

In a study recently accepted for publication in the Journal of Geophysical Research and led by scientists at NASA's Goddard Institute for Space Studies, records of rising and falling CO2 levels in the atmosphere were linked to warming periods in which the glaciers melted. The study focused on time periods when CO2 levels were at 180 ppm and 280 ppm. David Rind, a co-

[19] Steig, Eric J. "Sources of Uncertainty in Ice Core Data A Contribution to the Workshop on Reducing and Representing Uncertainties in High-Resolution Proxy Data International Centre for Theoretical Physics."
[20] Stocker, T. F., D. Qin, and G. K. Platner. "Climate Change 2013: The Physical Science Basis." *Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Summary for Policymakers (IPCC, 2013)* (2013). TS-15

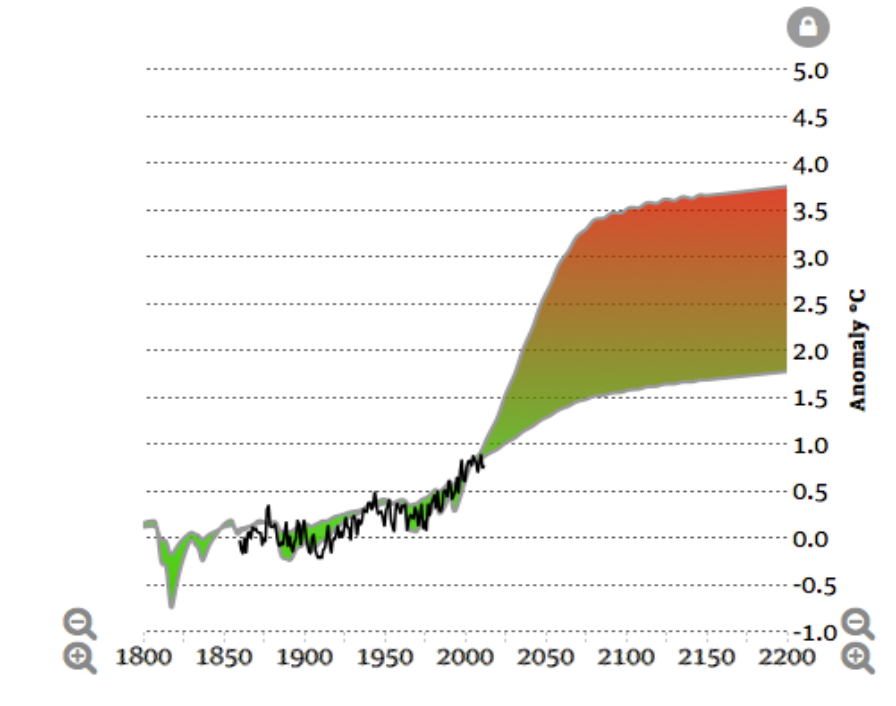
author of the study, said, “when carbon dioxide increases, more water vapour returns to the atmosphere”, which in turn causes the atmosphere to heat up. He went on to say that “today we are in uncharted territory as carbon dioxide approaches 390 ppm in what has been referred to as the ‘superinterglacial.’”[21] Below is a graph from the IPCC’s 2013 report demonstrating the correlation between rising greenhouse gas concentrations and temperature.[22] Below that chart is a second consistent, but not identical, chart that confirms the IPCC’s findings, provided by the Environmental Change Institute, School of Geography and the Environment, and Department of Physics, University of Oxford:[23]

<u>Rising Greenhouse Gas Concentrations and Temperatures</u>:



[21] Dunbar, Brian. "Carbon Dioxide Controls Earth's Temperature." *NASA*.
[22] Stocker, T. F., D. Qin, and G. K. Platner. "Climate Change 2013: The Physical Science Basis." *Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Summary for Policymakers (IPCC, 2013)* (2013). TS-96
[23] Clark, Duncan. "UN Climate Change Panel: Two Graphs That Tell the Real Story of the IPCC Report." *Theguardian.com*.

Rising Greenhouse Gas Concentrations and Temperatures:



Depicted in these graphs are greenhouse gas emissions of the past with the corresponding temperatures of the time, and projected emissions versus future temperatures. These graphs show a consistent rise in temperature following a rise in emission concentrations. That being said, the relationship between emissions and temperature does not appear to be as strong as originally predicted. These improvements, however, are hardly reassuring. In an article published by *The Guardian* it was argued that the new emission trends indicate that, over the next century, the globe may warm by 6°C (not the projected 7°C). With the lowest emissions predicted, this works out to a rise of 3°C (instead of 3.5°C).[24]

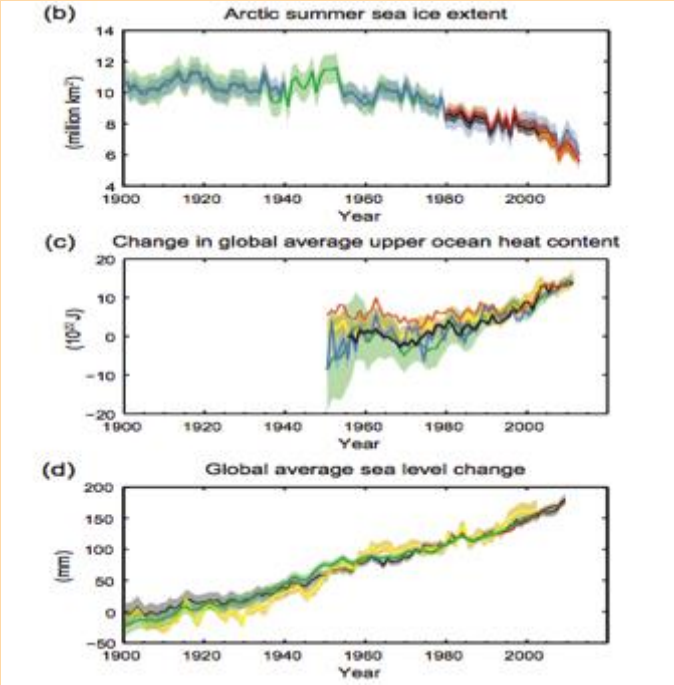
[24] Clark, Duncan. "UN Climate Change Panel: Two Graphs That Tell the Real Story of the IPCC Report." *Theguardian.com*.

The IPCC raises a second issue, which may account for the decreasing rate at which the planet appears to be warming. This explanation, also used by climate contrarians, is natural variation. Since 2001, the overall mean temperature has risen at a rate outside of observational certainty. This could be a result of environmental events, such as the eruption of Mount Pinatubo in 1991, when volcanic material ejected into the atmosphere converted sulphur dioxide to sulphuric acid. This conversion occurred in the stratosphere (about 50 km above the Earth's surface) and it formed a fine sulphite aerosol. These aerosols reflected the sun's radiation back into space, ultimately cooling the earth.[25] The eruption of Mount Pinatubo was enormous, ejecting 20 million metric tons of sulphur dioxide into the stratosphere, making it one of the largest eruptions of the twentieth century.[26] Environmental models do not, however, include the impacts of such eruptions. The IPCC also points to additional environmental events, including El Niño in 1997–1998 and La Niña in 1999–2001 that led to unusually strong and warm ocean currents (the effects of which are not fully known).[27]

Finally, rising sea levels and the melting of Arctic sea ice must be addressed. The IPCC says with 90% confidence that sea levels have risen in the 21st century.[28] The primary cause of this rising sea level is thermal expansion. It is stated with 100% confidence that this thermal expansion will continue past the year 2100 for many centuries to come. This sea level rise corresponds

[25] "Volcanic Gases and Climate Change Overview." *Volcanic Gases and Climate Change Overview*.
[26] "Volcanic Gases and Climate Change Overview." *Volcanic Gases and Climate Change Overview*.
[27] Houghton, John T., ed. Climate change 1995: The science of climate change: contribution of working group I to the second assessment report of the Intergovernmental Panel on Climate Change. TS-95.
[28] Ibid, 5.

to rising CO2 concentrations in the atmosphere.[29] Below are three charts, which taken together, show shrinking Arctic ice and corresponding rises both in ocean temperature and sea level.



[30]

There is evidence that the Arctic sea ice increases and decreases according to regional specific factors. In some areas sea ice has increased while in other areas it has decreased. However, using satellite images from 1979 to 2012, the IPCC says that the annual mean of Arctic sea ice has decreased by 0.45 million to 0.51 million km^2 per decade in winter and 0.73 to 1.07 million km^2 in the summer.[31]

In summary, the IPCC bases its information on many different studies, including the work of both mainstream climate scientists and climate skeptics. Furthermore, the IPCC produces a number of world averages (which are

[29] Ibid, 26.
[30] Ibid, 8.
[31] Ibid, 7.

helpful to non-scientists) and it corrects mistakes when they are made. The same things cannot be said of the science that appears in the NIPCC reports.

IV. THE NIPCC's SCIENTIFIC EVIDENCE

The kind of analysis conducted above in this paper for the IPCC cannot be conducted for the NIPCC. Unfortunately, the NIPCC does not itself produce any global averages on any subject. Instead, the NIPCC singles out individual studies that support its position on a given topic. This can lead to a great deal of confusion because the information can be contradictory between topics in the reports. For instance, in some parts of the NIPCC's reports it is argued that the planet is warming, but only as a result of the sun (an argument that has been debunked), while in other places, it is said that warming is a result of natural variation. Finally, in contradictory fashion, it is argued that warming is not occurring at all and, if it is, warming is a good thing.[32] When mistakes are made, they are not corrected as in the IPCC report.

As the NIPCC does not produce any global averages, the basic messages between studies cannot be condensed into easy-to-read charts as with the IPCC. Instead, each study must be reviewed on an individual basis. As such, I have chosen one topic in the NIPCC report, climate sensitivity, which is highly relevant to the issue of anthropogenic global warming. The IPCC defines climate sensitivity as the change in global mean surface temperatures relative to atmospheric CO2 concentrations.[33] In the 2011 NIPCC report, the climate contrarians' scientific evidence supporting their position on climate sensitivity

[32] Cook, John. "DenialGate Highlights Heartland's Selective NIPCC Science."*Skeptical Science*.
[33] "8.6 Climate Sensitivity and Feedbacks." *8.6 Climate Sensitivity and Feedbacks*.

is only 1.5 pages in length. They argue that the evidence linking CO2 and temperature is insufficient. The NIPCC references four studies on this subject. The studies are:

1) Charney, J.G. et al. 1979. Carbon Dioxide and Climate: A Scientific Assessment. National Academy of Sciences. Washington, DC (USA).

2) Idso, S.B. 1998. CO2-induced global warming: a skeptic's view of potential climate change. Climate Research 10: 69–82.

3) Lindzen, R.S. and Choi, Y.-S. 2009. On the determination of climate feedbacks from ERBE data. Geophysical Research Letters 36: 10.1029/2009GL039628.

4) Rind, D. 2008. The consequences of not knowing low- and high-latitude climate sensitivity.

Three of these four studies are highly disputable, making their use as evidence inappropriate without additional corroboration. For example, the Charney study is misrepresented by the NIPCC as its findings stated that there was "incontrovertible" evidence that the atmospheric composition was changing and CO2 levels were rising, and that this had an effect on temperature.[34] This conclusion proves the very point that the NIPCC seeks to disprove when citing the study. The Lindzen and Choi study was debunked shortly after being published.[35] Finally, the Rind study is specific to high-latitude sensitivity, not global sensitivity.[36] While being of some use, the Rind study cannot be used to make general claims about climate sensitivity, given its very specific focus. Thus, three out of the four studies cited as evidence against corresponding

[34] Bony, Sandrine, et al. "Carbon dioxide and climate: perspectives on a scientific assessment." Climate Science for Serving Society. Page 2
[35] Cook, John. "Working out climate sensitivity from satellite measurements." *Skeptical Science*.
[36] Rind, D. "The consequences of not knowing low-and high-latitude climate sensitivity." Bulletin of the American Meteorological Society 89.6 (2008): 855-864.

rises in temperature and CO2 emissions are seriously flawed, irrelevant, or misinterpreted.

V. CONCLUSIONS

In summary, the IPCC is a large, well-funded body, with extensive resources and scientists at its disposal. Although the reports that the IPCC produces are not perfect, when mistakes are made, they are corrected and the climate projections changed accordingly. From a scientific perspective, the IPCC builds a strong case for anthropogenic global warming. Greenhouse gases in the atmosphere are increasing in concentration, the global mean temperature is rising along with sea levels and the Arctic ice is melting. Over a thousand scientists have reviewed these findings and agree. In contrast, the conclusions of the NIPCC reports are based on questionable and selective scientific studies. The NIPCC fails to produce reports of requisite scientific merit to adequately refute the claims of the IPCC. The reports are also reviewed by scientists who arguably are biased as the majority of them may be climate skeptics. Moreover, the biases associated with the NIPCC's founder, Fred Singer, and its funder, The Heartland Institute, raise important questions about the NIPCC's motives. Not only do both Singer and The Heartland Institute accept large donations from companies whose profits are inextricably tied to the outcome of the global warming debate, but they are also ideologically biased towards attempting to disprove anthropogenic global warming. In this essay, these biases have been laid out and the *science* juxtaposed. It is

abundantly clear that anthropogenic global warming is a problem and the human race must make changes to reverse its harmful effects.

Photo Credit: Matthias Rhomberg
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"Desperation is the raw material of drastic change. Only those who can leave behind everything they have ever believed in can hope to escape."
– William S. Burroughs

SAFE INJECTION SITES:
A STEP FORWARD IN HEALTH CARE

Naiara Toker

For over ten years, Insite has been saving the lives of injection drug addicts in Vancouver's Downtown Eastside, one of the poorest neighbourhoods in Canada. Insite is the only supervised, clean and safe injection site in North America. It provides drug addicts and other injection drug users a safe place to use drugs, and connects them to other programs and resources in order to manage their illness. Since opening its doors in 2003 as a trial project, Insite has been very controversial. To stay open, the site requires a constitutional exemption to the *Controlled Drugs and Substances Act*, allowing users to consume illicit drugs at the facility without being arrested. When the Conservative Party was elected, the new Federal Health Minister did not want to renew this exemption. However, the Supreme Court of Canada held that closing Insite would constitute a violation of Section 7 of the *Canadian Charter of Rights and Freedoms*, which grants everyone "the right to life, liberty and security of the person."[1]

While extensive research points to the immense benefits of Insite, members of the Conservative Party, some experts, and even some ex-addicts are opposed to safe injection sites for different reasons. In this essay, I will argue that drug addiction is not a choice, but an illness, especially in the context of Vancouver's Downtown Eastside. Health care providers and policy makers need to shift their view of drug use in this area from seeing it as a

[1] *Canadian Charter of Rights and Freedoms*

matter of crime to seeing it as a matter of health. Therefore, the services provided at Insite must be evaluated as health care services that save the lives of one of the most vulnerable and marginalized groups in society; any law that prevents such access is in violation of Section 7 of The Charter.

Vancouver's Downtown Eastside is home to the poorest and most marginalized members of Canadian society. They are often homeless, have mental illnesses, and have been addicted to drugs for decades.[2] Additionally, from those people who frequent Insite, 18% are aboriginal, 38% are involved in the sex trade, 87% are HCV positive and 18% are HIV positive.[3] Members of this community are often born and raised around drugs. For example, one of the plaintiffs in *PHS Community Services Society v. Canada (2008)* was born and raised addicted to methamphetamine because her mother had been addicted to the substance throughout her pregnancy. The plaintiff's first experience with illicit drugs was at the age of seven, when a relative injected her with "speed". While the neurochemical effects of drugs partially explain addiction, the trial judge says that the situations that drug addicts in the Downtown Eastside find themselves in result from:

> [A] complicated combination of personal, governmental and legal factors: a mixture of genetic, psychological, sociological and familial problems; the inability, despite serious and prolonged efforts, of the government to provide meaningful and effective support and solutions; and the failure of the criminal law to prevent the trafficking of controlled substances as evidenced by the continuing prevalence of addiction in the area.[4]

As chemical dependency specialist Gabor Maté explains, drug addicts suffer. They lose everything and yet nothing can shake them from their

[2] Vancouver Coastal Health. *Supervised Injection Sites* (2013).
[3] External Advisory Committee. "Vancouver's INSITE service and other Supervised injection sites: What has been learned from research? Final report of the Expert Advisory Committee." *Health Canada* (31 March 2008).
[4] PHS Community Services Society v. Attorney General of Canada. British Columbia Supreme Court 661 (2008).

addiction. When they inject drugs, they experience a temporary relief from pain and a sense of peace, control and calmness. Hence, the question becomes why these qualities are missing from their lives in the first place. Speaking from experience, he says that most of his patients have been sexually and physically abused all their lives, neglected, abandoned, and emotionally hurt since their early childhood. Without love and connection at a young age, the brain does not develop properly and does not release dopamine, a neurotransmitter that serves several functions and plays an important role in motor control, motivation, cognition and reward. People who grow up in damaging environments have to seek dopamine from an external source, which is why they turn to drugs. In this context, society's role in perpetuating drug addiction can be seen clearly when it comes to Aboriginals. While they make up a small percentage of the population, they make up a large percentage of drug addicts and mentally ill people. As Gabor Maté says, this is because their lands were taken away from them and they were killed and abused for generations.[5]

In *PHS Community Services Society v. Canada (2008)*, the trial judge finds that "the plaintiffs and Canada agree on one thing: drug addiction is an illness."[6] From the evidence presented, the judge concludes the following:

1. Addiction is an illness. One aspect of the illness is the continuing need or craving to consume the substance to which the addiction relates.

2. Controlled substances such as heroin and cocaine that are introduced into the bloodstream by injection do not cause Hepatitis C or HIV/AIDS. Rather, the use of unsanitary equipment, techniques, and procedures for injection

[5] Maté, Gabor. "The Power of Addiction and the Addiction of Power."*YouTube* (9 October 2012).
[6] PHS Community Services Society v. Attorney General of Canada.

permits the transmission of those infections, illnesses or diseases from one individual to another.

3. The risk of morbidity and mortality associated with addiction and injection is ameliorated by injection in the presence of qualified health professional.[7]

Therefore, when we consider social factors as they impact addiction, and acknowledge the fact that addiction cannot simply be stopped or ignored, society becomes responsible for finding a way to decrease the harm that drug addiction has on communities and individuals.

In the 1990s, injection drug use reached crisis levels in the Downtown Eastside, followed by epidemics of HIV and Hepatitis C. Hence, in 1997, a public health crisis was declared. It was clear that conventional methods were not working properly and new solutions had to be implemented. This led the then Liberal government to adopt Insite as part of a harm reduction approach to drug use. Harm reduction, as explained in a report released in 2001 entitled *A Framework for Action - A Four Pillars Approach to Drug Problems in Vancouver: Prevention, Treatment, Enforcement and Harm Reduction,*

> is a pragmatic approach that focuses on decreasing the negative consequences of drug use for communities and individuals. It recognizes that abstinence-based approaches are limited in dealing with a street-based open drug scene, and that the protection of communities and individuals is the primary goal of programs to tackle substance misuse.[8]

Harm reduction challenges the view that addiction is deviant behaviour best addressed by the criminal law and instead embraces the view that it can best be dealt with through health care services that can empower individuals

[7] Ibid.
[8] Ibid.

to practice safer injection and to eventually seek help. The approach draws upon other successful programs around the world that have significantly reduced both the negative health and societal impacts of drug addiction, as well as its costs.[9] Furthermore, the report explains that "accepting harm reduction as part of the strategy does not mean condoning the use of illegal drugs. It means accepting the fact that drug use does and will occur - and accepting the need to minimize the harm this has on communities and individuals."[10] The idea of safe injection reaches high-risk injection drug users, luring them into Insite so that health care services may be delivered.

Insite's goals are explicit: to reduce the harms from injection drug use by increasing access to health and addiction care, to reduce overdose fatalities, to improve public order, to reduce the use of emergency health care, and to reduce the transmission of blood-borne infections such as HIV and Hepatitis C and of other injection-related infections such as skin abscesses.[11] Over 30 scientific studies have been published in peer-reviewed journals outlining the many benefits of Insite both for its clients and for the broader community. An External Advisory Committee (EAC) was asked by the Minister of Health to examine these studies and summarize the key findings without making any recommendations. While it is true that statistics and other information about drug users are hard to obtain since it is an illegal activity and most of the information is self-reported, the committee found that the evidence supports the following conclusions: since 2006, Insite has successfully intervened in

[9] Ibid.
[10] Ibid.
[11] Vancouver Coastal Health. *Supervised Injection Sites* (2013).

over 300 overdose events and no deaths have resulted from overdoses. The estimated number of HIV cases that might have been prevented varied widely depending on certain assumptions and more objective evidence is needed in this area. It cannot be denied, however, that Insite decreased the likelihood of users sharing needles, thereby decreasing the rate of transmission of HIV. Insite has led to an increased use of detoxification services and engagement in treatment; there has been a reduction in the number of people injecting in public, but Insite does not have the capacity to accommodate all, or even most of the injections that might otherwise take place in public. While there was a decrease in vehicle break-ins, there was no evidence of increases in drug-related loitering, drug dealing or drug-related crime in the area around Insite. There is no evidence of a change in rates of drug use or relapse in the community. Finally, mathematical models including the prevention of HIV infections and overdose deaths show a cost-benefit ratio that ranged from 1.5 to 4.02.[12] Other benefits that have been noted by peer-reviewed research include Insite's ability to facilitate contact with high-risk injection drug users, the reduction of discarded syringes and drug-related paraphernalia,[13] better responses to education on safe injection practices—since users are often most receptive to teaching after they have injected[14]—and a reduction in the utilization of other emergency care services due to services provided at Insite such as changing bandages for abscesses.[15] We can conclude from this that

[12] External Advisory Committee. "Vancouver's INSITE service and other Supervised injection sites".
[13] Lessard, Hester. "Jurisdictional justice, democracy and the story of Insite." *Constitutional Forum* , Summer (2011): 93.
[14] Ibid.
[15] Andresen, Martin A. and Eshan Jozaghi. "The Point of Diminishing Returns: An Examination of Expanding Vancouver's Insite." *Urban Studies Journal Limited.* 49.16 (2012): 3531-3544.

Insite has decreased harms caused by injection drugs to its users, improved public order and public health, and saved health care dollars.

While there is no evidence that Insite has decreased the rates of drug use in the Downtown Eastside, this was never the purpose of the facility. The primary goal was to provide a safe place for injection and access to health care services in order to reduce the harms associated with drug use, including public disorder, overdoses, deaths, needle sharing, and the need for emergency care services. These goals, as outlined above, have been achieved. Additionally, the staff at Insite has been able to create dignified, caring, and trusting relationships with drug users, which the latter are usually unable to find as they often face stigma and discrimination when attempting to access health care services through the mainstream system.[16] These relationships allow nurses to gain insight into the needs of individual clients, facilitate referrals to addiction and other services, and lead to the personal empowerment of drug users, which can lead to a positive change in their behavior.[17]

Andresen and Jozaghi found a significant transformation in the roles and behaviours of drug users using Insite, and a subsequent cultural transformation in drug use within the Downtown Eastside and neighbouring communities: users have "gradually become active within their community [as educational and safety ambassadors], trying to alleviate misery and improve lives in the Downtown Eastside."[18] This alludes to a shift in views that is needed when it comes to drug addicts—the shift from seeing and treating them

[16] Lessard, Hester. "Jurisdictional justice, democracy and the story of Insite."
[17] Ibid.
[18] Andresen, Martin A. and Eshan Jozaghi. "The Point of Diminishing Returns: An Examination of Expanding Vancouver's Insite."

as deviant, beyond repair, and undeserving of humane treatment to seeing them as full citizens with rights, capable of exerting agency. A change in public framing is required from viewing drug use, at least in the Downtown Eastside, as a matter of crime to viewing it as a matter of health.[19] The Supreme Court of Canada seems to agree with this framing, as Chief Justice Beverley McLachlin begins her judgment in *Canada* v. *PHS Community Services Society (2011)* by stating that "the Insite safe injection facility has provided medical services to intravenous drug users in the Downtown Eastside."[20]

The Attorney General argues that "Parliament has a compelling state interest in prohibiting the injection of controlled substances, in part because of their adverse effects on individual and community health, [and that] permitting Insite to continue its operations will create a safe haven from the criminal law and undermine its national objective and importance."[21] Some ex-addicts agree. They claim that Insite "sounds like a wonderful place to relapse" and "almost too appealing" (quoted in Leone).[22] While both these points may be valid, seeing drug addiction as an illness, and attempts to manage the illness as health care, as I have argued, make this claim futile. Indeed, as the trial judge argues, regardless of why the illness arose, "the failure to manage the addiction in all of its aspects may lead to death, whether from overdose or other illness resulting from unsafe injection practices. If the root cause of death derives

[19] Fafard, Patrick. "Public Health Understandings of Policy and Power: Lessons from INSITE." *Journal of Urban Health.* 89.6 (2012): 906.
[20] Canada (Attorney General) v. PHS Community. 3 S.C.R. 134. Supreme Court of Canada. *Judgements of the Supreme Court of Canada* (2011).
[21] PHS Community Services Society v. Attorney General of Canada.
[22] Leone, Melissa. *Can Safe Injection Sites Work in Toronto?* Excalibur (2012).

from the illness of addiction, then a law that prevents access to health care services that can prevent death clearly engages the right to life".[23]

The Attorney General disagrees, claiming that clients do not use Insite for the purpose of treating an illness, but rather to satisfy a craving.[24] However, as the trial judge explains, this argument amounts "to a condemnation of the consumption that led to addiction in the first place, while ignoring the resulting illness".[25] Indeed, "while users do not use Insite to directly treat their addiction, they receive services and assistance at Insite which reduce the risk of overdose, they avoid the risk of being infected or of infecting others by injection, and they gain access to counselling and consultation that may lead to abstinence and rehabilitation".[26] This amounts to health care services. Furthermore, it must be noted that allowing Insite to operate is not an exception to the law, but rather a part of it. Indeed, Section 4 of the *Controlled Drugs and Substances Act* must be read together with Section 56, which grants the Minister the power to exempt any person or class of persons from the application of any provisions of the Act if he deems it necessary "for a medical or scientific purpose or is otherwise in the public interest".[27] The implications of this provision are discussed later in the essay.

The Conservatives' most compelling argument is perhaps that the goal of drug control should be to stop people from doing drugs and to get rid of drug addiction all together. In a perfect world with unlimited resources, this would indeed be the ideal scenario. However, while the state's goal is to help clients

[23] PHS Community Services Society v. Attorney General of Canada.
[24] Ibid.
[25] Ibid.
[26] Ibid.
[27] Controlled Drugs and Substances Act. S.C, c.19. Canada (1996).

live a life that is free from drug abuse, for many individuals "it takes support across a continuum of services including harm reduction to realize that goal".[28] In 2007, the opening of Onsite, a detoxification centre located above Insite, showed that this goal has not been forgotten, but rather is complemented by Insite, and that efforts continue to be made in order to help people manage their addiction. In fact, according to Hester,

> weekly attendance at Insite and contact with a supervised injection site addictions counsellor were associated with more rapid entry into detoxification programs, and there has been a 30 per cent increase in the use of detoxification services, associated with entry into longer term treatment and less use of the site.[29]

The Attorney General's last attempt at withdrawing the exemption was to argue that more research is needed to prove the benefits of the facility and to simultaneously remove funding for such research. The Crown relied on two studies that claim that the benefits of Insite shown in the many peer-reviewed journals were based on methodological failures in research. However, neither study was published in a peer-reviewed journal.[30]

The majority of these arguments point to the idea that Insite as an institution and an ideal is part of a much more complex social, moral, and political problem, based on the social narrative surrounding drugs, and should be addressed as a social justice issue. In fact, Insite changes the long-standing predominant narrative that portrays drug addicts as criminals engaging in an immoral activity to one that exposes them "as a group with legitimate

[28] PHS Community Services Society v. Attorney General of Canada.
[29] Lessard, Hester. "Jurisdictional justice, democracy and the story of Insite."
[30] Dooling, Kathleen and Michael Rachlis. "Vancouver's Supervised Injection Facility Challenges Canada's Drug Laws." *Canadian Medical Association Journal.* 182.13 (2010): 1442.

collective needs and claims on the polity".[31] Since, as explained earlier and as outlined by Small, drug addicts in the Downtown Eastside "experience health inequities that are exacerbated by poverty, homelessness, racism and social isolation" (quoted in Hester) [32], the legal struggles of Insite present in actuality a struggle "over the rights and life chances of groups significantly marginalized and disadvantaged in Canadian society".[33] Hence, if the monetary gains in health care services that Insite allows for are not enough, a social justice argument can be made for keeping Insite open. Social justice is the fundamental moral justification of public health care, which the Canadian health care system relies on, and therefore Insite must remain open in order to meet the needs and fundamental human rights of drug users who suffer from an illness to which a health care response is necessary.[34]

Indeed, as the Supreme Court of Canada ruled in *Canada v. PHS Community Services Society (2011)*, withdrawing the services provided by Insite is against the right to life and security of the person of drug addicts, which is guaranteed to everyone under Section 7 of the *Canadian Charter of Rights and Freedoms,* and which can only be withdrawn "in accordance with principles of fundamental justice".*[35]* Since closing Insite would force those suffering from drug addiction to inject drugs in an unhealthy and unsafe environment where the result is often morbidity or death, and since the risk can be managed by allowing Insite to continue to operate, not granting Insite a new exemption

[31] Young, Margot. "Insite: site and sight" Constitutional Forum Summer (2011): 87
[32] Lessard, Hester. "Jurisdictional justice, democracy and the story of Insite."
[33] Young, Margot. "Insite: site and sight".
[34] Fafard, Patrick. "Public Health Understandings of Policy and Power: Lessons from INSITE", 909.
[35] Canada (Attorney General) v. PHS Community.
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engages these rights. As outlined earlier, the threat to the life and security of drug addicts does not arise solely from the individual's choice to inject drugs, however harmful they may be, but from addicts' lack of access to sanitary equipment and to qualified health care professionals that can supervise their injection.

The Attorney General argues that depriving drug addicts of their Section 7 rights is in accordance with principles of fundamental justice. The Crown claims that the state has an interest in a drug-free society, which is "shared by the world and formalized in international treaties".[36] However, a blanket prohibition on the use of drugs, with no regard to individual cases, is a grossly disproportionate way of achieving this goal. In fact, it is the ability of the Minister to provide exemptions that makes Section 4(1) constitutional, preventing it from being arbitrary, over broad, or grossly disproportionate in its effects. The Minister's decision to close Insite is arbitrary, as both the trial judge and the Supreme Court found that "it undermines the very purposes of the *Controlled Drugs and Substances Act* — the protection of health and public safety".[37] Furthermore, the decision is also grossly disproportionate; since its opening, Insite has been proven to save lives with no evidence of negative effects on the public safety and health objectives of Canada. As the Supreme Court ruled, "the effect of denying the services of Insite to the population it serves and the correlative increase in the risk of death and disease to injection

[36] PHS Community Services Society v. Attorney General of Canada.
[37] Canada (Attorney General) v. PHS Community.

drug users is grossly disproportionate to any benefit that Canada might derive from presenting a uniform stance on the possession of narcotics".[38]

In conclusion, the issue of illegal drug use and addiction is a complex one that engages a variety of social, political, scientific and moral reactions. While Insite may not have solved the drug addiction problem, it has solved the public health problem both for drug users in the Downtown Eastside and for the broader community. As I have argued, this is a crucial achievement, since drug addiction in this area must be seen as an illness, beyond the control of those who suffer from it. As outlined in *PHS Services Society v. Canada (2008),* "letters of support and surveys show that health professionals, local police, the local community and the general public have positive or neutral views on Insite and the majority wish to see the service continue."[39] Moving forward, we should keep in mind the differences between drug use, drug abuse, and drug addiction or dependence, as these conditions should be treated differently. Furthermore, many studies point toward a need to expand the service provided by Insite, both within the Downtown Eastside, since Insite is currently only able to accommodate 5% of all injections in the area, and in other cities. While the criteria for future expansion of safe injection sites is beyond the scope of this essay, this question is of crucial importance. One of the main things that authorities must consider is whether expanding would cause an improvement in public health.[40] As the Supreme Court concluded, "where a supervised injection site will decrease the risk of death and disease,

[38] Ibid.
[39] PHS Community Services Society v. Attorney General of Canada.
[40] Andresen, Martin A. and Eshan Jozaghi. "The Point of Diminishing Returns: An Examination of Expanding Vancouver's Insite", 3532.

and there is little or no evidence that it will have a negative impact on public safety, the Minister should generally grant an exemption".[41] While the option of keeping Insite open—and potentially expanding it—seems clear, the Conservative government does not seem to agree. Their decision seems to be based not on science, budget, or health care services, but on politics and ideology.

[41] Canada (Attorney General) v. PHS Community.

Photo Credit: Viktor Hanacek

“I’d rather live with a good question than a bad answer.”
– Aryeh Frimer

ELIMINATING THE "OTHER PERSON" PROBLEM FOR DEMENTIA AND ADVANCE DIRECTIVES

Charles Dalrymple-Fraser

Recent medical advances make it possible to know if one is liable to suffer hereditary neurodegenerative disorders, including dementia, with great certainty. Consequently, increasing numbers of young individuals are offered the opportunity to know about, and the chance to prepare for, their futures as patients of dementia. As a result, concerns have been raised about the validity of care-planning tools, and advance directives in particular. Specifically, questions have been posed pertaining to whether the agent compiling an advance directive has the moral authority to make decisions for the patient of the advance directive, given concerns that the agent and patient may not be the same person. Such concerns are generating problems for the practice of advance directives in the case of dementia patients both as the practice becomes significant, and as physicians and proxies find it difficult to follow advance directives against the wills of their present patients.

In this paper, I will demonstrate that it is a mistake to think that the validity of an advance directive must necessarily consist in the continuity of personal identity between the moral agent and the moral patient. Rather, I will argue that an alternative account—one which places aside the matter of personal identity—finds support in the seemingly predominant intuitions of a number of other debates in applied ethics. That is, I will demonstrate that: (i) there are cases wherein we seem to have a moral right, if not an obligation, to make decisions for individuals who are not in a position to make decisions for themselves, cannot form moral or social contracts with us, and are incapable of

reversing the actions or the effects of our actions on them; and (ii) these intuitions map onto the concerns about dementia and advance directives. In indicating the underlying intuitions of these cases, I suggest that there is a possibility that a theory could be constructed which, in accounting for these intuitions accounts for the validity of advance directives in cases of dementia.

This paper has five sections. Section one provides a cursory review of the "other person" problem for advance directives and dementia patients. In section two, I examine different accounts of personal identity, and demonstrate how they fail to mitigate the concerns raised by the "other person" problem. In section three, I introduce an alternative account, which suggests that advance directives may be valid even without a continuity of personal identity, and indicate how it receives support from pre-established moral intuitions. Section four raises objections to the alternative project, and demonstrates how they are unsuccessful. Finally, I offer a brief conclusion in section five.

1. Dementia and the "other person" problem

As the global average lifespan continues to increase, so too does the prevalence of dementia. Recent studies demonstrate that the prevalence of dementia increases with age, to 5% in persons ages 71-79 years old, 24% in persons ages 80-89 years old, and 37% in those age 90 years and older.[1] Moreover, recent medical advances make it possible to know if one is liable to suffer hereditary neurodegenerative disorders, such as dementia, with great certainty. In the past decade alone, no fewer than four genetic biomarkers have been identified,

[1] U.S. Preventive Services Task Force (2013).

which predict the onset of dementia with great certainty.[2] As a result of these medical and technological advancements, increasing numbers of young individuals are being offered the opportunity to know about, and the chance to prepare for, their futures as patients of dementia.

One way for individuals to prepare for their futures as dementia patients is to draft an advance directive. Advance directives are legally protected documents which detail the wishes of a person toward their health care, in case of an event in which they have lost their capacity to make decisions, such as with a persistent vegetative state or dementia. Advance directives are becoming increasingly legally—or "quasi-legally"[3]—binding in many countries and can work to ensure that a patient's wishes and autonomy are respected, even when they are incapable of decision making.[4] Accordingly, advance directives offer a unique opportunity for persons with futures as dementia patients, in that an advance directive allows them to determine their own health care without the need for encumbering or entrusting surrogate decision makers. However, with an increasing number of individuals turning to advance directives, there has been a corresponding increase in attention given to whether advance directives ought to be considered valid for dementia patients.

In particular, concerns are raised as to whether the person receiving treatment in accordance with the advance directive—the moral patient—is necessarily the same person who details the advance directive—the moral

[2] Alzheimer's Disease Education & Referral Center (2013); Citron, et al. (1992); Harvey, et al. (1998); Rogaeva (2008); Rovelet-Lecrux, et al. (2005).
[3] See Epstein (2007).
[4] Burnette and Heck (2012); Epstein (2007).

agent. Indeed, radical change is a hallmark of dementia, with many patients suffering from: (i) memory impairment; (ii) changes in character; (iii) aphasia, apraxia, and agnosia; (iv) disturbances in executive functioning, including difficulties planning, organizing, and abstracting; and (v) significant impairments in social and occupation functioning, representing a substantial decline from a previous level of functioning.[5] If it is possible that the moral agent is a different person from the moral patient, then it becomes difficult to see whether advance directives for dementia patients should be considered valid. Consider the following case:

> Case one: Susan fills out an advance directive, wherein she stipulates that she does not want any feeding support should she fall into a persistent vegetative state (PVS) or develop dementia severe enough that she requires assistance eating. Some while later, Susan is a dementia patient, and her physicians note that she is incapable of feeding herself. They consult her advance directive and decide to remove the feeding tube. Susan, now a dementia patient, protests the removal of the feeding tube. What ought her physicians to do?

Susan's physicians are met with two opposing views: Susan as an agent wants the feeding tube removed, whereas Susan as a patient does not. It seems that, given that Susan as a patient does not have the cognitive capacity to make informed decisions or provide informed consent, the physicians ought to yield to the advance directive Susan as an agent set out. Yet, at the same time, there is the concern that perhaps Susan as a patient is not the same person as Susan as an agent: indeed, their patient has a different set of values, beliefs, and characteristics than did Susan as an agent. The worry is raised whether the advance directive is still valid across such changes. This is a dilemma which

[5] These criteria draw from the American Psychiatric Association's *Diagnostic Standards Manual (IV)* (Washington, DC: APA, 1994, 85-93), as cited in DeGrazia (1999).

physicians face regularly, and empirical data suggests that these concerns have resulted in a decreased efficacy of applying advance directives for dementia patients, as physicians are left with the task of deciding whether a wish ought to be considered valid.[6]

This is the "other person" problem: the concern that an advance directive is invalid if there is not a continuity of identity between the moral patient and the moral agent. If the moral agent is not the same person as the moral patient of their advance directive, it is not clear that the agent should have the right or ability to make decisions for that patient, let alone that their decisions should be able to override the decisions of the patient. Yet, we retain an intuition that persons told that they will develop dementia have a right to make decisions for what appears to be their future selves. For, it seems odd that a person with prospective dementia can give power of attorney or otherwise have a surrogate decision maker who is able to make decisions on their behalf when they are suffering from dementia, but that the prospective dementia patient cannot themselves make decisions toward such future states. Granted, there is a distinction to be made between a surrogate decision maker and an advance directive in terms of the ability of the former to react to different situations, but it is not clear that an advance directive is incapable of providing a rigorous anticipation of different events and changes in technology or condition. Surely, an exhaustive advance directive could do much more to accurately represent the wishes of its author than could a surrogate decision maker because of the proximity it has to its author. Finally, while physicians

[6] See, as cursory review, Boer, Hertogh, Droes, Jonker, and Eefsting (2010).

might have difficulty discerning whether a dementia patient is the same person as the author of an advance directive, an individual who is a prospective patient of dementia surely feels that the future patient is the same person as they are, or is highly probable to be,[7] and feels also that they have a right to make decisions for that patient who appears in their future. These justifications, among others, match our intuitions that persons told that they will develop dementia have a right to make decisions for what appears to be their future selves.

In what follows, I will examine two different approaches to dissipating the "other person" problem. The first will seek to identify a robust theory of personal identity which accounts for the intuition that there is some semblance of continuity of identity persistent throughout the changes of dementia. The second approach seeks to locate the validity of an advance directive as constituted in something other than personal identity. I will demonstrate that current theories of personal identity fail to circumvent the "other person" problem, and that it is an apparent mistake to think that the validity of an advance directive necessarily consists in the continuity of personal identity.

2. Personal identity considered

In this section, I will briefly review three possible responses to the "other person" problem, with a focus on how accounts of personal identity might be able to circumvent the issues presented in the above section. The accounts

[7] Given the difficult task of establishing a phenomenology of dementia, persons with prospective dementia are stuck with a task of uncertainty, incapable of comprehending what the experience of dementia might be like. Yet, it seems intuitive that whatever these experiences might be, that they are to be the subjects of those experiences. And, while some might object that not knowing what the experience of dementia is critically undermines a person's authority to make decisions regarding that state, these decisions are already frequently made by those who stand in more distant relationships with a patient, and who are themselves without such knowledge.

given are not intended to be an exhaustive survey of the positions on this matter, but are representative of some of the more prominent and prevalent views held in the philosophical community. Ultimately, it will be shown that each of these accounts fails to meet our intuitions and fails to account for the "other person" problem. In §2.1, I briefly introduce physiological criteria for personal identity. In §2.2 and §2.3, I examine psychological and social approaches to identity. Finally, I provide an interim summary in §2.4.

2.1 Physiological criteria. Physiological accounts of personal identity locate identity in the spatiotemporal continuity of a person's physical makeup. On this account, if I chose to ceaselessly follow an individual around from the time they are born until the present moment I would be able to assert with confidence that the person born at such-a-time and such-a-place was indeed the same person before me. In some regards, this account seems intuitive: it focuses on the physiological makeup of a person, by which we most frequently recognize persons, and it seems that our bodies belong only to us. However, the physiological account is victim to a number of metaphysical contentions and difficulties, and has not been well defended. While an examination of the difficulties with the physiological account is beyond the scope of this paper, a few brief rejoinders indicate difficulties for the account in the context of this examination.

Firstly, there seems to be an intuition that our personal identity is not strictly reducible to our bodies. I can readily conceive of waking in a different body while still being "myself". Secondly, my body is constantly undergoing

physical change, losing cells and original matter across my lifetime, yet one does not tend to say that they are a different person for this. Moreover, demented persons suffer severe atrophies of their brains and bodies; and, it seems that the brain is a critical component of the body. Finally, it is often said that people with dementia seem radically different—"different people"—from their non-demented counterparts; and, in general, we can conceive of different people occupying the same body. These objections, though brief, go a long way to discredit physiological criteria: those criteria seem both to fail to capture our metaphysical intuitions of wherein identity consists, and to fail to explain the apparent continuity of identity through dementia, which we seem to require for the validity of advance directives. Hence, it seems that physiological criteria, unless better defined,[8] fail to address the "other person" problem.

2.2 Psychological criteria. Psychological accounts of personal identity suggest that continuity of personal identity consists in psychological continuity. The specific psychological criteria for identity have been disputed, and differ between accounts, but the more common theories locate identity in the continuity of: (i) memory; and (ii) propositional attitudes like intentions, beliefs, and desires; and similarity of character (e.g., how one responds or acts in situations).[9] For the most part, psychological criteria for identity have served philosophers well, and largely find objection only in bizarre metaphysical scenarios involving teleporters and fusion or fission cases.

[8] While it may be argued that this brief summary is too brief, effectively strawmanning the physiological criteria, a cursory review of the texts in favour of these criteria does very little to detail the account or to explain what physiological losses should or should not constitute a loss of identity. Hence, until better defined, physiological criteria appear insufficient for our purposes.
[9] See Parfit (1984), 205-223.

However, psychological criteria face plain difficulty with dementia.

A hallmark of dementias, and Alzheimer's in particular, is an atrophy of the brain, which results in a wide array of psychological dysfunction. Most typical of these disorders is a loss of memory, but it is common also to see drastic changes in character (particularly toward anger and impatience) and in beliefs or desires (as with delusions and false memories). This is particularly damaging in the context of the "other person" problem, as we tend to view advance directives as a matter of representing such interests, beliefs, and desires through time.[10] Furthermore, while one might suggest that memory appears, at least in part, intact in some dementia patients, this does not seem to apply in the more severe cases of dementia where the implementation of advance directive tends to be more important, and for which they seem intended.[11] Indeed, though psychological criteria hold better than most theories in philosophical discourse, they seem to fail to make any progress toward a resolution of the "other person" problem, precisely because they are dependent on those psychological features which are negatively affected and drastically changed during dementia.

2.3 Social criteria. Social criteria for personal identity roughly stipulate that identity consists in the relationships we bear to other persons. This position tends to be motivated by the social nature of human beings, and the

[10] Cf. Susan's change in desires in the case in §1. Surely, there is a degree to which we may be inclined to say that Susan is the same as an agent and as a patient, loosely construed. But, psychological criteria dictate that they are necessarily numerically distinct, on account of their differing psychological constitutions.

[11] Allen Buchanan (1988) attempts a defense of the advance directive where a moral agent's intentions can persist even when the person does not. However, this alone does not seem to provide sufficient grounds for accepting the validity of an advance directive: that one's intentions may persist beyond the existence of that person does not mean that those intentions are salient or can speak for the dementia patient at present. For a more thorough treatment of his account, see Buchanan (1988), 283-294.

existentialist offering that we are defined by comparing ourselves to others and offering ourselves for examination, loosely construed. Such social criteria might seem attractive: they move to externalize identity in a way that avoids those internal changes which an individual with dementia undergoes, and they provide a practical means for identification, as was the case with physiological criteria. However, it is not clear that these criteria are sufficient for the account of identity we hope to establish. Indeed, the relationships that dementia patients bear to their relatives and friends are often radically different from the relationships held prior to dementia onset. Aside from the potential of dementia patients to forget individuals with whom they held relationships, the very relations between individuals and patients are often strained, either by the changes in the patients (e.g., changes in character, aggression) or by the strains which accompany caring for another. In this manner, it is unclear how identity might persist through dementia in a manner congruent with our intuitions, and hence it remains unclear how social criteria might offset the "other person" problem. Without a clearer construct for how relationships might persist through these changes, the social criteria fail to overcome the "other person" problem.[12,13]

2.4 Summary. A brief review of some accounts of personal identity suggests that a solution to the "other person" problem may not merely consist in a retelling of that in which personal identity consists. Indeed, it seems that

[12] Janis Moody (2003) proffers a social account which she calls the *situated-embodied-agent* account, in which she defends that persons are critically situated within familial, social, and historical contexts. However, her account critically relies on the body as being located in each context, and her position thus requires defense both from the objections raised here and the objections raised against the physiological account. Cf. Moody (2003), 20-21.
[13] See also Kitwood and Bredin (1992), 280-286; Johnson (2009), 42-48.

responses to the "other person" problem generally rely too heavily on personal identity to account for an applied situation where most facets of human life are subject to change. It may be that accounts of personal identity will be later capable of accounting for the validity of advance directives, but a review of current literature does not yet generate a solution to this problem.

Granted, it may be that the criticisms here are too quick, and that we are setting the bar too high for what is required of personal identity. To be sure, it might be the case that the "other person" problem is wholly persistent, and that advance directives for dementia patients ought ultimately to be held invalid, or at least for those stronger cases of dementia where personhood seems to fall apart. However, we seem to have the persistent intuition that advance directives ought to be valid: it seems bizarre that a prospective dementia patient can have their wishes later carried out by a spouse or other third-party surrogate decision maker—with no guarantee of accurate representation—but not by their competent, present self. Yet, there is an alternative to these accounts. It arises from abandoning the personal identity criteria as necessary for the validity of advance directives.

3. Validity without identity

In the above section, I suggested that responses to the "other person" problem take for granted that the validity of an advance directive necessarily consists in the continuity of personal identity, and that this may not be as necessary as assumed. Indeed, there appear to be two ways to defend against the "other person" problem: (i) provide an account of personal identity which is

sufficiently broad to include dementia patients, and sufficiently narrow to exclude undesired consequences; or (ii) provide an account of the validity of advance directives which does not require dependence on personal identity. Having reviewed a number of approaches of the first type in the above section—and having found them inadequate—I turn to a defense of the second type: the position that the continuity of personal identity is not necessary for advance directives.

In this section, I defend this claim by demonstrating that such an alternative account finds support in our common moral intuitions toward a number of other applied ethical cases. In particular, I will demonstrate that: (i) there are cases wherein we seem to have a moral right or obligation to make decisions for individuals who (a) are not yet in a position to make decisions for themselves, (b) cannot form moral or social contracts with us, and (c) are incapable of reversing our actions or the effects of our actions; and (ii) these intuitions map onto the concerns about dementia and advance directives. Sections 3.1 and 3.2 look at moral considerations of future persons through the lenses of conception and climate change; §3.3 looks at moral considerations regarding non-human animals; and finally, in §3.4, I turn to look at our moral considerations regarding parenting and guardianship. I offer a brief summary in §3.5.

3.1 Conception. An interesting feature of the "other person" problem is that it concerns a person which may not yet exist. Namely, if the moral patient is numerically distinct from the moral agent, and if they are to be acted upon by

the latter, then that moral patient must come into existence at some point in time which is later than the moral agent's own existence. So, in prospectively considering the validity of an advance directive presently being signed, we are concerned with a possible future person.[14] The "other person" problem suggests that we cannot have a valid advance directive if the moral patient is distinct from the moral agent and cannot enter into a moral contract with the agent. However, it seems that there are a number of current ethical cases in which we think that we can have moral rights or obligations to future persons, even if they do not yet exist or cannot form moral contracts with us. In this section, I look at such intuitions in the matter of conception. In §3.2, I will briefly turn to future persons in the context of climate change.

An emerging theme in the discourse surrounding conception is the intuition that we may have obligations not to reproduce when it is for the betterment of possible people. In particular, Laura Purdy (2006) argues that persons who suffer from Huntington's Disease ought not to reproduce, given the high probability that their offspring would suffer from Huntington's Disease.[15] Specifically, she argues that a life ailed by Huntington's Disease can be so terrible that it is morally reprehensible to bring into existence a person who is extremely likely to be plagued by that disease; this position is motivated by our contemporary knowledge of the disease, its symptoms, and its 50%

[14] Philosophers, particularly Derek Parfit (see Parfit (1976)), tend to be careful to distinguish between possible people and future people. Possible people are those people who do not yet exist, and whose existence is contingent on our present actions. Future people are those people who do not yet exist, but whose existence is not contingent on our present actions: they will come to exist despite changing circumstances. Accordingly, it might seem that we should favour "future people" in this paper. However, I will take up the practice of referring to the moral patients here as possible future persons. For, if they do exist, then their existence is not contingent on our present actions (unless a cure is found); but their existence is not certain. I will keep the terminological distinction intact for the other discussions which follow.

[15] See also, Purdy (1996), 42-49.

inheritability.[16,17] Furthermore, given a context where alternative means of raising a family are available, such as adoption or surrogacy, the risk of conceiving an individual with a tragic inheritable disease seems unjustified.[18] If Purdy's intuitions are met, then we have a case of moral obligations to numerically distinct persons. Moreover, the nature of the relation is such that the moral patients (the possible children) are incapable of entering into a moral contract with the moral agents (the potential parents), and are incapable of reversing the decisions made by the moral agents, insofar as they do not exist at the time required to do so. Accordingly, there seems to be a strong intuitive parallel to the case of advance directives for dementia patients, and we might find that arguments in favour of positions like Purdy's are also arguments in support of an account of validity for advance directives which does not rely on personal identity.

However, Purdy's argument stands against other philosophers' claims that existence is inherently better than nonexistence, and it is not immediately clear that her position is the most common one, even if it is very intuitive. It is not the purpose of this paper to decide such disputes. Yet, it is worth noting that many of those philosophers who hold that existence is categorically better than nonexistence would not be averse to the claim that, should it be proven better in a case for a possible person not to exist than to exist, then a moral agent would have an obligation not to reproduce. Indeed, the difference between the positions seems to fall to whether there does exist such a situation wherein it is better not to exist. Hence, it seems that the salient matter stands,

[16] Purdy (2006), 116-118.
[17] If the severity of Huntington's Disease is met with contention, one might consider Tay Sachs Disease instead.
[18] See, for example, Purdy (1996), 46-48.

namely that we can have certain moral obligations to possible people, and rights to make decisions concerning them.

3.2 Climate change. Discourse on the ethics of climate change tends to consider as moral patients the future generations and future persons who will suffer the more extreme and distant effects of climate change. It should be intuitively evident, without perusing the relevant literature, that the common intuition is that we do have a moral obligation to act in prevention and mitigation of anthropogenic climate change. In what follows, I will briefly outline how this intuition can inform our discourse on advance directives.

The motivation for thinking that we have moral obligations to future generations in the case of climate change seems to consist in the same principle which drives considerations of obligations not to conceive: the intuitive principle that we should prevent or mitigate harm to others. In this manner, climate change can be considered akin to a hereditary disease like Huntington's Disease: the severe predicted effects of climate change will negatively impact the quality of life in a very extreme manner for those future generations. And, given the extreme likelihood that climate change is anthropogenic,[19] it appears to pose even more of a 'hereditary' risk than does Huntington's Disease. Here, then, we sustain an intuition that we have a moral right, if not an obligation, to make decisions that affect future generations and future persons, which are numerically distinct from ourselves. Furthermore, future generations are incapable of forming moral contracts, given that they do not yet exist when the

[19] Intergovernmental Panel on Climate Change (2013), 15.

relevant decisions need to be made, and are incapable of reversing the effects of our decisions.[20] Accordingly, yet another parallel can be drawn to the matter of advance directives.

It seems, in this regard, that common intuitions about climate change ethics fit uniformly with what would be required of an account of validity for advance directives, without continuous personal identity.

3.3 Nonhuman animals. Perhaps more common than discourse on environmental ethics as a whole is the discourse on whether we ought to extend morality to animals. Again, one need not delve into current literature to meet the common intuition that we ought to treat animals with a particular moral regard. Such an attitude is reflected in the common treatment of pets, and in the disgust which meets reports of animal cruelty. Regardless of the philosophical approach to animal ethics (e.g., consequentialist, deontological),[21] there tends to be strong agreement with the claim that we have obligations to treat nonhuman animals with a particular moral regard, irrespective of whether that treatment is exactly equal to the treatment of human animals.[22] The typical force of this intuition is such that I will not examine it in detail, but rather demonstrate how it maps onto the case of advance directives. For, it should be obvious that nonhuman animals are distinct entities from us, that they are incapable of the communication required to form a moral contract, and that they are largely incapable of reversing our

[20] Intergovernmental Panel on Climate Change (2013), 25-27.
[21] See, as exemplary, Singer (1974) and Regan (1983), respectively.
[22] Again, those who believe otherwise tend to believe that we have a *right* to treat animals in particular ways, which may inform our right to act toward the moral patient of an advance directive. Though, it appears to remain that an obligation toward nonhuman animals is ultimately more compelling.

decisions: our choices to conserve or display animals, to breed them or let them expire, or to log and depreciate their habitats, are actions which nonhuman animals are largely incapable of offsetting. Again, we find an intuitive fit between our current ethical intuitions and practices, and the case of advance directives.

3.4 Guardians and minors. Finally, let us briefly consider parenthood and guardianship over minors. This case is useful in that it regards a widely visible practice and calls upon strong intuitions, as with the case of nonhuman animals. Indeed, it is widely regarded that children are not always capable of making their own decisions, nor of making correct decisions. In these circumstances, it is their parent or legal guardian who provides consent, and who makes decisions which concern those children. It does happen on occasion that a parent or guardian makes a decision which is deemed wrong for the child, but it is not contested that parents have a right—if not an obligation—to make decisions for their children.

This strong intuition maps readily to the matter of dementia. It is widely regarded that those suffering from dementia are incapable of making their own decisions; indeed, it is because of this diminished capacity that questions are raised about the practice of advance directives. Furthermore, we wish to attend to the possibility that the moral patients of our advance directives are numerically distinct persons, whence the "other person" problem arises. Moreover, while children are clearly distinct from their parents, they are also widely incapable of reversing the decisions set out by their parents or

guardians, as are patients of dementia acted upon through the advance directive. In these manners, parent–child relationships map readily onto our advance directive case. The only ready difference consists in the matter that older or more mature children may be capable of entering into contracts with their parents, verbally indicating that their parents may make decisions on their behalf; however, we must acknowledge that this is not always the case in practice, or at least not the case in the capacity of fully informed consent (for if children were capable of fully informed consent, it would be arguable whether parents still had the rights to make decisions for them).

3.5 Summary. The cases considered here are not meant to be exhaustive nor conclusive. However, it has been made clear that there is precedent for accepting the possibility of a theory of the validity of advance directives which does not rely on the continuity of personal identity. Indeed, there is a wealth of intuitions supporting the claim that we may make decisions for other persons and entities, and a number of these cases find reasonable congruency with the case at hand.

However, it is worth remembering that the purpose of this paper is not to advance a strong account of the ground for the validity of advance directives. Rather, its purpose is to demonstrate that a survey of common intuitions is suggestive of a consistency and coherence which may inform such a theory. For example, we might find that the validity of an advance directive can be constructed from the particular strength or closeness of the relationship between the moral agent and the moral patient, just as it seems that the

particular closeness of relation between parents and their children grants the right of the former to make decisions affecting the latter. An examination of such possibilities, however, is beyond the scope of this paper. Yet, the cases presented suggest the possibility that a theory may be constructed which, in accounting for these above intuitions, accounts also for the validity of advance directives in cases of dementia.

4. Objections considered

I have demonstrated that the validity of an advance directive need not necessarily consist in the continuity of personal identity. Indeed, it has been shown that common intuitions about many applied ethical cases map uniformly onto the debate over the validity of advance directives for dementia patients. In this manner, this paper paves the way for a theory which can account for intuitions in favour of the validity of advance directives, even in circumstances without promise of continuous personal identity. However, it is worth noting that a few objections may be raised against this move, even before such a theory has been fully articulated. In this section, I briefly examine two such possible objections, and demonstrate how they fail to undermine the current project.

4.1 A first objection may be raised that it is not immediately clear that moral intuitions ought to guide our moral theories or practices. Indeed, philosophers have long held that our intuitions may be wrong or poorly grounded, and there is no strong reason to suggest that our intuitions across

these many applied cases are correct. Certainly, each case presented in the above section is a matter of philosophical contention: debate rages over whether we have obligations to animals, or to future and possible generations. Accordingly, it is not clear that these intuitions are sufficient to motivate an account of validity for advance directives; and, if so, how this account is preferable to those theories which may be derived from the opposing intuitions in each debate.

Firstly, predominant moral intuitions do seem to play a role in informing policy and practices. It is a mistake to treat the issue at hand as a debate merely to be relinquished to the philosophical armchair. Rather, the project of reconciling advance directives with the concern of non-continuity of identity is one which plagues our current affairs. Ethics in practice requires decisions to be made, and policies to be enacted, and there is a wealth of evidence to support the claim that these decisions are made with consideration to such moral intuitions: one need only look at the increasing reception to abortion clinics, to movements against climate change, and to progress toward an animal ethics, in order to identify that our moral practices do not wait for theoretical unanimity, and that they do not take place in an intuition vacuum. It may be the case that our intuitions are wrong, in some moral realist sense, but this should not prevent us from making progress in practice and policy at present, where such progressions may solve or better determine the problems at hand. Rather, we should recognize and contend that policies may be corrected as we gain more moral data or develop theoretical constructs, just as we tend to update other practices and we gain further scientific knowledge. In

this regard, the objection seems to miss the immediacy and the applied nature of the matter at hand, focusing too strongly on the need for a coherent theoretical system.

However, the objection may be read more strongly, according to which the defense makes a critical naturalistic fallacy: that though our moral intuitions may inform policy presently, they ought not to. On this position, that our intuitions map onto matters of advance directives for dementia patients is not sufficient to defend their validity, as such a move requires a unified theoretical account of morality. Here, though we may claim that there is a coherency within our intuitions, we do not yet have a sufficient account of why such matters are indeed moral, and thus do not have adequate support for our practice.

Here, our rejoinder returns to have play. Granted, it may be that moral intuitions are insufficient for moral practice, and that we must work to complete a moral theory to account for the true validity of the advance directive. However, there are two points of note: (i) again, a moral practice may be subject to updating, and it seems too conservative to suggest that we refrain from moral practices which cohere with a system of moral intuitions, merely because we cannot yet account for those intuitions; and (ii) it may very well be the case that there is a coherent theory which explains the coherency of these intuitions, in which case the problem fails to present. Indeed, it seems morally permissible to act in a way which is consistent with a coherent system of moral intuitions, even before the governing principles of that system are revealed; and, it seems plausible that such a system of governing principles might be

found available given the coherency of the intuitions covered in this paper.

Finally, it is worth noting that even theoretical accounts for morality tend to rely heavily on intuitive fit, in terms of their evaluation. Those theories which fail to account for our intuitions—i.e., which lack intuitive fit—tend readily to be disregarded. In this regard, it again seems permissible to treat our intuitions as having a critical "intuitive force" which may support the implementation of like practices in congruent cases.

4.2 A further objection may be raised that it is not necessarily the case that moral intuitions carry across seemingly similar cases. That is, even if we permit moral intuitions to play a role in practice and policy, it is not necessarily evident that the moral intuitions in the above cases do transfer precisely to the matter of advance directives. Indeed, examinations of trolley-like cases have demonstrated apparent contradictions in our intuitions. Consider, for example, the following two cases.

> Case One: You are on a trolley which is approaching a fork in the tracks. The tracks are set to head to the left, where five people are tied to the tracks. If the trolley continues, it will run them over and they will die. On the right fork, there is only one person tied to the track. You have the ability to change the tracks so that the trolley heads to the right, causing one person to die instead of five. Do you switch tracks?
>
> Case Two: You are a surgeon with five dying patients. Each of them needs an organ transplant in the next hour, or they will die, and there is no evidence that organs are on their way. You learn that one of your other patients, otherwise healthy, is a direct match to all five of your dying patients' organ needs. Furthermore, that healthy patient is sedated and prepared for surgery. You have the ability to transfer the organs from your healthy patient into your five dying patients, causing one person to die instead of five. Do you perform the surgery?

A survey of intuitions tends to show that you ought to let the one die to save

the five in the first case, but not in the second case. Whereas the two cases seem strongly parallel in content and form, our moral intuitions do not carry between them. Accordingly, it is not clear that our moral intuitions about other applied ethical cases should carry into the moral matter of advance directives and dementia patients. That is, there may be a subtle and morally salient difference between the debates herein considered, as there is between case one and case two, which renders our intuitive bridging invalid.

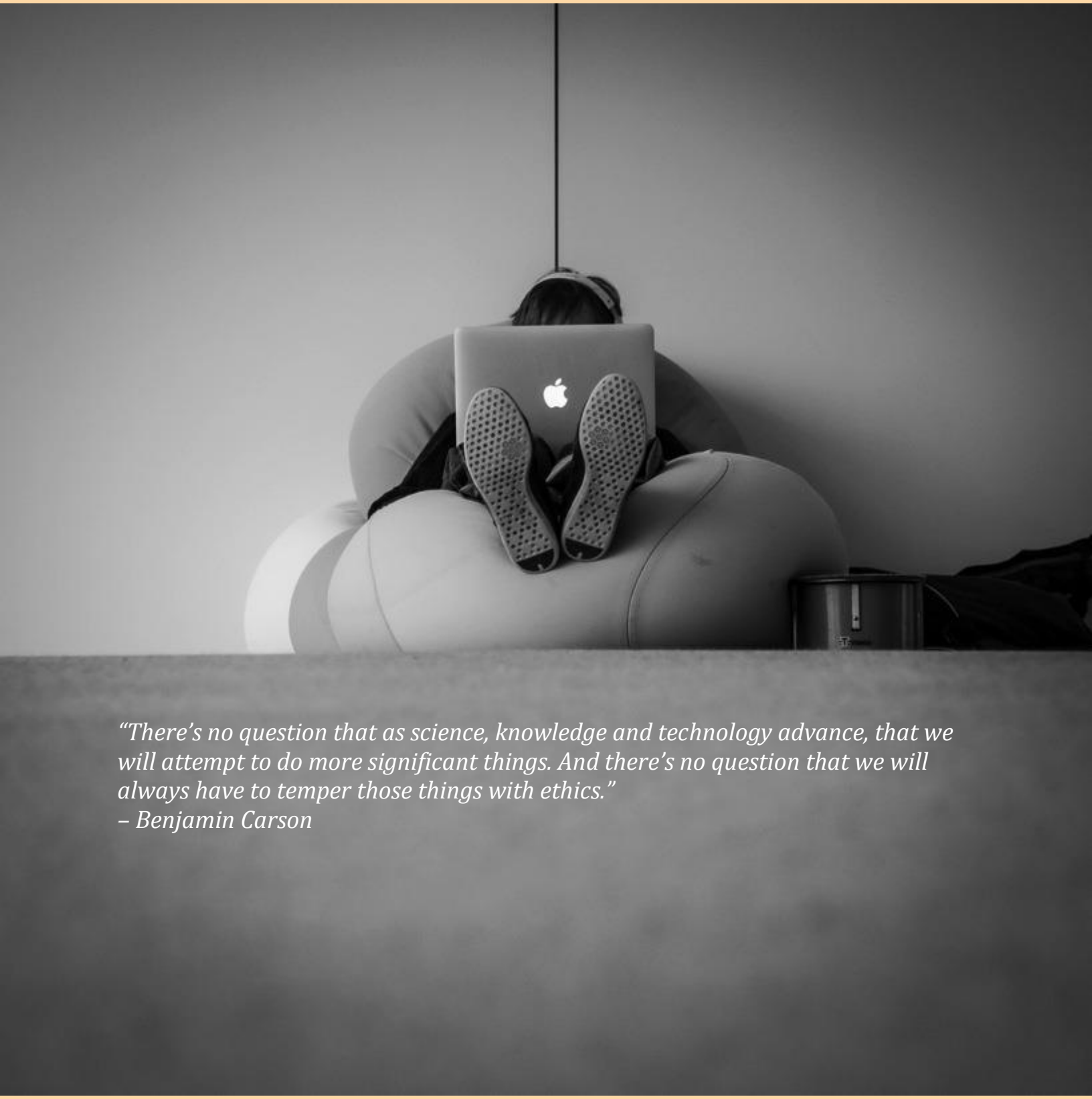
The response to this objection is brief: the burden of proof falls to the interlocutor to demonstrate wherein this difference consists. For, it seems intuitive that a person with prospective dementia has a right to make decisions for what appears to be their self, even if it turns out to be the case that the dementia patient in the future is a different person. Unlike case one and case two, there is not a strong difference of intuition which suggests a morally relevant difference between the cases presented in section three and with advance directives for dementia patients. Hence, it falls to the interlocutor to demonstrate either where our intuitions separate, or wherein a morally relevant difference consists.

5. Conclusion

This paper reviewed possible solutions to the "other person" problem. In particular, it was demonstrated that the "other person" problem does not appear resolvable by appealing to accounts of personal identity. I advanced the position that validity need not necessarily consist in personal identity, and demonstrated how this position finds support in pre-established moral

intuitions across applied ethical fields. In doing so, I marked a novel approach to dealing with the "other person" problem, which does not rely on personal identity but keeps advance directives intact.

The arguments forwarded in this paper should present without surprise, for they do nothing more than to dissect the situations toward which we have ready intuitions. It should be plainly evident that it is consistent to hold a theory regarding the validity of an advance directive without appeal to identity, given that we share like intuitions and practices in other applied ethical debates. Yet, despite their intuitive ease, these arguments are ultimately valuable as they may drive common intuitions back toward acceptance of advance directives for dementia patients, where physicians and families today are often faced with uncertainty. It is in this regard that we may rekindle optimism about the futures of future dementia patients.



"There's no question that as science, knowledge and technology advance, that we will attempt to do more significant things. And there's no question that we will always have to temper those things with ethics."
– Benjamin Carson

Photo Credit: Thomas Leuthard

ABOUT THE EDITORS AND AUTHORS

Zoe Hountalas / Lead Editor

Zoe recently graduated from the University of Toronto with a double major in Political Science and English. In the fall, she will be attending Queen's Law and hopes to pursue an interesting legal career in social justice. Zoe's interest in law is rooted in the constant tensions between personal ethics and legal justice; rights and freedoms; and technological advancement and moral boundaries. In her spare time, Zoe enjoys writing, cooking, reading and yoga.

Sofia Brondino Zavalla / Lead Editor

Sofia recently graduated from Trinity College at the University of Toronto with a double major in Criminology and Ethics, Society & Law. She will be pursuing a Master of Arts in Law in hopes of continuing to explore the intersection between law and contemporary ethical dilemmas. Her research interests include poverty, social exclusion, and human rights. Sofia hopes to continue to engage with such issues as she pursues her postgraduate studies at the University of Bristol Law School.

Connor Annear / Editor

Connor Anear is entering his third year of studies at the University of Toronto and is the incoming Male Head of Trinity College. Connor is pursuing a double major in Ethics, Society & Law and Criminology, with an additional minor in Psychology. His academic interests are Canadian criminal law, political and legal philosophy, the disordered mind and social psychology. He is also passionate about access to justice issues in Canada. Outside of class, Connor is an avid musician and athlete. He has played trumpet in the Hart House Orchestra and the Symphonic Band and plays on multiple Trinity College sports teams.

Pujan Modi / Editor

Pujan is a full time football (soccer) nut that also spends some of his free time at university. He will be going into his fourth year in an Economics and Ethics, Society & Law double major this September. His academic interests are varied, but consist of the two wide fields of economics and ethics and their various intersections. He hopes to pursue a Masters degree in economics following graduation next year.

Emma Smith / Editor

Emma Smith is going into her third year at the University of Toronto at Trinity College, studying Ethics, Society & Law and Literary Criticism and Cultural Theory. She is a staff writer for the *Salterrae* and a copy editor for the *Varsity*. She is also very excited to be taking on the role of Communications Assistant at Gailey Road Productions this fall. She is involved in campus life through theatre, most recently appearing as Cinderella in the TCDS's production of *Into the Woods*. Emma is very passionate about ethical debate and that is why she is thrilled to be on the Editorial Board for *Mindful* this year.

Arash Ghiassi / Editor

Arash is double-majoring in Philosophy as well as Ethics, Society & Law. He has previously served on the Ethics, Society & Law Students' Association both as President and as VP (Social Events) and also as a Teaching Assistant in the Department of Philosophy. He is currently an Undergraduate Fellow at the Centre for Ethics. He is passionate about progressive politics and his "likes" on Facebook include Hafez, *My Neighbor Totoro*, and the singular 'they.'

Madeleine Chin-Yee / Editor

Madeleine is in her third year at U of T majoring in Ethics, Society & Law and History. Specifically, she is interested in African American and postcolonial studies. In her spare time, she enjoys theatre, music, cooking and spending time with family. This is her first year as a member of the *Mindful* editorial board and she is excited to be involved with this unique publication.

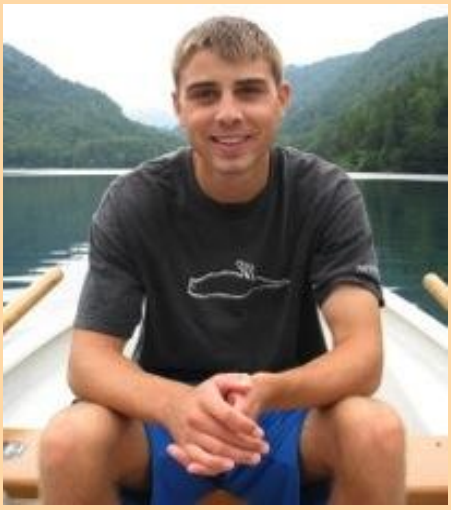
Larysa Workewych / Editor

Larysa is in her fourth year of study at the University of Toronto, Trinity College, with a double major in Ethics, Society & Law and Political Science. She has always had an interest in the overlapping spheres of politics and ethics, fascinated by topics such as the legal and ethical ramifications of drone use, the global impacts of climate change and the controversial roles that technological advances play in society. In addition to being an editor for *Mindful*, Larysa loves to stay involved in university campus life, including serving as the Secretary General of the North American Model United Nations (NAMUN) 2015 Conference and Vice-President Administrative for the Ethics Society & Law Student Association. In her spare time she enjoys immersing herself in the fictional (and sometimes dystopian) worlds found in novels.

Naiara Toker / Author

Naiara graduated from the University of Toronto in 2014 with a major in Ethics, Society & Law and a double minor in math and anthropology. She is particularly interested in the relationship that law has with society and morality and the exploration of ethical dilemmas and their overlap with the law. In the fall, she will be starting the BCL & LLB program at the McGill Faculty of Law, where she hopes to focus on issues of human rights, both locally and internationally.

Andrew Foster / Author



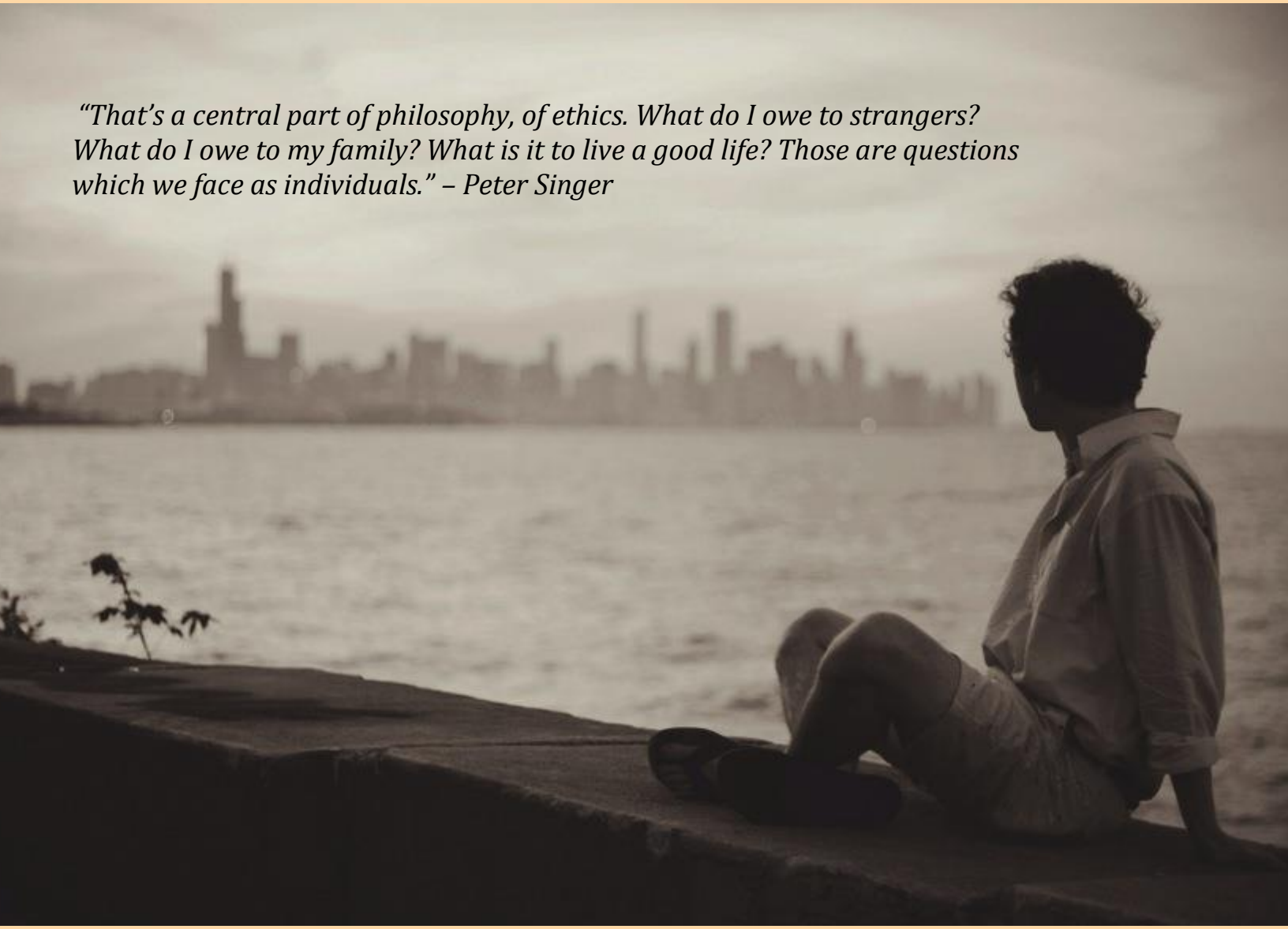
Andrew Foster graduated from the University of Toronto in 2014 with a BA in Political Science and Ethics, Society & Law. Next year, he will continue his studies in London, England where he will be a candidate for an MA in International Political Economy at King's College London. This is Andrew's first publication in a school journal and he is very excited about it. The subject of his piece, climate change and the science surrounding this issue, has been an interest of Andrew's since childhood. He used to take trips with his family to Stoney Lake in Peterborough where nature factored greatly into his enjoyment of the holiday. These experiences ignited Andrew's interest in the environment and its conservation. Preserving the environment is an important task that Andrew encourages all to undertake. He thanks all those who take the time to read his article. Go outside!

Caroline Mok / Author

As she enters her fourth year, completing a double major in Ethics, Society & Law, and Criminology, Caroline has had many opportunities to discuss topics in criminal law by drawing on the moral and political theories of her favorite theorists, including Kant, Hobbes and Mill. Academically, she is particularly interested in examining how processes in the criminal law influence the legitimacy of the legal system and the State more broadly. In the future, Caroline hopes to pursue a career in the field of immigration that enhances the rights, liberties and welfare of immigrant groups.

Charles Dalrymple-Fraser / Author

Charles is a current student and a future educator. Currently, he intends to pursue a doctorate in philosophy, with a focus on issues of identity and care for dementia patients. Until then, Charles works to make philosophy more accessible, and spends his time teaching philosophy at youth shelters and rewriting philosophical texts as children's books.


"That's a central part of philosophy, of ethics. What do I owe to strangers? What do I owe to my family? What is it to live a good life? Those are questions which we face as individuals." – Peter Singer