

The Oracle

York University's
Undergraduate Philosophical Journal

Issue 6 (Spring 2012)

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A Note of Thanks

It has been my pleasure to work as staff for the Oracle for the past few years, and to be part of our first production to accept undergraduate papers from outside York University, and the first issue to include commentaries.

The Oracle has never before had a staff quite this large. Let me begin with thanking two York University alumni: Shadi Afshar the president of our student association from last year for her editorial introduction, and Alex Kosovic for her cover artwork inspired by the tarot card “The hanged man”.

I would like to thank our general staff: our four editors Niser Tookhi, Will Coddington, Sameen Amjad, Stefania Mendolina; our four commentators Mike Anderson, Andre Gordon, Peter Verveniotis, Kevin Wright; and a special thanks to Marilena Danelon (the editor-in-chief elect for our 2013 edition) for taking on both commentator and editor. In addition all our general staff acted as referees to select the papers presented here, in conjunction with Jeff Burns.

Finally thank you for your sponsorship: York Federation of Students, Vanier College, and the Department of Philosophy.

Sincerely,
Dennis Papadopoulos
Editor-in-Chief, 2012

Editorial

One day, when delivering a lesson on civil disobedience to my grade ten students, I played a video from the Occupy Wall Street movement. In the video, students from the University of California, Davis sat in peaceful protest as a police officer walked amongst them with pepper spray. I predicated the video by talking to my students about peaceful and violent protests, and the various forms of interactions state authority and citizens may have.

Later that day, as I talked with students about their thoughts and understanding of the lesson, one group of girls seemed particularly affected. “Ms., why did the officer pepper spray the students?” “Well, that’s a good question” I replied, “the event raises issues about freedom of expression, the right to assemble...” They looked at me and asked again “yes, but why did he do it?” “I’m not sure,” I tried again, “he may have believed it was in his authority, that his actions were a valid response to the protest, that...” They listened, but again, with the same persistence as before asked “yes, but why did he do it?”

Whether it be unrelenting curiosity, empathy or innocence, the commitment these students showed towards fulfilling their curiosity serves as an expression of the enticement many of us experience in our engagement with what we strive to understand. Perhaps it was unknown to them then, but their commitment to understanding, to finding a good reason for motivations that seemed so unintelligible brought them closer to an understanding of

what, for many, was at the core of the issue; there appeared no sound motivation for such an act of violence.

For those who embrace philosophy and its methods, formally and in lived experience, this initial propensity towards speculation and wonder can form into an identity, dialogue and narrative. In essence, the pursuit of philosophy embodies, and can affect both the individual, and the collective fabric of discourse.

Our relationship with philosophy can become an expression of our individual identity. Just as paint on a canvas, or the words of a poem act as an expression of engagement and struggle with the world, the philosophical questions and confusions we embrace reflect our own curiosities about ourselves, and the external unknown. The desire and willingness to question, critique, and explore through the methods of philosophy illustrates a particular intellectual openness, appreciation for philosophical ways of thought, and curiosity above comfort or conformity.

However, beyond the discovery and expression of personal and intellectual identity, philosophical inquiry can build a community; a social fabric of thought. There comes a point at which we must allow our ideas to be challenged by the opinions of others, engage in debate about the issues most important to us, and furthermore, even concede our beliefs for the sake of objectivity and philosophical rigour. Through open dialogue, critique and discourse, the sharing, refining and intertwining of ideas build a philosophical narrative, much richer and diverse than perhaps any belief in isolation.

At times the purpose and ideals of philosophy may seem difficult to uphold. However, a philosophy education, community, and literature foster the intellectual and social environment for the pursuit of these commitments. For many of us, a formal education and deep interest in philosophy has led to a more intricate understanding of our experiences and beliefs, while shaping and complimenting our interests and identity. Perhaps, even cultivating a further desire to pass on this appreciation for philosophy to others.

The Oracle is a place to share our passion and learn from the knowledge and inquiry of others. The rigour and quality of the contributions represents the efforts and experiences of many within the field. Yet, The Oracle further serves as a testament to the evolution philosophical thought can undertake. We have perhaps all had a moment similar to that which was experienced by my students, when we become bound by a question, when something we don't understand simply won't escape our thoughts. These moments can inspire an individual desire and propensity towards philosophy and active inquiry. Over time, these deep curiosities may inform philosophical theories and arguments we believe in, and believe should be shared with others. Publications such as The Oracle are home to this personal expression, and the dialogues which enrich philosophical thought.

By Shadi Afshar

Alumni President of Philosophia Student Association

On Nagel's Conception of Life and Death

By Jason Huang (York University)

Edited by Niser Tookhi

Introduction

Consider Jack who is a prominent and successful businessman. Jack is travelling on a train to attend a business meeting. This train is currently carrying 500 passengers, one of which is Jack. The train was derailed for some reason, resulting in the death of all the passengers except Jack. Jack is left in a completely paralyzed state, unable to move a single muscle in his body. Jack is alive, able to think and perceive. Jack is conscious yet he cannot open his eyes, move his mouth or anything else. Jack can evaluate his situation in two instances. First, Jack can be grateful that he survived, and indeed the only one who survived the tragic accident. Even though Jack is completely dependent on life support technology, Jack is still in the state of living, which is the state of consciousness and this state is good for Jack. The second instance illustrates Jack as a depressed individual. Jack was in the prime of his life, contributing positively to society and building a prosperous future for himself. But in an instant, all of this has been taken away from him. It is true that he is still in the state of living, but he is barely living. Unable to move and unable to interact with others, Jack hates his new condition and wishes he would have died like the others. Whereas the first

instance Jack saw his condition as a gift for remaining alive, the second instance considers his condition a curse for surviving in such a state.

The first instance represents Nagel's argument about life and death. Nagel considers life to be good in and of itself because of the basic characteristics such as consciousness, thoughts, and perception constitutes the goodness of life (Nagel, 1979). Jack's condition is still good for Jack because he is able to perceive and think despite his inability to do anything physically. Nagel is arguing that mere consciousness constitutes the goodness of life, regardless of quality of life (Nagel, 1979). Hence, death must be evil because it is the deprivation of consciousness, resulting in the loss of goodness of life. Nagel argues that death is the worst thing that can happen to an individual because it is the removal of the state of life which is good in and of itself (Nagel, 1979).

The second instance of Jack's interpretation of his condition is an attempt to illustrate my argument against Nagel. Nagel makes this very simplistic claim that life is intrinsically good solely because it is the state of consciousness (Nagel, 1979). This is simplistic because Nagel neglects the complexities of life. Nagel forgets that quality of life plays a role in determining the goodness or badness of one's life. While negligent of the quality of life, Nagel quickly deduces that because life is good in and of itself, death must be bad because it deprives the subject of all the benefits and goods of living (Nagel, 1979). Jack's condition, illustrated in the second instance, demonstrates that one's

quality of life can sink so low that one wishes the end of one's own life in order to end meaningless consciousness. But before developing my argument further, a closer look at Nagel is necessary.

Nagel's Conception of Life and Death

Nagel's argument is only considering the goodness and badness of life and death for the subject of life and death (Nagel, 1979). This means that Nagel does not consider whether the death of one is good or bad for others, such as loved ones and dependants, but only to the one who is dying or living (Nagel, 1979). Nagel says that life is intrinsically good or good in and of itself (Nagel, 1979). This means that there is something about life that is inherently and naturally good. Nagel says, "perception, desire, activity, and thought [that] are so general as to be constitutive of human life" (Nagel, 1979, pg2). These characteristics that constitute life make up the basic conditions of living (Nagel, 1979). From here, I will use the term 'consciousness' to encompass the ability to perceive, desire, think, experience which establish the basic conditions of human life. So when one is alive, one is also conscious for consciousness is the basic condition of human life.

Nagel makes the claim that consciousness is the inherent trait of life that makes it good in and of itself (Nagel, 1979). This means that consciousness must be intrinsically good, thereby making life intrinsically good because life is the state of being that allows consciousness.

Life will be good even if one's life is full with misery and despair, because the intrinsic goodness of being alive and conscious will always override the negative (Nagel, 1979). If consciousness and life are good in and of itself, then living longer is always better than living less because a longer life allows a longer duration of consciousness (Nagel, 1979). Death, being the deprivation of the goodness of life and consciousness as well as the deprivation of future possibilities, must be bad and evil in and of itself (Nagel, 1979). Nagel's argument may be summarized in the following:

- 1) A state of being that allows consciousness is good in and of itself.
- 2) Life provides a state of being that allows consciousness.
→ Therefore, life is good in and of itself.
- 3) A deprivation of a state that is good in and of itself must be evil in and of itself.
- 4) Death is the deprivation of life
→ Therefore death must be evil in and of itself.

Premises 2, 3 and 4 are irrefutable. Mere consciousness is the foundational property of living as argued by premise 2. Life provides the ability to perceive, think, desire and experience. It can be argued that some can be born living, in the sense that the bodily organs are functioning, but can never gain consciousness due to some brain defect such as anencephaly. Anencephaly is a birth defect characterized by most or all of the brain being missing from a baby's skull causing the inability to be conscious (Singer, 1995). But the occurrences

of anencephaly are rare because ultrasound can detect this defect very early on resulting in most parents opting for abortion (Singer, 1995). Due to the rarity of these brain defective cases, it is generally true that life is the state that allows consciousness. From this, it seems plausible to say that premise 2 is irrefutable, that life and consciousness is necessarily intertwined. Furthermore, premise 3: the deprivation of something that is good in and of itself must be evil in and of itself cannot be refuted because to deprive someone of something that is naturally and universally good cannot be a good but must be a bad for that someone. Lastly, premise 4: that death is the deprivation of life is commonsensical for death is the end of one's life.

My aim is to refute premise 1: A state of being that allows consciousness is good in and of itself, and in doing so will render Nagel's entire argument void. Nagel's entire argument rests on the claim that consciousness is good in and of itself. This means that a state of consciousness must also be good in and of itself and this is exactly what life is. Once it has been determined that life is good in and of itself, Nagel can further his argument by claiming that death is the worst thing that can happen to someone because death deprives one of the goodness of life. By refuting the intrinsic goodness of consciousness, life loses its intrinsic goodness as well which means that death loses its intrinsic badness.

Consciousness as a Good in and of Itself

Premise 1: A state of being that allows consciousness,

is good in and of itself is an unwarranted claim. Nagel does not state this premise in his essay, *Death*, but it is one that Nagel necessarily assumes is true when attributing the intrinsic goodness of life to the ability to experience and be conscious. Premise 1 is necessary for Nagel's argument because in order to determine that death is universally bad and never good, what death deprives one of must be something that is good in and of itself and never bad. Nagel says that life is good in and of itself because it is the state that allows one to be conscious (Nagel, 1979). By claiming this, Nagel is appealing to the minimalist property of living. But the question remains whether consciousness alone is what makes life good in and of itself or is there something else. To argue that consciousness is not good in and of itself, two arguments demonstrating that quality of life is important will be made: the meaningless consciousness and the endless consciousness.

The Meaningless Consciousness – Jack's Condition

Jack's condition mentioned earlier represents a meaningless consciousness. Admittedly, some who fall in the same condition as Jack will adhere to the first instance that aligns with Nagel. Some will consider their survival a blessing because they remained in the state of living, even though they are completely paralyzed. But it is probable for the majority who falls into this paralyzed condition to adhere to the second instance, which is the frustration and dread of their meaningless existence. It may be true that

some of the proponents of the first instance will convert to the second instance after living long enough in this condition. It may be one's initial reaction after awakening from the accident to be happy and grateful after finding out that one survived a terrible accident. But after countless days of sleeping, awakening to blackness (as one cannot open one's eyes) to endure another day of possibly listening to a radio or merely thinking about anything or nothing, one will consider their life to be meaningless. Jack's condition demonstrates a truly meaningless consciousness since the radio becomes an outlet to the world in which one can never interact with. More importantly, one becomes trapped in one's thoughts without the ability to act those thoughts out or advance one's desires. In the face of meaningless consciousness, it is reasonable for Jack and anyone in a similar condition to want to pull the plug and end one's life. In this situation, death is not seen as the worst thing that can happen to one but rather a desirable end to a torturous existence.

The condition of Jack is that of a meaningless consciousness because he can desire for things and dream up or fantasize real life scenarios but can never act upon those thoughts. Jack's quality of life has shrunk from a great, prosperous life full of possibilities to just the basic condition of living, consciousness. Jack can no longer enjoy his favourite sports and hobbies, can never watch his favourite television show, and interact with his loved ones and so on. Life revolves around achieving what one desires while simultaneously and continuously avoiding what is harmful

(Hobbes, 1651). This is human nature and the success or failures of achieving one's desires while avoiding harms determine the goodness or badness of one's quality of life (Hobbes, 1651). Jack's condition demonstrates that mere consciousness alone cannot determine the goodness of life.

Endless Consciousness, Endless Life – Immortality

Nagel makes the argument that everyone can benefit from living longer, even for a several minutes (Nagel, 1979). So Nagel would agree that immortality, the freedom from death and the ability to perceive forever, is desirable. Immortality seems to be the logical next step to Nagel's analysis of life and death. This is because Nagel claims that consciousness and life is good in and of itself and death is bad in and of itself, so the escape from death and a state of endless consciousness and life must be desirable. I will show, however, that immortality is not desirable for it leads to boredom, meaninglessness and social withdrawal.

A mortal human life is "...structured by [a] timetable. We get two or three decades of discovery and growth and then two or three decades of channeling most of our energy into the production and nurture of the next batch" (Lenman, 1995). Immortal life is free from this timetable so one is able to do as one please at the pace that one pleases. In this way, the immortal loses the sense of being human, and one's decisions do not have significance anymore. For example, a mortal individual, especially a female, is usually conflicted with the issues of starting a family or starting a career. This

mortal must make a choice. Either start a career early and leave childbearing for later, which increases the health risk for both the mother and the child. Or begin a family first, which means it may be at least a couple of years before the mother can start her career. A mortal being's decisions when faced with a forked road are significant ones and will determine the outcomes of one's life. These concerns are irrelevant to the immortal for the immortal has limitless time to accomplish all tasks. This limitlessness of time renders each decision, each goal and each accomplishment insignificant.

To illustrate the immortal life, Williams' cited a play in which a woman named EM became immortal by drinking an elixir of life (William, 1973). Williams said that "Her unending life has come to a state of boredom, indifference and coldness" (Williams, 1973, pg 332). Furthermore, EM became socially withdrawn (Williams, 1973). This is probably because all her loved ones, friends, acquaintances and so on eventually died. This forces EM to build new relationships with another set of friends and acquaintances. But eventually they will die as well. After many funerals and times of mourning, EM will avoid close relationships and possibly even social interactions in order to avoid more pain. At the end of the play, EM decided to withdraw from drinking the elixir which caused her to die (Williams, 1973). EM's choice to die shows that, at least in her case, death was more desirable than life, which challenges Nagel's position. Immortality drains the significance and meaning out of life, causing it to be boring and intolerable which is why EM

decided to end her life (Williams, 1973).

One may quickly respond by stating that EM would not be socially withdrawn if others were immortal with her. This example is illustrated by James Lenman in his hypothetical letter discussing the consequences of an immortality drug. This drug has the potential to create an immortal world population (Lenman, 1995). Lenman makes various arguments against this idea. In regards to social withdrawal, Lenman explains that our meaning of love becomes redundant and meaningless (Lenman, 1995). Whereas one's first love bears great meaning, the thousandth becomes meaningless (Lenman, 1995). Also, friendship and even familial ties are difficult to remain strong for eternity because disagreements and arguments tend to arise. This leads to not necessarily a socially withdrawn world but one in which strong, intimate ties are scarce. And even in an immortal world, the significance of life has been drained out. Lenman writes that "value relates to scarcity" (Lenman, 1995, pg 328) and the reason why humans value things is because there is a chance of missing it in a given life (Lenman, 1995). This means that with an immortal population, everything becomes valueless as no one will miss out on any life chances and opportunities. This eventually leads to a world of loneliness and meaninglessness. Surely, some will wish the end of their life similar to EM did in the play.

Immortality is the next logical step for Nagel's account of the goodness of life and the badness of death, so refutation of immortality must mean that Nagel's account is flawed. If life is intrinsically good because one is conscious,

this must mean that death is always bad and that immortality must always be desirable. But as we have seen, immortality is not always desirable as it creates a state of loneliness, insignificance and tedium. Mere consciousness for all eternity is undesirable if one's quality of life has diminished to absolute boredom and meaninglessness.

By showing that a meaningless consciousness and endless consciousness can result in a very poor quality of life and, therefore meaningless existence, mere consciousness is not good in and of itself. And mere consciousness does not make life good in and of itself. Nagel's position is rejected because both examples above show that the quality of life can be detrimental to the point that death is desired as a good and as an escape from consciousness. And by proving that one wants to escape consciousness, it cannot be a good in and of itself. Premise 1 has successfully been rejected.

Nagel's Reply

Nagel may reply to my quality of life stance by first agreeing that quality of life does matter. Nagel's point of view on the quality of life may be that quality of life does matter for the individual because "there are elements which, if added to one's experience, make life better; there are other elements which, if added to one's experience, make life worse. But what remains when these are set aside is not merely neutral: it is emphatically positive" (Nagel, 1979, pg2). So a good quality of life will add on top of the intrinsic good of life making life better (Nagel, 1979). But a poor quality of

life cannot take away the inherent goodness of life (Nagel, 1979). So Nagel is not neglecting quality of life altogether. Furthermore, Nagel would probably concede that although life is always good, there are preferable qualities of life. The preferred life is one where good elements outweigh bad ones and the least preferred is one where bad elements outweigh the good ones. But no matter what occurs, life is always good because the quality of life can only add to the goodness of life. Quality of life does not and cannot take away from the basic goodness of life that is consciousness.

The meaningless consciousness argument where Jack wants to die because he cannot do anything and is trapped in his own thoughts can be argued by considering Jack irrational. Jack was a prominent businessman at the prime of his life and all of that was taken away from him. Nagel would argue that the resulting paralyzed individual is depressed and irrationally lost the hope of living. Nagel would argue that the intrinsic value has not depleted or disappeared in Jack's life, it is only Jack's point of view about death that has changed. Even if Jack is completely paralyzed and cannot fully function like others in society, the fact that he is alive and conscious is better than being in a comatose state or dead.

Considering the immortal, Nagel would say that this is the utmost desired state. Based on his argument, Nagel must agree to this as the escape from death and endless life is logically inferred from his argument. Similar to Jack, the immortal individual's state is still one that is good in and of itself. It is only the individual, like EM, who has lost sight of

what is valuable. Life is valuable and one should never forget it, even 1 trillion years later. The problem is that in the case that I have demonstrated, Nagel would say that these individuals were not mentally strong enough to stay true to this value of life in the face of endless boredom and social withdrawal. Immortality grants one unlimited possibilities and the deprivation of nothing since one has endless time to achieve all that one desires.

Refutation of Nagel's Reply

Nagel has yet to prove his unwarranted claim that consciousness is good in and of itself. Perhaps this is because there are no plausible arguments for this claim. Nagel simply assumes without justification that consciousness is both necessary and sufficient for the intrinsic goodness of life. But this is not the case. Consciousness is only a necessary requirement for a good life because one cannot feel anything, let alone enjoy anything without being conscious. But consciousness is not sufficient for a good life. In the example of Jack, consciousness has been isolated from all other factors in Jack's life. This example demonstrates that consciousness alone is not sufficient for a good life and that consciousness must be supplemented by the acquisition of desires and other positive attributes of life. It is these positive qualities of life, not consciousness, that make up a good life rather than a bad one.

It seems that Nagel relies on claiming that life is good even if the individual does not see the goodness of life.

Specifically, Nagel said Jack is depressed and irrational and cannot see the value of life and that the immortal is not seeing the benefits of eternal life. But this is flawed. Nagel's discussion and argument is concerning the subject of life and death and therefore, that subject's opinions must matter. So Nagel's attribution of the value of life and consciousness to those who lost the will or hope to live is futile. Both Jack and the immortals desire death because their condition is meaningless. If Nagel were able to tell either of them that their life is a blessing because they are alive and conscious, neither of them will change their minds. This is because Nagel is making an unjustified claim that neither Jack nor the immortals can adhere to.

Conclusion

In this paper, I have shown that premise 1 of Nagel's argument is flawed because perception, desires, thoughts and experiences alone do not constitute a universal good. By demonstrating that consciousness and all that it encompasses is not good in and of itself, life cannot be good in and of itself solely on the basis of consciousness. Without proving that life is good in and of itself, Nagel cannot further his argument by showing that death is an evil in and of itself because it deprives one of all the intrinsic goods that life provides. I argue that life can be either good or bad and that there are no intrinsic attributions to life. The quality of life determines whether life is good or bad based on the subject's opinions of his or her own life. This means that a career as a

lawyer can constitute a successful, prestigious life to one but a stressful, work-ridden life for another. This shows that same situation can result in two very different interpretations and therefore, qualities of life. One sees life as a lawyer as a good and the other as bad.

Also, how one sees one's life will determine how one sees death. That being said, just because one's life is bad in that one may be poor, hungry and homeless, does not automatically mean that death is desirable. This is all based on the opinions of the subject. Life, its goodness and badness, and its corresponding attributions to death must be considered on an individual basis because everyone is different. Life is not so simple. Life cannot be simply placed into a logically deduced argument and be universally applied, as Nagel attempted. This demonstrates the complexities of life and Nagel misses this point altogether. Life is not intrinsically good and death is not always the worst thing that can happen to someone. Both life and death can be good or bad. It all depends on one's quality of life and one's interpretation of those qualities.

Works Cited

Hobbes, Thomas. (1651). *Leviathan*. J.C.A. Gaskins (ed.) (2008). New York, NY: Oxford University Press

Lenman, James. (1995). "Immortality: A Letter" in *Cogito*, 9, pg. 164-169

Nagel, Thomas. (1979). "Death" in *Mortal Questions*, Cambridge, England: Cambridge University Press.

Singer, Peter. (1995). "Dr. Shann's Dilemma" in *Rethinking Life and Death: The Collapse of our Traditional Ethics*, New York, NY: St. Martin's Press

Williams, Bernard. (1973). "The Makropulos Case: Reflections on the Tedium of Immortality" in *Problems of the Self: Philosophical Papers 1956-1972*, Cambridge, England: Cambridge University Press

Commentary by Mike Anderson

In this piece, the author effectively and cheerfully tackles several important philosophical questions: the utility and state of immortality, the value of consciousness, and ultimately seeks to resolve the question of whether or not life is worth living. It is, therefore, disappointing that the author spends so little time attending to the actual arguments presented by Nagel in his 1979 chapter. Where the author devotes a third of the paper to dissecting and proving Nagel wrong on matters of immortality, the word and concept are only mentioned in passing and are far from central to Nagel's argument.

Where the author repeatedly criticizes Nagel for failing to take into account quality of life, it is not apparent that this has occurred. We may consider, for example, that if, within Nagel's calculus, enjoyment of quality of life is what justifies life (the "capacity to suffer and enjoy", as Nagel calls it), then elimination of that quality of life (as is the case with Jack's story) would no longer justify life. On this matter there does not appear to be a disagreement at all, despite the author's repeated claims to the contrary.

Most troublingly, in the final pages, the author begins to explicitly put words into Nagel's mouth. When the author suggests that Nagel's position may be summarized as

"Quality of life does not and cannot take away from the basic goodness of life that is consciousness.", they are either misreading or twisting the exact Nagel quote which the author uses earlier in the same paragraph: "[...] there are elements which, if added to one's experience, make life better; there are other elements which, if added to one's experience, make life worse. But what remains when these are set aside is not merely neutral: it is emphatically positive".

It is true that Nagel is arguing that life is intrinsically good, but it is not the case that Nagel merely waves away quality of life. Within the framework he establishes, it is entirely possible for quality of life to offset the intrinsic goodness of life. Whatever the merits of Nagel's position that life is intrinsically good, it is profoundly unfair to lambaste him for holding a position which he does not advocate.

In their conclusion, the author argues for a pluralistic understanding of life: one within which different strokes are to be permitted for different folks. The difficulty, once again, is that, while this is phrased as a substantial disagreement with Nagel, it is not apparent or obvious that this is the case, nor has the author demonstrated that Nagel is ignorant of the "complexities of life". The author made the unfortunate choice of finishing their paper with a suggestion that Nagel has "miss[ed] the point altogether".

Evolution as the Architect: Bringing the Mind Into Being

By David Puzak (York University)
Edited by Will Coddington

I

In the early days of artificial intelligence, symbolic internal representations filled the spaces between perception and action. These representations relied on formal logics that contained rule based propositions to construct behaviour. However, as research in artificial intelligence continued to progress, scientists began to discover the critical role of how the body and its interaction within a dynamic environment ultimately lead us to realize that to “build a system that is intelligent it is necessary to have its representations grounded in the physical world.” (Brooks, *Elephants Don't Play Chess*, 1990, p. 5). Here the definition of intelligence is redefined as something that has the potential to act autonomously in an environment and not be self limited by its own inner representations. Brooks was ultimately trying to say that intelligence as a sense-think-act process is incompatible with true adaptive behaviour and that by taking thinking out of the equation a more accurate model of cognition would ensue. This discovery threatened the role of internal representations in explaining what human intelligence truly consists of. This shift away from symbolic representation was the key turning point in helping

researchers realize that perhaps true intelligence is not only founded in logical reasoning and computation but as adaptive behaviours that promote survival within a specific environment. Brooks extrapolates on the importance of this by stating that, “mobility, acute vision and the ability to carry out survival related tasks in a dynamic environment provide a necessary basis for the development of true intelligence.” (Brooks, *Intelligence without representation*, 1991, p. 140). The very act of performing these survival related tasks in an ever changing environment is a far more accurate basis for understanding the true definition of intelligence. By taking this approach in redefining intelligence, in a way we are mimicking the process of how evolution came to shape what we see has higher cognitive processes.

By examining the role of how evolutionary pressures contribute to shaping the brain and body through complex environmental interactions, we begin to see the emergence of the mind as a specific entity fit to problem solve and maximize its efficiency in a larger dynamical system. In doing so, we will become better equipped to reorient our models of cognition to more accurate accounts aiding in our construction of artificial intelligence. It is better suited to take this bottom-up approach to studying artificial intelligence rather than adopting a top-down approach. A bottom-up approach assumes that our cognitive processes are products of an engine of reason. One specific bottom-up approach borrowed from information theory is that of subsumption architecture. Subsumption architecture aims to

explain complex and intelligent behaviour by reducing it into simpler components. I will make a case of how throughout evolution the human brain has had to solve domain specific adaptive problems and through this process continual improvements guided by these problems have made small improvements to the brains architecture. These solutions have incrementally through time combined themselves in such a way to give rise to the higher cognitive faculties of reasoning.

II

Each stage of human evolution has found solutions to domain specific problems that have been slowly tinkered through selection to provide us with the cognitive apparatus we currently possess. Although this has been an extremely lengthy process, it has allowed human beings to possess the faculties of higher cognitive processes like reasoning. The parallels between the domain specific adaptations we have gained from evolution and the subsumption architecture we have created in the field of robotics is worth investigating primarily because of the value that the process of evolution can impart on our endeavour in creating accurate models of human cognition. The domain specific adaptations discussed in this paper all relate to the development of a specific cognitive faculty and help explain how small improvements through time have gradually reached complexity.

There exists a growing amount of evidence and research that supports the idea of how body, mind and

environment are a complex but deeply intertwined causal system. One particularly interesting account involves how the switch from quadruped locomotion to bipedal in early hominid fossils influenced the size of our inner ear balance organs to allow us to become sensitive to vertical movements. This strengthens the embodiment thesis by reinforcing the fact that “changes in behaviour over evolutionary time are associated with coordinated changes in both the periphery and the nervous system.” (Beer, 1997, p. 154). These peripheral changes modified the architecture of the brain in turn creating new layers of cognitive processes that could have led to such beneficial adaptive behaviours as navigating more rugged terrain, avoiding predators, enhancing visual perception and further augmenting our problem solving abilities. It is worth noting that an organism does not select for these adaptive solutions electively – no forethought on the part of the organism plays any role in gaining these new layers of cognition; it is merely a product of agent-environment interaction. This supports Brooks’ assertion that “low level simple activities can instill an organism with reactions to dangerous or important changes in its environment without complex representations and the need to reason about them.” (Brooks, *Intelligence without representation*, 1991, p. 6). As a result of the changes brought on by the development of bipedal movement, humans gained better control over their environment through increased cognitive capacity of their surroundings.

Although classical artificial intelligence research can be seen to have successfully reverse engineered the

mathematical processes of human cognition, how can domain specific adaptations account for its emergence? The idea that mathematics had emerged purely a priori in the mind is generally supported by proponents of those who assume that our cognitive processes are predominantly products of an engine of reason. However, Lakoff and Nunez provide a perspective of the development of mathematical thought founded in environmental interactions that steer us towards the idea that mathematical processes are based on representations that are grounded in the external environment. Some of the domain specific problems that would have needed solutions would be directly related to the perceptions of the phenomena we were sensing. For example, in object collection, in order to best maximize our economy of materials such as stones needed for tools in the manipulation of our environment, humans would have needed some way of keeping track of sum or difference. (Lakoff, 2001, p. 64). This primitive behaviour preceded the more complex mathematical concepts that are seen today because it was this among many incremental processes provided by evolution that lead to more complex problem solving abilities. The emergence of mathematical thought was a process that included interactions between the human brain, body, and environment. The continuous feedback provided by domain specific problems found in the environment led to a simultaneous increase in brain size and as a result – enhanced cognitive abilities (Beer, 1997, p. 554).

In adding to what is commonly seen as strictly

representational within cognition but has seen new light within embodiment research is that of language being the product of interactions between an organism and the environment. What approaches to explaining language can we investigate in gaining a better understanding in our modelling of cognition? It has been a widely held assumption that language is a representational vehicle in which beliefs are carried. However, numerous studies in neuroscience have shown no positive correlate between beliefs and neural processes (Churchland, 1981). If this continues to hold true and empirical evidence goes against vindicating beliefs, proponents of the mind as an engine of reason such as Fodor and his Language of Thought hypothesis would be wise to investigate other avenues of discourse.

Andrews and Radenovic (2010) explained the following:

“If the antirepresentationalists are correct, there is no categorical definition of belief, that is, no definition that would tie belief to language, concepts, content, or representations. Rather, “belief” is a cluster term that includes dispositional stereotypes and patterns of behavioural and affective responses that can be analyzed only in terms of an interaction between the organism and the environment. Further, belief is not binary; there are degrees of belief, and there is belief relative to a context.” (pg. 41)

Beliefs are generally seen as internal representations for the causes of behaviour and this is held firm by thinkers

such as Fodor. However, how does this relate in our abilities to recreate the linguistic abilities of humans in artificial life? Language has always been a challenge in artificial intelligence, but by approaching language from an embodied perspective and examining the behaviour of an organism in its environmental interactions (rather than reverse engineering using a top-down approach like we have currently done); we could gain a much clearer picture of the processes that underlie it. Further, by investigating the nature of dispositional stereotypes, a view on how linguistic ability emerged by way of domain specific adaptive responses might help in reorienting our cognitive models of language.

More evidence that during its infancy, human cognition did not rely on inner representations to generate and guide behaviours lie in the experiments conducted in change blindness. The main premise behind change blindness is in the fact that because we do not carry internal representations the result is that we are prone to missing many details that are found in our environment. Humans as situated organisms take information from their environment as needed. It would not suit early hominids adaptively to carry maps of their terrain internally since it would not assist them maximizing their problem solving abilities in encountering a myriad of new novel stimuli.

The experiments in change blindness provide us with another fact -- that an organism can be limited by its physiology. The anatomy of the eye only affords humans a very small presentation of the environment – the fovea (area

with the sharpest central vision) is very small. In order to compensate for this, evolution has provided human vision systems with extremely fast eye movements called visual saccades. These saccades help humans maximize cognitive efficiency by allowing them to quickly parse their environment in wide horizontal and vertical planes. These eye saccades developed by a domain specific adaptation have likely had a direct impact in the development of the human brains visual centres and have led to changes in how they attend to their environment (Kalat, 2009, p. 242). Recall the similar account made earlier in the relationship between bipedalism and its influence on cognitive functioning. Again, this supports the example of some pre existing 'organ' that is being constantly modified in a simultaneous fashion with the environment and our cognition. The fovea is a structure that exists in its own right – but as a result of environmental pressures, some adaptation had to occur in order for humans to maximize their cognitive efficiency.

Another field founded in evolutionary psychology that has potential benefits in assisting us in creating accurate bottom-up models of cognition is the neuroscience of reasoning. How can a bottom-up approach explain seemingly complex behaviour such as social reasoning? Taking a look at what evolutionary pressures played a part in shaping this domain specific adaptation can allow us to see what purpose reasoning had in coming into being. One hypothesis for the development of social reasoning is found in what is called the Machiavellian approach. This approach assumes that it was advantageous to gain the ability to be

able to socially manipulate others in a group in order to gain an individual benefit (Atkinson, 2003, p. 15). As early human social groups grew in complexity, so consequently did the interactions between them. Studies help confirm the fact that this pressure for social adaptation in larger groups lead to marked changes in brain size – “average social group size and neo-cortex size are positively correlated across species: the bigger the social groupings, the bigger is the neo-cortex relative to the rest of the brain.” (Atkinson, 2003, p. 16). This can help conclude that a specific pressure helped select for a sub system in the brain that helped increase an aspect of intelligence. When it is known what particular sub systems underlie a process (such as reasoning), it is easier to understand its place in the whole system adding to a better understanding of how all of the sub systems came together to create its function. This can positively impact the creation of bottom-up models in artificial intelligence.

The views and ideas shared in the preceding paragraphs all express the idea of what is termed as neuroconstructivism. Research based on this field of study generally looks towards finding empirical evidence found in dynamical systems to try and distance themselves from the limiting burden of internal representations. This increases the breadth of someday soon finding new theoretical bases for cognitive processes that up to this day have been based on representation sparse top-down models of cognition.

III

The limitations of this paper revolve around whether or not bottom-up processes such as those used in subsumption architecture can account for more complex cognition. The answer to this is most likely yes, that given time and allowance for technological limitations to evolve, it is possible that the theories we develop in areas of research such as neuroscience and evolutionary psychology will allow us to apply these as models to the subsumption architecture in the field of robotics. Throughout human evolution, humans did not have to rely on any forms of internal representation. In turn it is not necessary that in our creation of autonomous agents this be a requirement either. Given the change, complexity can emerge through agent-environment interactions by way of designed purposeful domain specific adaptations (Brooks, *Elephants Don't Play Chess*, 1990, p. 3).

Many apply to adopt a hybrid approach to creating models of cognition that involve combining top-down and bottom-up approaches in order to try to capture the full picture of human cognition. Even though this seems intuitive, it is counterproductive in the modelling of cognition. This need not be the case because whereas top-down approaches are limited in that reverse engineering a system does not reveal to us the purpose that each sub system had in creating the whole. Evolution required millions of years of tinkering, if we are going to build the cognitive system with the ground up based on subsumption

architecture, then we can expect some delays in our current theoretical models. Classical AI used a top-down approach only because it was more convenient and modelled cognitive faculties that were relatively recent evolutionary gains. For example, one of the top-down approaches to modelling language was created into a software program called DEC talk. DEC talk only focused on language as tokens of internal representation and fell short of what meaning the words had within the context of a conversation (Clark, 2001, pp. 63-64). As a result, the top-down approaches to language still have not found any success in exhibiting anything near the human linguistic flexibility.

Another area of limitation could be seen in how the role of memory might relate to representation. Do memories count as forms of internal representation? Even if they do, memory can be conceptualized as a link between the internal and external. It was an adaptive benefit that we as humans developed memory. For example, highly developed spatial memory skills help us locate ourselves in a particular place in time and help us navigate terrains (Kalat, 2009, p. 384). This allows for a strategic manipulation of the environment that could include hunting and catching prey, memories of harmful food substances, animals that pose a threat to our survival. There is much proof supporting the fact that memory is not really a form of representation in our minds. Based on the physical systems hypothesis, what counts as a representation is something that is quite static and unchanging so that when formal rules are applied to it, it produces meaningful and logical output (Clark, 2001, p. 28).

Memory as it occurs in humans does not follow this pattern. The studies in change blindness confirm this by showing how we are limited when it comes to sensing novel input; we don't have an internal representational correlate to allow us to detect changes quickly – in other words there is no comparison between anything we sense to anything in our memory. In analogy to subsumption architecture, memory is just a number of neural structures all working together to create the illusion of discrete information storage. Studies to find the traces of memory in neuroscience have still been evasive likely because it is a global process relying on many different localizations of function.

Evolution designed the body around a combination of a great multitude of adaptive parts – these parts come together to form the structure in which function (mind) ultimately emerges. Without this cascading effect of simple to complex processes, it will not be possible to trace the path of how higher cognitive faculties emerged. Bottom-up approaches will benefit from advances in technologies and research in helping explain complex behaviours. This is why work in robotics specifically subsumption architecture is so valuable in the construction of artificial intelligence. For example, it could be possible that reasoning requires the cooperation of many lower level cognitive functions like attention and memory; this outlines the importance of the cascading effect of domain specific adaptations.

The shift away from inner symbols that has been argued for in this paper through the use of

neuroconstructivist views allows a new perspective on understanding how intelligence can emerge from mindless and non representational causes. While Brooks' work is generally based in robotics, research from fields like evolutionary psychology might help inform and improve the progress in creating successful autonomous agents that are based on representations that are physically grounded. Brooks outlines one of his main contentions with artificial intelligence researchers that still adopt a top-down representational approach as disregarding the fact of how the early evolutionary processes effected the cognitive systems as a symbol system and reinforces the point of the poor performance of symbol based robotics in comparison to embodied robotics (Brooks, *Elephants Don't Play Chess*, 1990, p. 3).

There is promise in the study of evolutionary processes in aiding the creation of more accurate models of cognition. By gaining a clearer understanding of how domain specific adaptations contributed to designing the mind through incremental complex interactions between brain and body, a benefit will be seen in our understanding of how subsumption architecture will be able to account for complex and intelligent behaviours.

Works Cited

- Andrews, K. R. (2010). Confronting Language, Representation, and Belief: A Limited Defense of Mental Continuity. In J. V. Shackelford, *The Oxford Handbook of Comparative Evolutionary Psychology*. Oxford: Oxford University Press.
- Atkinson, A. P. (2003). Evolutionary Psychology's Grain Problem and the Cognitive Neuroscience of Reasoning. In *Evolution and the psychology of thinking: The debate* (pp.61-99). Hove: Psychology Press.
- Beer, H. J. (1997). The brain has a body: adaptive behavior emerges from interactions of nervous system, body and environment. *Trends in Neuroscience* , 553-557.
- Brooks, R. (1990). Elephants Don't Play Chess. *Robotics and Autonomous Systems* , 3-15.
- Brooks, R. (1991). Intelligence without representation. *Artificial Intelligence* , 139-159.
- Churchland, P. M. (1981). Eliminative materialism and the propositional attitudes. *The Journal of Philosophy* , 67-90.

Clark, A. (2001). Robots and Artificial Life. In A. Clark, Chp. 6 Mindware (p. 109). Oxford: Oxford University Press.

Kalat, J. W. (2009). Biological Psychology 10th Edition. Belmont, CA: Wadsworth.

Lakoff, G. N. (2001). Where Mathematics Comes From: How the Embodied Mind Brings Mathematics into Being. NY: Basic Books.

Sylvain Sirois, M. S. (2007). Neuroconstructivism: How the Brain Constructs Cognition. In Behavioral and Brain Sciences (pp. 2-33). Cambridge: Cambridge University Press.

Commentary by Andre Gordon

"Evolution as the Architect: Bringing The Mind Into Being" outlines that nature of the study of the emergence of human intelligence and how it impacts our views on the context of creating a form of artificially intelligent being. As it outlines, until recently, development of artificial intelligences has taken a sort of "internal representation" of memory, or rather, a "top down" method of intelligence. This is, essentially, that the intelligent beings develop reason, and then subsequently use it to respond to their environment. That is, their sense of intelligence is purely internalist, and thus making a sort of internal representation or "top down" model. Recently however, there has been the assertion that intelligence is reached from acting in context of its environment and not by an internal definition of reason. The article says from here that with this new model of intelligence, it will solve the large issues with creating a sort of artificial intelligence without the issues found in the "top down" model of intelligence.

With this, there are certain implications that may emerge. The first is the time scale with artificial intellectual development. As stated in the article, the means in which humans developed intelligence was a process that took tens of thousands of years , even to reach any level resembling something to our scale . The article does prescribe that human intelligence did demand a high degree of body, mind and environment, all of which were changing and thus aided in the growth of human intellect in the bottom up

paradigm. The question that would arise is what does this mean for artificial intelligence? Did human growth and intellectual contextual progression take forever because of that is how long true adaptive intelligence takes or is that only in the human paradigm? If the former is true, then workarounds would have to be done to reach human like artificial intelligence, lest you would have to wait fifty thousand years for progressive intellect to take shape. One could argue that the advances that we have made already would aide our process, but those advances were made on the pretext of internalist calculation as reason and may not solve the prevalent difficulties related to time. The logistics of the time problem are considerable but surmountable likely with considerable scientific advancement, but to dictate the parameters of such a development would be difficult to formalize.

Another difficult idea inside of this paradigm is the idea that larger models of cognition are based on smaller ones. As stated, some ideals such as reason may in fact be based on simpler concepts such as recognition or adaptability, and this is how human intellect is built up from the bottom up. One could argue however that some more complex intellectual system are not emergent from smaller ones. Morality, for example, may be based on a series of smaller conceptual exercises, such as social cohesion etc., but not all the concepts inherent inside of morality are reducible to simpler concepts. This may then mean that there were more than just simpler mental processes at work, which may or may not indicate internalist development inherent in

human intellect.

Finally, one may argue that the new form of regarding intelligence would work, but it should not be stated as the only thing that may work. What is assumed from the outset for most is that human intellect is the only logical model for artificial intelligence, which of course may not be the case. What is it to say that there may another way to grant intellect to artificial intelligence, that is not human based, and may actually be easier to do? If there is in fact intelligent life outside of Earth, more than likely their emergent intelligence will be far different than ours, which would at least prove that our intelligence paradigm may be at least faulted. This is not to say, however, that we should dispel our advances in intelligence based on an artificial assumption of aliens. Quite the contrary, the possibly of other regarding concepts of life should at least encourage the thought that intelligence is not purely subsumption based.

Nye's Herstory

By Benjamin Mendelez (York University)

Edited by: Sameen Amjad

An interdisciplinary approach to argumentation with its underpinnings in our sociology will be most needed to unravel the far reaching fabric of our communication. A one-dimensional view cannot possibly capture the multifaceted realness of communication and it cannot expose what we need to be studied. Likewise, communicative exchanges and any theory attempting to ground it with one method, one direction or one tool will be capturing but a partial picture of the whole. Logic is such an approach: it has disabled other modes of communication and branded them subsidiary. As dark as its past may have been, has logic or critical thinking had any developments? Has it evolved to capture what actually occurs when two humans or nonhumans, argue or communicate? Have we, as a global society, not benefited from the art of critical thinking? Andrea Nye, in the entirety of her book *Words of Power* (1990) cries out that it has not, that it still remains a male-dominated discipline, oppressing the under-class, and admitting only those that fit their agenda. This paper will attempt to show that Andrea Nye does not give a fair account of the history of logic, she gerrymanders data to support her thesis and that there are major benefits to espousing critical thinking skills as long as it is not the only communicative skill we inflate.

Andrea Nye, at the onset of her book *Words of Power*

(1990), discusses the separation logic has promoted throughout the course of history, a separation that has its roots in an exclusive male dominated discipline, wherein women lie at the outskirts and are deemed inferior to their male counterparts. This movement, Nye urges, is motivated by those logicians who “depend on thought only, unrelated to any personal, political, or economic considerations” (3), so as to view such matters as irrelevant to or incompatible with, logical activities or intellectual pursuits. This approach, according to Nye, promotes the exclusion of emotions - namely, fears, humiliations, resentments, and the like - along with impulses, drives, and “all of his natural life” (ibid.), so as to distinguish human concern from reasoning, i.e., the emotionality and the context of the speaker are kept separate and distinct from the understanding of the world.

This ideal language, Nye asserts, is said to be rid of confusion and passion, and be transcended from natural language, so that, by definition, it is deemed unreadable to the non-logician, for, as she writes, it is claimed that “logic is the perfect transparency of a language which does not need to be read” (4). To fully capture what Nye expresses here one must draw on her distinction between ‘reading’ and ‘analyzing’: the latter is concerned with judgment, which removes one from the context, the speaker’s desires, intentions, or motivation for a particular speech act, i.e., it views language as an isolated vehicle to logical truth while the former focuses on understanding, which entails a story of the speaker, their position, and their intended meaning and expected reception (173-174). Moreover reading, according

to Nye, is absent in a logicians world, where only analysis is said to guide one to logical truth. The former is concerned with human preferences, does not treat “logical truth [as] independent of both its genesis and of the man who speaks it” (174), and thus can be viewed as fallacious; while the latter narrows in on isolated propositions, context less avenues, mind-independent claims, and is justified, for “truth must be judged on its own merits...without reference to men and without reference to the origins of ideas in specific social conditions” (ibid.). In other words, reading interrupts the progress to logical truth, according to the logician, and analyzing permits one to establish the universality of truth, independent of human concern.

In support of this stream of decontextualizing, the paper will briefly shift the reader’s attention to two authors - one prior to Nye’s book, and a more contemporary one - to illustrate the predominance of this notion of reasoning, or logic, as the Holy Grail of argumentation.

Foreshadowing Nye’s book, and the primacy of reasoning and logical pursuit, is David Hitchcock’s book *Critical Thinking: A Guide to Evaluating Information* (1983), where he notes that “critical skills are justified by the standards of reason...because reason is in fact the only sure ultimate guide to truth” (5) (emph. add.). He does, however, give some elbow room for emotion, intuition, authority, and tradition, but they depend on, and thus are subordinate to, reasoning, for, as he notes, “where your instincts prove false, your emotions distort or are inappropriate, or authority misleads, reason will caution you against continuing to rely

on them” (ibid.). Reasoning, moreover, is a human beings essential ability, that which distinguishes them from other species, according to Hitchcock; he even goes on to say that “in a certain sense, to be a good human being is to be good at reasoning” (7).

A second and more contemporary outlook on the primacy of the context less account of logical truth is found in *An Introduction to Philosophical Logic* (2008) by A.C. Grayling. He discusses two common assumptions: (i) the intentionality of consciousness where “propositions must be independent of any acts of consciousness intending them...they are eternally true, if true...I do not create them merely by assuming a propositional attitude towards them” (17); and (ii) the denotive theory of meaning, where Grayling argues that propositions are non-physical, atemporal, and are “available to more than one user of the language, and so cannot be dependent for their existence on this or that particular utterer or circumstance of utterances” (20). The entirety of the book lays out the fundamental distinction between a realist and an anti-realist (the aforementioned account of a proposition is within the scope of realism); but the crucial point here is that these views - that arguments be judged according to validity and soundness, existing beyond the physical and temporal, with little to no regard for the attitudes, preferences, goals, or motives, of the speaker - are mainstream (or, as Nye prefers, ‘malestream’), i.e., they have current usage in intro courses to logic and critical thinking, and cater to a very specific group, and neglect another. To this discussion we turn to next.

Nye (1990) asserts that logic has been socially constructed to cater to the nature of men, and, consequently, to exclude women's: citing men such as Aristotle and his pursuit of a necessary truth with the collapse of Athenian hegemony, Plato in his search for the absolute good during the disintegration of the traditional order of city-state as foreigners and Frege detailing a new logical notation amidst an economic crisis in Bismarck's Germany, Nye concludes that "logic is the creation of defensive male subjects who have lost touch with their lived experience and define all beings in a rigid oppositional category modeled on a primal contrast between male and female" (4-5). In other words, it is men's response to the crises of their time that brought about a structure that seemed to give them a handle on the chaos but from this structure came the silencing of those who could not accommodate to it i.e. those outside of this circle were deemed illogical and thus speaking a language that was impotent or subordinate.

Logic, moreover initiated and reinforced a chasm between the sexes and the minorities, one that led to segregation in social communities, such that women and the under-class, being deemed illogical, were in charge of slave labour and reproduction, while men were concerned "with law courts, assemblies, and magistrates in which rational discourse prevailed" (178).

Was the exclusion of women to account for the fact that they were not predominately logicians, professors, politicians, or leaders of the sort? Nye argues that it does not follow. Nye urges that women, even upon admission to a

university, public debate or another venue where logic predominates have felt uneasy, uncomfortable and complemented by the norms of the institution, for the norms do not parallel their nature and thus have “an agonizing sense that the terms of success still escape them, that what they care about is lost in following the rules” (176).

Success, according to this logical foundation is equated with rule following with excelling within the confines of this structured system which complements men and delimit the feminist voice. The sound that is alien to logical structure; thus, Nye urges, any implementation of a ‘women’s language’ is futile, for it would not be categorized as logic, per se, but as lying “outside of logic, different from logic...an expressive alternative that leaves thinking to men” (179).

So, it would seem that the minority are stuck: in attempting to structure the world around them, men have excluded women and the under-class, and this exclusion has left them with two options - to strive for inclusion and to endeavour for admission into the halls of ‘logic,’ or to remain content and passive, comfortable auxiliaries to the ‘elite’ - both of which are secondary, or subsidiary, positions; the latter more salient than the former.

To draw an objection to Nye’s historical account of logic, Michael Gilbert’s paper *Feminism, Argumentation, and Coalescence* (1994) will be used to zone in on the missing gaps and implicit selectiveness evidenced in her work. Gilbert notes that Nye establishes a good exposition of the progressive nature of logic, a progression that aims to

disconnect 'correct' logic from human interaction and connectedness; but Gilbert argues, she does so selectively for "her history stops at Frege...[no] mention of Russell...nothing about his going to prison rather than war...and what of Tarski[?]...[and] the vision he saw [?]" (12). Nye omits these individuals in her account, Gilbert urges, because they are aimed at establishing a means of communication between cultures to prevent "the incomprehensible madness that is war" (ibid), i.e., their omission gives credence to Nye's thesis, that logic is an onslaught or a delimitation on all that connects us humans.

Nye's (1990) account is selective in that it thrives on dismantling Frege (127-172), Aristotle (41-46), Plato (23-37); yet, as Gilbert (1994) notes, she fails to address "Leibniz' dream of new knowledge for humankind" (13), the death of Logical Positivism via Gödel's Incompleteness Theorem, and the emergence of "Ordinary Language and our own Argumentation theory" (ibid), amongst others. In other words, Nye stopped her historical spillage just as the movement or reaction commenced, i.e., just as logic began to evolve new branches many of which bare very little resemblance to the stem, Nye halts, giving no further account of progress in the discipline.

Moreover, the aforementioned notion of selectiveness is formally known as a confirmation bias, wherein, say, the researcher, seeks only confirming evidence, evidence that will support their thesis, or predetermined agenda, while resisting conflicting or disconfirming data. This phenomena is well documented in psychology textbooks: discussed by

Weitan and McCann (2007) as 'the experimenter bias' (65), and by Jeffrey S. Nevid, et al (2005), as an avoidant, for one ought to be unobtrusive with the data, "so as to prevent any interference with the behaviour observed" (23), and known less formally as cherry picking, quoting mining, or gerrymandering. Thus a theory or collection of data is less credible when one overlooks that which refutes and marvels at that which confirms: theories need to go against the grain to have any credence.

The introduction of the two authors above - David Hitchcock and A.C. Grayling to give an account of the primacy of reason, logic, and contextlessness - were selected for the very purpose of illustrating selectiveness, or gerrymandering; neither author is limited to what was quoted of them: Hitchcock (1983) discusses Overview, Meaning, Structure, Inferences, Truth, Other (relevant data), and Grade and thus introduces 'The OMSITOG Approach' (15-26), where utilizing it one ought to "acquire some sensitivity to the variety of types of human discourse and to the way in which the critical approach of the seven-step procedure can be adapted to this variety" (27) (emph. add.); also Grayling (2008) notes the problems one were to face in adhering to abstract entities, such as having no means of individuating them, and thus having no clear criteria of identity (30), which, when populating our ontology with them would in turn violate the rule of parsimony (Ockham's Razor) (29). These two authors were originally quoted to support Nye and the primacy she aimed to lay out but this was by no means the entirety of their agenda or thesis for

they clearly give more bite than the teeth marks show. In other words it is simple to see what you want to see, quote what you want to quote, hear what you want to hear, if all you see/quote/hear does nothing but confirm your views.

Nye (1990) may reply to the charge of confirmation bias, however; her rebuttal rooted in the very fabric of the above objection i.e., the origins of the structure in which it relies. In excluding individuals such as Tarski, Leibniz, and the rise of Ordinary Language and Argumentation Theory, Nye could respond that they too are driven by the same 'stuff' that propels logic, i.e., any such proponent - women philosophers, theologians, social scientists, and logicians included - would be "speak[ing] from a script in which the master always win" (180). There can be no freedom from oppression from within the walls of the enemy according to Nye; Men have introduced an illusion she remarks, an illusion that women must subscribe to for survival, so that "they must take up words of power and fashion them into the same weapons as men" (ibid), hence the title of her book. Such endeavours, she would reiterate, are troublesome for women, for they do not complement their nature, their preferred means of communication, and thus their tendency to 'read' the world, rather than to 'analyze' it. The oppression lies within the exclusion, according to Nye, so to assume reformation within the structured walls of 'logic' would be assuming that which one aims to reform, or change. In other words, one cannot expect to change the color of the red sea by jumping in with red dye, metaphorically speaking.

Drawing back to Gilbert (1994), where he notes that “all attention to structure does is allow us to classify certain highly defined argument forms as reliable (i.e., formally valid,) and other as not” (14), and that demanding support for claims, or arguments for opinions, is but essential to widening our repertoire of knowledge, human interconnectedness and coalescence; the real issue or widely untested error is when argumentation is viewed as a one-dimensional unit of discourse, i.e., when only the logical is presented as the ‘correct’ form, neglecting all others (ibid). Reinterpreting argumentation as a one mode exercise and thus stripping it of essential components, would be, as Gilbert in his book *Coalescent Argumentation* (1997) notes, to be charged with prejudiced reductionism: to construe all the additional modes he presents - the emotional, visceral, and kisceral - and reduce them to the logical is to not treat “argumentation [as] a subspecies of the more general category of human communication” (79), and thus one would not be “capturing the richness of everyday disputing” (88).

There is nothing intrinsically wrong with asking where the support beams are before entering the house of belief. Nye (1990) misses this point. Her book is concerned with discrediting logic via its oppressive history, which complements the nature of men and their endeavour to regain control; but there is no explicit emphasis on the usefulness of looking for support before espousing beliefs or opinions.

Now, to be fair to Nye, she does concede that logic is

not the initiator of oppression, nor the maintainer of it, for the “disciplining of women, the capture of slaves...were carried on in more material exercises of economic and military power” (79). However, she adds, the introduction of Stoic logic - a sort of cosmic law, according to Nye, that imposed structure on the physical world and universality of the will for the virtuous (66) - was not exempt: in providing a grammar for communication, one that could govern the polis, “logic rendered them [its students] all speechless...unable to validate or refute what had been said from their own experiences...this [is] the silencing that logic was meant to create” (79). So, it would seem, Nye has fallen into some sort of contradiction, a cognitive dissonance, if you will: on the one hand she argues that logic is not the sole cause of oppression, charting it to militant and economical forces, yet on the other hand charges logic with teaching its students not to question beyond the scope of their grammar which in turn causes silencing and blind following. If the latter is true it would most certainly lead to the former i.e. to being politically exercised as a norm. But is this true? Does critical thinking delimit the scope for understanding the world around us and those people with whom we share it?

To elucidate the usefulness of critical thinking, this paper will now consider *The Power of Critical Thinking 2nd* (2010) by Lewis Vaughn and Chris MacDonald. The book quickly outlines the quality of beliefs, as opposed to what a belief is, as a fundamental concern in critical thinking, for it “is not about what you think, but how you think...not on what causes a belief, but on whether it is worth believing” (3)

(emph. orig). Critical thinking, according to Vaughn & MacDonald, equips us with tools to rise above blind acceptance and arbitrary choices (5), abilities to evaluate beliefs across all disciplines (8), and “suspend judgment until there is enough evidence to make an intelligent decision” (10), amongst other. The book encourages the reader to read between the lines and think outside of the box; there is no dogmatism, no ‘blindness,’ in what is asked of the reader. Nye, however, sees no light in this hallway; she seems to take ‘critical’ to mean ‘cynical,’ and thus purports that at the very foundation lays oppression and male chauvinism. But this need not be the case. Vaughn & MacDonald argue likewise: critical thinking is about open-mindedness and “a tolerance for opposing perspectives, a focus on the issue at hand, and a fair assessment of arguments and evidence” (7).

Furthermore, there is no exclusion of emotionality in this text, no deliberate omission to emphasize the primacy of one mode over another, for “critical thinking and feelings actually complement one another...it is our feelings that motivate us to action, and without motivation our reasoning would never get off the ground” (ibid). There is clearly the inclusion of other communicative modes here; other modes that may cater to wider audiences than Nye can set a stage for.

To conclude: Andrea Nye, in the entirety of her book *Words of Power* (1990), gives an inadequate account of the history of logic: she inflates Frege, Aristotle, and Plato but gives no account of Russell, Leibniz, and Tarski, no account

as the movement began to incorporate other modes of communication and discourse. Her confirmation bias is duly noted and caution is taken thereafter. Nye also gives a poor account of the usefulness of critical thinking and as such other authors were introduced to do so, to elucidate the art of belief apprehension only after critical, not cynical, scrutiny. This paper has shown that in order to capture the entirety of a given phenomena, one ought to be prepared to have multiple modes under its scope, for communication far exceeds the linguistically explicit, orthographically or phonologically; it underpins our sociology and maintains cohesion; it often operates as an adhesive, and at other times as a repellant, within our social networks; and its absence, misconstruction, or misinterpretation, has caused much discomfort, oppression, and most unfortunately, war. It is the very stuff that we are made of, and is thus what we ought to work aptly to refine.

Works Cited

- Gilbert, M. A. (1994). "Feminism, Argumentation and Coalescence". *Informal Logic*, 16:2: 95-113.
- Gilbert, M. A. (1997). *Coalescent Argumentation*. Mahwah, N.J.: Lawrence Erlbaum Associates.

Grayling, A.C. (1997). *An Introduction To Philosophical Logic*.
United Kingdom: Blackwell.

Hitchcock, D. (1983). *Critical Thinking: A Guide to
Evaluating Information*. Canada:
Methuen Publications.

Nevid, J. S., et al. (2005). *Essential of abnormal
psychology in a changing world*.
Canada: Pearson Education.

Nye, A. (1990). *Words of Power*. New York:
Routledge.

Vaughn, L., & MacDonald, C. (2010). *The Power of
Critical Thinking*. Canada: Oxford
Press.

Weiten, W., & McCann, D. (2007). *Psychology: Themes
and Variation*. Canada: Thomson
Learning.

Commentary by Marilena Danelon

Benjamin Mendelez's essay was excellent for many reasons. Mendelez summarized Nye's "Words of Power" very well in order to establish his point that Nye uses confirmation bias selectiveness to strengthen her argument. Particularly, it is interesting that many other authors also agree that logic should not be the only communicative skill, but since Nye rejects certain philosophers in her study, she actually weakens her argument disputing logic instead of strengthening it. Mendelez references many different authors and incorporates their views very well in order to establish his thesis. Mendelez may have improved his work if he transitioned his themes more clearly. Although all points developing the thesis were addressed, there is still room for improvement as transitions between themes that were introduced sometimes seemed random. Overall, Mendelez's paper was clearly written and well argued for the benefits of critical thinking, and also clearly described where Nye's work "Words of Power" lacks argumentatively. It leaves the reader with a new perspective and curiousness towards logic and in-itself exemplifies the major benefits of critical thinking.

Mendelez could have more deeply considered the feminist incentive behind Nye's work. Nye may have weak arguments when disputing logic, however, the oppressive nature of logic is still an unaddressed issue. Logic is still essentially a language that leaves 'women's language' futile. Logic is associated with being human and being good at

reason, as Hitchcock suggests—and with due notice, logicians are predominantly male. Does this not suggest that males are predominantly the ‘good humans’, with ‘good reason’? Although authors such as Russel or Tarski attempt to bridge the gaps of communication between cultures, there is still the issue that logic in itself is oppressive in nature towards women. Perhaps these authors all agree that “logic is an onslaught”, but this is simply dismissing logic, instead of addressing it and the oppressive issues that come with it. Nye also agrees that ‘logic is not the initiator of oppression’, it must then be the logicians who are the oppressors. Logicians being predominantly male have then created a system of logic which appeals to males, and as a result oppress women from being included in the class of logic. Mendelez, although addressing the weakness in Nye’s arguments, could have taken note of Nye’s ‘confirmation bias selectiveness’ mistake, and could have addressed the oppressive nature of logic when developing his/her work instead of ‘grazing over it’, metaphorically speaking.

Problems with Physicalistic Accounts of the Case of the Prince and the Cobbler

By David Balcarras (University of Toronto Scarborough)

Edited by: Stefania Mendolina

Introduction

Traditionally, advocates of the psychological criterion of personal identity have argued against the bodily criterion by appeal to possible cases of body swapping. For instance, John Locke argued against the bodily criterion through the thought experiment of a prince waking up in the body of the cobbler (1996, p. 142). Locke argues that since this case is possible, it follows that bodily continuity is not necessary for personal identity to persist over time. Interestingly, in presenting these cases, Locke claims that the nature of the mind is irrelevant to the question of personal identity and to his arguments for his memory-based account. Throughout his discussion, he makes sure to add in parentheses that his key premises are acceptable regardless of whether the mind is a material or immaterial substance:

[...] place that self in what substance you please – [...] (whether I consist of all the same substance, material or immaterial, or no) [...] Self is that conscious thinking thing, – whatever substance made up of, (whether spiritual or material, simple or compounded, it matters not) – which is sensible or conscious of pleasure and pain. (p. 143)

Contra Locke, I will be arguing that the Prince and the Cobbler case presupposes or only makes sense if dualism is true, and is impossible if physicalism is true. Or, in other words, that Locke was wrong in understanding the debate over the criterion of personal identity as independent of the debate over the nature of the mind. First, I will lay some groundwork for the psychological and bodily criteria for personal identity, and tease out intuitions that if these criteria form a strict dichotomy, then their formulation might presuppose dualism. Then, I will focus on the case of the Prince and Cobbler, assess whether or not it can be characterized in an acceptable way in accordance with physicalist theory of mind, and attempt to show that it cannot. My conclusion will be that the case presupposes dualism, and I will end with a brief suggestion of how to better characterize personal identity if physicalism is true.

1. The psychological criterion, the bodily criterion, dualism, and physicalism

Intuitively, persons change in various ways over a lifetime and yet remain the same person. Some philosophers, most famously Locke, have accounted for this sameness of persons over time by endorsing a psychological criterion of personal identity. Roughly, the criterion is that person A at time t_1 is identical to person B at t_2 if and only if some psychological continuity relation holds between person A's mind at t_1 and person B's mind at t_2 . For Locke, the specific psychological continuity relation that is relevant

to personal identity is sharing memories (p. 138). For Derik Parfit, another advocate of the psychological criterion, additional psychological relations are included, such as sharing beliefs or intentions (p. 206). Note that my discussion will not be partial to memory relations; I will focus on memory, however, for the sake of simplicity. Another proposed criterion is the bodily criterion, according to which personal identity consists in sharing bodily continuity relations, such as sharing organs or other bodily features. Now, it is usually assumed that the criteria are either psychological or bodily. But are these criteria truly separable? One motivation for my argument is that it is unclear how one should properly differentiate between psychological and bodily continuity relations. For instance, a key question about these criteria is whether by distinguishing the psychological from the bodily, we are also ontologically distinguishing the physical from the mental. What do we mean by psychological properties? Do we mean just specific types of physical (neuronal) properties? Or do we mean something over and above physical properties, like emergent mental properties or properties of non-physical souls? To put these questions more simply, does the mind-body dichotomy presuppose some form of mental-physical dualism? In order to answer this question, I will stipulate bare definitions of dualism and physicalism. I will define dualism simply as the claim that mental states are ontologically independent of physical states. And, although physicalism has been variously characterized, I will define it minimally

as the claim that mental states are ontologically and causally dependent on physical states. Now, to better see how my concerns about the psychological-bodily dichotomy might arise, consider that brain states seem best classified as bodily states since the brain is an organ of the human body. But, if physicalism is true, then psychological states are nothing over and above brain states. But then the psychological criterion seems to be just a species of the bodily criterion. So, at least on the face of it, it seems that in order for the psychological criterion to be fundamentally different from the bodily criterion, it is necessary that physicalism is false. In turn, the claim that psychological states are fundamentally different than bodily states seems to entail dualism. If the above intuitions are correct, then the nature of the criterion of personal identity over time is dependent on the nature of the mind. I will now attempt to show how the intelligibility and possibility of the Prince and the Cobbler case is dependent on the nature of the mind.

2. The Prince and the Cobbler case

One of the many cases Locke gives in support of his memory-based psychological account of personal identity is the case of the Prince and the Cobbler. Locke tells us to imagine a Prince, in his princely body with his princely thoughts and princely memories, who goes to bed, but wakes up in the body of a humble Cobbler, while retaining his princely thoughts and memories. Locke claims that this case is possible, and that the person at the later time, with

the Prince's memories and the Cobbler's body, is identical to the person at the earlier time, with the Prince's memories and the Prince's body (p. 142). With this case, Locke is arguing that having the same body is not constitutive of being the same person, because it is possible to body swap with someone and yet retain one's identity in virtue of psychological continuity.

Is this case possible? If we assume that dualism is true, then the case is easy enough to conceive. Imagine that by either an act of God or an anomalous occurrence, the Prince's immaterial mind or soul (which somehow contains his memories) is disembodied from the princely body, floats over to the Cobbler's body, and there it is then re-embodied after the Cobbler's soul is wisped out of existence or away to the afterlife. Surely this is conceivable. Now, although Locke uses conceivability as a direct guide to possibility, and although conceivability seems subjective because different people have different conceptual abilities, I take it that we can still use conceivability as at least a rough guide to determining possibility. To further motivate the possibility of this case, consider that there does not seem to be anything contradictory or incoherent in this case, given dualism. So, it is fair to say that in a dualistic world, this case is quite plausible.

Now we must consider how this case might be possible in a physicalistic world, where the mind is ontologically and causally dependent on the brain. Excluding soul transference, I can think of two ways or sub-cases in which the Prince and Cobbler case might be

physicalistically acceptable, each of which involves a different kind of possible brain surgery that I will call 'brain transplantation' and 'brain alteration' (Whether there are other possible sub-cases, I am not sure, but hopefully I will draw general conclusions from the analysis of these two sub-cases that will apply to other possible sub-cases.) Next, I will elaborate on each sub-case and argue that both of them are highly problematic on the supposition of physicalism.

3. Brain transplantation

The first method of transferring the Prince's memories into the Cobbler's body that seems physicalistically acceptable would be a brain transplant surgery. This would involve removing the Cobbler's brain and central nervous system from the Cobbler's body, and then replacing them with the Prince's brain and nervous system. I will assume that if physicalism is true, then a person's brain and central nervous system are wholly determinant of one's psychology and memory possession. So, in moving the Prince's brain into a new body, all of the Prince's memories would be preserved, and he would awake in the Cobbler's body being completely psychologically continuous with himself as he previously existed in his original body. Surely a surgery like this is possible. Even if it is not feasible with our current medical technology, we can easily conceive of it taking place in the distant future, or perhaps being performed by a technologically advanced species of extraterrestrials. The problem with this method,

however, is that the surgery obviously involves bodily changes to the Cobbler's body such that it is not entirely the Cobbler's body. After the surgery, it would be composed of parts from both the Prince's and Cobbler's bodies. This would establish a relation of bodily continuity between the Prince's body and the Cobbler's body, and thus the awakened Prince would not inhabit a totally new body. Furthermore, the removal of the brain and nervous system from the Cobbler's body would be a significant change that would be sufficient to make that body no longer the Cobbler's body.

If this is how Locke's case could be possible in a physicalistic universe, then its possibility would fail to refute the bodily criterion because bodily continuity, or more specifically neurological continuity, is required for the person in the Cobbler's body to be identical with the Prince. In response, one might argue that neurological continuity is not a species of bodily continuity. But is it not uncontroversial that the brain and nervous system are organs of the body? Consider that if we developed technology that allowed us to strip away our limbs and torso and exist in *The Matrix* as brains in vats, we would not then be existing as disembodied individuals. We would have just a brain body, the smallest body it is possible to have, given physicalism. So, a brain transplant surgery is not sufficient for the possibility of personal identity being preserved through a total body swap.

4. Brain alteration

Another way the Prince and Cobbler case might be possible in a physicalistically acceptable way would be through a process of brain alteration, where the brain states that are determinant of the Prince's memories would be programmed into the Cobbler's brain. Unlike in the last sub-case, where the transplant surgery was sufficient to make the post-surgery body no longer the Cobbler's body, it seems that gradual brain alteration is compatible with the post-surgery body remaining the Cobbler's body. This is because a gradual process of brain alteration takes place during the entire lifecycle of a human brain. Throughout our lives, our brains undergo drastic changes as we mature, have new experiences, make new memories, build up synaptic connections, and forge new neuronal pathways. And yet, through these changes, it seems true to say that our brains remain the same brains (at least for a significant period of time).

Now, for the purposes of this paper, I will assume an account of the preservation of identity over time of non-personal entities like brains and brain states. So, since the cells and atoms in the Cobbler's brain turn over and get replaced at a drastic rate, and yet it seems right to say that the Cobbler's brain would remain the Cobbler's brain for at least a significant period of time during these changes, it seems acceptable to say that the Cobbler's brain will remain the same brain, even though it is altered to accommodate the Prince's memories through a gradual surgical process. To

make this even less problematic, we could postulate a possible surgical process of brain alteration that closely mimics the rate and ways in which our brains change on a day-to-day basis. Again, such a case seems medically possible, if not for us, then definitely for our either our future descendents or possible fictional alien brain surgeons.

However, even with these advancements from the brain transplant sub-case, there are various concerns with this sub-case. If this process of brain alteration is enough to transfer the Prince from his body to the Cobbler's, the question arises as to how much of the Prince's memories need to be transferred in order for the Prince to cease being the person in the Prince's body, and for the person in the Cobbler's body to become to Prince. According to Locke, it seems that the transfer of only one of the Prince's memories would be enough to make the change. But surely this is unrealistic. One memory transferred into the Cobbler's brain would surely be ignored as a delusion by the Cobbler, and be irrelevant to his identity. More realistically, Parfit requires that a significant amount of psychological continuity relations be established before identity holds, or enough to constitute what he calls "strong psychological connectedness" (p. 207). Let us arbitrarily suppose that if 60% of the Prince's memories are transferred, then the person in the Cobbler's body becomes the Prince. Note that there has to be some definite percentage that would be sufficient for the transfer of the Prince between bodies. But this is potentially problematic if just one modicum of psychological connectedness would make the difference

between a person being either the Cobbler or being the Prince. Surely the difference between 59% and 60% of the Prince's memories would not make a difference as to who the person in that body was. But perhaps persons can vaguely exist, and that between having 40% and 60% of the Prince's memories, the identity of the person in the Cobbler's body was indeterminate. Although I do not think that persons can exist vaguely, I will grant this for the purposes of this paper.

I will now attempt to show that brain alteration is insufficient for transferring a person between bodies. Consider that it is compatible with programming the Prince's memories into the Cobbler's brain (after it has been wiped of the Cobbler's psychology) that the Prince survives the surgery and continues life normally in his original body. If this happened, no one would think that the person in the Cobbler's body was the Prince, for the Prince would still be alive and unaffected in his original body. Surely the two persons existing after the surgery cannot both be the Prince, and although the person in the Cobbler's body would be a very Prince-like mental clone of the Prince who shared all of his memories, I want to argue that this would not make him identical with the Prince. Now, a physicalistically acceptable interpretation of the way Locke describes this case would include the Prince getting his original brain wiped during the surgery, and then the above problem would not arise. But if we would not call the person in the Cobbler's body the Prince if the Prince still existed in his original body, then why would we call the person in the Cobbler's body the

Prince if the Prince were brain-wiped? I would agree that the person in the Cobbler's body would then be the best candidate for being the Prince, but only if the Prince still exists in one of the two bodies after surgery. But why think that the Prince still exists in one of the two bodies? Why think that someone has to be the Prince if the person we knew to be the Prince has by all appearances ceased to be by having his psychology annihilated? Perhaps we would want to say that the Prince still exists as the person in the Cobbler's body because his memories still exist there. But this cannot be right, for the person in the Cobbler's body could have the Prince's memories even if the Prince had been killed a month before the surgery and had his memories saved on a computer or had his brain cryogenically frozen. But surely programming the Prince's memories into the Cobbler's brain a month after the Prince has been dead would not thereby resurrect the Prince, for it seems very implausible that it is possible (let alone physicalistically acceptable) for people to go in and out of existence. But if transferring the Prince's memories is insufficient to make the person in the Cobbler's body the Prince a month after the Prince has been dead, then how could the result of the surgery be any different if the elapsed time was shorter or merely an instant? It seems very implausible that the length of the passage of time from when memories were last actively remembered is relevant to whether those memories would constitute personal identity. Thus, the fact that the Prince's memories are housed in the Cobbler's body does not entail that the person in the

Cobbler's body is identical to the Prince. But if that is the case, then I see no reason to think that someone has to be the Prince after his memories are transferred and his brain is wiped.

It does not seem that the possibility of brain alteration transferring a person between two bodies is physicalistically intelligible. If dualism is true, however, the problem case I just described would not occur. This is because the transfer of the Prince's memories would coincide with a soul transfer, which would entail that the Prince's original body is soulless and dead. On the dualistic account, the Prince cannot still exist in his original body after the soul transfer. It seems to me that the difficulty of making sense of the Prince and the Cobbler case in a physicalistic universe, and the simplicity of making sense of the case in a dualistic world, implies that the case presupposes dualism.

Based on the above considerations, I take it that it is highly implausible that either of the proposed sub-cases for the possibility of the Prince and the Cobbler case can make sense within a physicalistic world. Thus, the nature of the mind, contrary to what Locke would have us believe, is indeed relevant to the nature of personal identity over time. Generally speaking, in order for the Prince and Cobbler case to be possible, radical psychological change must be possible without radical physical change, which is only possible in a dualistic world.

If physicalism is true, then the psychological and bodily criteria should be characterized in a new way, without reference to archaic thought experiments of body

swapping. Also, terms should be used that do not suggest that the mind is fundamentally different from the body. Instead, the criteria should be differentiated by the fact that they pick out different physical features of persons, such as brain states or other bodily features, for constituting the sameness of persons over time.

Works Cited

- Locke, John. (1996). *An Essay Concerning Human Understanding*. Ed. Kenneth P. Winkler. Indiana: Hackett Publishing Company, Inc.
- Parfit, Derek. (1984). *Reasons and Persons*. New York: Oxford.

Commentary by Peter Verveniotis

What makes me who I am? What makes me different from somebody else? These questions about personal identity are the subject of David Balcarras' paper *Problems with Physicalistic Accounts of the Case of the Prince and the Cobbler*. More specifically, Balcarras addresses John Locke's critique of the somatic criterion of personal identity. The critique comes in the form of a thought experiment. Imagine two persons, a prince and a cobbler. One night while they are both asleep the prince's consciousness and memories leave the original body and enter into that of the cobbler's. Upon awakening, the prince still recognizes himself as the prince (i.e. he still thinks of himself as the prince) since all (or many) of the psychological states are the same, but he does not recognize where he is, or why he looks so different. Or just think about all of the movies in which two very different people all of a sudden switch bodies overnight. If these cases are conceivable, then there cannot be a somatic criterion which makes someone who they are as opposed to someone else. Therefore, the somatic approach is false. More importantly, Locke claims (according to Balcarras) that this conclusion is independent of one's view about whether is a physical substance or a spiritual one. Balcarras claims that this is false. The prince and the cobbler case cannot be characterized in a manner acceptable to the physicalist; it only makes sense on a dualistic account of the mind. Ergo, the case takes dualism as a presupposition.

There is much to be commended in this paper.

Balcarras carefully and systematically sets up the problem of properly distinguishing between psychological and bodily criteria and if and how they relate to the mind-body problem in the philosophy of mind. Despite his careful and generous way of addressing these difficulties, I want to argue that he sets up a false dichotomy for theorists who defend the psychological criterion.

Balcarras argues that brain states should be considered bodily states since the brain is an organ of the body. If physicalism is true, then mental states are nothing over and above physical states (in this case, brain states). But then the psychological criterion would just be a species of the bodily criterion, and as such a change in a psychological state entails a change in a bodily state. This is a problem if we want to allow for the possibility that there is a significant psychological change without any significant physical changes. As such, Balcarras argues that in order for the psychological criterion to be fundamentally different from the bodily criteria, then physicalism must be false. This would seem to suggest that psychological accounts of personal identity would be at bottom meaningless unless dualism was true. I think that this is false. In particular, I believe that Balcarras' account so far would be objectionless only if we are considering a type-identity relationship between mental and physical states. If however, we allowed for a functionalist or computationalist account of psychological states, then we may have a middle ground for the psychological account of personal identity. A functionalist/computationalist account claims that

psychological states are computational/functional states that arise from but are not type identical to the underlying neural processes. One and the same computational state may arise from many different types of neural states and, perhaps counter-intuitively, one and the same neural state type can give rise to more than one computational (and hence psychological state). These computational states are wholly physical in a sense, but they are not identical to the neural state. Furthermore, these computational states are not organs of the body but rather the outputs of a bodily organ, the brain. If the above account is possible (or even coherent), then it is possible for psychological states to be wholly physical and yet fundamentally different from purely somatic states.

There Is No A Priori

By Alessandro Colarossi (York University)

Edited by: Marilena Danelon

A priori knowledge is defined as knowledge derived from logic and axioms, and is independent of experience. Michael Devitt believes that such knowledge is not possible given a thoroughgoing naturalism. He makes a case for abandon reliance on accounts of knowledge that rely on the a priori in his provocatively titled paper, "There is no a priori." He does this by attempting to attack the a priori in two ways. First, he tries to undermine the motivation that people have for turning to an a priori explanation. He thinks that we should turn to a more naturalistic account of how exactly we have our apparent a priori knowledge, and possibly reveal that this knowledge could be empirical in nature. Second, Devitt thinks that a priori knowledge is deeply obscure and mysterious, and therefore should be abandoned on these grounds. Specifically, he states that it cannot answer questions such as, "what is it for a belief to be justified a priori?" and, "what is the nature of this nonempirical method of justification?" (Devitt, pg.1) The following will critically analyze Devitt's paper, arguing that a priori knowledge does exist (most notably, in mathematical statements of the form $5+7=12$) and it is because of such knowledge that people are motivated to posit the a priori as a category of knowing. This is something Devitt only briefly

touches on in his paper and fails to give a decent account of. It will also argue that Devitt's second objection (that a priori knowledge is mysterious and obscure) is not at all an objection or a weakness but could indeed be a property of a priori knowledge. In other words, obscurity or mystery is not a *prima facie* reason for rejecting any claim.

Devitt begins his rejection of a priori by introducing his naturalistic alternative. He argues that this naturalistic account must view justification in a more holistic way, a way that encompasses beliefs and whole theories rather than just evidence. It should be accompanied with auxiliary theories and background evidence that can be used as additional mechanisms of justification and support. He examines the "Duhem-Quine" thesis, which describes the perspectives of both philosophers Pierre Duhem and Willard Van Orman Quine. Duhem argued that, unlike the laws of science, the laws of logic and mathematics cannot be tested experimentally. Quine on the other hand, believes that both mathematics and logic must also be included as part of human knowledge and that even mathematics and logic are susceptible to the revision of experience. Devitt uses Quine's perspective to assist in strengthening his account of a naturalistic alternative. He adds that instead of justifying mathematics and logic by using an a priori explanation, we can refer to our knowledge of them as institutions that are empirical and justified indirectly.

Devitt further elaborates on the naturalistic alternative by describing the web of beliefs, a metaphor originally illustrated by Quine. The metaphor describes an

interconnection of beliefs that encompasses logic, mathematics, theory and experience. Specifically, it places logic and mathematics in the center of the web. From there, it connects and builds upon this foundation with various theories and experiences. According to Quine, the point is that this web of beliefs can be rebuilt by individually altering each link one at a time. Devitt also provides Quine's reinterpretation of this metaphor by using the example of a boat. Like the web of beliefs, this example presents that by replacement or addition any part of the boat can be rebuilt one piece at a time, but in order to do so one must stand somewhere on the boat, thereby ruling out a wholesale replacement of all the boards at once. The parallel here is that our beliefs are much like the boards on a boat or the individual strands of the web. They can be (and indeed are) altered over time as new facts arise and old facts are re-interpreted, but they are never re-built from scratch. In other words, whereas knowledge is like a web or the planks of a boat, it is certainly nothing like a pyramid or a tower under this account, with lower beliefs serving as more 'privileged' and 'foundational' than beliefs higher up. This view is suggested by the existence of a priori knowledge, for if it were to exist, then it would underlie all of our knowledge claims and would be incapable of revision or refutation. A priori beliefs would form the 'base' of beliefs that we would then build empirical 'a posteriori' beliefs on top of.

Devitt, however, thinks that a thoroughgoing naturalism is the most consistent alternative, and therefore the idea that some items of knowledge are in principle

unrevisable should be ejected. He develops this account in greater detail by responding to several objections by philosopher, Lawrence Bonjour. Devitt's first response to Bonjour presents itself with several flaws. The first comes from the fact that he fails to acknowledge and further explain that if something is not known a priori, then it must be known empirically. He argues that, "whereas empirical scientific laws are confirmed in a holistic empirical way, the laws of mathematics are not." (Devitt, pg.3) However, in claiming initially that there is no a priori, the burden of proof is on him to provide an alternative to an a priori explanation of our knowledge of necessary truths. Specifically, he must be able to provide an alternative way of defining our knowledge of mathematics as opposed to turning to examples of how knowledge is created by using mathematics.

A second flaw comes in response to Bonjour's objection that presents we must be able to accurately explain our knowledge of necessities. For example, necessarily without further investigation or experimentation we know that $5+7=12$. Devitt provides the example that some necessities are known empirically – for example, the necessity that all water is equal to H_2O . However, Devitt's example of water is not at all the same as the example of mathematics. The statement $5+7=12$ does not rely on empirical confirmation in order to be true. It is difficult to imagine what it would be like for this statement to come under revision due to some new discovery. Indeed, it seems that it is a truth that is discovered, and yet, also the

consequence of the definition of the numbers and operations involved both hallmarks of a priori knowledge. Devitt never really addresses this issue however, preferring instead to insist on the desirability of consistent naturalism.

A third flaw spawns from Devitt's attempted objection which illustrates that "the whole idea of the a priori is too obscure for it to feature in a good explanation of our knowledge of anything". (Devitt, pg. 7) This objection is problematic for two reasons. The first reason is that according to Devitt, calling something obscure and mysterious indicates a weakness in an explanation of our knowledge of necessary truths. However, it may be true that the a priori may appear to be obscure at face value but upon closer examination it is evident that mathematical truths act as a foundation for so-called "scientific theories" to piggyback on. For instance, when science attempts to make a claim about the natural world, it uses empirical evidence that is invariably built upon fundamental concepts in mathematics that are known without further discovery or verification. In fact, Devitt himself states that we do not have a serious empirical theory but "we do have an intuitively clear and appealing general idea of this way, of learning from experience." (Devitt, pg.8) This idea that Devitt presents involves an undeniable a priori Cartesian standard of our knowledge, acting as a foundation for further ideas, experiences and beliefs.

Devitt would argue that this Cartesian view would still not grant us access to facts that would "justify the proposition that all bachelors are unmarried unless the

proposition that all unmarried's are unmarried were justified". (Devitt, pg.8) Granted, the Cartesian view fails if we present it with a conceptual fact that involves language and further discovery. However, it does not fail when we introduce it to a necessary mathematical truth such as $5+7=12$. Unlike the bachelor proposition, this equation is equipped with truths that do not need to be subject to further verification or universal justification. The equation does not need language nor does it need proof that each variable is what it is in every instance.

A second reason that claiming something weak because it is obscure arises when Devitt fails to acknowledge that we still do not have an idea of what a priori knowledge is. However, as shown before, the example $5+7=12$ is a perfect example of what a priori knowledge is because it is known without further reference to experience.

Furthermore, necessary mathematical truths can be presented as a higher form of knowledge that, in turn, illustrates that truth cannot be subject to doubt of any kind. Specifically, if we deny our existence in the world, we must still adhere to the fact that mathematics is still true. It exists as a form of knowledge that does not attach itself to any other belief, experience, or idea, and is something that we can be fully certain of even if we deny experiential claims as carrying epistemological weight.

Ultimately, I don't believe Devitt makes a solid case for denying that a priori knowledge exists as an explanation of our knowledge of necessary truths. Devitt's account contain several flaws: the inability to provide a concrete

alternative to the a priori of mathematical statements, an alternative means of justifying such statements, and the dismissal of a priori knowledge on the grounds that it is obscure or mysterious. In rejecting a priori claims of knowledge in favour of naturalism, Devitt cherry picks the weakest examples of such claims while leaving untouched the strongest. Moreover, to assert that the a priori must be abandoned because of its obscurity is not terribly compelling – quantum mechanics, by all accounts, provides an extremely obscure and mysterious view of the world, yet it provides operational knowledge of how to construct various technological artifacts. Thus, obscurity by itself is no contra-indication of truth.

Work Cited

Devitt, M. (2005). There is no a priori In *Contemporary Debates in Epistemology*, Cambridge, (MA): Blackwell Publishers (pp.105-115).

Commentary by Kevin Wright

The author does a great job at illustrating the misapprehensions that arise from confusing the qualities from which truth emerges. Misapprehensions that are common in the work of M. Devitt in "There is no A priori". It could be said of Devitt that his whole argumentative strategy with regards to the role of the a priori is inappropriate. Devitt enlarges the role of justification through direct experience by making an appeal to the nature of a priori truths, not to whether or not a priori truths can or cannot have "truth-maker" qualities. The author of this piece goes through Devitt's argument and is quite clear about the overall misapprehension that Devitt falls into. Ultimately, Devitt is making an appeal to the "uncomfortable" nature of a priori nature, claiming that since only direct experience of something can grant it justification, that we should cease to claim the a priori as a form of legitimate knowledge.

What might be missing from the essay is an attempt at making the case for a priori truths harder. This is obviously no necessary, since the essay is meant to answer Devitt's points directly, but it wouldn't hurt to take into consideration more recent developments in metaphysics. The case has been raised, by modal realists like David Lewis, that the "truth-making" of things like counterfactuals could be found by positing that possible worlds exist. Perhaps this could strengthen the case for a priori truths, since they are necessary in all possible worlds. This is of course a metaphysical matter and the essay is concerned with

epistemic matters, but perhaps the author of the essay could derive some support from these developments.

The one complain that I can rise against the paper is with regards to his take on mathematics and science. is the idea that scientific facts, being connected to physical necessity, do not, as the author says, "piggyback" on mathematical truths that are connected to logical necessity. Here he might be making a similar mistake to Devitt's. After all, mathematical terms are based on logical necessity while scientific claims are claims about logical or nominal necessity.

Editorial Process

The essay's selected for this years journal were each read by randomly assigned double blind referees who scored them. Those with the highest average score are published here. All the referees were undergraduate philosophy students at York University and all the submissions were by undergraduate students.

Inquires

Each year the exact specifications vary slightly on submission requirements to ensure you receive the next call for papers, if you are interested in being involved in anyway with future issues of this journal, or you just have an inquiry e-mail us at: Philclub@yorku.ca