MAYNOOTH
PHILOSOPHICAL
PAPERS
ISSUE 8
(2016)

An Anthology of Current Research from the Department of Philosophy, NUI Maynooth

DEDICATION

This issue of the
Maynooth Philosophical Papers
is dedicated to the memory of

Dr Lidia Matassa

1st August 1960–11th January 2016.

Dr Matassa studied for her PhD in Religions and Theology, at Trinity College Dublin.
She was the founding President of 'Hekhal: The Irish Society of the Ancient Near East',
which held yearly conferences in Dublin since its foundation in 2012.

She will be sadly missed.

CONTENTS:

General Editor's Foreword

It is my great pleasure as General Editor of *Maynooth Philosophical Papers* to write this foreword to the eighth volume of the series. It was the desire of my predecessor, Prof Thomas A Kelly, that the Department should publish a journal which would capture something of the on-going research in the Department both among staff members and postgraduate students as well as contributions made by invited speakers in our annual seminar series. It is to the great credit of the current editor, Dr Haydn Gurmin that he has managed to showcase here some of the great variety of interests within the Department and manages at the same time to contribute an article of his own on some important philosophical debates raised by evolutionary biology. I congratulate and thank all of the authors on their generous contributions to this volume. Especial thanks, of course, are to the editor, Dr Gurmin who has had the unenviable task, which is the experience of all editors, and that is to chase up people who because of the increasing demands of academic life find that they have less time than they wish to devote to research and writing.

This issue is dedicated to a dear friend who died suddenly. The theme of the sorrow at the loss of a friend is one of the great themes of the philosophy of friendship. It reminds us that in the midst of so many false friends such as those listed by Boncompagno of Signa, the fair weather friend, the turncoat friend, and so on, how precious and how rare a true friend is.

Prof. Michael W. Dunne
General Editor, *Maynooth Philosophical Papers*
Head, Department of Philosophy
Maynooth University
County Kildare
IRELAND

November 11th, 2016

Issue Editor's Introduction

I would like to thank Prof. Michael Dunne, Head of the Department of Philosophy, Maynooth University for inviting me to be the issue editor of this, the eight issue, of the *Maynooth Philosophical Papers*. As ever, the papers published herein, provide a window into the diverse research interests of the Department of Philosophy, at Maynooth University.

My gratitude is extended to my colleagues in the Department of Philosophy, and to the two invited speakers who submitted papers for this issue. The first of the invited speakers, Dr Declan Kavanagh, delivered a talk under the auspices of the President of Ireland's Ethics Initiative. President Michael D. Higgins established the Ethics Initiative in 2013 in order to stimulate discussion surrounding the values and actions that ought to be prioritised for contemporary Irish society. In line with this initiative, Dr Kavanagh gave a paper entitled, 'Beyond Toleration: Queer Theory and Heteronormativity'. Dr Kavanagh currently lectures in Eighteenth-Century Studies, at the University of Kent.

I am heavily indebted to the anonymous peer-reviewers; each of them gave so generously of their time and energy to help ensure the quality of this publication.

Finally, as we begin the new academic year, I hope that colleagues and students will continue to have a fruitful engagement in our common pursuit of the love of wisdom.

Dr John Haydn Gurmin
Department of Philosophy
Maynooth University
County Kildare
IRELAND

Notes on Contributors

Michael Dunne is Senior Lecturer and Head of the Department of Philosophy at Maynooth University. He has taught Philosophy of Religion for many years. His more recent publications include *John Blund, Treatise on the Soul, Auctores Britannici Medii Aevii: Introduction and Translation* (Oxford: OUP, 2012), and *Boncompagno da Signa, Amicitia and de Malo Senectutis et Senii,* (Leuven: Peeters, 2012).

Alan Forde has taught philosophy at Trinity College Dublin, The Milltown Institute, and University College Cork. His research interests are primarily in Analytic Philosophy and the Philosophy of Mathematics.

John Haydn Gurmin has taught philosophy at Dublin City University, Maynooth University, and the Pontifical University, Maynooth. He recently edited *Intersubjectivity, Humanity, Being: Edith Stein's Phenomenology and Christian Philosophy* (Oxford: Peter Lang, 2015). His current research interests focus on philosophical theology, phenomenology, and the philosophy of science (particularly evolution).

Declan Kavanagh is lecturer in Eighteenth-Century Studies and Director of the Centre for Gender, Sexuality, and Writing at the University of Kent, Canterbury, United Kingdom. He has research interests in eighteenth-century poetry and prose satire, aesthetics, political writing, masculinities and the representation of phobia in literature. Declan completed his PhD on the relationship between xenophobia and effeminophobia in literary narratives of the Seven Years' War and its aftermath, at Maynooth University. He was the recipient of an Irish Research Council doctoral award. He has published essays on authors such as Charles Churchill, Arthur Murphy and John Wilkes. He is currently working on a monograph, entitled *Effeminate Years: Literature, Politics and Aesthetics in Mid-Eighteenth Century Britain*.

Yinya Liu received her Bachelor and Master degrees in Philosophy from Sun Yat-Sen University in Guangzhou, China and obtained her PhD at Maynooth University (MU). She worked in the Department of Philosophy (MU), Department of Chinese Studies (Dublin City University) and the International Strategic Collaboration Programme (ISCP-China) before joining the School of Modern Languages, Literatures and Cultures at Maynooth University in 2015. Her research interests concern the thought of Bonhoeffer and Levinas, Chinese Philosophy, Comparative Philosophy, Philosophy in Literature, Chinese Buddhism.

Steven Lydon is a PhD candidate in German Studies at Harvard University, and a pre-doctoral research fellow at the Max Planck Institute for the History of Science in Berlin. His thesis concerns the philosophical reception of Ernst Chladni's sound figures, in which Nietzsche and Schelling represent two opposing tendencies. Broadly, his research concerns the role of the aesthetic in scientific research, and the literary reflection of problems within science. Focal points include German Idealism, poetry and poetics, and critical theory. He holds a B.A. in English Literature and German Studies from Trinity College Dublin, and an M.Phil. in English Literature from Cambridge University.

Denise Ryan has taught philosophy at Maynooth University, the Pontifical University, Maynooth, and Hibernia College, Dublin. She currently lectures on the Philosophy of Religion, Logic and a module on *Fides et Ratio,* at the Pontifical University. She is also a senior tutor at Maynooth University. Her main interest lies in Medieval Philosophy, and, in particular, with the subject of the mind/body dichotomy in Neo-Scholasticism.

Evil and Indifference[*]

Michael W Dunne
Maynooth University

ABSTRACT:
This article is a personal reflection on the question of the importance of human experience regarding suffering and death. It is also a reflection on the paradoxical indifference that many feel with regard to the suffering of others. It concludes, after an examination of some of the major thinkers on the topic, that we may well be forced to concede that to this question we may possibly be unable to give an answer.

Pieter Breugel the Elder (ca. 1525-1569), Landscape with the Fall of Icarus[1]

Introduction

Many people feel that they have had a hard life – and in many cases this is even true. It is not something that they have imagined or made up. Many will keep quiet about it; some will try to avoid talking about it, others will scream and shout, or get drunk, end up being treated for depression, or, in extreme cases, take their own lives. In any case, it is an inescapable fact of life that people suffer.

---

[*]This article is based on a paper originally presented to the Maynooth Philosophical Seminar on October 15, 2013. I am grateful to Dr Gurmin for extending me the invitation to address staff and students on that occasion.
[1] Pieter Bruegel, 'Landscape with the Fall of Icarus' – Royal Museums of Fine Arts Belgium, (now viewed as a good early copy of Bruegel's) Wikipedia public domain,
 https://en.wikipedia.org/wiki/Landscape_with_the_Fall_of_Icarus

And yet no matter how hard my life has been, there is always someone who is worse off. I do not mean this as some kind of consolation – as when someone who loses a child and someone else says 'Perhaps it was for the best'. No, I simply mean it as a fact: there are depths of human misery and suffering where no one wants to go.

I make these initial observations because one of my students in Maynooth offered as a 'partial' solution to the problem of death and suffering that things could always be worse. Fifty people die in an earthquake; it could have been five hundred, or a thousand. Statistically, this is indeed true. We have to admit it. The vast majority of people live lives which are more or less all right, filled with happiness and not too many tears, we hope. Statistics, however, do not help the individual who is suffering here and now, while perhaps everyone else seems to be happy. For our purposes here, I shall focus on the problem of death and suffering not so much as a 'metaphysical' problem but more from the problem considered 'existentially,' paraphrasing Epicurus: 'Empty is the philosophy which does not offer some solace for human suffering'.[2]

When I lived in Italy, I once went to an exhibition in Milan of medieval torture instruments. I have a general interest in all things medieval and expected this exhibition to repeat the usual accepted truths about this being an age of darkness, prejudice, etc. etc. The setting for the exhibition was an old fortress, rather gloomy, as suited the occasion. Inside there were all kinds of elaborate, rusty machines, including the old favourites, the rack, the iron maiden, and so on. However, the torture instruments that really frightened me were the simple ones. They showed the other side of human imagination and ingenuity. Someone had sat down and thought what is the best and most simple way to cause distress, fear, pain and loss of dignity? Finally, what completed the experience was that attached to each instrument of torture was a little card stating the countries where each 'medieval' instrument of torture was being used today. Thus, while we are here this evening, talking and debating, it is likely that there is someone somewhere who is really suffering.

We can ignore this fact, and of course we normally do not give much thought to the amount of suffering that there is in the world. A common source of our indifference to the suffering of others is some kind of vague notion, perhaps, that suffering like poverty is relative. These people, in such and such a country are used to hardship, they expect it and are able to overcome it. We are different, we are not used to it, nor would we expect to suffer. One thing that I think we may safely conclude is that whereas all people will not all think the same about various issues, that we will all suffer the same when being tortured on the rack.

This attitude of indifference to the suffering of others is captured very well, I think in the poem by W.H. Auden and in the rather strange painting, *Landscape with the Fall of Icarus*, (c. 1558) by Pieter Bruegel the Elder.

> About suffering they were never wrong,
> The Old Masters: how well they understood
> Its human position; how it takes place
> While someone else is eating or opening a window or just
> walking dully along;
> How, when the aged are reverently, passionately waiting
> For the miraculous birth, there must always be
> Children who did not specifically want it to happen, skating

---

[2] See, Epicurus, 'Fragments from Uncertain Sources, On Philosophy' section 54, 'Vain is the word of a philosopher which does not heal any suffering of man', http://www.epicurus.info/etexts/fragments.html The online sources takes the information from C. Bailey, *Epicurus The Extant Remains* (Oxford: OUP, 1926) collection, LIV is translated by Bailey as follows: 'We must not pretend to study philosophy, but study it in reality: for it is not the appearance of health that we need, but real health', p. 115.

On a pond at the edge of the wood:
They never forgot
That even the dreadful martyrdom must run its course
Anyhow in a corner, some untidy spot
Where the dogs go on with their doggy
Life and the torturer's horse
Scratches its innocent behind on a tree,
In Bruegel's *Icarus*, for instance: how everything turns away
Quite leisurely from the disaster; the ploughman may
Have heard the splash, the forsaken cry,
But for him it was not an important failure; the sun shone
As it had to on the white legs disappearing into the green
Water; and the expensive delicate ship that must have seen
Something amazing, a boy falling out of the sky
Had somewhere to get to and sailed calmly on.[3]

Suffering, it would seem, is best avoided through avoiding those who suffer, or through not thinking too much about it. This, of course, is one thing when it is someone else who suffers; when I am suffering then it is a different matter and such indifference will be both puzzling and hurtful.

Steven Spielberg, the Director of the film 'Schindler's List' managed to capture in that film one of the most chilling aspects of the Nazi persecution, namely, the casualness and indifference with which people were 'dispatched.' If I have to die as a 'martyr', as a victim of persecution, then I would expect my 'moment of glory', my speech from the dock. In other words, we have an expectation that we will meet death in such circumstances with our dignity intact, on our own terms as it were, and not in a banal, instantly forgotten about way, being turned into a number, a statistic.

Returning again to our picture. Both in the poem, as well as in the picture, there is more than human indifference. Nature which is present in all its beauty and domesticity, in the ploughing, the flock of sheep, the landscape, the sun, is also indifferent to the embarrassment of those ridiculous and undignified legs sticking out of the water. Death is part of the picture but no-one pays any attention – only Icarus is affected, life goes on, death is always something that happens to someone else.

Indifference as an attitude may be a useful one. It enables everyone within the scene as depicted by Bruegel to continue on with their lives. What difference does it make if one person suffers, who would look after my sheep if I run to help – keep your head down, the storm may pass, disaster may be avoided, we may survive.

Disasters are funny things: they affirm the survivors. In films, the unimportant people, the nonentities fall out of aeroplanes, get crushed in earthquakes, are shot, stabbed, burnt, tortured, and so on. The heroes survive, or if they suffer it becomes the stuff of tragedy. I was always struck by the accounts of Florence during the Black Plague, the suffering, the randomness of it all, the fear, the breakdown in society – how people must have promised anything to survive, to reform, to live a good life, to be nice to their mothers… And what happened when the plague ended? The city went wild, there was one long party for months, when all morality went out the window – so great was the feeling of having survived.

---

[3] W. H Auden, "Musée des Beaux Arts", http://english.emory.edu/classes/paintings&poems/auden.html, (accessed Nov. 29, 2015).

Well, I am afraid that I am a bit on the side of Icarus and company. I do not feel that I have the kind of luck that would save me from the bubonic plague – I only have to look at someone with a cold and I catch it. I also remember what Solzynitzyn wrote in *The Gulag Archipelago*, the first people to die in the concentration camps were the philosophers, they just were not necessary for survival. For those of us who are concerned with real suffering, this problem is certainly one of the major problems for any theistic philosophy and I want to cast a critical eye over some of the proposed solutions and strategies which have been put forward.

Dualism

One of the earliest and most enduring explanations for the problem of evil is to posit a dualism, to split off the good from the bad, to see them as two conflicting principles, which are equal and opposed. The principle of evil is often personified as a malign divinity who is the enemy of God and man. This evil god is an autonomous divinity, one who is opposed to good from the beginning: all evil in the world can ultimately be traced back to him or her. In particular, this evil force is envious of human happiness and seeks to ruin it whenever it can. So death, suffering, disaster, earthquakes, crop failure, etc., and even bad luck, is caused by the evil principle. On the basis of such views evil is a reality, a force for harm; and since it is equal and opposed to the good, it can never be completely eliminated from human life. This recognition of the 'power' of evil in human life leads to a whole host of superstitions to avoid or to placate evil or bad luck. There are various gestures and practices which aim at some kind of protection but the best and most primitive form of protection is to avoid it completely, never to mention it.

Incidentally much of contemporary horror films and books espouse a position of dualism. Unlike the earlier films we cannot expect evil to be defeated. In the early Dracula films, the 'living dead', 'Nosferatu' is killed by the good, usually in the form of light – good triumphs definitively over evil. In many contemporary horror films, however, it is evil which is triumphant – in the battle evil may seem to be conquered but it is only for a short while before it inevitably returns with even greater strength. One avoids or survives evil by chance but the central message would seem to be that it will get us in the end.

The experience of evil is thus inevitable and unavoidable. In such dualistic notions, a deep-seated pessimism begins to take over, I feel. The only liberation which we can look forward to is the end of human existence, although again many of these horror films may not believe in heaven but they certainly believe in hell.

What is the role of the principle of the good in all of this? Life is not all bad, as well we know. There may be many evils but there are also many good things and these surely must have an explanation. A view on this was put forward by Plato. In the *Republic* he writes:

> […] The good is not the cause of all things, but of the good only? Assuredly. Then God, if he be good, is not the author of all things, as the many assert, but he is the cause of a few things only, and not of most things that occur to men. For few are the goods of human life, and many are the evils, and the good is to be attributed to God alone; of the evils the causes are to be sought elsewhere, and not in him (*Republic*, II, 379 b-c).[4]

---

[4] Plato, *Republic*, trans. Benjamin Jowett, in *The Internet Classics Archive*, by Daniel C. Stevenson, http://classics.mit.edu/Plato/republic.3.ii.html (accessed, 15th Dec., 2015).

But where shall we look? Is it our fault, do we deserve to be punished? Are we a spirit cast down into a body, a body which continually distorts our spiritual nature through introducing irrational desires? Does all disorder and chaos derive from matter – a disorder which God is not fundamentally able to overcome or remove? Thus, it would seem that our condition is not one which can be fully understood but can only be endured, with perhaps a sense of resignation and a dose of indifference.

Philosophies of Indifference: Sublime Resignation

One way of coping with the problem of death and suffering is the adoption of a sense of resignation, to be 'philosophical' about things, to free ourselves from any extreme emotion in this regard – 'why go upsetting yourself'? The ancient and modern sceptic or agnostic will cultivate a detached attitude – why get so hot and bothered about matters concerning which we can have no clear knowledge, namely, the existence of God, life after death, and so on, and over which we can have no control whatsoever. If it is unclear whether a providence exists or not (and the experience of evil would seem to suggest that it does not) then let us act as if we are alone and cultivate a moderate hedonism, hoping that in the end science will free us from all pain, will lengthen our life span and, at the end, smoothen our exit from this world. Thus, even if evils can never be completely eliminated, we can, at least, hope that their effects can be mitigated.

There have also been many attempts to rationally overcome the existence of evil through trusting in the rationality of the universe. From Stoicism onwards an attempt is made to deny any positive quality to evil through arguing that real evil can have no co-existence in a universe with the principle of good. If the world has been produced by God it must have been done so according to intelligence and reason. Therefore, everything is rigorously and profoundly rational. Evil only exists for the individual who loses his or herself in the particular and forgets the 'big picture.'

The 'big picture' or the viewpoint from the perspective of the totality, contains no evil but only good. The project which the world is realising consists of events which are as they should be and must be good since they are. Evils do not exist for the person who has understanding, who has had a glimpse into the 'big picture.' Everything which happens, no matter how difficult or painful, must be accepted as part of God's design and as working towards the good of the totality. Such an optimistic view was put forward by, among others, Alexander Pope. Alexander Pope, *Essay on Man* (1733-34), Epistle 1:

> Go wiser thou! and in thy scale of sense
> Weigh thy opinion against Providence;
> Call Imperfection what thou fancy'st such,
> Say, here he gives too little, there too much;
> Destroy all creatures for thy sport or gust,
> Yet cry, If Man's unhappy, God's unjust;
> If Man alone ingross not Heav'n's high care,
> Alone made perfect here, immortal there:
> Snatch from his hand the balance and the rod,
> Re-judge his justice, be the GOD of GOD!
>
> […]
>
> Cease then, nor ORDER Imperfection name:
> Our proper bliss depends on what we blame.

Know thine own point: This kind, this due degree
Of blindness, weakness, Heav'n bestows on thee.
Submit – In this, or any other sphere,
Secure to be blest as thou canst bear:
Safe in the hand of one disposing Pow'r,
Or in the natal, or the mortal hour,
All Nature is but Art, unknown to thee;
All Chance, Direction, which thou cans't not see;
All Discord, Harmony, not understood;
All partial Evil, universal Good:
And spite of Pride and erring Reason's Spite,
One truth is: 'Whatever IS, is RIGHT'.[5]

The result is, I think, a very noble attitude which can bring one through many difficulties. It is attained through the use of reason alone and through mistrusting our emotions, personal opinions, etc. It does not provide an answer but it does give a hope that ultimately things will be shown to make sense. It calls upon a very strong act of will and is not for everyone inasmuch as it depends upon a sufficient understanding or insight. It may be of poor consolation to the one who is suffering while they are suffering but it may be helpful to others to make sense of it, or to the sufferer upon mature reflection. It has proved historically to be of great help to many people to make sense of their lives.

On Animal Pain

Aristotle, like many people, saw a certain order or providence in the design of the universe – that it is characterised by reason, it is a cosmos not a chaos. This order extended to the arrangement of the various creatures in the universe and the fact that each of them has its place and its function. Thus, there is a certain natural providence to be seen in the fact that one creature lives off the death of another. Is there not something magnificent, something regal, in the way that the lion or the cheetah moves as it chases and catches its prey. There is a lesson here: the lower exists for the sake of the higher: the killing of the antelope by the cheetah is part of the natural order. Antelopes exist to be chased and eaten by predators such as cheetahs. Now human beings, as we know, are the highest and most noble of beings in the material universe. It is this which, it seems, justifies our killing and eating any animal we choose, or to treat any other living thing in any way which we deem necessary. It could be argued that animals will kill each other in any case:

> Far over, in the ill-defined region between sea and sky, there was an iridescent patch, roughly oval, of the size that an outstretched hand might cover; and its colours, sometimes faint, sometimes surprisingly vivid, shifted right through the spectrum. 'A wind-gall to windward means rain, as you know very well,' said Jack. 'But a wind-gall to leeward means very dirty weather indeed. So Joe, you had better make another cast: let us eat while we can'.

> The other sea-creatures were of the same opinion. The launch was now in the middle of the northward-flowing Peruvian current and for some reason the animalculae that lived there had begun one of those immense increases in population that can colour the whole sea red or make it as turbid as pea-soup. The anchovies, blind with greed,

---

[5] Alexander Pope, *Essay on Man*, Epistle 1. http://www.poetryfoundation.org/poem/174165, (accessed Nov 29, 2015).

devoured huge quantities; medium sized fishes and squids ate the anchovies with reckless abandon, scarcely aware that they themselves were being preyed upon by fishes much larger than themselves, the bonitoes and their kind, by sea-lions, by great flights of pelicans, boobies, cormorants, gulls and a singularly beautiful tern, while agile penguins raced along just below the surface.[6]

However beautiful and 'awe-full' the spectacle, the law of nature would seem to be '*mors tua, vita mea*' – for even a vegetarian lives off the death of vegetables.

Mammalian, avian, and piscine killing can perhaps be understood by us but we seem to have an instinctive revulsion where insects and reptiles are concerned. So much so that as Richard Dawkins points out in his book *River Out of Eden*, Charles Darwin famously lost his faith because of a wasp.[7] In fact, Darwin's faith was already quite weak but it was the activities of the fruit wasp which pushed him to a position of atheism. The fruit wasp has the practice of stinging caterpillars and paralysing them permanently. Then it injects its eggs into the body of the caterpillar where eventually they hatch. Once hatched the larvae eat their way out of the living caterpillar, hollowing it out from the inside. Darwin felt that such cruelty disproved the existence of a designer of the universe, or at least one having the traditional characteristics of goodness and care for his creatures. The question remains: what is the significance of animal pain?

I do think that in the past where human survival was at issue that animal pain, no more than human pain, was ever considered significant. Some theories of reincarnation regarded the animal state as a just punishment for a previous life. Someone such as Descartes regarded animals as mere automatons, incapable of real feeling because they were lacking in real awareness – thus, there is very little difference between the cry of a real cuckoo and the noise made by a cuckoo clock. In medieval Christian tradition all of nature, including animals, are affected by the Fall; human beings through original sin, have introduced disorder such that the lion no longer lies down with the lamb.

There is, of course, a problem with this latter theory. If, as modern science tells us, human beings arrived rather late in the day as far as life is concerned on this planet (100,000 to 60,000 years ago) they cannot really be responsible for the pain which is associated with sentient life. C. S. Lewis in the *Problem of Pain* is perhaps the first to consider this problem. He writes:

> […] The problem of animal suffering is appalling; not because the animals are so numerous (for, as we have seen, no more pain is felt when a million suffer than when one suffers) but because the Christian explanation of human pain cannot be extended to animal pain. So far as we know beasts are incapable of sin or virtue; therefore they can neither deserve pain nor be improved by it.[8]

In other words, the problem of animal pain would seem to be somehow analogous to the problem of the suffering of innocents. Now one can certainly argue that it is 'natural' for some animals to be carnivores and for others to be eaten. But if this is natural, then this would say something about the Author of Nature – how does this fit into the 'big picture'?

A strong faith may well be an anchor in times of trouble, but what of those who have no faith and who try to make sense of it all without such convictions – how will they view the

---

[6] Patrick O'Brian, *The Wine-Dark Sea* (New York: Harper Collins, 1993), p. 216.
[7] Richard Dawkins, *River Out of Eden. A Darwinian View of Life* (London: Weidenfeld & Nicolson, 1995), p. 95.
[8] C.S. Lewis, *The Problem of Pain* (New York: Simon and Schuster, 1996), p. 115.

suffering of innocents. For someone such as Thomas Aquinas, the problem of evil can be analysed but cannot be solved by human reason. He speaks about a 'crisis' in philosophy where reason finds itself unable to answer the questions which it itself raises regarding the meaning of human existence. One strategy which may be adopted is to accept that there is a *good reason* why things happen except that we cannot know what this good reason is. The other option may be to despair in finding any answer at all and so thinking begins to subvert itself – reason concludes that everything may be in the last analysis, irrational, absurd, senseless.

We may become stoical, indifferent, heroic in our attempts to hold back the tide of time; or in a more modest way we may seek to get on with life, creating small pockets of meaning and truth through contacts with family and friends, cultivating a moderate hedonism, maximising the pleasures of life even those higher pleasures such as art, literature, music, philanthropy, and avoid pains and ugliness – a cult of health and good living.

There are, however, many sensitive souls who have always rebelled against such indifference to the problem, who are still concerned about the individual, with the fall of each 'Icarus'.

Other societies have always valued, respected, or at least taken seriously, people whom we might call 'prophets.' I think that some of the more powerful prophets which Western society got were the existentialists. As a group the problem of suffering was particularly significant. It was this crux which lead one to belief or to atheism, to ultimate meaning or to absurdity: a being towards transcendence or a being towards death.

For most people the problem of evil is experienced at an existential level rather than at a primarily metaphysical level, although that may follow later. Albert Camus (1913-1960) famously put forward a myth for the human condition in that of Sisyphus, a man condemned to a senseless task which has to be repeated over and over again – can Sisyphus be happy? He also described evil in terms of the metaphor of a plague where there is no escape except by chance. Indeed, there is no rational explanation for it. One lives as a stranger within a world deprived of meaning. The human response is to rebel, to 'rage against the dying of the light.' And since we are all condemned to the same end, a loneliness of meaninglessness culminating in death, we can work towards some kind of solidarity: 'It is because life ends so completely in death, and because there is no transcendence to give it significance, that its price is infinite'.[9] I suppose that one might summarise Camus' position as one of heroic atheism – it is not so much a denial of God, as a rejection of whatever power planned and organised this universe. The experience of injustice, of the suffering of innocents, leads to the endorsement of Ivan's speech in *The Brothers Karamazov* – even if God exists, He does not deserve to exist, therefore He does not exist.[10] One is lead back to the old trilemma, as put forward by Anthony Flew: '[…] to assert at the same time first that there is an infinitely good God, second that He is an all-powerful creator, and third that there are evils in the universe, is to contradict yourself'.[11]

* * *

[9] See, Philip Thody; *Albert Camus, A Study of His Works* (Hamilton: Hamish, 1961), p. 9.

[10] Fyodor Dostoyevsky, *The Brothers Karamazov*, trans. David McDuff (London: Penguin, 2003), see Book V, chapters I-IV.

[11] Anthony Flew, *God and Philosophy* (London: Hutchinson, 1966), p. 48.

It was once said that the goddesses of Virtue and Fortune had a bad quarrel. In her distress, Virtue sought the aid of Jupiter, chief of all the gods. But Mercury intervened, and told her to wait: the gods were busy, he said, making cucumbers blossom and painting the wings on butterflies. In the 1520s, Dosso Dossi set the scene to canvas, in 'Jupiter, Mercury and Virtue'.[12]

Divine Indifference

It is a common presumption that God cares for me but I'm not sure that this is something which is necessary or indeed which can be shown philosophically. In the *De veritate* (5, 5, ad 6) St. Thomas writes:

> [...] it appears to us that all things happen equally to good people and evil-doers. It seems so to us because we do not know the precise reason why providence produces each individual thing or brings about each individual event. However, there is no reason to doubt whatever about the fact that there is a good reason (*recta ratio*) why good things or evil things happen to good people or to evil-doers. In accordance with this good reason, divine providence puts everything in order. Because we do not know this good reason, it seems to us that everything happens in a disordered and irrational manner.[13]

---

[12] Picture in the public domain sourced from
https://en.wikipedia.org/wiki/Dosso_Dossi#/media/File:Dosso_Dossi_010.jpg
[13] Thomas Aquinas, *Questiones Disputate de Veritate* (Truth), trans. By Robert W. Mulligan, SJ (Chicago: Henry Regnery Company, 1952), html edition by Joseph Kenny, OP. '*Ad sextum dicendum, quod quamvis videatur nobis quod omnia aequaliter bonis et malis accidant, ex hoc quod nescimus qua de causa divina providentia singula dispenset; non est tamen dubium quin in omnibus bonis et malis, quae eveniunt sive bonis*

Of course, how could we know this good reason? We cannot because to do so would be to know the divine mind itself.

> Aristotle had a version of providence where the good of the universe is shown in the preservation of life, life of the species but not of the individual. Indeed, being food for other living things is part of this providential order. This is how Peter of Ireland picks this up in the 13th century: the solution to the problem is to be found in the fact that different beings have different states or functions within the universe of things and as such contribute to the good and perfection of the universe. As regards the heavenly bodies, Peter states that they move freely and without error and so contribute to the greater good.[14] However, the activities of corruptible things are less well disposed and arranged, since some occupy different levels than others, such as wolves and other preying animals. However, nothing is to be found in the universe which is not ordered, and all activities are directed towards one thing; all agents follow order because of one thing and that is the First Cause. Peter continues that in the universe some things exist for the sake of others, even to be the food of others, as plants for animals, and animals for other animals.[15]

Now if one wants to avoid dualism – and dualism is a very successful explanation for the problem of evil and has been since it was first put forward by Zoroaster – then the order and design of the universe and everything in it has to be attributed to the maker of the universe, including my being food for other animals. As Hume pointed out, this is the problem with taking the universe as evidence for the nature of the divine – the evidence to our minds is mixed and we cannot reconcile it philosophically but instead may choose to turn to myth or religion. Mackie wrote about an incompatibility problem between asserting the existence of a good and omnipotent God and the existence of evil but one can solve the incompatibility by denying the objective existence of evil.[16] For Spinoza, good and evil do not indicate anything positive in things considered in themselves, and are nothing other than ways of thinking or notions which we form from the fact that we compare one thing to another. Indeed, one and the same thing may be considered good and bad at the same time or indifferent.[17] He concludes that since everything in the world is as it ought to be, evil is merely the result of our imagination, of taking the world as in some way created for us only, as if we were the only important existents in the universe. In Nature, for Spinoza, there is no good and evil.

Moreover, as Hume points out, there is no necessity to assert that the maker of the universe must be omnipotent, or necessarily good, just up to the job, more or less.[18] No doubt the maker of this universe might seem divine to us but such a being does not have to be God. There may be many universes, many makers; many possible worlds so much so that we can't even begin to imagine what we don't know. What, however, of a First Cause of

---

sive malis, sit recta ratio, secundum quam divina providentia omnia ordinat. Et quia eam ignoramus videtur nobis quod inordinate et irrationabiliter eveniant; sicut si aliquis intraret officinam fabri, videretur ei quod instrumenta fabrilia essent inutiliter multiplicata, si nesciret rationem utendi unoquoque; quorum tamen multiplicatio ex causa rationabili esse apparet ei qui virtutem artis intuetur.'

[14] C. Baeumker, 'Petrus de Hibernia der Jugendlehrer des hl. Thomas von Aquin und seine Disputation vor Koenig Manfred" in *Sitzungsberichte der Bayerischen Akademie der Wissenschaften* (1920), pp. 3-52, p. 44.

[15] C. Bauemker, 'Petrus de Hibernia', p. 45.

[16] J. L. Mackie, 'Evil and Omnipotence,' in *Mind*, New Series, Vol. 64, No. 254 (April, 1955), pp. 200-212.

[17] See, B. Spinoza, *Ethica*, IV, Prop. VIII, proof, trans. R. H. M. Elwes (Dover Publications, 1883) located, http://www.yesselman.com/e4elwes.htm (accessed Jan. 4th. 2016).

[18] See, David Hume, *Dialogues Concerning Natural Religion*, edited by Tom L. Beauchamp (Oxford: Clarendon Press, 2007), in particular, parts VI, VII.

everything? Traditionally, one asked: *An sit? Quid sit?* To the question *An sit?* I offer the following:

Dunne's Disprove of Atheism (or how he really does think he is God)

Killian: Dad, I'm an atheist

Michael: Hmm interesting. You know it's impossible to be an atheist?

Killian: Here we go …

Michael: In order to know with certainty that God does not exist, you would have to be God. The only being in the universe who could possibly be an atheist is God.

Killian: Run that by me again.

Michael: In order to know that God does not exist, you would have to know that God does not exist in this universe and in every universe that has, will, or could be and in addition that He does not exist outside of any universe in any other dimension. In other words, you would need to have the kind of knowledge that no human being can have, you would have to be omniscient. The only being who could possibly know that God does not exist is God because only He is omniscient and that is why God potentially is the only being in the universe who could be an atheist.

Killian: Oh God, he really does think he's God …

This is a nice and hopefully amusing *reductio ad absurdum* but I don't think it's likely to convince many people. Most intelligent sceptics like Hume are not absolute sceptics nor are they atheists; to use J.C.A Gaskin's terminology: Hume was a mitigated sceptic and a minimal theist.[19] Most intelligent 'atheists' know this of course and what they mean is that their atheism is of the practical kind, what traditionally was called moral certainty, moral because this is how things are expressed in everyday living.

Actually, I have a problem with the term theism because it is very imprecise and like the term God already loaded with presuppositions. We have strong theism (s-theism) which is very close to the God of religion since it asserts the existence of a personal God whereas weak theism (w-theism) is very close to the position of Deism, namely that God exists as the First Cause but one can say little beyond that. One can, in fact be atheistic and still deistic and Deism is, it seems to me, where philosophy can end up, I think that it is problematic to say that philosophy on its own can establish the existence of a personal God. The position of s-theism probably emerges most clearly in the seventeenth and eighteenth centuries where Christian apologists, concerned with the attacks on the historicity and veracity of Scripture turn to the book of nature in order to point out the natural evidence of the divine mind in the origin and planning of the universe. All too quickly, the Maker of the universe is conflated with the God of Christian belief and this really does no service to either religion, science or philosophy. Aquinas had already pointed out the dangers:

> […] since Holy Scripture can be explained in a multiplicity of senses, one should adhere to a particular explanation, only in such measure as to be ready to abandon it, if it be proved with certainty to be false; lest Holy Scripture be exposed to the ridicule of unbelievers, and obstacles be placed to their believing (*S.Th.* 1a, 68, 1, c.).

---

[19] See, J.C.A. Gaskin, *Hume's Philosophy of Religion* (Palgrave Macmillan: Dublin, 1978) 1st ed., in particular chapter 8, 'Scepticism and Natural Belief'.

As every good Thomist knows, the existence of God is not evident; in Aristotelian terms our minds and language are fitted best to know the world of our surroundings. Therefore, even if we are only to be w-theists, our theism will be a low-ascending theism.

Turning to the second part of the question: *Quid sit*? What is the First Cause like? Well, even theologians are divided on this one and many would hold that we can never know God even in the Beatific vision since to know God would be to see the Divine Essence as it is in itself and this is impossible for a human mind. And Aquinas would hold that the person who best knows God says that they do not know God. So what are we left with? Very little actually but the words we use to talk about God are for our own sake since as Scotus put it: *negationes non summe amamus*.[20] And this, as Hume points out, runs the constant risk of anthropomorphism – how close a comparison can you make, where will you stop, why here rather than there?

> And why not become a perfect anthropomorphite? Why not assert the deity or deities to be corporeal, and to have eyes, a nose, mouth, ears, etc. (*Dialogues*, V)

And if we say only the best can be affirmed of God, what do we mean exactly by that except that what is best in our own judgment?

> One way to learn the mind of the Creator is to study His creation. We must pay God the compliment of studying His work of art and this should apply to all realms of human thought. A refusal to use our intelligence honestly is an act of contempt for Him who gave us that intelligence ... [21]

Advances in science have really transformed how we might look at the author of nature, even from our own very limited position in the universe. It is not comforting to think that every cell in my body is pre-programmed to decay and die and ultimately me too along with them. Our goldilocks planet protects us from thinking and grasping the fact that probably the greatest part of the known universe is inimical to our life and suited only to burn, fry, irradiate, freeze, and crush us in a million different ways. The universe is a vast and scary place and the mind of the one who is responsible for it either by designing it or by providing the general principles which have led to its present state is more other to the human mind than any alien in any Science Fiction film. Black holes and dark matter aside, the thought of the spectacle of colliding galaxies induces awe. In contemporary philosophy something is found like this in reflection on the notion of *khora*, first found in Plato's *Timaeus* as 'a placeless place from which everything comes' and how this might relate to the divine. In a psychoanalytic reading Kristeva holds that it is a primordial matrix which the ego dismisses as irrational and confused, as eroding the paternal *logos* of naming. For Kristeva, *khora* is a pre-verbal semiotic space, a 'placeless place' before language, law or cognition. For Žižek, on the other hand, it is the place of the monstrous, the pre-ontological night of the world. Indeed, many contemporary thinkers from Derrida onwards concentrate upon the 'awefulness' of God.

Hume, of course, warned that the theist (s-theist) cannot have it both ways. If we argue that God produces the nice things, you also have to accept that he produces the awful things – the lamb at peace and the rainbow in the sky reflect the divine mind but so do the

---

[20] John Duns Scotus, *Opus Oxoniense,* I, dist. III, q. 1 (Assisi 137, f. 25r^a-27r^b, cf. Vatican ed., vol. III, 1-48), see, Duns Scotus, *Philosophical Writings*, trans. Allan Wolter, OFM (Indianapolis, Indiana: Hackett, 1987), p. 15.

[21] V. J. McBrierty: *Ernest Thomas Sinton Walton, The Irish Scientist, 1903-1995* (Dublin: Trinity College Dublin, 2003), p. 58.

poisonous spider and the tsunami. Hume's position is that the evidence is too mixed for us to reach any conclusion and cautions us from doing so:

> The whole [thing] is a riddle, an enigma, an inexplicable mystery. Doubt, uncertainty, suspense of judgement appear the only result of the most accurate scrutiny, concerning this subject.[22]

Let me finish by looking at divine indifference again. One could say: Why does God tolerate evil? And answer: He doesn't because it's not evil to Him. We are always convinced that everything is not as it should be; with presumption we think that we would do a better job than God. And from a philosophical point of view, how could we show that God would care for us, or why should he? Perhaps he is as indifferent to our fate as we are of the fate of other living things as they are hunted and killed, fish by seagulls and so on. We might pity them but we really don't think about them because they are not like us; we are neither good nor bad but indifferent.

> Look round this universe. What an immense profusion of beings, animated and organized, sensible and active! You admire this prodigious variety and fecundity. But inspect a little more narrowly these living existences, the only beings worth regarding. How hostile and destructive to each other! How insufficient all of them for their own happiness! How contemptible or odious to the spectator! The whole presents nothing but the idea of a blind Nature, impregnated by a great vivifying principle, and pouring forth from her lap, without discernment or parental care, her maimed and abortive children.

> Here the MANICHAEAN system occurs as a proper hypothesis to solve the difficulty: and no doubt, in some respects, it is very specious, and has more probability than the common hypothesis, by giving a plausible account of the strange mixture of good and ill, which appears in life. But if we consider, on the other hand, the perfect uniformity and agreement of the parts of the universe, we shall not discover in it any marks of the combat of a malevolent with a benevolent being. There is indeed an opposition of pains and pleasures in the feelings of sensible creatures: but are not all the operations of Nature carried on by an opposition of principles, of hot and cold, moist and dry, light and heavy? The true conclusion is, that the original source of all things is entirely indifferent to all these principles, and *has no more regard to good above ill than to heat above cold*, or to drought above moisture, or to light above heavy.[23]

The conclusion is not a very comforting one, is not in any sense a necessary conclusion since others can and are also put forward. It is a solution to the problem of evil but one that has, curiously, not appealed to the philosophical tradition since Hume. It may also serve to remind us of the limits of human thinking. Finally, it is interesting to note that such diverse thinkers as Aquinas and Hume concur that although we may raise the question we cannot ultimately answer it in philosophy.

---

[22] David Hume, *Dialogues Concerning Natural Religion,* Section XV.
[23] David Hume, *Dialogues Concerning Natural Religion*, ed. N. K. Smith (Indianapolis: Bobbs-Merrill, 1947), part, XI, p. 210 ff.

A Response to Yablo's Ontological Fictionalism

Alan Forde
Maynooth University

ABSTRACT:

In a series of recent articles Stephen Yablo argues the case for mathematical fictionalism on the basis that a Quinean approach to ontology is undermined by an indeterminacy about which objects we should be committed to. Yablo has developed a series of semantic models purporting to show that there is no principled way to separate out genuine from apparent ontological commitments. In this paper I focus on his argument that mathematical discourse is metaphorical. I argue that Yablo's criticism relies on a misunderstanding of the status of Quine's naturalised ontology. In particular, the indeterminacy Yablo identifies in ontology is common place in all scientific theories, and just as it is not a sufficient reason for abandoning any other scientific theory so is it not sufficient to abandon ontology. I conclude by arguing that Yablo's presentation of fictionalism as a return to a Carnap style 'quizzical' attitude to ontology is equally problematic.

Introduction

In a number of recent articles Stephen Yablo has advocated a novel approach to ontological fictionalism in mathematics.[1] Yablo accepts the indispensability of mathematical expressions and mathematical discourse to progress in on-going scientific inquiry but argues that asserting sentences containing mathematical expressions does not entail an ontological commitment to mathematical objects. Yablo suggests a variety of semantic models to explain how numerical terms have the same semantic effect whether or not they refer to mathematical objects; to the effect that what a numerical sentence claims to be the case will have the same truth-value whether numbers exist or not. The underlying point in this approach is that it is indeterminate whether mathematical terms refer to anything, and if there is no fact-of-the-matter whether the term 'five' refers to the object five there is no fact-of-the-matter whether the object five exists. This means that, unlike other contemporary fictionalists (such as Hartry Field), Yablo does not suggest we rewrite mathematics to exclude reference to any abstract objects, but argues that it is possible to dispense entirely with abstract entities with pain-free implications for scientific theory.

Yablo's underlying approach goes back to his paper 'Does Ontology Rest on a Mistake?', where he introduces the idea that although mathematical terms are empty, mathematical discourse still contributes to the truth or falsity of on-going scientific inquiry.

---

[1] Stephen Yablo, 'Does Ontology Rest on a Mistake?' *Proceedings of the Aristotelian Society* supp. Vol. 72 (1998), pp. 229-62; 'Apriority and Existence' in *New Essays on the A Priori*, P. Boghossian and C. Peacocke (eds.) (Oxford: Oxford University Press, 2000); 'Abstract Objects, A Case Study,' in *Individuals, Essences and Identity: Themes of Analytic Metaphysics*, Andrea Bottani, Massimiliano Carrara, and Pierdaniele Giaretta (eds.), (Dordrecht: Kluwer, 2002), p. 229 (hereafter 2002a); 'Go Figure: A Path Through Fictionalism', *Midwest Studies in Philosophy* 25 (2002), p. 98 (hereafter 2002b) 'Non-catastrophic presupposition failure.' In J. J. Thomson and A. Byrne (eds.) *Content and Modality: Themes from the Philosophy of Robert Stalnaker* (Oxford: Oxford University Press, 2006); 'Must existence-questions have answers?' in David J. Chalmers, David Manley and Ryan Wasserman (eds.) *Metametaphysics* (Oxford: Oxford University Press, 2009).

Here, Yablo characterises Quine's project as the apex of the 'curious' attitude to ontology, i.e., the attitude that wants to find answers to ontological questions, which he contrasts with the 'quizzical' attitude (as advocated by Carnap), which views ontological questions as linguistic oddities, questions without meaningful answers, to be shrugged off as an irrelevance by the on-going scientist. Yablo's central claim is twofold. First, he holds that Quine's view that ontological questions have answers in on-going scientific inquiry is the 'best last hope for ontology'[2]; second, he argues that Quine's approach inevitably commits us to entities we should not believe in. In this paper, Yablo explains this by arguing that mathematical discourse is entirely metaphorical, in subsequent papers he proposes a semantic model based on the notion of non-catastrophic presupposition failure[3], but the underlying point is that it is inevitable that many of our ontological commitments are false, but it is not possible to determine which of them are the false ones. It is this ontological indeterminacy, Yablo argues, which undercuts all 'curious' approaches to ontology, and forces us to return to the 'quizzical' attitude.

My purpose here is not to challenge any specific points about the indeterminacy of literal and metaphorical content, or to defend the claim that all metaphorical content can be eliminated from on-going inquiry, or even to dispute his alternative semantic model based on the notion of non-catastrophic presupposition failure; rather, my purpose here is to examine more closely the key element in Yablo's approach to ontological fictionalism, namely – that the ontological indeterminacy Yablo diagnoses is sufficient to undermine Quine's approach to ontology. I argue that the indeterminacy Yablo identified in ontology is also found in all other areas of on-going scientific inquiry including physics, and I conclude that this indeterminacy is no more reason to abandon ontology as an on-going research program than it is to abandon on-going inquiry in physics. As his point about ontological indeterminacy underlies Yablo's later papers, in so doing I hope to show that Yablo's subsequent semantic models which aim to explain ontological indeterminacy also fail to motivate ontological fictionalism.

Yablo's Argument

According to Yablo, by viewing ontological statements as scientific hypotheses about the world, Quine provides a viable method for ontology, a method worth pursuing because it promises progress; it holds out the promise of 'ontology that is a progressive research program (not to be confused with ontology the swapping of hunches about what exists)'.[4] As Yablo makes clear, Quine's attack on the analytic-synthetic distinction is widely seen as a rejection of Carnap's ontological deflationism and a resuscitation of the ontological enterprise. He points out that the underlying assumption here is that because the analytic-synthetic distinction has failed, ontological questions are in the same boat as those of natural science, and while not providing a wide-ranging vindication of traditional metaphysics, this approach has been grasped by metaphysicians as a scientific justification of the ontological project: the type of ontology resuscitated is not a return to the *a priori* metaphysics but is substantive ontology nonetheless.

But, according to Yablo, Quine's approach is undermined at its most basic step, namely in identifying those sentences that are ontologically committing. For suppose one grants with Quine that we are committed by the assertions we take seriously (where on-

---

[2] Yablo, (1998), p. 259.
[3] Non-catastrophic presupposition failure is explained as a sentence that is false for reasons independent of that sentence's presupposition, (2009), pp. 514-16.
[4] Yablo, (1998), p. 229.

going physics is the paradigmatic example of taking something seriously), to the entities that must exist in order for these sentences to be true, then one presumably must hold that it is always possible to identify precisely those sentences, or parts of sentences, that we assert in all seriousness. However, Yablo doubts whether it is always so easy to make this distinction between speaking in a fictional or a literal spirit, and suggests it is more likely that these two contexts are hopelessly muddled with no sharp distinction between them, such that ultimately it is indeterminate to me whether I am speaking in a metaphorical or literal sense. The problem, he argues, is that there is no sharp distinction in ordinary language between the metaphorical and literal content of sentences we assert; such that, we cannot know which part of a sentence, or indeed which sentences in a theory we accept, we assert seriously and which part or sentence we assert in a non-serious, fictional sense. This means it is not possible to eradicate all metaphorical content from on-going theory, making it inevitable that unidentified metaphorical expressions or sentences are regimented into the canonical notation version of theory. It follows that, on Quine's approach we are inevitably committed, in error, by sentences we do not assert seriously, to entities that we should not believe to exist.

Let's look at each of the steps in Yablo's argument in turn. There is much in Yablo's paper on the role of metaphor to convince the reader of their benefit to on-going science. There are however three essentials, matters identified in the middle sections of his paper, on which attention must be fixed. The first is a view of the broad factors that motivate including metaphorical expressions in language. The second concerns what it is that a metaphor actually communicates, and, hence, commits us to when we assert it. Finally, there are reasons why metaphor cannot be assumed to simply drop out of on-going inquiry as science gets progressively more sophisticated.

For Yablo, the motivation for introducing metaphor centres on how useful they can be without being true. What is distinctive in metaphorical or figurative language is that while the literal content of a sentence may be false, the sentence does nevertheless communicate some sort of truth. For example, when a celebrity chef asserts 'Spuds and butter are the Irishman's caviar', she wants to ignore the content literally expressed, which is clearly false, and focus instead on whether the fact communicated by the metaphorical content is correct, i.e. that Irish men really, really like spuds and butter. Hence, the chef can be said to 'put on' a way of talking for the practical advantage it brings, irrespective of whether the utterance is in a larger sense true or false. Yablo's explanation of how this works draws from Kendall Walton's account of metaphorical language as 'prop oriented make-believe'. Walton holds that make-believe or pretend games are the paradigm example of where we assent to a sentence despite not believing it to be true: here the speaker does not commit herself to the literal truth of the content she asserts, but only to its truth in the relevant fiction or game.[5] However, in a make-believe game an expression's use is still governed in a defined way by the rules of that game, which determine what is appropriate to say at a certain point in the game, but not what to assert as true. Thus, when we assert a sentence in this pretend sense, acceptance falls short of genuine belief, but is along the lines of 'true for present purposes'. Later sections will tell how this characterisation of the metaphorical-literal distinction as a distinction between statements made internal or external to make-believe games becomes central to Yablo's efforts to reinvigorate Carnap's conception of a linguistic framework, and ultimately to defend the 'quizzical' attitude to ontology, which, as mentioned above, is the eventual aim of his attack on Quine; we will also consider whether this is a development Carnap would have approved of.

---

[5] From K. Walton 'Metaphor and Prop Oriented Make-Believe', *European Journal of Philosophy,* 1 (1993): pp 39-57, p 40-1; quoted by Yablo (1998), p. 246-7; (2000), p. 213.

Yet in terms of how useful metaphor can be, Yablo lists numerous ways in which metaphorical expressions are indispensable to on-going inquiry. For example, he points out that metaphors are representational aids, 'things' that we advert to not out of any interest in what they are like in themselves, but because of the help they give us in describing other things. Metaphorical expressions make it possible to 'systematize' and 'visualise' certain facts, and may communicate facts as metaphorical content that no literal content can reach: any translation into literal content completely alters the meaning we aim to communicate through the metaphor. In this sense, metaphorical expressions are useful precisely because they are not literally true. Their importance lies in boosting the language's expressive power, facilitating access to theoretically important contents that can't be accessed in any other way.

What it is that a metaphor actually communicates – what we are committed to in asserting a metaphor – is the second of the basic issues of fictional language that Yablo addresses. In developing his answer, Yablo's first point is that while a truth in fiction does not aim to say anything literally true about the world, sentences within make-believe games may nonetheless describe game-independent reality. This is because the game's content can have some significance beyond the confines of the game itself, and can give voice to a fact holding outside the game. Yablo goes on to explain how make-believe games, in general, can be useful for communicating facts about aspects of the game-independent world. The key point, however, is that in make-believe games our assertions are protected from ontological commitment; for a sentence to be literally true the objects referred to must exist, but because in make-believe games the reference to a particular entity or realm of entities is only a form of pretence, there is no commitment to their existing in reality.

We do, however, commit ourselves to something in uttering metaphorical sentences. For example, in asserting 'Bankers will be jailed when pigs fly', while I am not sincere in asserting that there is a world in which pigs fly, I am sincerely asserting something, i.e. there is a genuine belief here that I aim to communicate. Yablo calls this belief the 'real content' of the sentence. He characterises the real content of a sentence as the fact in reality that makes the sentence true in the make-believe game. The central point about 'real content' is that what is true in the make-believe story depends on what is true in reality: one communicates this real truth by pretending to assert the fictional truth that it enables. And, on this basis, we can distinguish correct from incorrect metaphorical utterances: my utterance is correct if the real content is true, incorrect if it is false.

Third and finally, Yablo argues that there is no non-arbitrary criterion for distinguishing literal and metaphorical content in all cases. Yes there are straightforward examples, such as Cinderella and ideal objects, where it is obvious that we are speaking in a figurative sense, but the problem of how to apply this distinction more broadly, to statements where it is not so obvious whether our attitude is fictitious or serious, has, Yablo argues, been underestimated by Quine. This is particularly damning, he thinks, when one considers the level of scrutiny to which Quine has famously subjected the analytic-synthetic distinction. It is ironic, then, that should he subject the literal-metaphorical distinction to a similar level of rigor he would quickly find that the boundaries of the literal-metaphorical are if anything even less clear than the analytic-synthetic. For example, remembering that one of Quine's arguments in 'Two Dogmas of Empiricism' is that analyticity has never been explained in a way that enables us to decide different cases than the examples used to explain it in the first place, Yablo argues that while there may be obvious cases at either extreme of the scale of metaphorical and literal content, there is a vast interior region where the distinction is indeterminate.[6] Indeed, in many cases we don't have even a rough criterion

---

[6] Yablo, (1998), p. 233.

here. Instead, what we have is a liberalized version of what it is to put a sentence forward as metaphorically true, this holds that metaphor must be interpreted in a holistic way, as connected with and mediated by surrounding theory. This means that a sentence's truth-conditions ultimately depend on posterity's judgment as to what game(s) it is best seen as a move in. However, this judgment may not be definitive, and ultimately this matter may be left hanging indefinitely. Consequently the speaker may not know, indeed it may be indeterminate, whether from her point of view she is advancing the literal content or the metaphorical content of the sentence.[7]

Accordingly, one can see that it is untenable to simply assume that all metaphorical content will ultimately drop out of on-going inquiry as science becomes progressively more sophisticated. We cannot assume that all metaphor will ultimately be junked as unscientific or be replaced by a paraphrase serving the same function but devoid of the metaphorical distractions because, famous cases aside, such as Weierstrass' supplanting the traditional notion of infinitesimal with the notion of approaching a limit, it is not possible to identify all metaphorical content in order to single it out for special treatment. In contrast, the indeterminacy of literal-metaphorical content means that best science will inevitably contain metaphorical expressions whose literal content is not meant to be taken seriously. Yablo is no doubt correct that Quine does not have an argument to support the assumption that all metaphorical content will eventually drop out of on-going science, and so must accept the Malthusian principle that 'like the poor, metaphor will be with us always'.

It is in this context, Yablo argues, that Quine faces a contradiction. It is inevitable that on-going theory will include many metaphorical sentences whose literal content we do not mean to assert as true, but, as Yablo points out, because of the indeterminacy between literal and metaphorical expressions, it is not possible to single out all metaphorical expressions in science and subject them to special treatment. Consequently, it is inevitable that many of these metaphorical sentences will make it into a regimented version of our best theory. That is, metaphorical expressions will be translated into canonical notation, and thus regimented, will be taken as the literal truth, committing us to the existence of whatever objects serves as the values of their variables. Hence, the Quinean approach to ontology inevitably commits us, by expressions not meant to be asserted as literally true, to the existence of entities we 'should not' be committed to. Yablo's criticism in essence, then, is that it is inevitable that many of our ontological commitments are false, but it is not possible at this point in time to determine which of them are the false ones.

Once Yablo has developed this criticism of Quine's ontological project (and more broadly the 'curious' attitude to ontology), he goes on to argue that the literal-metaphorical distinction provides the basis to resuscitate Carnap's internal-external distinction (and more broadly, the 'quizzical' attitude to ontology).

The key, for Yablo, is to reconstitute the notion of a framework devoid of any association to the problematic notion of analyticity. He argues that what is required is a distinction between statements *S*, *T*, etc., and a framework that provides a context in which we are to say *S* under these conditions, *T* under those conditions, etc., entirely unconcerned for whether *S* or *T* are in a framework-independent sense true. A framework is thus simply a regulated way to put sentences at the service of something other than their usual truth-conditions. He thinks that his earlier exposition of metaphor fits the bill here: a make-believe game is a context in which we can assent to a sentence without regard for its actual truth-value. Moreover, while make-believe games are constituted by rules, the critical point is that, unlike linguistic frameworks in Carnap's original version, these rules are not the sole determinate of meaning; in contrast, the meaning of any sentence depends on factors

---

[7] Yablo, (1998), p. 257.

completely independent of the framework/make-believe game.[8] More generally, external statements are rules about what to say when, i.e. what to 'put forward', not rules about what to believingly assert; internal statements are metaphorical, asserted within the boundaries of make-believe games.[9]

The most important upshot of this is that Yablo holds both that mathematical discourse is metaphorical and is analogous to Carnap's internal statements. A mathematical sentence such as 'There is a number that added to 3 yields 5' has a real content and a literal content. The real content of the sentence '2+3=5' is the fact in reality that makes it true in the number-game, namely – the long disjunctive sentence 'no things and three things make five things, or one thing and three things make five things, or two things and three things make five things, or …'. This sentence raises no deep ontological issues and solicits straightforward agreement; hence, questions about real contents are analogous to Carnap's internal questions. In contrast, focusing on the literal content over and above the real content is an attempt to ask about the ontology of numbers. But it seems clear that a sentence such as '2+3=5' is not the correct way to express this concern for the ontology of numbers: because numbers stand or fall together as a total system, the literal content of this sentence does not lend itself to focusing on the ontology of these particular numbers. Rather, that question should be 'are there numbers?' We have to take this question literally as it has no real content; in asking this question one is asking whether these objects exist in a literal sense. Again, there are accepted ways of determining the answer to this question. This is therefore an external question.

Thus Yablo argues that mathematical discourse is ultimately a myth, i.e., a form of pretence similar to the 'prop-oriented make-believe' outlined by Walton. Numbers enable us to make claims which have as their real contents things we really believe, but would otherwise have trouble putting into words. According to Yablo, therefore, we use numbers for representational purposes, because they make it possible to systematize and visualise facts as metaphorical content that no literal content can reach: their literal translations are infinitely long. As merely pretended objects, however, they have all the benefits attributed to allegedly real numbers, but none of the drawbacks associated with mathematical realism. And as there is no advantage in being committed to real numbers as opposed to 'as-if' numbers, Yablo thinks that in mathematical discourse our assertions fall short of genuine belief, amounting rather to 'true for present purposes'.[10] Consequently, all mathematical utterances should be interpreted as 'following on a "say there are models (or whatever)" prefix', i.e., if mathematical objects really do exist then we are speaking literally, but if not then we are speaking metaphorically. Furthermore, the indeterminacy of literal and metaphorical content explains how the 'say-hypothesis' can slip unnoticed into mathematical discourse: nobody notices we are not speaking literally because we often speak metaphorically without noticing that we do.

Now Yablo's objection to Quine's approach to ontology was that it led to an indeterminacy over which objects we are ontologically committed to. If one cannot guarantee the exclusion of metaphorical content from regimented theory there is no principled way to separate out our genuine from false ontological commitments. However, if Quine could argue that a similar indeterminacy applies equally in *all scientific theories*, not just ontology, there might well be a reason for thinking such indeterminacy is not as damning as Yablo suspects, allowing him to evade Yablo's criticism. It is to this I now turn.

---

[8] Yablo, (1998), p. 243.
[9] See Yablo ,(2000), (2002a), and (2002b).
[10] Yablo, (2000), p. 211; see also, (2002b), pp. 94-5; (2002a), p. 230; (2002b), p. 98.

Quine's Response

Quine's central idea is that all inquiry necessarily proceeds from an immanent perspective.[11] This is the claim that judgment is possible only by 'working from with' or 'immersed within' some conceptual scheme, albeit any of numerous alternatives, and must take seriously the commitments embedded in this perspective. However, an important dialectic point in Quine is that he proceeds from a perspective immersed in the conceptual scheme of physical science; this is simply the view he embodies, and by implication, takes it as the position that his reader will also embody. In this context, Quine simply personifies the perspective of physics, adjudicating all on-going theory choices from this privileged standpoint. And as there is no possibility of justifying this prioritisation of physical science from a more secure, transcendent platform, Quine presents this perspective as a matter of fact, and assumes that 'working-from-within' means 'working from within the physical sciences'. Quine's view of on-going inquiry, therefore, is simply to acknowledge the beliefs that we do hold and take them seriously without demanding the impossible 'external' or *a priori* justification of these beliefs.

This 'naturalism' forms the background to Quine's account of ontology. The key point of which is that reality is identified and described only from within on-going scientific inquiry. For, by ruling out the *a priori*, Quine rejects as incoherent the idea of existence completely independent of all conceptual schemes, and the related idea that we can have some prior intuition about the nature of reality to which science must then measure up. In contrast, ontology is simply one facet of taking our immersed perspective seriously, on a par with naturalised accounts of epistemology and language; like them, ontology is conscripted as an on-going theory in the broad spectrum of scientific inquiry, and just as epistemology is assimilated as a scientific account of how we gain knowledge of the world around us, ontological assertions become tentative hypotheses about the world, to be assessed according to the criteria of best current science.[12]

So what exactly is a scientific account of ontology? It seems to me that this question must be separated into two distinct questions. The first is 'What does the scientific theory of ontology say about ontology?' to be kept separate from a second question 'What is the status of that theory of ontology itself?'. Let's take these in turn.

First, for Quine, science tells us that ontological commitments do not arise in ordinary language as ordinary language is simply not precise enough to imply any ontological commitments whatsoever.[13] Rather, we determine what exists by regimenting our best scientific theory into first-order predicate calculus;[14] we then pay attention to the bound variables of this theory, as the objects taken as their values are the objects that must exist in order for this theory to be true. Hence, asserting this theory commits one to the existence of these objects. It must be pointed out, however, that the regimented version of theory does not attempt to faithfully reflect the original ordinary language version, or even to provide a more systematic edition of original theory: Quine is not interested in a project of language reform in this sense and rejects that we should, or even could, give up ordinary language and use regimented canonical notation in its place. One paradigm example of this

[11] See for example: Quine, 'On what There Is', *From a Logical Point of View*, 2nd ed. (Cambridge, MA: Harvard University Press, 1961), p. 10; Quine, *Word and Object* (Cambridge, MA: MIT Press, 1960), p 275-6; Quine, 'Things and Their Place in Theories', reprinted in *Theories and Things*, (Cambridge, MA: Harvard University Press, 1981), pp. 21-22.
[12] Quine, (1961), pp. 16-17.
[13] Quine, (1981), p. 9.
[14] Quine, *Pursuit of Truth*, 2nd edition (Cambridge, Mass.: Harvard University Press, 1992), p. 26; see also, Gary Kemp, Quine: *A Guide for the Perplexed* (New York & London: Continuum, 2006), p. 105.

is the definition of an ordered pair; Quine argues that we do not need to assume the existence of ordered pairs in addition to sets, as the fundamental postulate defining ordered pairs can be translated into a theorem of ordinary set theory. However, Quine is not proposing that we should stop using terms such as 'the ordered pair': if we restricted what we can legitimately say to what can be spelt out in full literal truth, conversation would become impossibly long.[15]

As a consequence, Quine accepts that there are a number of ways in which we can assert a sentence in the original theory but avoid commitment to the entities presupposed by that sentence. In *Word and Object* Quine lists the following three ways of avoiding commitment: the offending expression can be paraphrased away; the offending sentence is repudiated; or we can view the offending expression as uttered in a figurative or fictional sense. Yablo is most interested in the last of these – figurative language. Quine points out that we typically speak in a figurative sense in most everyday interactions.[16] Indeed, much of the ordinary language version of best scientific theory is not literally true, and will not be included in any ultimate version of that theory; for example, the literal content of ideal objects, frictionless planes, limitless depth, etc., is not meant to be believed. However, this does not mean that what we say in ordinary language can be dismissed as vacuous; rather these usages are 'a deliberate myth' which are false on a literal reading, but are nonetheless useful in on-going inquiry. For this reason Quine introduces a 'double standard' which allows for ways of speaking that are useful without being true. It is only when we are speaking in the spirit of full scientific seriousness, when we 'limn the ultimate structure of reality', that we speak in a wholly literal spirit.[17]

So while Quine can theoretically accept that there may be no sharp distinction between the metaphorical and literal content of expressions and sentences *in ordinary language*, he is committed to holding that there is nevertheless a hard and fast line between these, drawn along the line of ordinary language versus regimented theory. That is to say, for Quine, all sentences in regimented version of theory are literally true. The order of priority between theory and ontology determines that this is so. For it is not the case that I can determine whether there really are or are not, for example, 'computer viruses', absolutely independently of the choice of conceptual scheme, so that I can then determine if a sentence quantifying over 'computer viruses' in regimented version of our best theory is metaphorical or literal. Rather, it is the other way round; by the criterion of ontological commitment, if the regimented version my best theory is committed to 'computer viruses' then they exist and what this theory says about them is literally true. This is the precise sense in which Quine holds that canonical notation is an improvement on ordinary language for the purpose of making ontological commitments explicit, and explains why regimented theory may diverge radically from the original theory.[18]

Turning to the second question, while it is true that most of Quine's writing on ontology deals with the issue of resuscitating ontology from Carnap's attack and subsequently working out the dynamics of this new approach to ontology, what is often overlooked is the attitude Quine holds to this ontological project itself. For, while it is clear that naturalism means ontology is determined by scientific inquiry, rather than by a pre-theoretical, *a priori* intuition about the nature of reality, it is often forgotten that this naturalistic attitude makes ontology itself just one scientific theory among others: that is to say, the notion of ontology itself (as distinct from our various ontological commitments) is a now theoretical construct on a par with any theory in natural science, and as such is

---

[15] Quine, (1960), pp. 228, 258-59
[16] Quine, (1961), p. 103.
[17] Quine, (1960), pp. 219-28, 248.
[18] Ibid., pp. 258-9.

warranted on the same basis as any scientific theory.[19] Moreover, as science's most general concern is with negotiating, predicting, systematizing, etc., experience, it follows that the ontological question is relevant to on-going science only insofar as it is of pragmatic benefit for us to determine ontological issues; that is, if ontology helps systematize, simplify, make our overall theory more fruitful, and so on. However, by the same token, the concept of ontology is, like any other aspect of science, open to revision in the face of recalcitrant empirical evidence. And, hypothetically, given enough reason to view the ontological enterprise as no longer beneficial to on-going inquiry it is conceivable that we junk the entire ontological project.

Quine makes this point in very explicit terms towards the end of his career, in *Pursuit of Truth*, where he points out that the current trend in on-going physics may soon invite logical deviations so extreme as to be impossible to translate back into the regimented language of quantification which serves as the ontological standard. [20] In this context Quine is reflecting on recent developments in quantum physics and concludes that they may render the traditional notion of ontology obsolete; that is, the notion of existence may ultimately prove to be a restriction on, rather than be of benefit to, on-going inquiry, and were that the case, the project of ontology would be junked in the wheelie-bin of bad science. So we find that right at the end of his career, Quine views the ontological enterprise as a conjecture, as a theory that may or may not turn out to be compatible with the progress of on-going science.[21] So, I don't think there can be any doubt that, for Quine, when correctly located the ontological project is simply one theory among many within the broad spectrum of on-going scientific inquiry.

It is in this context that we must assess Yablo's criticism. Yablo clearly assumes that the indeterminacy of truth is a definitive objection to Quine's ontological program, but it is not immediately obvious why this 'indeterminacy' criticism is really all that damning. In particular, it seems to me that the point underlying Yablo's 'indeterminacy' criticism applies equally in *all scientific theories*, not just ontology. That is to say, it seems incontrovertible that many of the claims asserted in current scientific theory will ultimately turn out to be false in the face of, as of yet undiscovered, empirical evidence; moreover, it is not possible at this point in time to determine which of them are the false ones. For example, consider on-going inquiry in physics: surely it is subject to the same indeterminacy of truth claims as ontology?

Quine is an empiricist first and foremost – whatever the evidence for science it rests in observation. More precisely, Quine's empiricism leads him to embrace physicalism: he holds that our best current set of theories about the world, and the stopping place for explanation, is physical science; hence it is privileged as the apex in our hierarchy of theories about the world. The key point in the prioritisation of physics is its scope – physics has the widest scope, and hence is cognitively superior to all other theories. This special deference to physics as the basic science is underpinned by the belief that physics alone holds out the promise of a fundamental explanation of all phenomena. And, while this physicalism is non-reductive in the sense that it does not claim that all of science can be translated into the technical vocabulary of physics, it nevertheless does hold that there is no difference without a physical difference. For Quine, the motivation for pursuing 'physics' down the centuries has been to come up with the minimum catalogue of states that suffices

---

[19] Quine, 'On Carnap's View of Ontology', in *Ways of Paradox and Other Essays*, expanded ed. (Cambridge, Mass.: Harvard University Press, 1976), p. 134.

[20] Quine, (1992), pp. 35-36.

[21] See also, Quine, 'Facts of the Matter', in *Essays on the Philosophy of W. V. Quine,* R. Shahan and C. Swoyer (eds.) (Norman: University of Oklahoma Press, 1979); 'Whither Physical Objects?', in *Essays in Memory of Imre Lakatos*, R. Cohen, P. Feyerabend and M. Wartofsky (eds.) (Dordrecht: Reidel, 1976).

to account for all reality, or in Quine's terms to provide 'full-coverage' of reality by accounting for 'all possible evidence'. Current physics, however, does not fulfil this requirement – it cannot provide 'full-coverage' of reality. But it does constitute our best effort, to date, to satisfy this general ambition, and the best current formulation is as the 'fulfilment of physical-state predicates by space-time regions'.[22] However, the crucial point is that this formulation of physicalism is incomplete, and because it is incomplete, it follows that future inquiry will necessitate departures from our current physics, possibly as dramatic as revising our very conception of what counts as an elementary physical state. So, according to Quine, just as physics has undergone revolutionary changes in the past it is equally likely to undergo radical changes in the future, but all the while continuing the project of collating the minimum catalogue of states sufficient to explain all change.[23]

So unless current physics is the finished article, i.e. has achieved full-coverage of reality, then it is inevitable that many of the laws governing current physics are based on theoretical assumptions that will ultimately be revealed as false. Indeed, without being overly melodramatic about it, Quine can even accept that *all* of current physics will turn out to be false. It seems indisputable, therefore, that according to Quine physics (and because they are all ultimately determined by physics by extension all other branches of on-going inquiry), will face the same indeterminacy of truth claims as identified by Yablo in ontology.

So the alleged contradiction identified by Yablo underlying Quine's approach to ontology is in fact our common condition. But Yablo does not advocate that we junk the rest of science, so why junk ontology? It can only be because he assumes ontology is radically different to the rest of on-going inquiry, that it is a static discipline, a collection of *a priori* truths about independent reality, as opposed to their continual evolution and revision. That is, both science and ontology are replete with known (but currently unidentifiable) falsehoods, but that ontology is sufficiently different from science to make this a profound problem in ontology but not in science. Ontological inquiry refines and improves knowledge of the basic constituents of an independent reality but is in an important sense constant: ontology is a solid, unchanging set of truths, and the ontologist, accordingly, seeks and finds eternal verities just as the traditional metaphysician claimed to have done. But clearly this cannot be the basis for a criticism of the Quinean approach to ontology.

Trouble is, Yablo appeals to the wrong type of indeterminacy here. The indeterminacy of truth claims is a problem only when viewed from a neutral perspective, aloof from the coal-face of on-going inquiry; but it cannot undermine the fundamental point that at this moment, from the perspective we embody right now, current physics is true (though fallible)[24]. And while it is the case that we have no conception of what ultimate or ideal physics will be like, from our immersed perspective current physics is the best place to start, and as it will be the product of sustained inquiry, ideal physics will be continuous with current on-going physics. Moreover, however radical the changes in the future this does not alter the fact that current physics is a (relatively) coherent and unified body of knowledge – clearly surpassing any current alternative theory that we can come up with. Accordingly, even if we assume the *a priori* perspective required to generate the indeterminacy of truth claims, it still does not give us a reason to junk on-going physics.

Quine would no doubt accept that there is a clear empirical assumption in play here – given the physics we currently are immersed in we assume that physics will ultimately come up with a complete account of reality – but this is simply a feature of taking our immersed perspective seriously. Likewise with ontology: Quine assumes that ideal physics will ultimately deliver the complete ontology of reality, and that when this is found it will be a

---

[22] Quine, (1979), pp. 166-9, 192-193; (1981), p. 98.
[23] For example, see Quine, (1979), pp. 188-189; (1986), pp. 430f.
[24] Quine, (1960), pp. 19-25; (1992), p. 99.

coherent development of current theory, and that a continuous story can be told of this development regardless of how different the ultimate ontology is from our current version. In either case, the indeterminacy of truth claims becomes a problem only if we demand a more secure basis for justifying physics or ontology, i.e., only on the assumption that physics or ontology is an *a priori* discipline.

It seems clear, therefore, than simply pointing out the indeterminacy of literal and metaphorical content in ordinary language is not sufficient to motivate the kind of contradiction that would undermine Quine's approach to ontology. For, just as it would not lead to the demand that we abandon current physics or that the prioritisation of physics is somehow vacuous, once ontology has been co-opted into the broader spectrum of on-going science, as one theory among many, subject to the vicissitude of empirical evidence, Yablo is wrong to suggest that Quine's ontological project is undermined simply because we are ontologically committed by sentences thought to be true but which are in fact false. On the contrary, so long as we view ontology as on a par with any other scientific theory, the indeterminacy of truth claims is no more devastating to ontology than to physics, as it is evident that precisely this type of scenario arises internal to any on-going scientific theory, where empirical evidence regularly leads to revision of claims previously held to be true.

It appears that Yablo has his work cut out for him if he is to show that the indeterminacy of literal and metaphorical content is a basis for undermining Quine's approach to ontology. But what of Yablo's other goal, of attempting to re-instate Carnap's 'quizzical' attitude to ontology on the basis of a distinction between statements internal and external to make-believe games? Can this project undermine the 'curious' attitude to ontology by substantiating the 'quizzical' attitude as a viable alternative?

Here is where the second bore of Yablo's double-barrelled criticism is brought to bear, reflecting the second dominant trend in his thought at this time, namely – to show mathematical objects do not exist and mathematical discourse is fictional. This marks a change in his writing from emphasising the indeterminacy of literal-metaphorical content in ordinary language, to emphasising the similarity of mathematics to Walton's 'prop-oriented make-believe'.

The central evidence in Yablo's case that mathematical objects do not actually exist is his claim that we can make do in mathematics with merely pretending that these objects exist: we lose nothing by supplanting the allegedly real objects with their make-believe substitutes. The hypothetical test case here is that of the philosopher confronted with evidence that mathematical objects do not in fact exist. Imagine waiting before the famed Philosophical Oracle and upon your turn to receive some insight being told that only concrete objects really exist.[25] What would the impact of this revelation be on university mathematical departments? Nothing, zilch, not interested. Everyone would still carry on as before, and how we use mathematics would not be altered in the slightest. For, as Yablo has already shown, metaphorical utterances can be descriptive of reality, and relying on make-believe games has no bearing on the ability of on-going inquiry to describe reality. Our lack of concern about this, i.e., our willingness to continue as if nothing were different, testifies, Yablo argues, that we are not nor *were we ever* committed to the literal truth of mathematics in the first place.[26] So according to Yablo, mathematics is a make-believe game, played not for its own sake but to make clear some feature of game-independent reality, i.e., the ones that would confer legitimacy upon the mathematical utterance construed as a move in the game, thus making mathematical discourse equivalent to Carnap's internal statements.

---

[25] J.P. Burgess and G. Rosen, *A Subject with No Object* (Oxford: Clarendon Press,1997): p. 3; Yablo, (2000), p. 200.
[26] Yablo, (2000), p. 214.

There is something wonderfully neat and logical about the conception of nominalism behind the 'oracle' argument; one can see why Yablo would think it can solve the whole problem of our commitment to abstract objects. Moreover, repudiating a set of objects because we can make do with simply pretending to be committed to them has the air of Occam's razor about it, lending it the glow of scientific legitimacy. But in fact, this analogy between mathematical discourse and metaphor shows what else is defective in Yablo's thesis, namely – that his fictionalism relies on a transcendent assumption about the nature of extra-theoretic reality, though not clearly identified by him as such.

Yablo's attack on mathematical objects begins with the Oracle argument, but it doesn't end there. Because up to a point, Quine *agrees* with the Oracle: mathematical objects are one and all make-believe, and pretending that they are real is just as good as their actually being real. It is just that Quine has a very different spin on this situation. All objects (thinks Quine) are make-believe, in the sense that the only evidence for their existence is that they are presupposed by a theory which is itself a human construct: we believe *these* object exist only because we believe *that* theory.[27] Moreover, Quine agrees that there is a requirement to streamline, i.e., make more economical, our commitments in ontology by repudiating duplicated or redundant objects; hence, he shares Yablo's intent of reducing our ontology by distinguishing real objects from the merely useful.

But when Quine makes this distinction he plays it straight and insists that only the standards of existence internal to science be adopted. For example, in distinguishing between real numbers and infinitesimals, the boundary between the real and the merely useful is drawn along the line of indispensability.[28] The point about this is that the standard of reality employed in this case is also that employed in distinguishing, for example, 'a real pool of water up ahead from a mere mirage'; the only difference is that in the former case it is formalised to a much higher degree as the indispensability thesis and the regimentation of theory into canonical notation. This type of decision can only be seen as a theory choice within on-going science equivalent to, for example, the decision that light rays are straight; the scientist decides, for purely scientific reasons, to trade a commitment to one type of object for another, thereby making a new and more scientifically consistent ontology.

This is where push comes to shove for Yablo. In order to maintain that mathematical objects are useful but not real, Yablo must reject the indispensability thesis; and along with it the standard of existence internal to science. For, in contrast to some rival approaches to fictionalism, rather than tailor scientific theory to fit his rejection of abstract entities, Yablo rejects the indispensability thesis as a guide to existence.[29] That numbers are indispensable to on-going inquiry proves nothing about their existence, Yablo says, because once we realise that a variety of metaphors are indispensable to on-going inquiry we can accept that mathematical discourse is indispensable but metaphorical nonetheless. This means that while mathematical *discourse* is indispensable to on-going inquiry, mathematical *objects* are not. Mathematical discourse is indispensable because it alone enables us to express in English facts (such as the relation between planets and stars) that have nothing to do with numbers: we must employ mathematical statements because there is no readily available paraphrase that has equally positive cognitive effects. But the objects they appear to commit us to are dispensable; nothing additional is gained by the further assumption that these objects actually exist. So, we can, he thinks, continue to quantify over variables taking mathematical objects as values but not accept this as evidence for their existence. The novelty in Yablo, therefore, is that because mathematical discourse remains indispensable to on-going inquiry,

---

[27] Quine, (1960), p. 22.
[28] Quine, (1960), p. 248.
[29] Hartry Field, *Science Without Numbers: A Defence of Nominalism* (Princeton: Princeton University Press, 1980), pp. 1-2.

the distinction between the real verses the merely useful is now to be drawn within regimented theory itself. That is, there is a distinction within formalised science between the bound variables that are ontologically committing and those that we merely pretend to be ontologically committing.

So Yablo's is really a two-part argument; the similarity between mathematics and 'prop-oriented make-believe' Yablo points to is the first step, arguing that this similarity is sufficient reason to abandon the indispensability thesis is the second. But now wait. If indispensability has been repudiated, what criterion of existence are we appealing to here? And, more importantly, whatever this criterion is, can it be anything other than an extra-scientific intuition about the nature of reality? In fact, it begins to look as if Yablo's fictionalism is motivated, despite its protestations, not by looking at what we are currently committed to and deciding that this range of commitments is uneconomical and should be reduced (as is the case with Quine's doctrine of ontological reduction), but by what Yablo thinks *we should be* committed to; that is, it depends on a background assumption about what does and does not exist, which is somehow to provide a guide to what commitments we should take on. This background assumption is problematic: according to the standards internal to science numbers do exist, hence this assumption must be extra-scientific. But if it can be articulated at all, it is hard to see how it can avoid being a synthetic *a priori* intuition about the nature of extra-theoretical reality. And, insofar as this assumption cannot be supported from a perspective immanent to on-going science, it undercuts the relevance of fictionalism.

So much effort has been spent on demonstrating the similarity of mathematical discourse to metaphor, but it turns out that metaphor is a red herring. The point is not whether make-believe objects are just as good in math; the point is not even about the merits that accrue once we junk math objects; rather the point is about the justification for holding that *if* make-believe objects are sufficient *then* we should not be committed to them as real. And now here is the rub. Pointing out that real objects contribute nothing that cannot be also accomplished with make-believe mathematical objects cannot be a justification for the naturalist to repudiate mathematical objects: only an already committed nominalist can take this as compelling evidence, and Quine is no nominalist.

Some lingering confusion over this point is perhaps understandable, since Quine at one time defends a form of nominalism; indeed, early in his career, in the paper 'Steps Towards a Constructive Nominalism'[30] co-authored with Nelson Goodman, Quine even appears to advocate nominalism as the goal of naturalism. In this paper, the argument begins with a pre-scientific intuition about the way the world is, namely – that abstract objects do not exist in reality – and then attempts to tailor on-going scientific theory to fit this intuition. Consequently, the paper opens with the assertion that abstract entities do not exist and, following that, an avowal to eradicate all quantification over variables that call for abstract objects as values. However, because at this point he accepts the validity of a pre-scientific intuition about the way the world is, in this paper Quine's position cannot be described as naturalism: as this motivating intuition is beyond the pale of on-going inquiry and is impervious to scientific criticism, accepting it implies rejecting the naturalistic view that reality is described and codified only from within on-going inquiry. Indeed, Quine quickly renounces the project of paraphrasing all of science in exclusively nominalistic terms, not only because he subsequently accepts that it cannot be actually carried out, but more importantly because he renounces as illegitimate the intuition which had originally served as the motivation for the project: any pre-scientific intuition about the nature of reality, such as

---

[30] W.V.O. Quine and N. Goodman, 'Steps Towards a Constructive Nominalism', in *Journal of Symbolic Logic* (1947), 12:97-122.

the intuition that abstract objects do not exist, is now repudiated as a meaningless metaphysical prejudice.[31]

Quine's ultimate view, in contrast, is that if the choice is whether to adopt any entity, this decision is a decision about whether to adopt a particular scientific hypothesis, or set of hypotheses; it is a theory choice within on-going science, determined by whatever the standards of existence are within whatever is the best on-going science at that time. This is a criterion that fictionalists should study more deeply, not deny. To claim that there is a division within regimented theory between real entities and useful fictions, is to claim that there is a more real existence out beyond the ascriptions of reality made immanent to science, and that on *this basis* mathematical objects do not exist. But, as with any appeal to a super-ordinate standard of reality, this is a refusal to take scientific endeavour seriously, and makes fictionalism a fundamentally unscientific form of scepticism about on-going inquiry. Unless Yablo replaces indispensability with a *more scientifically acceptable* standard of existence his argument fails.

My difficulty with Yablo, then, is not that he claims make-believe objects are just as good in mathematics, rather, it is that he thinks this fact, i.e., that make-believe objects are just as good, is sufficient reason for abandoning our commitment to the existence of mathematical objects. It seems to me that this can be a sufficient reason for fictionalism only if one has an antecedent desire to eradicate mathematical objects from ontology, but this desire cannot be a justification for a theory choice in science; this desire is unmotivated within on-going inquiry, and is precisely the type of 'first philosophy' prejudice Quine aims to eradicate from science. In contrast, when we adopt a consistently naturalistic perspective, immanent to on-going inquiry, it is clear that whether or not make-believe objects would be just as good in mathematics is irrelevant to their status as real or merely useful: that is decided by the standard of existence of best on-going science.

Ultimately, Yablo's fictionalism rests on the belief that mathematical objects do not exit. Without this assumption his project does not get off the ground; after all, why look for some standard of existence other than indispensability unless you already knew that mathematical objects did not exist? But what is that belief based on? Clearly, it is not warranted by current best on-going scientific inquiry; rather, it can only be based on some pre-scientific intuition about the nature of reality-as-it-is-in-itself. And, who knows, Yablo may be right about this. But, by failing to identify this as a separate assumption Yablo misleadingly presents his critique as operating within a naturalistic context. And he also fails to make clear what else must be accepted if one is to accept his fictionalism. For example, are there other pre-scientific intuitions that come into play now? How are we to decide amongst them? But apart from all that, assuming a pre-scientific perspective – even if he does not clearly articulate it as a separate assumption – undermines Yablo's critique of Quine, and his justification of a fictionalist account of mathematics.

Conclusion

I mentioned at the outset that when Yablo advocates a return to a 'quizzical' attitude to ontology he cites Carnap as the historical source for his position. There is, however, something of an irony in his using Carnap in this way. For, while Carnap does indeed accept the view that it is pointless to question whether numbers exist (i.e. he shares the 'quizzical' attitude to ontology), he cannot share Yablo's fictionalism.

---

[31] See for example, Quine, (1960), pp. 236-7, p. 243 ft. 5.

While Yablo concedes that Carnap did not accept fictionalism he thinks Carnap's objections to it are easily overcome.[32] In particular, Carnap would have resisted Yablo's characterisation of internal statements as 'myth' or make-believe: Carnap characterises 'myth' as a false internal statement, such as 'there are ghosts', and rejects that we view the acceptance of abstract entities as a 'kind of superstition, or myth, populating the world with fictitious…entities'.[33] In contrast, Yablo characterises a 'myth' as a true internal statement (i.e. it follows from the rules of the framework), 'whose external truth value is as may be, the point being that that truth value is from an internal standpoint quite irrelevant'.[34] So, for Yablo, Carnap's objection is that internal statements describe reality but that 'myth' or playing make-believe games does not; Yablo, of course, argues that playing games *is* a way of describing reality and in his paper dismisses this problem with easy disdain.

The difference, however, is not one to be so dismissed. The characteristic feature of Yablo's account of metaphor is the notion of 'real content'. The real content of a metaphorical sentence is the fact in reality that makes the sentence true in the make-believe game; it thus explains both how metaphorical sentences can be descriptive of game-independent reality and explains the difference between true and false metaphors.[35] But shouldn't Yablo also be concerned about the ontological status of the entities presupposed by the 'real content'? He certainly ought to be because we cannot also adopt a 'quizzical' attitude to them. For example, Yablo holds that a mathematical assertion does not commit us to the existence of mathematical objects because its real content is a sentence that does not quantify over numbers – thus avoiding any ontological commitment to them – but this sentence does quantify over some objects, and, in Yablo's approach, this sentence must be taken literally. The real content of a metaphorical sentence cannot itself be metaphorical, as make-believe games would then lose their capacity to describe game-independent reality.

Consequently, Yablo's position relies on a contrast between two kinds of entities – the entities presupposed by literal sentences which are real, and those presupposed by metaphorical sentences which are no more than useful fictions – that Carnap cannot consistently recognise. For Carnap, there can be no such contrast between physical objects as real and abstract objects as merely fictions, without introducing a prioritisation of particular frameworks, i.e., the prioritisation of the physical over the abstract. Carnap, however, views this type of prioritisation as based on a metaphysical prejudice that is invidious to scientific progress.[36]

For Carnap, the key point motivating his entire project is that traditional philosophical prejudices must not be allowed to stand in the way of scientific progress. He argues that rather than allow counterproductive extra-scientific assumptions to infect on-going inquiry, we park philosophical intuitions as external questions, permit science the freedom to progress liberated from these presuppositions, and judge the outcomes of on-going inquiry on their own merits – ultimately in terms of usefulness – not by how it measures up to some dogmatically held picture of reality. He consequently argues that it is more beneficial to on-going inquiry to be tolerant of alternative frameworks. This 'tolerance' assumption means that the contrast Yablo presupposes, while appearing to be based on substantive scientific evidence, is purely verbal: the frameworks quantifying abstract and empirical objects are on a par, and the choice between them is purely practical. Moreover, you can't fake tolerance; holding that make-believe objects are just as good in mathematical

---

[32] Yablo, (1998), p. 244.

[33] Carnap 'Empiricism, Semantics and Ontology', *Revue Internationale de Philosophie*, 4 (1950), pp. 20-40; reprinted in *Meaning and Necessity*, 2nd ed., (Chicago: University of Chicago Press, 1956), pp. 205-21, p. 218.

[34] Yablo, (1998), p. 244.

[35] Yablo, (2002b), p. 78

[36] R. Carnap, *Logical Syntax of Language*, trans. Amethe Smeaton (London: Routledge, 2000), xiii.

contexts won't get Yablo away from this problem, as simply pretending that these frameworks are on a par is a clear indication of actual intolerance. Carnap's point is that any prioritisation between frameworks will be provisional, limited to the purpose in hand, but an absolute prioritisation such as Yablo's is invidious to scientific progress.

So, if Carnap exemplifies the 'quizzical' attitude to ontology, it seems that even should Yablo's argument against Quine succeed, the resultant picture would not be the 'quizzical' approach.

The mistake underlying Yablo's fictionalism is the need to introduce a non-scientific intuition about the nature of reality. I suggest that the source of this mistake lies in his over-emphasising the significance of differences in Quine and Carnap's attitude to ontology. As in most cases where this is the starting point, Yablo's argument ignores that Quine's opposition to Carnap stems from a deep initial sympathy in their views. And consequently, it undervalues the fundamental agreement underlying Quine's apostasy, namely – the shared aim of eradicating any dogmatically held philosophical intuition from on-going scientific inquiry. Their contrasting attitudes to ontology are determined, in large part, by their differing views as to how this underlying project can be actualised.

More precisely, their difference over ontology can be traced to a disagreement over the distinction between purely theoretical internal assertions and purely pragmatic external proposals – and in turn to – a deeper disagreement about the possibility of philosophy methodologically distinct from on-going inquiry. Carnap sees philosophy – and the principle of tolerance it facilitates – as essential to the progress of inquiry free from dogmatic assumptions: Quine rejects both as illegitimate unscientific intuitions which impede rather than help progress in on-going inquiry. Thus, while Carnap and Quine both aim to free on-going inquiry from illegitimate philosophical intuitions they understand this project in different ways. For Carnap, this means allowing on-going inquiry the freedom to quantify over whatever it must without interference from misplaced philosophical scruples about nominalism, Platonism, etc. that arise from an illegitimate *a priori* metaphysical intuition; for Quine, this project means resuscitating ontological considerations in such a way that they cannot impede on-going inquiry, i.e., by transforming the Platonist-nominalist dispute (for example) into the question of whether quantification over abstract entities can be eliminated without restricting on-going science.

On this reading, then, Yablo is wrong to align himself with Carnap against Quine, as, in the end, Yablo's fictionalism is acceptable neither to Carnap as a re-introduction of the 'quizzical' attitude to ontology, nor can it be a legitimate criticism of Quine's 'curious' attitude. And, ironically, both would reject it for the same reason, namely – Yablo's fictionalism reintroduces a dogmatically held philosophical intuition into on-going inquiry, which both were united in rejecting.

Richard Dawkins, Daniel Dennett, Sam Harris, An Analysis of Free Will and Determinism

J. Haydn Gurmin
Maynooth University

ABSTRACT:

The question of free will is a perennial one. With new insights from modern science much reflection is given again to the problem of determinism, and the possibility of human freedom. Richard Dawkins argues that our genes need to be taken into account when considering the question of whether we are free. Daniel Dennett argues for free will from within the context of an evolutionary framework, thereby giving freedom a naturalistic grounding. Both these thinkers operate from within the neo-Darwinian framework, allowing for the possibility of freedom, against the backdrop of determinism/ materialism. One other thinker arising out of the neo-Darwinian framework is the neuroscientist Sam Harris. In his publication *Free Will*, Harris argues that the concept of free will is incoherent, he appeals to arguments from neuroscience to 'prove' that we are not free, outlining that the content of experience is not a free choice, the content is produced out of a complex interaction with the individual, and the environment. For a human being to truly have a free choice, Harris argues we would need to be given access to everything that gives rise to the choice. As Harris draws from findings in neuroscience, discussion will be given to the question of Benjamin Libet's famous neurological experiment, and the wider discussion of consciousness. The paper argues for the *possibility* of a compatibilist model of free will in line with Dawkins and Dennett's approach. Concluding that the naturalist model of explanation has a lot of detail to furnish before it could be proven that free will is an illusion.

Introduction

Recent publications from recognised scientists and philosophers have pointed to the notion that human freedom is determined by the 'underlying material, genetic, biochemical and neurological manifolds'[1] whilst questioning whether it is possible given such determination to have free will. Upon further investigation of some of these key thinkers, it becomes clearer that while they argue from within a naturalistic, deterministic, scientific perspective, they still allow for some possibility of free will. Whether that is in terms of transcending our genes, the 'executive decision makers', or our freedom 'evolving' from our evolutionary development. Can we accept on the one hand that we are determined, yet also argue that we are free? Or would we need to be fully aware of all the elements that inform us in order to be *truly* free?[2]

Many hold that biological and neurological insights should not be overlooked when considering free will given our porosity to the causal realm, however, others point out that arguments arising out of biological and neurological insights, presuppose reflection on acts of consciousness to corroborate their findings. Indeed, it is difficult to extricate the discussion of

---

[1] See, Brendan Purcell, *From Big Bang to Big Mystery: Human Origins in the Light of Creation and Evolution* (Dublin: Veritas Press, 2011), p. 256.

[2] From the outset, it must be noted that there is little agreement over what is meant by the term 'free will'. For instance, 'free will' is understood differently from the perspective of libertarianism, as compared to soft and hard determinism. A libertarian will maintain that free will is not determined. Whereas compatibilists (or soft determinists) will hold that it is possible to have free will and be determined. While hard determinists, also called incompatibilists, hold that free will is impossible given the reach of determinism. So the idea of 'free will' will take on different definitions depending on these broad perspectives. Even within these perspectives there are disagreements with regard to a definition of free will. See for instance, Joseph Keim Campbell, *Free Will* (Cambridge: Polity, 2011) pp. 21-22 ff.

free will from the context of philosophical reflection on consciousness, and the self.[3] A detailed analysis of consciousness or self is not undertaken here, rather we opt to remain focused on Dennett, Dawkins and Harris's accounts of free will, while acknowledging that these thinkers draw from their wider discussion on consciousness and the self.[4]

The first three sections of the paper will outline the approaches of Dawkins, Dennett, and Harris and their reflections on free will. Their views are by no means homogenous on the topic of free will, although they all come from the background of neo-Darwinism. These approaches are outlined in order to set the context of the modern evolutionary/ neurological/ scientific debate on the question of free will. We focus on Dawkins, Dennett, Harris, because they have been associated in other areas of philosophical discussion (e.g. on evolution, morality, the God question). In addition the three of them are prominent proponents of the neo-Darwinian framework. Alongside the now departed Christopher Hitchens,[5] they have been termed the 'Four Horsemen of the Apocalypse'[6] given their contemporary critiques of religion and religious belief. In the latter part of the paper we will look at wider questions concerning neuroscientific approaches, the question of consciousness and the issues it raises for the question of free will, before concluding that the rigidly determinist position on free will as *illusionary* still requires a lot of detail to furnish in order to prove its case.

---

[3] For instance, Dennett explains in 'Some Observations on the Psychology of Thinking About Free Will', in *Are We Free? Psychology and Free Will,* ed. John Baer et al. (Oxford: OUP, 2008), that 'First, I needed a more detailed naturalistic theory of consciousness, since many people share the intuition of philosopher P. F. Strawson that genuine freedom depends on an agent's behaviour being "intelligible in terms of conscious purposes rather than in terms only of unconscious purposes" ['Freedom and Resentment,' *Proceedings of the British Academy,* 48, 1-25, 1962, pp. 9–91, quoted in Dennett, *Elbow Room, The Varities of Free Will Worth Wanting* (Cambridge MA: MIT Press, 1984), pp. 36–37]. Second, I needed a more foundational account of evolution by natural selection, since I was relying on evolutionary theory to provide the *design work* that, I claimed, distinguished genuinely free agents from less sophisticated (and hence morally incompetent) agents. I set out to fill these gaps, in *Consciousness Explained* [1991] and *Darwin's Dangerous Idea* [1995], and my conviction that I was on the right track was bolstered by a curious pattern I observed in the critical reactions to my uncompromising materialism in both these books: My critics would begin with one technical challenge or another ("But what about this:...?") and after I'd parried their point, they would come up with another, and perhaps a third or fourth, but eventually, after I had responded to their apparent satisfaction to their technical objections, they would say, in one way or another, "Very well. But *what about free will?*" This was the hidden agenda that was driving their skepticism all along: the concern that if, as I was arguing, consciousness could be explained as a material phenomenon, and evolution could explain how it, and all the competences associated with it, came to be, the resulting picture of mankind would somehow fall short of providing us with enough ... *magic* to give us the free will we desperately want to believe we have.' Ibid., pp. 249-250. See also, Sam Harris, *Waking Up*: *A Guide to Spirituality Without Religion* (London: Simon & Schuster, 2014), in particular chapter 2, and 3.

[4] For example, see, Daniel Dennett, *Consciousness Explained* (Boston: Little, Brown and Co., 1991), Sam Harris *Waking Up*: *A Guide to Spirituality Without Religion* (New York: Simon & Schuster, 2014).

[5] Christopher Hitchens was a prolific writer and journalist, he wrote many works that critically engaged with religion, including *God is not Great: How Religion Poisons Everything* (New York: Twelve Books, 2007), he died in 2011.

[6] These four thinkers appeared in a 2007 documentary entitled 'The Four Horseman' to discuss, as it were, how to 'break the spell of religion' *The Four Horsemen,* Filmed by Josh Timonen (USA: Upper Branch Productions, 2008), https://richarddawkins.net/2013/10/the-four-horsemen-dvd-19-95/ Also see, Daniel Dennett, *Breaking the Spell: Religion as a Natural Phenomenon* (London: Penguin, 2006).

Richard Dawkins on the Question of Free Will[7]

Dawkins in his 1976 publication *The Selfish Gene*[8] gave an account of the role of the 'selfish genes' which he described as the 'executive decision' makers, of the '*survival machines*'[9], that is, the bodies, which the genes built for their survival. He also explored the idea of 'memes' as the 'new replicators' on the cultural level.[10] Dawkins's writings on these topics have had an on-going impact from a proliferation of discussion in the scientific and philosophical realm to engagement with ideas in literature. Siddhartha Mukherjee in *The Gene an Intimate History,* quotes the Japanese writer Haruki Murakami referring to the 'selfish genes' in his 2009-2010 novel *IQ84*:

> Human beings are ultimately nothing but carriers – passageways—for genes. They ride us into the ground like racehorses from generation to generation. Genes don't think about what constitutes good or evil. They don't care whether we are happy or unhappy. We're just means to an end for them. The only thing they think about is what is most efficient for them.[11]

In light of the above, many might be surprised that by the final chapter of *The Selfish Gene* Dawkins holds that human beings unlike other animals can transcend the controlling forces of the genes (and memes) and thus can be held to be 'free agents'. As such, Dawkins in the final chapter of the first edition of *The Selfish Gene,* states that 'we, alone on earth, can rebel against the tyranny of the selfish replicators'.[12] In the endnotes of the 1989 edition, he outlines that he was the subject of criticism for the optimistic tone that he struck in his original conclusion. Criticism came from amongst others, the neurobiologist Stephen Rose, the psychologist Leon Kamin, and geneticist Richard Lewontin. They, according to Dawkins, accused him of a reductionist approach entailing a determinist outcome, which Dawkins did not follow through upon. But Dawkins notes in his riposte that:

> Rose and his colleagues are accusing us of eating our cake and having it. Either we must be 'genetic determinists' or we believe in 'free will'; we cannot have it both ways. But –and here I presume to speak for Professor Wilson [E.O Wilson][13] as well as for myself – it is only in the eyes of Rose and his colleagues that we are 'genetic determinists'. What they don't understand […] is that it is perfectly possible to hold that genes exert a statistical influence on human behaviour while at the same time

---

[7] The account of Dawkins's general position on the selfish genes, and Dennett's account below, draws upon material from Chapter V of, John Haydn Gurmin, *A Study of the Development and Significance of the Idea of the 'Image of God' from its Origins in Genesis through its Historical-Philosophical Interpretations to Contemporary Concerns in Science and Phenomenology*, PhD thesis (Maynooth: Maynooth University, 2010) and John Haydn Gurmin, 'The Theory of Evolution from Darwin to Postmodernism', in *Maynooth Philosophical Papers* Issue 3, ed. Michael Dunne, (Maynooth: Maynooth University, 2006) pp. 81-100.

[8] Richard Dawkins, *The Selfish Gene* (Oxford: OUP, 1976)

[9] Ibid. p. 19.

[10] See, *The Selfish Gene,* chapter 11. The 'meme' is a cultural unit, that can spread from mind to mind, the meme can like the gene replicate and mutate, and is open to being selected. The idea of God for instance could be viewed as a meme, that spreads through societies. We will return to the meme below.

[11] Siddhartha Mukherjee, *The Gene: An Intimate History* (London: Scribner, 2016), p. ix.

[12] Dawkins, *The Selfish Gene,* p. 201.

[13] Here Dawkins is referring to E. O. Wilson the eminent socio-biologist. Wilson had stated that 'The individual organism is only the vehicle (of genes), part of an elaborate device to preserve and spread them with the least possible biochemical perturbation […] The organism is only DNA's way of making more DNA' see Edward O. Wilson, *Sociobiology; The New Synthesis* (Cambridge, Mass., Harvard University Press, 1975) p. 3. Dawkins explicates the gene's-eye-view of evolution in *The Selfish Gene*.

believing that this influence can be modified, overridden or reversed by other influences. Genes must exert a statistical influence on any behaviour pattern that evolves by natural selection. Presumably Rose and his colleagues agree that human sexual desire has evolved by natural selection, in the same sense as anything ever evolves by natural selection. They therefore must agree that there have been genes influencing sexual desire – in the same sense as genes ever influencing anything. Yet they presumably have no trouble curbing their sexual desires when it is socially necessary to do so. What is dualistic about that? Obviously nothing. And no more is it dualist for me to advocate rebelling 'against the tyranny of the selfish replicators'. We, that is our brains, are separate and independent enough from our genes to rebel against them. As already noted, we do so in a small way every time we use contraception. There is no reason why we should not rebel in a large way too.[14]

We may now wonder by what explanatory natural process could we be free to transcend the tyranny of the gene?[15] Dawkins explains:

By dictating the way survival machines and their nervous systems are built, genes exert ultimate power over behaviour. […] Genes are the primary policy-makers; brains are the executives. […] The logical conclusion to this trend (towards increasing intelligence) not yet reached in any species, would be for the genes to give the survival machine a single overall policy instruction – 'do whatever you think best to keep us alive.'[16]

Our next question may pertain to how the genes give over control to 'intelligence' so that their best 'selfish' interests for survival are maintained. For Dawkins the genes are the primary policy-makers and brains are their executives, – genes give the survival machine a single overall policy instruction – 'do whatever you think best to keep us [the genes] alive'.[17] This was possible because human brains became more 'highly developed', having the ability to learn and to simulate.[18] One can imagine that what is best for genes to stay alive is to make sure procreation occurs, but we observe that human minds have produced contraception to thwart such a decision. The use of contraception may be viewed as advantageous given the mind's ability to simulate the future and contemplate that too many offspring may place an arduous burden on the family, resulting in the need to share scarce resources and thereby weakening the chances of survival.

Later in the work, Dawkins introduces what he terms the *Evolutionary Stable Strategy* to explain how it is possible that we move from complete selfishness to the possibility of working in community, somewhat similar to the Hobbesian problem of explaining how it is possible to move from a state of a war of 'all-against-all' to a social contract, using a kind of prisoner's dilemma model, to secure self-preservation.[19]

---

[14] Richard Dawkins, *The Selfish Gene* (Oxford: OUP, 1989), pp. 331-332.

[15] Brendan Purcell states, 'it is hard not to get the impression here that Dawkins is trying to have his determinist cake and then eat it without telling us. If the preservation of our genes "is the ultimate rationale for our existence", if we are their survival machines, then going against our genes is simply impossible […] Dawkins's consciousness of his own freedom seems to be getting the better of himself, despite his theory'. See, Purcell, *From Big Bang,* p. 259.

[16] *The Selfish Gene,* p. 60.

[17] Ibid.

[18] Ibid.

[19] In other words, it is beneficial for us to co-operate in order for us to stay alive longer. By co-operating we allow for 'peace', this co-operation is not based on altruism, rather on the selfish desire to survive longer (to pass on our genes).

Overall a key passage from Dawkins's *The Selfish Gene* argues for 'free will' even within such deterministic hardwiring, he describes this is a unique capacity of human kind, maintaining:

> It is possible that yet another unique quality of man is a capacity for genuine, disinterested true altruism. I hope so, but I am not going to argue the case one way or the other, nor to speculate over its possible memic evolution. The point I am making now is that, even if fundamentally selfish, *our conscious foresight – our capacity to simulate the future in imagination* – could save us from the worst selfish excesses of the blind replicators. We have at least the mental equipment to foster our long-term selfish interests rather than merely short-term selfish interests. We can see the long-term benefits of participating in a 'conspiracy of doves', and we can sit down and make the conspiracy work. *We have the power to defy the selfish genes of our birth and, if necessary, the selfish memes of our indoctrination.* We can even discuss ways of deliberately cultivating and nurturing pure, disinterested altruism—something that has no place in nature, something that has never existed before in the whole history of the world. We are built as gene machines and cultured as meme machines, but we have the power to turn against our creators (emphasis added).[20]

The 'meme' is a form of cultural transmission and, according to Dawkins, is analogous to 'genetic transmission […] in that it can give rise to a form of evolution'.[21] The meme of the idea of God is given special consideration by Dawkins. However, any idea could be considered a meme, scientific ideas themselves, the theory of evolution etc., so the question arises as to who decides what is a beneficial meme or a 'virus'. Dawkins will later publish on the idea of religion as a virus, and the idea of God as a delusion.[22] But it is also worth considering that the meme itself could be utilized to attack the foundations of scientific theories themselves.[23]

In Dawkins's 1982 work *The Extended Phenotype* he outlines that while we may view that genes are passed on from one generation to the next without much modification unless there is a mutation which is favoured by natural selection – this does not mean we are genetically determined. There is always statistical correlation between genes, diet, how we

---

[20] *The Selfish Gene*, pp. 200-201.

[21] Ibid. p. 189. The word meme comes from the suitable Greek root '*Mimeme*' but adapted to meme to rhyme with gene – and can be understood also as *imitation*.

[22] Richard Dawkins, *The God Delusion* (London: Bantam Press, 2006). Also see, Richard Dawkins, *The Root of All Evil*, Channel 4 documentary, produced by Alan Clements, 2006.

[23] If memes in general survive in terms of their cultural transmission – they appear to have no rationality of progression other than their ability to survive transmission, thus scientific ideas may be passed on via memetic transmission as much as religious ideas, the question then arises as to what is the relationship between these ideas, whether scientific or religious to objective reality and/or 'truth', and how would we decide? Dawkins argues for the prowess of science in *A Devil's Chaplain*. The hallmark of science for Dawkins is its testability, and our ability to explain and predict. As he states in *A Devil's Chaplain: Selected Essays* (London: Phoenix, 2004), 'science boosts its claim to truth by its spectacular ability to make matter and energy jump through hoops on command, and to predict what will happen and when'. *A Devil's Chaplain,* p. 17. Philosophers of science, and in particular, Thomas Kuhn point out that science operates via paradigm shifts, and the rationality of progression from one paradigm shift to another can be highly problematic to explain. See Thomas Kuhn, *The Structure of Scientific Revolutions* (Chicago: Chicago UP, 1967), pp. 92 ff. Often scientific ideas are kept even in the face of a lot of problems, there is a resistance to a paradigm change. Perhaps popular scientific ideas, akin to popular memes, have a level of survivability in human minds which resist new ideas – resist paradigm shifts.

are raised, and other environmental factors. So while the genotype may not be flexible, the phenotype is entirely flexible.[24]

The idea that the genes interact with the environment and in so doing there can be a dynamic relationship between the geneotype and the environment to produce a flexible phenotype. This presupposes that there is the possibility of genes being expressed in different ways in accordance to their relationship with the environment. Daniel Dennett in his works gives a comprehensive philosophical account of this relationship between genes, environment, and the importance of chance, and luck when it comes to considering the question of free will.

Daniel Dennett: Chance, Luck and the Evolution of Freedom

Daniel Dennett, an evolutionary philosopher, also reflects on the developments in the science of neurology. He developed a comprehensive philosophical outline of an evolutionary conception of free will in his work *Freedom Evolves*[25] published in 2003.[26] Dennett takes on the problem of genetic determinism in *Freedom Evolves* by facing down the Harvard palaeontologist Stephen Jay Gould's definition of what genetic determinism in fact is. Gould maintained that:

> If we are programmed to be what we are, then these traits are ineluctable. We may, at best channel them, but we cannot change them either by will, education, or culture.[27]

According to Dennett, if this is genetic determinism, then we can all breathe a sigh of relief: there are as such, no genetic determinists[28] because, as Dennett explains:

> I have never encountered anybody who claims that will, education, and culture cannot change many, if not all, of our genetically inherited traits.[29]

---

[24] Richard Dawkins, *The Extended Phenotype* (Oxford: OUP, 1999) 1st published, 1982. See chapter 2, and for instance, pp. 13-14.

[25] Daniel Dennett, *Freedom Evolves* (London: Allen Lane, 2003). Dennett takes on Dawkins's idea of the meme and develops this idea more fully in his works, in particular in, *Darwin's Dangerous Idea*: *Evolution and the Meaning of Life* (1995) and *Freedom Evolves*. In these works, he traces, a natural explanation for freedom – moving through various stages – from blind selfishness, to pseudo-altruism, up to quasi-altruism (or benselfishness). Also, see, Brendan Purcell, *Big Bang*, who expands the discussion out into the moral question, pp. 260 ff.

[26] For Dennett the question of free will is not a matter of physics, it is a matter of biology, given the development of evolution. He expands on this as follows; 'In my second book on free will, I tried to show that the varieties of free will worth wanting could indeed be composed of natural tricks, products of genetic and cultural evolution. According to *Freedom Evolves* […] it is evolutionary biology, not (indeterministic?) physics, that accounts for free will. (A billion years ago, there was no free will on this planet, but now there is. The physics hasn't changed; the improvements in *can do* over the years had to evolve.) […] The key to understanding *real* free will is recognizing that it does not reside in some concentrated internal lump of specialness, but in the myriad relations and dispositions of an enculturated, socialized, interacting, acknowledging, human agent. Tradition makes the Cartesian mistake of packing all the power into the inner puppeteer who pulls the body's strings. When we banish this inner agent, distributing its tasks throughout not just the entire brain, but the body and "surrounding" cultural storehouse – the memes, plus a little help from our (human) friends – we don't have to banish free will! We can see it as a phenomenon distributed in space and time as well.' Daniel Dennett, 'Some Observations on the Psychology of Thinking About Free Will' in *Are We Free?: Psychology and Free Will,* ed. John Baer et al. (Oxford: OUP, 2008), pp. 250, 254-255.

[27] Stephen J. Gould, *Ever Since Darwin: Reflections on Natural History* (London: W. W. Norton & Co., 2007) p. 238., quoted in Dennett, *Freedom Evolves,* p. 156.

[28] Dennett, *Freedom Evolves*, p. 156.

[29] Ibid.

Examples of our abilities to overcome genetic determinism include wearing glasses to overcome myopia, taking medication to overcome illnesses, avoiding food products if allergic etc., and perhaps even undertaking elements that are hostile to life (the ultimate 'hostile' act towards life, being suicide). But some elements are not so easily overcome, so the genotype is not infinitely overcome, for instance, having a Y chromosome rules out the possibility of giving birth, 'this [cannot] change by either will, education, or culture',[30] certainly at the moment at least. Dennett also considers environmental determinism and explains:

> If we have been raised and educated in a particular cultural environment, then the traits imposed on us by that environment are ineluctable. We may, at best, channel them, but we cannot change them either by will, further education, or by adopting a different culture.[31]

Dennett quotes the famous Jesuit adage, 'give me a child until he is seven, and I will show you the man.'[32] He makes the case that we cannot equate determinism with inevitability.[33] According to Dennett one can be determined for instance not to know a word of Chinese because of cultural influences, however, if one was to move to China, such a position might change, one would be 'cured' with some effort on one's part to speak Chinese. Dennett also points out that it isn't simply the dichotomy of being determined by genetics or the environment, there is also *chance and luck*. As he states:

> [Chance] is all around us in the causeless coin-flipping of our noisy world, automatically filling in all the gaps of specification left unfixed by our genes, and unfixed by salient causes in our environment. This is particularly evident in the way the trillions of connections between cells in our brains are formed. It has been recognized for years that the human genome, large as it is, is much too small to *specify* (in its gene recipes) all the connections that are formed between neurons. What happens is that genes specify processes that set in motion huge population growths of neurons – many times more neurons than our brains will eventually use – and these neurons send out exploratory branches, at random (at pseudo-random, of course), and many of these *happen* to connect to other neurons in ways that are *detectably* useful (detectable) by the mindless processes of brain-pruning). These winning connections tend to survive, while the losing connections die […] this selective environment within the brain (especially within the brain of the foetus, long before it encounters the outside environment) no more *specifies* the final connections than the genes do; saliencies in both genes and developmental environment influence and prune the growth, but there is plenty that is left to chance.[34]

For Dennett, culture can help us to leverage ourselves into new territory. Culture provides a vantage point so that we can change direction, change trajectories into the future, trajectories that have been laid by the blind explorations of the genes. Dennett, quoting Dawkins, notes that 'the important point is that there is no general reason for expecting genetic influences to

---

[30] Ibid., p. 157.
[31] Ibid., pp. 157-158.
[32] Ibid., p. 158.
[33] In other words, just because we are *determined* in a certain way, e.g. being female, or male, this does not mean that we are completely/rigidly determined. As, according to Dennett, chance and luck also play a role.
[34] Ibid., p. 159.

be any more irreversible than environmental ones'.[35] Dennett contends that to reverse any such influence, we have to be able to recognise and understand it. As he explains:

> it is only we human beings who have the long-range knowledge capable of identifying and then avoiding the pitfalls on the paths projected by our foresightless genes. Shared knowledge is the key to our greater freedom from 'genetic determinism'.[36]

As such Dennett's approach to free will, as Dawkins's previously, is one of compatibilism, developed on a neo-Darwinian model. Dennett, as outlined above, does not hold that outcomes are inevitable (i.e. unavoidable), but coins the term *evitablility* as a negation of inevitable[37], and Dennett notes that in a 'deterministic world such as the Life world we can design things that are better at avoiding harms in that world than other things are, and these things owe their very persistence to this prowess'.[38] Dennett believes that, 'if determinism is true, then whatever happens is the *inevitable* outcome of the complete set of causes that obtain at each moment'[39], here he highlights that inevitable then becomes a synonym for 'determined', and asks what does the term conditionally convey. But this does not take into consideration the circumstances.[40] So, ultimately, we have evolved as complex creatures that can change our natures in reaction to the environment.[41] At the end of *Freedom Evolves*, Dennett like Dawkins makes claims about the uniqueness of the human being, as he states:

> Recognizing our uniqueness as reflective, communicating animals does not require any human 'exceptionalism' that must shake a defiant fist at Darwin and shun the insights to be harvested from that beautifully articulated and empirically anchored system of thought. We can understand how our freedom is greater than that of other creatures, and see how this heightened capacity carries moral implications […] we are in the best position to decide what to do next, because we have the broadest knowledge and hence the best perspective on the future. What the future holds in store for our planet is up to all of us, reasoning together.[42]

Sam Harris, however, is not convinced of Dennett's account of free will. Harris as a hard determinist makes use of neuroscientific information which he believes points to the fact that free will is nothing but an illusion.[43]

---

[35] Dawkins, *The Extended Phenotype,* p. 13, quoted in Dennett, *Freedom Evolves,* p. 166.
[36] *Freedom Evolves,* p. 166.
[37] Ibid. p. 56.
[38] Ibid.
[39] Ibid.
[40] Ibid., p. 57.
[41] Dennett highlights that 'The combination of genetic and cultural evolution does provide *Homo sapiens*—and only *Homo sapiens,* so far, on this planet—with precisely those features [i.e., to choose as we like, and to *like* as we like]. Thanks to our enculturation, we have been endowed with perspectives that enable us (and only us) to reflect indefinitely on whether our choices are well grounded, whether we *ought* to like what we find ourselves liking, and so forth. Even when we dis- cover, as we sometimes do, that it is difficult or impossible for us to revise some of our likes and dislikes, at least we can inform ourselves of this, and think about ways of working around them.' See, 'Some Observations on the Psychology of Thinking About Free Will', p. 251.
[42] Ibid., p. 308.
[43] While we do not concentrate on Christopher Hitchens's position re free will, he ironically said there was 'no choice but to have free will', see for instance, 'Christopher Hitchens God Mandated Free Will is Self Cancelling Nonsense' (https://www.youtube.com/watch?v=BH2G7fkXAc8). Hitchens seems to be pointing out that we have an experience of free will and yet hinting at its determinism. Yet, he does not appear to provide more detailed philosophical elaborations on the topic.

Sam Harris: Free Will as Illusionary

Sam Harris in one of his most recent publications titled *Free Will*[44] draws from the findings of neuroscience and argues that we are in fact not free, that freedom is an *illusion*.[45] Harris argues that:

> It is important to recognise that the case I am building against free will does not depend upon philosophical materialism (the assumption that reality is, at bottom, purely physical). There is no question that (most, if not all) mental events are the product of physical events. The brain is a physical system, entirely beholden to the laws of nature – and there is every reason to believe that changes in its functional state and material structure entirely dictate our thoughts and actions. But even if the human mind were made of soul-stuff, nothing about my argument would change. The unconscious operations of a soul would grant you no more freedom than the unconscious physiology of your brain does.[46]

Harris is saying that his theory does not depend on materialism as such – although he believes that '"most, if not all" mental events are the products of physical events'.[47] This is so because mental events arise out of the darkness. So, if one has in fact a soul, it would not change the reality that one doesn't know what the soul is going to do next. Just like if we follow Harris's physical account, we still do not know what the mind is going to think next. In both cases, according to Harris, one is not in control, one is not free.

He goes on to discuss the difference between voluntary and involuntary actions – voluntary actions are described as being 'accompanied by the felt intention to carry it out, whereas an involuntary action isn't'.[48] Intentions, for Harris, are important as these are reflected at the level of the brain, and what a person consciously intends gives us an idea about them, for instance a person who enjoys murdering children should be treated differently from a man who accidently hit and killed a child with his car – because the conscious intentions of the former give us a lot of information about how he is likely to behave in the future.[49] But the more fundamental problem for Harris is where these intentions come from in the first place, and how they are determined. He holds the origin of these intentions are mysterious in subjective terms.[50] Ultimately, Harris explains that,

> our sense of free will results from a failure to appreciate this: we do not know what we intend to do until the intention itself arises. To understand this is to realize that we are not the authors of our thoughts and actions *in the way that people generally suppose* (my emphasis).[51]

Harris at this juncture makes the concession that 'the freedom to do what one intends, and not to do otherwise, is no less valuable than it ever was'.[52] But maintains that the 'idea that we, as conscious beings, are deeply responsible for the character of our mental lives and subsequent

---

[44] Sam Harris, *Free Will* (London: Free Press, 2012)
[45] Ibid., p. 11.
[46] Ibid., pp. 11-12.
[47] Ibid. p. 11
[48] Ibid., p. 12.
[49] Ibid., pp. 12-13.
[50] Ibid., p. 13.
[51] Ibid.
[52] Ibid.

behaviour is simply impossible to map to reality'.[53] For Harris, to have free will one would need to be aware of all the factors that determines one's thoughts and actions and to be in complete control of those factors.

Harris goes on to consider the critique that compatibilists, like his friend Dennett, will level against his position above. He points out that Dennett (and other compatibilists),

> insist that even if our thoughts and actions are the produce of unconscious causes, they are still *our* thoughts and actions. Anything that our brains do or decide, whether consciously or not, is something that *we* have done or decided. The fact that we cannot always be subjectively aware of the causes of our actions does not negate free will – because our unconscious neurophysiology is just as much 'us' as our conscious thoughts are.[54]

But Harris cannot hold with Dennett that we are 'coterminous with everything that goes on inside our bodies, whether we are conscious of it or not.'[55] Because, as Harris lucidly points out, we are producing red blood cells, digestive enzymes, etc. at this moment, and these are not elements for which we feel responsible. One's body is doing these things, and if the body 'decided' to do otherwise, you would succumb to these changes rather than cause them. Again Harris argues and questions 'how can we be "free" as conscious agents if everything that we consciously intend is caused by events in our brain that we *do not* intend and of which we are entirely unaware? We can't'.[56]

While Harris advocates this level of determinism he states that he is not a *fatalist*.[57] He holds that 'the fact choices depend on prior causes does not mean that they don't matter'.[58] As such:

> Decisions, intentions, efforts, goals, willpower, etc., are causal states of the brain, leading to specific behaviours, and behaviours lead to outcomes in the world. Human choice, therefore is as important as fanciers of free will believe. But the next choice you make will come out of the darkness of the prior causes that you, the conscious witness of your experience, did not bring into being. Therefore, while it is true to say that a person would have done otherwise if he [she] had chosen to do otherwise, this

---

[53] Ibid.

[54] Ibid., p. 20.

[55] Ibid., p. 23.

[56] Ibid., p. 26.

[57] Fatalism in the philosophical sense usually means that 'we are powerless to do other than we actually do'. See, Hugh Rice, 'Fatalism', *The Stanford Encyclopedia of Philosophy* (Summer 2015 Edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/sum2015/entries/fatalism/>. (accessed, 20, August, 2016). See, Harris, *Free Will*, p. 46. As he states, 'Losing a belief in free will has not made me fatalistic – in fact, it has increased my feelings of freedom. My hopes, fears, and neuroses seem less personal and indelible. There is no telling how much I might change in the future […] A creative change of inputs to the system – learning new skills, forming new relationships, adopting new habits of attention – may radically transform one's life. Becoming sensitive to the background causes of one's thoughts and feelings can – paradoxically – allow for greater control over one's life'. Ibid., pp. 46-47. In fact, Harris argues that we can change, we can alter the strings which affect the 'biochemical puppet'. 'We can steer a more intelligent course through our lives (knowing, of course, that we are ultimately being steered)'. Ibid. p. 47. But his argument here suggests that we have 'power' over the direction of our lives and to re-order ourselves in accord with our intellect. In this way, Harris seems to be pointing to our ability to understand 'purpose', that we would be better to change this and that about our lives because of x, y, z reasons. And so does this not point to a conscious awareness on our part, even if this is simply comprehending that we are 'biochemical puppets'? Surely by being 'aware', we can make decisions (freely?) to alter our directions within the deterministic elements that we find ourselves in (e.g. place of birth, cultural norms, gender, the environment etc.)?

[58] Ibid., p. 34.

does not deliver the kind of free will that most people seem to cherish – because a person's 'choices' merely appear in his mind as though sprung from the void. From the perspective of conscious awareness, you are no more responsible for the next thing you think (and therefore do) than you are for the fact that you were born into this world.[59]

Harris goes on further to discuss that one can decide to go on a diet and in one case you can be successful while in others you are not. What is the difference he asks between the two situations, and he considers 'what the difference is' – but explains the 'change' by outlining that it is not one that *you* brought into being. But we might now ask the question *who* brought the difference into being? Was it merely an accident of causality that lead in some situations to a dietary success, whereas in other cases dietary failures?

Yet, it seems in these instances that Harris neglects any discussion of the 'will' or 'will power' or resolve to undertake a diet, and the power that is required to undertake such a diet. Surely, it is not simply the case that something mysteriously makes one diet work while another does not, for anyone undertaking self-discipline in any particular way; diet, exercise regime etc., there is an enormous felt effort of shifting energy by way of willing and promoting a resolve so that one does not fall back into the same patterns as perhaps lead to the previous collapse of a diet, or exercise regime.

There is a need, to put energy in, to rewire neuronal pathways, and create new habits. For those of us who fail to keep to new exercise regimes, or diets, we understand/ we feel, that we did not input enough energy of our 'will' to sustain the programme, and may resolve to try again.

Harris might respond by saying one can do what one decides to do, but you cannot decide what you will decide to do.[60] Again surely this is problematic, as one can decide what one will decide to do because if an idea arises from the void as Harris states, then one can decide not to do anything with it, and in fact decide against doing it, that in itself is deciding what you will do against the origination of the idea from the void. In such cases, not to decide, as Sartre notes, is to decide, that is to say, a decision.[61] One may also be lead from that decision to decide other factors that are connected with this decision, for example, the impulse to eat chocolate arises, we decide not to eat the chocolate, then decide to eat a low fat yoghurt. This second decision has been decided by a rejection of the first impulse, which we decided against. Harris does not appear to take into account the difference between intention and action, merely thinking about something or the darkness providing intentions does not necessarily mean that we cause those thoughts to be brought into reality by acting upon them. There is an implicit assumption by Harris that thinking and doing are concomitant.[62] Also there is little consideration by Harris, about the *goal* of an action, the notion that we choose something because of some particular end (*purpose/ telos*). Being on a diet requires an evaluation of the end of such an action, i.e., to maintain health. Furthermore Harris builds his position from neuroscientific findings and refers to Benjamin Libet's experiment amongst others to underpin his position. But there are issues with Libet's findings, which we will turn to discuss next.

---

[59] Ibid., p. 35.

[60] Ibid., p. 38.

[61] As Sartre says, 'If I decide not to choose, that still constitutes a choice', he explains further, 'man is condemned to be free', see, Jean Paul Sartre, *Existentialism is a Humanism*, trans. Carol Macomber (London: Yale University Press, 2007) pp. 44, 29.

[62] As quoted previously, 'From the perspective of conscious awareness, you are no more responsible for the next thing you think (and therefore do) than you are for the fact that you were born in this world', Harris, *Free Will*, p. 35. But we think a lot of things which are never enacted.

Neuroscience, Consciousness, and Free Will

Ever since Benjamin Libet's neurologically based paper on human consciousness in the 1970s people have wondered whether we are truly free.[63] Much discussion has taken place regarding the 'Readiness Potential' and Libet's conclusions. Harris outlines Libet's experiment and findings as follows:

> The psychologist Benjamin Libet famously used EEG to show that activity in the brain's motor cortex can be detected some 300 miliseconds before a person feels that he has decided to move. Another lab extended this work using functional magnetic resonance imaging (fMRI): Subjects were asked to press one of two buttons while watching a 'clock' composed of random sequence of letters appearing on a screen. They reported which letter was visible at the moment they decided to press one button or the other. The experimenters found two brain regions that contained information about which button subjects would press a full *7 to 10 seconds* before the decision was consciously made […] These findings are difficult to reconcile with the sense that we are the conscious authors of our actions. One fact now seems indisputable: Some moments before you are aware of what you will do next – a time in which you subjectively appear to have complete freedom to behave however you please – your brain has already determined what you will do. You then become conscious of this 'decision' and believe that you are in the process of making it.[64]

Tim Lewens, however, points out that

> A recent piece of detailed neuroscientific work has suggested that the nature of the RP [Readiness Potential] may have been misunderstood. Scientists have tended to think of the RP as a neural indicator of something akin to a plan to move: the RP indicates an unconscious determination to flex one's wrist, for example. New experimental work has made trouble for this interpretation. A team in New Zealand asked subjects to wait until they heard an audio tone before deciding whether or not to tap a key. The team reasoned that if, as Libet suggests, the RP is an indicator of upcoming action, then they should detect an RP when people do decide to tap, but not when they don't. Instead they detected an RP regardless of what their subjects ended up choosing. So the RP does not seem to be an unconscious resolution to move.[65]

---

[63] Libet's paper asked subjects (consisting of two groupings, with a total of six subjects) to flex their wrists whenever they wished to do so, ignoring external stimuli (i.e. 'to let the urge to act appear on its own at any time without any preplanning or concentration on when to act', Benjamin Libet et al., 'Time of Conscious Intention to Act in Relation to Onset of Cerebral Activity (Readiness-Potential)', in *Brain* (1983), 106, 623-642, (p. 625)). Psychologists had already noticed prior to this experiment that there was neuronal activity (i.e. a build-up of electrical activity in the brain) prior to action– this build-up of electrical activity is what Libet termed the *Bereitschaftspotential* or the 'Readiness Potential' (RP). This activity was measured using an EEG (electroencephalogram). Libet first measured the subject's consciousness of the urge to flex their wrist. The subjects were asked to look at the 'clock-position' of a spot of light revolving in a circle, and to record when they felt the urge to flex. Next Libet, used an EEG to record the emergence of the RP – which Libet held as the time that the Flex was initiated by the brain, then Libet measured the time of the flexing itself. The onset of the RP arises about 550 milliseconds prior to action, and 350 milliseconds before the urge to flex a wrist was reported by a subject. So the RP arises first, then the 'conscious' urge to flex, and then the flex of the wrist. See Tim Lewens, *The Meaning of Science* (London: Pelican, 2015) chapter 8 for a more detailed discussion.

[64] See Harris, *Free Will*, p. 9.

[65] Tim Lewens, *The Meaning of Science*, pp. 247-248. Also see, J. Trevena and J. Miller, 'Brain Preparation Before a Voluntary Action: Evidence Against Unconscious Movement Initiation', *Consciousness and Cognition,* 19 (2010): 447-456.

Additional issues that arise for Libet's experiment include Dennett's argument that we are dependent on the subject to tell us the timing of the urge – which may be the time of when things come together, rather than when they may have objectively started. Others criticise the 'spontaneity' of the action given the subjects were instructed to move their wrists – perhaps such students had no desire to move their wrists ordinarily, but given that Libet had instructed them to move their wrist, were they in some way compromised?[66] While Mark Balaguer highlights that the 'readiness potential' could be referring to a torn decision making process – for instance should I have a coffee or a coke, rather than referring to *a* particular decision.[67]

More recently, an article from a team at John Hopkins University on the 'neural substrates of volition' reportedly observes for the first time the brain making a purely voluntary decision to act. Subjects were left in an MRI scanner to watch a split screen as rapid streams of colourful numbers and letters scrolled past on each side – when to switch sides was left entirely up to the subjects. After one hour in this situation, the subjects switched from one side to the other many times. Researchers noticed that deliberation occurred in the medial frontal and lateral prefrontal cortex, which 'likely reflects processing related to the intention or preparation to reorient attention'.[68] As the technological advances increase further such analysis of the mind working in real time and without the 'cues of researchers' will undoubtedly become more common.

Notwithstanding the issues mentioned above arising from Libet's experiment, perhaps more importantly we must also keep in mind that our current natural scientific findings are limited in understanding the question of free will arising out of a conscious subject. For instance, the 'hard' question of consciousness as raised by David Chalmers centres on a difficult question – how does the brain (a material entity), give rise to subjective experience, which is recognized by humans as consciousness?[69] And what sort of evidence would give us a solution to the question of subjective consciousness?[70] As such,

> Libet's data, [does not] address the core of the free will problem—the hard problem of free will. [There has been] progress on surrounding issues, often in conflicting directions, but with regard to the hard problem, none [of the progress] does more than push it further back—shrinking the black box, but never opening it.[71]

Further to this Shariff et al., argue that:

> The assumptions involved in scientific examination may themselves be in error. The existence of consciousness and the apparent existence of conscious volition may be examples of anomalies that indicate the limits of our current investigative paradigm.

[66] See Ibid., p. 245.

[67] See, Mark Balaguer, *Free Will* (Boston, MIT Press, 2014) p. 100. Balaguer states that one can 'respond to the Libet study by pointing out […] that there is no good evidence for the claim that when we make our torn decisions, the readiness potential is part of a physical process that causes us to choose in the specific ways that we do.' Ibid., p. 118.

[68] Leon Gmeindl, Yu-Chin Chiu et al., 'Tracking the will to attend: Cortical activity indexes self-generated, voluntary shifts of attention', in *Attention, Perception, & Psychophysics* online (June 14, 2016).

[69] See, David Chalmers, 'How do you explain consciousness?', Ted Talk (March 2014) https://www.ted.com/talks/david_chalmers_how_do_you_explain_consciousness?language=en;David Chalmers, 'Facing up to the Problem of Consciousness.' in *Journal of Consciousness Studies* 2: 200-19, 1995.

[70] See, Azim F. Shariff, Jonathan Schooler, Kathleen D. Vohs, 'The Hazards of Claiming to Have Solved the Hard Problem of Free Will', in *Are We Free?: Psychology and Free Will,* ed. John Baer et al. (Oxford: OUP, 2008), p. 183.

[71] Ibid., p. 188.

And those researchers who are strictly abiding by the established materialist modes of investigation may be the ones who are being overly rigid, trying vainly to cram ever more complex phenomena into inadequate methods of explanation. It is perhaps not the traditional understanding of free will that is in error but, rather, the traditional understanding of how to do science.[72]

Harris himself states 'in scientific terms […] consciousness remains notoriously difficult to understand, or even to define'.[73] Furthermore,

the sheer fact that this universe is illuminated by sentience – is precisely what unconsciousness is not. And I believe no description of unconscious complexity will fully account for it. To simply assert that consciousness arose at some point in the evolution of life, and that it results from a specific arrangement of neurons firing in concert within an individual brain, doesn't give us any inkling of *how* it could emerge from unconscious processes, even in principle.'[74]

Herein lies a dilemma for any discussion of free will. The ability of consciousness to reflect on nature and to reflect upon itself is not adequately understood. Perhaps consciousness, in its uniqueness, gives us an ability to overcome hard determinism. Being conscious we can reflect on the future, envision, simulate, and evaluate options in relation to purpose. In being able to carry out these endeavours, consciousness appears to allow us to overcome the blind physical, chemical, and biological forces of our natures.

Conclusion

In conclusion, our analysis of Dawkins, Dennett, and Harris on the question of free will demonstrates that there is not a homogenous account of free will from the perspective of prominent neo-Darwinian thinkers. One could have imagined that neo-Darwinian thinkers would have been strong determinists given their analysis of the impact of genetics, and culture (memes) on the human individual. But Dawkins and Dennett turn towards a compatibilist model. Even Harris is not a fatalist, and it appears he also opens up a space for 'free will' in his account given that we can alter the 'strings' and alternate the type of life we have. In his conclusion he notes – 'it is not that free will is simply an illusion—our experience is not merely delivering a distorted view of reality. Rather, we are mistaken about our experience. Not only are we not as free as we think we are – we do not feel as free as we think we do'.[75] Harris seems to think that we cannot decide what we decide, which is paradoxical to some of the statements he makes in his work regarding our ability to re-direct our future lives.

To lose sight of the ability of the human being to freely accept inclinations, just as with attitudes, or to allow them to become operative in us, to renounce them, to resolve to do otherwise, to resolve to decide and indeed to change thought patterns, to take up different attitudes – is something that requires a pause between thought and action. For Harris, he makes a connection between thinking and doing. Even if one accepts an inclination it does not mean that one wills it into action.[76] Although Harris would respond by saying that our

---

[72] Ibid. p. 194.
[73] Harris, *Waking Up*, p. 51.
[74] Ibid*.*, p. 56.
[75] Harris, *Free Will*, p. 64.
[76] According to the phenomenologist Edith Stein, 'inclining is (1) objectively grounded; (2) causally dependent; and (3) dependent upon the influence of the will, in a threefold way: (a) the objective basis can be withdrawn

inclinations to do otherwise are based on neurons, which are themselves bound up in a causal determinist chain.[77] Indeed, much work has been done on positive thought therapy in order to re-wire neuronal networks in neurology so that individuals can decide to change the ideas that arise from their mind. They can take a personal *resolve* to do otherwise. Dennett points out in his work *Freedom Evolves* that free will can be argued for from within the relationship of the individual and the wider sphere of his/her interaction with the environment, and with the development of brains to take over the executive decisions and simulate the future as Dawkins points out. But questions also arise in relation to our understanding of free will from the perspective of the wider discussion of how subjective experience can come about in the first place. That is, from the perspective of being conscious. Even Harris admits to the notoriously difficult problem of consciousness. This is not to discount the possibility that consciousness can be explained from the materialist perspective. But, Shariff et al. alert us to anyone who is claiming to have solved the hard problem of free will, given the difficulty of consciousness. As Shariff et al. contend, even if conscious free will is somehow shown to not exist, it does not necessarily negate the *idea* that conscious free will exists. But studies in neuroscience and in psychology are not at the stage where such conclusions can be drawn.

There is an-overstep by thinkers who have claimed that neurological insights have demonstrated that free will is an illusion. That is not to say of course that the neurological disciplines may in the future throw further light on free will that may raise concerns for compatibilists. But Mark Balaguer and others point to the current difficulty concerning the question of free will, he believes that the issue may not be solved in our lifetime. Discussions of free will, however, benefit from neurological and psychological findings. We only have to witness the successes of neurosurgery and neuroscience in general, to note the connections between brain states and our conscious experience. Brain injuries, strokes, brain diseases such as Alzheimer's etc. result in changes in our conscious awareness. Also our life is governed by causal elements – we get tired, we feel hungry, we cannot freely walk through a wall, or take flight, so any discussion of the question of free will is framed by materialist concerns, given our porosity to the causal realm. In this way, Dawkins and Dennett's compatibilist approach take into account both the casual and non-inevitable aspects of free will.

To conclude, in agreement with Balaguer, one needs to remain skeptical and highlight that the question of free will remains an open question, and not one that could at this time be definitely concluded by neurological or materialist findings.

---

from the inclining by turning the attention away, which is itself 'free'; (b) the influences of causal factors can be voluntarily counteracted; (c) the causal factors themselves are submitted to the influence of the will.', See, Edith Stein, *Philosophy of Psychology and the Humanities*, trans. Mary Catherine Baseheart & Marianne Sawicki, (Washinton, DC: ICS Publications, 2000) p. 64.

[77] Harris, *Free Will*, n. 2, p. 73. But these inclinations themselves would still only be open to possible actualization rather than brought from thinking into doing.

Discussion of the Ethical Significance of Language in the philosophy of Heidegger and Levinas

Yinya Liu
Maynooth University

ABSTRACT:

This article investigates the ethical significance of language in relation to Heidegger and Levinas's thought. It first examines the prerequisites of the discussion of language based on the concepts of Being (Heidegger) and the Other (Levinas). Then, it deals with the concept of time as an essential element in understanding language. Thirdly, it compares Heidegger's ontological-language and Levinas's ethical-language, highlighting Levinas's critique of Heidegger's ethical deficiency, especially in Heidegger's articulation on language. The paper argues that Levinas's emphasis on the priority and exteriority of the Other in our relation to language both reveals and replaces Heidegger's mystical significance of language as 'the House of Being'.

Introduction

Martin Heidegger's *Being and Time* (1927)[1] is considered to be one of the most important philosophical works of the twentieth century. Moreover, his thought has strongly influenced not only philosophy but also theology and the humanities. Heidegger's support for National Socialism and the Nazi Party in the 1930s, however, reveals real flaws inherent in his thought, and it has brought criticism from several of his students, including Hannah Arendt, Emmanuel Levinas, Karl Löwith, and many others.[2] Faced with the same historical background as Heidegger, Levinas argued against Heidegger's position on what constitutes 'authentic existence' (in the strong Kierkegaardian existentialist sense of concretely lived existence).

This article examines Levinas's thoughts which relate to Heidegger's standpoint and in particular to Heidegger's analysis of *Dasein* and his exploration of language in addressing 'the question of the meaning of Being' (*die Frage nach dem Sinn von Sein*). We shall see that Heidegger's discussion of the meaning of Being and his conception of (existentialist) ethics is founded upon an implicit egocentricity which prevents him from being able to address the *ethical* inter-connection between the Other, language, and ethical problems.

The Prerequisite of the Discussion on Language: Being versus the Other

The development of Heidegger's thought is complicated and outside of the limits of this article to address. We will focus, however, on those significant religious themes in the development of his thought that are of relevance for our understanding and evaluation.[3]

---

[1] Martin Heidegger, *Being and Time*, trans. by John Macquarrie and Edward Robinson (New York: Harper & Row, 1962); *Sein und Zeit* (Tübingen: Niemeyer, 1927, 1957); also published in separate printing in *Jahrbuch für Philosophie und phänomenologische Forschung*, ed. by Edmund Husserl, Vol. 8 (1927) 1–438. (Henceforth: abbreviated in notes as BT.)

[2] See, Hannah Arendt, 'Martin Heidegger at Eighty', in *Heidegger and Modern Philosophy*, ed. by Michael Murray (New Haven: Yale University Press, 1978), pp. 293–303; Karl Löwith, *Mein Leben in Deutschland vor und nach 1933: ein Bericht* (Stuttgart: Metzler, 1986), p. 57.

[3] See, John D. Caputo, *Demythologizing Heidegger* (Bloomington: Indiana University Press, 1993), pp. 178–179.

Heidegger himself, after all, in his later thought, admitted that 'without [the] theological background, he would never [have] come onto the path of thinking [about *die Seinsfrage*]'.[4] The first stage in the development of his thought regarding *die Seinsfrage*, that Heidegger recounts, is his conversion from Catholicism to Protestantism (1917–1919).[5] In this period, which coincides with his early teaching career at the University in Freiburg (1917–1924), Heidegger lays the foundation for his writing of *Being and Time*.[6] Heidegger rejected the 'catholic eye' that is characteristic of 'natural theology', and accepted the 'protestant ear' that is characteristic of hermeneutic-biblical scholars interested in exploring the significance of the meaning of the life, death, and resurrection (what the protestant theologians called 'facticity') of Jesus Christ for our human self-understanding. The second stage in Heidegger's thinking is a turn from Protestantism to a heroic and atheistic-Nietzschean voluntarism (1928–1929). In 1928 Heidegger returned to Freiburg University, to succeed Husserl who had retired and bequeathed the chair of philosophy to him. From the time of his return to Freiburg in 1928, and in the years to follow, Heidegger was engaged in activities supporting National Socialism. This involvement with National Socialism extended into the early 1930s. The third period in Heidegger's thought, begins from about 1936, and is represented by his move away from his early voluntarism and existentialist concerns, towards a more mytho-poetic meditation on Being and thinking.

Before the publication of *Totality and Infinity* in 1961, Levinas was always regarded as a follower and translator of Husserl and Heidegger.[7] After the publication of *Totality and Infinity*, Levinas's arguments attacking the ethical background of Heidegger's ontology were widely noted.[8] Based on this critique, Jacques Derrida thought that Levinas 'misunderstands and misrepresents Heidegger's philosophy' and he 'concludes by suggesting that Levinas's discourse is not really philosophy at all.'[9] There are two bodies of opinion on the differences[10] and convergences[11] between the thought of Heidegger and Levinas. Both of

---

[4] Martin Heidegger, *On the Way to Language*, trans. by Peter D. Hertz (New York: Harper & Row, 1982), p. 10. (Henceforth abbreviated as OWL). In 1957, the older Heidegger also recalls his younger days at University, remarking: 'What the exciting years between 1910 and 1914 meant for me cannot be adequately expressed; I can only indicate it by a selective enumeration: the second, significantly enlarged edition of Nietzsche's *The Will to Power*, the works of Kierkegaard and Dostoevsky in translation, the awakening interest in Hegel and Schelling, Rilke's works and Trakl's poems, Dilthey's *Collected Writings*.' M. Heidegger, 'A Recollection (1957)', in *Heidegger: The Man and Thinker*, ed. by Thomas Sheehan (Chicago: Precedent Publishing, Inc, 1981), pp. 21–22 (p. 22). See, also, below, n. 7.

[5] See, Hugo Ott, *Martin Heidegger: A Political Life*, trans. by Allan Blunden (London: Fontana Press, 1993), esp., Part Two The Struggle with the Faith of My Birth, The Break with the '*System* of Catholicism', pp. 106–121.

[6] For an extensive and meticulous examination of the many sources (e.g., from theology, existentialism, hermeneutics, Husserlian phenomenology, Dilthey's historicism, Augustinian philosophical anthropology and many more) that influenced the composition of Heidegger's *Being and Time*, see Theodore Kisiel's major study, *The Genesis of Heidegger's 'Being and Time'* (Berkeley: University of California Press, 1993).

[7] Emmanuel Levinas, *Totality and Infinity* (TI), trans. Alphonso Lingis, (Kluwer Academic Publishers, 1969, 1991).

[8] Robert John Sheffler Manning, *Interpreting Otherwise than Heidegger: Emanuel Levinas's Ethics As First Philosophy* (Duquesne: Duquesne University Press, 1993), p. 3.

[9] See, Jacques Derrida's, 'Violence and Metaphysics' in *Writing and Difference*, trans. Alan Bass (Chicago: The University of Chicago Press, 1978), p. 151.

[10] Steven Gans, 'Ethics or Ontology: Levinas and Heidegger', *Philosophy Today*, 16, no. 2 (Summer 1972): 117-21; Luk Boukaert, 'Ontology and Ethics', *International Philosophical Quarterly* 10 (1970): 402-19; C. D. Keyes, 'An Evaluation of Levinas' Critique of Heidegger,' *Research in Phenomenology*, 2 (1972): 121-42. Bernasconi and Critchley also observe this in their introduction to *The Levinas Reader* when they say that 'the initial reception of Levinas's work has been to a great extent determined by *Totality and Infinity*' (p. xxi)

[11] Luk Bouckaert, 'Ontology and Ethics: Reflections on Levinas' Critique of Heidegger,' in *International Philosophical Quarterly* (1970); F. P. Ciglia, 'Du Neant A L'Autre. Reflexions sur le theme de la mort dans la pense de Levinas' in *Les Cahiers de la nuit surveillee*, no. 3 (Lagrasse: Verdier, 1984); Guy Petitdemange's

these considerations reveal the complexity of discussing the true relations between Heidegger's thought and Levinas's and it is regarded as one of the most difficult topics in the field of post-phenomenology.[12] In Levinas's own words, he appraises Heidegger's *Being and Time* as one of the greatest works in the history of philosophy.[13] This makes it more complicated to identify in which respects Levinas agrees and disagrees with Heidegger. We agree with Manning's evaluation that '(I)ndebted to Heidegger as Levinas is, he is no Heideggerian.'[14] Levinas argues against Heidegger's phenomenological ontology as first philosophy, but at the same time develops his own phenomenological ethics as first philosophy based on his critique of Heidegger in a dialectical way.[15] Compared to Heidegger's insistence on exploring the knowledge of Being, Levinas proclaims the priority of the Other which we are responsible for in inter-subjective experiential relations. If we say that Heidegger's concern is about what man can experience, understand, and interpret from the mineness of Being, then Levinas's concern is about what man cannot constitute via the actions mentioned above from the Otherness of the Other.

Levinas further advocates that Heidegger's emphasis of the forgetting of the ontological difference posits man's thinking as the limit of being, which implies that one cannot think beyond being.[16] However, another emphasis of Heidegger is in the task of being: 'to-be'. This emphasis on the limit of being imposes restrictions on the emphasis on the 'becoming' of being. Nevertheless, the difficulty of solving the problem of the understanding of one's own being and the subjective understanding of the other's is exactly the starting point from where Levinas can begin to put forward his own thought. Next, we will analyse Levinas's response to Heidegger's terms of Being and time with his central notions of the 'Other' and 'diachrony'. Robert Manning's book *Interpreting Otherwise than Heidegger* provides a clear and precise discussion about this topic. Based on Manning's discussion, we will develop our arguments on how Levinas's discussion about Heidegger's ontological difference leads to Levinas's articulation of responsibility in relation to the other, and to language.

We will now discuss Levinas's views with regard to the relation between Being and the Other. In Levinas's later thought, he changes Heidegger's motif of Being-Other into the Same-Other because the interpretation of the meaning of Being in the manner of Heidegger's *Being and Time* will give rise to the self-projection of the Other into one's own interpretation of potentialities. This is a process of assimilation of the Other into the Same. According to Levinas, the ethical significance cannot be found in sameness because ethical questions will not be raised when everything is the same. Or, to put it another way, the ethical significance

---

essay 'L'un ou l'autre. La querelle de l'ontologie: Heidegger-Levinas' in *Les Cahiers de la nuit surveille;* Edith Wyschogrod, 'God and Beings Move', in *The Journal of Religion* (April 1982); Allain David, 'Le nom de la finitude' in *Les Cahiers de la nuit surveillee*; Adriann Peperzak, 'From Intentionality to Responsibility: On Levinas's Philosophy of Language' in *The Question of the Other*, ed. by Arleen Dallery and Charles Scott (Albany: State University of New York Press, 1989); Robert Bernasconi, 'Levinas and Derrida: The Question of the Closure of Metaphysics', Richard A. Cohen's *Face to Face with Levinas* (SUNY Series in Philosophy, SUNY press, 2007); David Wood and Robert Bernasconi, *The Provocation of Levinas: Rethinking the Other* (Warwick Studies in Philosophy and Literature, Routledge, 1988); Adrius Valevicius, *From the Other to the Totally Other: The Religious Philosophy of Emmanuel Levinas* (American University Studies Series VII, Theology and Religion, Peter Lang Pub Inc, 1988).

[12] See, Manning, p. 5, also Adriaan Peperzak, 'Emmanuel Levinas: Jewish Experience and Philosophy,' *Philosophy Today*, vol. 27, no. 4 (Winter 1983), p. 300.
[13] Emmanuel Levinas, Richard A. Cohen, *Ethics and Infinity: Conversations with Philippe Nemo* (Pittsburg, PA: Duquesne University Press, 1985), pp. 37–41.
[14] Manning, p. 6.
[15] See, Manning, p. 7.
[16] Emmanuel Levinas, *God, Death, and Time*, trans. By Bettina G. Bergo (Stanford, CA: Stanford University Press, 2000), p. 126. (Henceforth: abbreviated as GDT)

can only be found when the Other is treated *as Other* for questions to emerge from the differences.

But this later reflection by Levinas on Heidegger's deliberation of Being can be traced back to 1947. At that time Levinas states that Heidegger attempts to 'use phenomenological methods to overcome phenomenology'.[17] Compared to the later expression of the 'same-other', Levinas is concerned with 'the other side of being' (*au-dela de l'être*), which is similar to Plato's idea of the Good. This concern becomes the title of Levinas's later important work *Otherwise Than Being* (*Autrement qu'être*). What Levinas wants to draw attention to in the above discussions is the neutrality of Being from Heidegger's thought. Thus, we can say that Levinas's thinking begins with the *il y a* (there is), which corresponds to a neutral situation that exists before any understanding of Being (*Seinsverständnis*) comes to be *Dasein* in Heidegger. *Il y a* in Levinas specifically refers to 'a neutral, continuing existence without existents (and so never capitalized).'[18] From this point, we can conclude that the difference between Being and *il y a* lies in the different attitudinal disposition which is a key characteristic of the basic state of being in Heidegger and Levinas. Heidegger starts his analyses from the premise that the human being is in an inauthentic 'fallenness' and needs to affirm its mineness in the world, while Levinas begins his analyses from the presupposition that fallenness is the basic but not the *prior* state of human being, and the human being needs to affirm its existence from the Other. Thus, the '*il y a*' is the first target to be surmounted for Levinas in order to move on to his ethical deliberation of the otherness of the Other.

A question here arises. If being is manifold, as Levinas argues, and not as One or as the Same or as Mineness, as Heidegger contends, then 'how can Otherness on the other side of being be thought?'[19] In order to answer this question, Heidegger's approach to an understanding that is based on my own *Dasein* is no longer effective because the Other has its own unique quality of otherness that lies beyond one's own comprehension. Thus, on the one hand, what really matters, for Levinas, is not the forgetting of the ontological difference as Heidegger insists, but the forgetting of the dignity of 'the other person' (*l'autre homme*); while on the other hand, the meaning of Being, in Heidegger's view, is to appear or to become manifest(ed) by man in order for it to unfold its truth in the course of history. Yet, the meaning of the otherness of the Other, for Levinas, is to discover the intrinsic justice and righteousness in the being-between because justice is prior to existence.[20] In other words:

> Levinas is more concerned with justice than with the authenticity of existence, which is existing vis-à-vis existence as a whole; such care for the whole is typical of the ethics of a philosophy of totality.[21]

Thus, Levinas's critique of Heidegger's concept of Being is embodied in his criticism of totalitarianism in Western philosophy under three aspects: truth, exteriority and totality.[22] No matter what aspect Levinas wants to examine, nonetheless, the essential key concept that he uses to criticize is the Other.

For Heidegger, beings meet and co-inhabit the other as being-within-the-world (*innerweltlich Seiendes*) in a similar and parallel way. From this precondition, the

---

[17] Theodore De Boer, *The Rationality of Transcendence: Studies in the Philosophy of Emmanuel Levinas* (Amsterdam: J. C. Gieben, 1997), p. 83.
[18] Robert Bernasconi, Simon Critchley, *Re-reading Levinas* (Studies in Continental Thought, Indiana University Press, 1991), p. 214.
[19] De Boer, p. 127.
[20] See, Martin Heidegger, *Die Technik und die Kehre*, p. 38; Holzwege, p. 343, and De Boer's comment on this, p. 113.
[21] De Boer, p. 6.
[22] See, De Boer, p. 7.

understanding and the knowledge of the Other can be accessed from my self-understanding because of the similarity of the Being of everyone in this world. In the meantime, when my self-understanding is revealed from the solitude (*Vereinzelung*) of authentic existence then *after* the self can be confirmed. However, questions will be raised from this corollary: how and to what extent can this self-understanding be really 'shared' by a co-state-of-mind (*Mitbefindlichkeit*)[23]and reach the co-understanding in Heidegger's words if my self-understanding can only be revealed from the solitude? If this shared co-understanding is 'already' based on the understanding of Being, what is the significance of seeking another being-in-the-world who is similar to myself? These questions lead to our examination of the concept of 'we' in both Heidegger and Levinas's thought. 'We' is an important but controversial concept. In Robert Bernasconi's words,

> The identity of the 'we' has been the subject of some controversy. For Heidegger the standpoint of the 'we,' the observers who simply observe the correlation of knowing and object as it takes place within natural consciousness, is attained only in absolute knowing.[24]

The complexity of the concept of the 'we' lies in the overall consideration from experience, words, and subjectivity. In other words, the analysis of 'we' entails the paradigm of the being-knowing analysis. As Heidegger states, '(E)xperience is the movement of […] dialogue between natural and absolute knowing.'[25] From this statement we can clarify the concept of 'we' from Heidegger under three aspects. The first aspect refers to the natural knowing of one's being by using one's natural consciousness. The second aspect refers to the absolute knowing of the relationship between one's being and the other's being (i.e. one's subjectivity) in the movement of the dialogue by using words to detect what I lack in this dialogue. The third stage refers to how the I can be fulfilled from the knowing of the other in this movement. If our interpretation of Heidegger's statement is correct, then the concept of the 'absence' points out both a similar standpoint and a different direction in Heidegger and Levinas's respective philosophies. The similarity lies in both of them admitting the absence of the experience of the other when we extend the knowing of the being of myself to the being of the other. However, Heidegger takes this absence for granted, and affirms the subjectivity of *Dasein* by reducing the absence of the difference between the self and the other into sameness. By contrast, Levinas takes this absence in the experience as the starting point of his ethical thought because this absence of the experience of the Other calls on the self to establish a responsible relation to the other that is in accordance with but not necessarily restrained by the presence of the other. *Dasein* is in a situation of thrownness, which means that the '*sein*' (being) cannot determine '*Da*' (there) in this situation. Levinas would agree that the ethical I also cannot choose my primordial condition as an ethical creature.[26] Nevertheless, the *sein* (being) is made to be *Da* (there) in the situation of fallenness and thrownness, while the ethical I is made to be himself with the other person. From this analysis, we can conclude that the initial consideration of the 'we' from Heidegger and Levinas are quite similar but their different presuppositions and concerns lead to different directions in their development of the paradigm of 'being-knowing'. In other words,

---

[23] Heidegger, *BT*, p. 205.

[24] Robert Bernasconi, *The Question of Language in Heidegger's History of Being* (New York: Humanity Books, 1985), p. 82.

[25] Martin Heidegger, *Hegel's Concept of Experience* (New York: Harper & Row, 1970), p. 148.

[26] Emmanuel Levinas, *Otherwise than Being or Beyond Essence*, trans. by Alphonso Lingis (Dordrecht and Boston, MA: Kluwer, 1978); *Autrement qu'être ou au-delà de l'essence* (The Hague and Boston: Martinus Nijhoff, 1974). (Henceforth: abbreviated in notes as OB.), p. 110, 192.

Levinas's challenge to Heidegger's articulation of being is not to find out the authentic realness of being but the ethical being towards the good.[27]

After clarifying the similarities and differences with respect to their initial concerns regarding Being and the Other, we can argue that the difference between Heidegger's Being and Levinas's 'the Other' would lead to different linguistic poses. These linguistic poses show Heidegger's intention of using language to '[connect] ontological inquiry to historical existence'[28] in order to fill up the gap between Being and beings; while on the other hand, Levinas's argument of the 'good beyond being' is an inevitable development based on his critique of this ontological difference. The reason why Levinas can point out this blind alley of Heidegger's ontological difference lies in his insight that 'the question of the meaning of being involves the way to escape from being'[29], and language is the best possible approach for man to question his being, but at the same time to keep track of the uniqueness of his existence. In the latter section of this section, we will discuss the role of language in Heidegger and Levinas's thought based on our previous discussion regarding ontological difference.

The Essential Understanding of Language: Synchrony versus Diachrony

Time is a basic question in Heidegger's *Being and Time,* as well as in his later thought on the reality of history and the thinking of Being. In other words, time is an important reference frame for *Dasein*. Heidegger discusses time in terms of the ontic and the ontological mode of temporality. In the former case, time is understood in a serial temporal manner while in the latter, time is primordial, that is, it is 'outside-of-itself in and for itself'.[30] This 'outside-of-itself' is a characteristic that is derived from Heidegger's ontological difference because this 'outside' indicates the distance between Being and beings. For Heidegger, death is the end of *Dasein* because it reveals the authenticity of *Dasein*: Being-for-death (*Sein-zum-Tode*). Here, as paradoxical as it may sound, the mineness of *Dasein* is to be determined but, at the same time, to be eliminated by death. Death, for Heidegger, is like a terminal point of *Dasein* which defines our facticity as an '*a priori* past' but which also reminds man to recollect the forgotten and original structure of time in the form of the past, present and futurity.[31]

By contrast, for Levinas, to transcendentally understand death is to understand the Other or the non-self. If death as a terminal point confirms the mineness of *Dasein* for Heidegger, then death as a starting point confirms the otherness of the Other for Levinas. Both Heidegger and Levinas's arguments reveal to the subject a future that exceeds the present but, whereas Heidegger leads this future back to the self, Levinas extends this future outwardly to the plural Other. This is exactly Levinas's purpose: 'to transcend Being: to move beyond or to the other side of Being and Time'[32], and to move from finitude of Being to its infinity of Goodness:

> It is not the finitude of Being that constitutes the essence of time, as Heidegger thinks, but its infinity. […] the aim […] is to show that time is not the

---

[27] Festschrift Roger Burggraeve, *Responsibility, God and Society*, edited by John De Tavernier, Joseph Selling, Johan Verstraeten, Paul Schotsmans (Belgium: Leuven, 2008), p. 51.
[28] See, James Dicenso, *Hermeneutics and The Disclosure of Truth: A Study in the Work of Heidegger, Gadamer, and Ricoeur* (Virginia: University Press of Virginia, 1990), p. 36.
[29] Manning, p. 57.
[30] BT, p. 377.
[31] See, De Boer, pp. 122–123.
[32] De Boer, p. 125.

achievement of an isolated and lone subject, but that it is the subject's very relationship with the other.[33]

Thus, for both Heidegger and Levinas, time constitutes history by returning to the I after experiencing the being of the other and forming one's history. But the difference between them is obvious; the difference lies in how they interpret the direction of the development of time. Compared to Derrida's argument, however, 'in a closed totality and in actual infinity there is no history; history occurs as the difference between the totality and infinity'.[34] Levinas critically holds that the problem of history in Heidegger's thought does not rest with the difference between totality and infinity but lies in his totalizing of the infinity into an essence (*Wesen*). The characteristic of this essence in terms of time is the synchrony of *Dasein* and other beings. And this synchrony in terms of language is the act of the assertion of *Dasein* with regard to the other beings in this world. For Heidegger, the understanding of the other being, is achieved by hearing and answering each one's individual assertion, which is done, in the presence of each other, because the presence of the Other demands my presence.

In comparison, for Levinas, time in the form of history is 'diachronic', rather than 'synchronic'. It is diachronic in terms of language in the act of the Saying and the Said of the Other towards one's self. The understanding of the Other is achieved by hearing and answering each one's 'precondition for the unsaying of what has first been said.'[35] This linguistic diachrony closely relates to the ethical diachrony because:

> the priority of responsibility relative to freedom signifies the goodness of Good [*la bonté du Bien*]: the Good must elect me before I may choose it. The good must elect me first. […] This is the strong sense of what we are calling diachrony. It is an irreducible difference that does not enter into the unity of a theme; an untraversable difference between the Good and me; a difference without simultaneity of unmatched terms.[36]

In other words, this time in diachrony indicates both the distance towards infinity and the openness towards infinity. This indication contains Levinas's critique of the Sameness in Heidegger's sense because Heidegger interprets time only in terms of the self-centred sameness of each individual *Dasein* and not in terms of the moral relation. Thus his phenomenological ontology cannot really be open towards the infinity of one's past and future, but only the utilitarian present in synchrony.[37] If we interpret this in the theoretical framework of Levinas's thought on ethics and language, then Heidegger's analysis of synchrony and language emphasizes the reduction of the ethical and plural Saying into the temporal and contemporary Said. But what does the temporality and contemporaneity of 'the Said' mean in Heidegger's thought?

In order to address this question, we need to include the question of language in Heidegger's history of Being. Robert Bernasconi has provided a substantial and comprehensive discussion of this topic. In his 1962 lecture entitled 'Time and Being', Heidegger stated that 'the sequence of epochs in the destiny of Being is not accidental, nor

---

[33] Levinas, *Ethics and Infinity*, p. 57.
[34] J. Derrida, *L'Ecriture et la différence*, 139, 168, 173, 186, Via. De Boer, p. 19.
[35] De Boer, p. 72.
[36] GDT, p. 177.
[37] See, Manning, p. 85.

can it be calculated as necessary'.[38] As for Being, Heidegger is interested in the essence of the destiny of the meaning of Being rather than the reason that lies behind this destiny in history. This is why, even though Heidegger discusses time as temporality in *Being and Time*, a genuine understanding of the history of the meaning of Being is lacking. Bernasconi points out three aspects of the reason why Heidegger intends to ignore it.[39] First, Heidegger holds that if there is a unity in the thinking of the history of philosophy, then its end would not be visible until the development finishes at the end. The sequence of different historical words for Being, however, is undetermined. Therefore, this thinking of remembrance is impossible. Second, the sequence of understanding these historical words is free. It is very difficult, therefore, to find out the most decisive elements in a series of reasons. Third, the understanding of history needs remembrance, which is a different way of thinking. These three aspects lead to Heidegger's distinction between the question of *aletheia* (understood as the 'unconcealedness of what is') and the question of truth.[40] Truth, for Heidegger, is 'correspondence, grounded in correctness, between proposition and thing',[41] while the essence of truth is the history of man's essence.[42] Thus, the question of truth is the question of the correspondence and the correctness in the history of man, and every truth has its time.[43] The question of *aletheia*, however, is to search for 'the trace' (*Spur*) that lies behind and gives rise to the history of human essence as unhiddenness, and the essence of truth will not change in time.[44] This can explain why we previously mentioned that Heidegger's thought talks about history while being still essentially a-historical. As Bernasconi shows, the history of Being begins with the forgetfulness of Being and the oblivion of Being can appear as concealed in language.[45] In sum, the history of Being and the history of beings are counter-aspects of the same history because the search for Being in the form of language (as trace) in history – as the pursuit of the essence of truth – constitutes the history of the human essence as an existing and understanding being.[46]

From the above analyses, we can see that language plays an important role in relating these two aspects of truth in terms of history. *Dasein* can only understand its history in terms of language in the form of 'the Said' in the history of being. Therefore, these previous analyses also answer the question regarding the meaning of the temporality or contemporaneity of the Said. With this in mind, Heidegger also discusses the 'historical return' because 'in the end it is the historical return which brings us into what is actually happening today', which contextualizes his discussion of the essence of truth.[47] And this history is always 'a matter of the unique task posed by fate in a determinate practical situation, not of free-floating discussion.'[48] From what Heidegger says, we can further confirm Heidegger's priority to the search for the essence of truth, and the role of language as

---

[38] Martin Heidegger, *On Time and Being*, trans. by Joan Stambaugh (Chicago: University of Chicago Press, 2002), p. 9.
[39] Bernasconi, p. 11.
[40] Ibid., p. 24.
[41] Martin Heidegger, *The Essence of Truth: On Plato's Cave Allegory and Theaetetus*, trans. by Ted Sadler (Athlone: Continuum, 2002), p. 1.
[42] Heidegger, *The Essence of Truth*, p. 81.
[43] Ibid., p. 25.
[44] For Bernasconi, this notion of 'trace' is developed particularly in the course of reading Hölderlin and also prominent in an essay on the Anaximaner Fragment. See, QL, p. 25, also QL, p. 27, original n. 13. On the notion of trace (*Spur*) in Heidegger, see J. Derrida, *Marges de la philosophie* (Paris: Minui, 1972), pp. 24–29; trans. A. Bass, *Margins of Philosophy* (Chicago: University of Chicago Press, and Brighton: Harvester, 1982), pp. 23–27.
[45] Bernasconi, *The Question of Language in Heidegger's History of Being*, p. 25.
[46] Even though the notion of trace was lacking in his early formulation, the thought of trace still runs through Heidegger's thought.
[47] Heidegger, *The Essence of Truth*, p. 7.
[48] Ibid., p. 66.

the voice of Being in this searching. Therefore, to explore the essence of truth is to explore the history of the human essence, which is also to explore the essence of language, as the voice of Being. We can conclude, therefore, that Heidegger's emphasis on the essence of truth repeats itself in the synchrony of language.

In Levinas's view, the diachrony of personhood in the I and the Other also repeats itself in the diachrony of language.[49] The diachrony in Levinas's phenomenological concern is to show that 'time is something more than merely the structure of being.'[50] Levinas's diachrony of language is embodied in his distinction between the Saying and the Said. This distinction was Heidegger's before being Levinas's.[51] Heidegger and Levinas, therefore, share this distinction, as Levinas also considers not only 'what words teach us, but in what they hide from us.'[52] However, the way Heidegger and Levinas use language is not the same. Levinas's concern is that the emphasis on the essence of language would lead to a closed language, and as such speech would have lost its speech due to, what Levinas terms, ontological totalitarianism.[53] We will now turn to analyse these different approaches to language.

The Ethical Significance of Language: Ontological-language versus Ethic-language

The role of language in Levinas's thought is just as important, as it is in Heidegger's. However, Levinas questions the role of language in the Western tradition in order to point out the problem of language, especially with regard to Heidegger's position:

> In the Western tradition, linguistic expression has importance for meaning as meaning: there is no meaning if there is no language. And this meaning qua meaning is a manifestation of being. ([…] and Heidegger preserves this position]) […] But if it is correct that meaning is only shown in language, must we likewise argue that logical exposition does not contain a manner of speaking [*pour-ainsi-dire*]? Must we not ask ourselves whether the logical exposition of meaning does not call for an unsaying [*dédire*]? […] Must we not ask whether speaking shows a gap between meaning and that which is manifested of it, between meaning and what, in manifesting itself, takes on the ways of being?[54]

With regard to Levinas's questions on the relationship between meaning and different ways of being, we will discuss three aspects in this section on language. In the first aspect, we will briefly review Heidegger's deliberations on language, both from his early and his later thought. After we outline the main arguments concerning language from the perspective of Heidegger, we will then discuss how Levinas responds to Heidegger's concept of language, specifically in relation to Levinas's ethical concern. In the last part, we will explore the discussion of the 'face and language' in both Heidegger and Levinas's philosophical accounts. In particular we will look at the similarity and difference between Heidegger's later thought and Levinas's ethical arguments. From the discussion of these three aspects, we intend to firstly clarify the extent to which Heidegger's thought on language influences Levinas's. Secondly, we will argue that Levinas's ethical priority determines the difference

---

[49] See, Graham Ward, *Barth, Derrida and The Language of Theology* (Cambridge: Cambridge University Press, 1995), p. 111.
[50] Manning, p. 86.
[51] Ward, p. 112.
[52] Emmanuel Levinas, *Difficult Freedom: Essays on Judaism*, trans. by Sean Hand (Baltimore: The John Hopkins University Press, 1997), p. 207. (Henceforth: abbreviated as DF.)
[53] DF, p. 207.
[54] GDT, p. 128.

regarding his articulation of language from Heidegger; and, thirdly, we will develop the ethical significance of language with regard to Levinas's discussion of the 'face' keeping in mind Heidegger's critique of the neutral attitude towards language. Language plays an essential role throughout Heidegger's thought because 'there are no paths to [the meaning of] being (*Sein*) except those which are grounded in language [...]'.[55] Heidegger's view of language, therefore, is a kind of transcendental ontology, in that it attempts, as White emphasizes, to find out 'how language can be'.[56] In other words, Heidegger attempts to find out the essence of language in order to reveal the essence of Being, because language shows how human beings locate themselves as being-in-the-world. In contrast to the idea that language is an instrument that we can utilise, Heidegger in his later thought points out that 'language is the house of Being, the home in which man dwells.[57]

The origin of this famous but intricate slogan can be traced back to Heidegger's *Being and Time* when he discusses language in the form of discourse. For Heidegger, language as discourse or talk (*Rede*) is the existential-ontological foundation in the existential constitution of *Dasein*'s disclosedness.[58] Language, for Heidegger, is the totality of words in an ontological sense rather than in a semantic and ethical sense in the form of speaking and listening. Not only can we trace the theme of language back to *Being and Time*, but we can also find this theme in Heidegger's early work *On the Essence of Language*.[59] Heidegger thinks that the 'human being' has 'language' and the 'word' has the 'human being' because language can make something manifest.[60] In other words, Heidegger, in these lectures on language, aims to reveal the origin of language in order to find out the ground for beings. From this work we can find both similarities and differences concerning language with regard to Heidegger and Levinas.

According to Heidegger's examination based on Herder's analyses, 'word' can be divided into inner word and outer word. The inner word refers to what lies before inside and the outside word refers to what lies before outside.[61] For Heidegger, the inner word is the reflective awareness or 'mark formation', which is the 'tightly held view of the difference.'[62] The outside word is the sound or 'the becoming' of this inner word. The inner word is 'the nomination-by-naming of something to something',[63] which is at the center of the consideration of language and exists prior to the 'sounding-towards' the outer word.[64] The reflective awareness of the inner word will become outer when it is speaking out or announcing, which is a process to reveal the existential significance of human being in the form of language. For Heidegger, this will let a human being have a chance to look at himself both from reason as an inner form and from language as an outer form. Sensibility connects these two forms. The idea that sensibility is the foundation of the unity of the inner and outer words can be found in Levinas's two major published works; he discusses the relationship between sensibility, enjoyment and existence in *Totality and Infinity*, and when he discusses

---

[55] David A. White, *Heidegger and the Language of Poetry* (London: University of Nebraska Press, 1978), p. xiii.

[56] Ibid., p. 6.

[57] Humanismus, p. 53, 57, 79, 115, Via. De Boer, p. 111.

[58] See, BT, p. 203, and also original n. 3.

[59] Martin Heidegger, *On The Essence Of Language* (OEL)*: The Metaphysics of Language and the Essencing of the Word; Concerning Herder's Treatise On the Origin of Language* (SUNY Series in Contemporary Continental Philosophy, State University of New York Press, 2004). The guiding theme of these reflections on language is found in Heidegger's lecture notes for a 1939 seminar that focused on J. G. Herder's treatise *On the Origin of Language*.

[60] OEL, pp. 3–4.

[61] Ibid., p. 6.

[62] Ibid., pp. 17, 78.

[63] Ibid., p. 95.

[64] Ibid., p. 157.

the relationship between sensibility, proximity and expression in the way of 'the saying' and 'the said' in *Otherwise than Being or Beyond Essence*. We will discuss Levinas's discussions about word, expression, and language shortly but it is of importance to return to Heidegger, and to his later work *On the Way to Language*, where Heidegger continues to intensively explore the possibility that 'language is the house of dialogue' even though the approach and the emphasis of his discussion has changed from 'language as a way to disclose Being' into 'language as the foundation of thinking of Being'. In other words, Heidegger's focus is no longer on 'what we discuss' but 'in the way in which we tried to do so'.[65] In this period, Heidegger affirms the impossibility of 'a dialogue from house to house' and admits the problem of his 'too far and too early' articulations on language in *Being and Time*.[66] Heidegger continues to emphasis the priority of the inner word in his analyses of the structure of language in the mode of sound and script, significance, and sense.[67] Yet, he doubts whether the phrase 'house of Being' can sufficiently convey the meaning of the nature of language. Therefore, at this juncture, Heidegger turns to the exploration of the 'pre-linguistic element', which bears the message, and determines hermeneutics. This exploration indicates that language plays an *a priori* role to the interpretation of the subject-object relation and the ontological difference. The reason for this, according to Heidegger, is that language makes man a message-bearer of the message. In this perspective, language walks through the boundary of the subject-object relation and the ontological difference. Heidegger further clarifies his understanding of 'saying' and 'said', and his position here is quite close to Levinas's. Saying, for Heidegger, means both 'saying as what is said in it and what is to be said.'[68] From this we can see that Heidegger turns from the 'what question' to the 'how question' by locating the 'saying' as 'showing' in the first place rather than 'the said', like the inner word in his early thoughts. Heidegger attempts to depart from the hermeneutic circle, as he maintained in his early work, but his mystical and poetical interpretation 'language or speech, speaks' (*Die Sprache spricht*) is still not clear and sufficient enough to explain the authentic dialogue of language.

We argue that Heidegger tries to avoid the elements that might misrepresent the structure of language in the thinking of being, but at the same time he proposes that in order to find out this structure of language it is necessary to discover our relation to language. This is Heidegger's definition of meta-language, which is also an experience that we undergo with language when this experience brings us face to face.[69] For Heidegger, this experience of the individual which they encounter face to face is a process of bringing a thing into being by language.[70] Heidegger himself terns this change (moving from his early thoughts on language) as 'the being of language becomes the language of being.'[71] Moreover, the stress on this question in his early period focused on listening, and to 'the promise of what is to be put in question.'[72] In other words, when we speak, the meta-structure of language already restricts or pre-constructs and pre-figures what we are going to say. What we are saying is to manifest this meta-structure and what we have said will change this structure for the next time, when we speak again. This meta-structure corresponds to our thinking experience, to the relation of word to thing. Thus Heidegger's intention is to detect the equivalence between our thinking and language. That is to say, for Heidegger, when we use language as an

---

[65] OWL, p. 4, my emphasis.
[66] Ibid., p. 5.
[67] See, OWL, p. 19.
[68] OWL, p. 47.
[69] See, OWL, p. 59.
[70] OWL, pp. 59–62.
[71] Ibid., p. 72.
[72] Ibid., p. 71.

instrument we are speaking merely about language, while we need to let language show its own structure from which it also reveals the genuine relation between the human being and things. We could summarize Heidegger's development of language with William J. Richardson's classification: in the first stage, Heidegger tends to use the method of phenomenology to clarify our speaking *about* language; while in the second stage, he focuses on the process of the thinking of being in order to detect our speaking *in* language.[73]

From the above analysis, a characteristic of the essence of Being and Language in Heidegger's thought is anonymous, because a human being is just a resonance of being, addressing, actualizing and revealing this presupposition.[74] Therefore, even though Heidegger attempts to move away from the hermeneutical circle with his examination of language in either the inner-outer word or said-saying mode, his investigation is still in a *regressus ad infinitum*. Although Heidegger changes his attention from 'what it signifies' to 'the signifier', from his early to his later thought, the path of the dialogue in which two people speak is still on the way to the 'clearing' (*die Lichtung*): language discloses.[75] As Charles Taylor concludes in his article 'Heidegger on Language', there is a long philosophical history on this *Dasein*-related clearing.[76] In the process of the clearing, a conversational common space will be set up. Hegel stands for the first aspect: expression brings something to manifestation and reveals reality as the self, which is embodied as self-expression in a cosmic spirit or process. The representative of the second aspect is the Humboldtian one: language does not bring something to light, but brings it about, which is a more radical subjectivism by creating the symbol as a medium in which some hidden reality can be manifested. Compared to the first aspect, the second one not only focuses on its self-expression, but also its self-completion. According to Taylor, Derrida stands for a third way because he turns from self expression and completion to the question of the 'who' of expression. If we use Taylor's analyses as a reference point, then Heidegger's deliberations cover the first two aspects, but not the third one. It is exactly with regard to the third aspect that Levinas criticizes Heidegger's early thought the most, even though in his later thinking Heidegger is already conscious of this aspect. Heidegger shows the humble side of the human being's use of language in the form of silence, from which the human being will not 'cover the sources of the clearing in darkness.'[77]

In this section, we have briefly reviewed and analysed Heidegger's exploration of language and its ontological characteristics. With this discussion, we make it clear that Heidegger's analysis is not *wrong*, but it also will not provide what is *right* or *good*. It just 'manifests' what humans are by the means of the clearing of what language itself expresses. This is a process of retrieval. However, the 'who' question will push this process to go beyond itself: it is not only about responding in the clearing of Being but responding to the plurality of historico-linguistic standpoints.[78] Thus, in the next section, we will discuss Levinas's response to Heidegger's concept of language in terms of his ethical priority rather than ontological priority.

---

[73] See Ward, p. 114.
[74] See, De Boer, p. 126.
[75] Hubert L. Dreyfus, Mark A. Wrathall, *A Companion to Heidegger* (London: Wiley-Blackwell, 2005), p. 441.
[76] Dreyfus, p. 446.
[77] Ibid., p. 448.
[78] See, Caputo, p. 96.

Levinas's Response to Heidegger's Thought on Language

We cannot discuss Levinas's thought on language without mentioning the influence of two thinkers. One is Heidegger, who we have been examining; another is Buber who influences Levinas both on the themes of 'the Other' and of dialogue. As Ward points out, however,

> Levinas's project, unlike Buber's, does engage with the phenomenological; but Levinas's project, unlike Heidegger's, appeals to monotheism's God. It is this theological appeal that determines the ethical emphasis in his work upon social responsibility and intersubjectivity.[79]

Ward points out the essential characteristics of Levinas's approaches in his examination of language: a phenomenological perspective and an ethical emphasis in the linguistic sense. These two aspects, nonetheless, are dependent on each other in order to examine the role of language in ethical interpersonal relationships. The approach of phenomenology provides the horizon for ethics to investigate the pre-linguistic elements that are fundamental to the constitution of the ethical relation, while the priority of ethical requirement provides the motivation for phenomenology to explore the genuine significance of language in the relationship of mineness and otherness. With these two aspects in mind, Levinas's consideration of language must be transcendental rather than immanent because it concerns when the *cogito* speaks towards the other and also to the collective. This proceeds to the limits 'beyond the thinking of being' because it aims at 'a description of a relationship between the "*logos de l'infini*" and the finite.'[80]

Levinas's response to Heidegger's thought on language is derived from his critique of Heidegger's knowing things in their ontological totality. The reason is that:

> Heideggerian ontology subordinates the relation with the other to the relation with the Neuter, Being, and it thus continues to exalt the will to power, whose legitimacy the Other (*Autrui*) alone can unsettle, troubling good conscience.[81]

Levinas holds that this ontological tradition begins from Plato and develops in two directions, Husserl is one and the other is Nietzsche.[82] Heidegger's early work, which Levinas mainly focuses on, is a synthesis but also a new development of these two directions at that time according to Levinas.[83]

Thus, we will now further examine the similarity and difference of the argument concerning language and its ethical significance from the perspectives of Heidegger, Buber, and Levinas. Ward already provides a detailed discussion of this theme; we, therefore, will summarize his analyses first, and then develop our own discussion concerning the theme of the Other, language, and ethical significance between Heidegger and Levinas.

According to Ward, Buber's, emphasis on dialogue-with-difference influenced Levinas. And further Ward holds that both Heidegger and Buber would agree that 'there is otherness because there is dialogue.'[84] We will argue, however, that Levinas would consider

---

[79] Ward, p. 140.
[80] See, ibid., p. 103.
[81] Adriaan Theodoor Peperzak, *Emmanuel Levinas, To the Other: An Introduction to the Philosophy of Emmanuel Levinas* (Purdue: Purdue University Press, 2005), p. 103.
[82] See, Ward, p. 121.
[83] See Levinas' examination on Heidegger's related discussion in Emmanuel Levinas, *Entre Nous: On Thinking-of-the-Other*, trans. by Michael B. Smith and Barbara Harshav (London: The Athlone Press, 2000; first published 1998*)*, p. 116. (Henceforth: abbreviated as EN.)
[84] Ward, p. 128, my emphasis.

conversely that there is dialogue because there is otherness. As for the analysis about genuine dialogue, Buber and Heidegger share similar viewpoints. Firstly, 'genuine dialogue is an ontological sphere which is constituted by the authenticity of being.'[85] Second, in genuine dialogue and in 'its basic order [...] nothing can be determined, the course is of the spirit, and some discover what they have to say only when they catch the call of the spirit.'[86] On the other side of the same coin, their differences are evident. The first lies in the fact that Buber still belongs to the Greek ontological tradition while Heidegger intends to push beyond it.[87] Even though both Heidegger and Buber start their thoughts from facticity (*Faktizität*), Heidegger's concern is to retrieve the forgetting of ontological difference; Buber's concern is to prove the fundamental I-Thou relation in a social, anthropological and philosophical sense.[88] From this we can conclude, according to Ward, that for 'both of them dialogue is the location for the ontological, but what each understands by the nature of the ontological differs radically'.[89] It is precisely these fundamentally different concerns which affect their viewpoints on the ethical consideration and its relation to dialogue.

Levinas identifies that the problem is of the sameness of the I-Thou relation in order to give a genuine place for the Other and continues Heidegger's tracks to find out the 'discourse prior to discourse' in order to detect the genuine significance of language in our ethical relationship. Thus, in the next section, we will briefly discuss Levinas's concept of face and its relation to language with Heidegger's later discussion of language within the context of the 'face-to-face'.

'Face and Language' in Heidegger and Levinas

We are now going to compare the idea of the face-to-face and its relationship to language with regard to the thinking of Heidegger and Levinas in this section. We do this because, though both of them use this concept to point out the pre-structure of language, but their presuppositions and purposes are not the same. It is still meaningful to look at their examples, nonetheless, because from their different perspectives we can detect why the same concept and similar starting points will lead to different concerns and directions. Then, we will argue for our own perspective by analysing the role of language in an ethical 'face-to-face' relationship as based on this discussion.

When Heidegger discusses the 'face to face' in his work *On the Way to Language*, this concept is explained as the 'neighbourhood'. This neighbourhood refers to the face-to-face that exists between poetry and thinking, that is to say, between two modes of saying, as well as when human experience is face to face with language.[90] Heidegger argues that it is not only important to detect our relation to language, but it is also necessary to find out how language keeps this relation as relation. In other words, language for Heidegger would reveal the inner structure and situation of the human being, by undergoing an experience with language.

With this in mind, Heidegger differentiates between 'the being of language' and 'the language of being'. Heidegger explains the former (the being of language) in the following way, 'language is the subject whose being is to be determined'.[91] While Heidegger, referring

[85] Martin Buber, *The Knowledge of Man*: *Selected Essays* (New York: Humanity Books, 1988), p. 86; see, also, Ward, p. 128.
[86] Buber, *The Knowledge of Man*, p. 87, also Ward, p. 128.
[87] Ward, p. 128.
[88] Ibid., p. 128.
[89] Ibid., p. 129.
[90] See, OWL, p. 82.
[91] OWL, p. 94.

to the language of being, outlines that; 'we shall comprehend what language [is] as soon as we enter into [it and when it] opens up before us.'[92]

The being of language and the language of being, appear to be two stages in the one process. The being of language is the being that exists prior to 'the speaking' but entails 'the speaking'. The language of being refers to the language that man is 'speaking', which represents all of the characteristics of this man as being. Heidegger separates this process into two stages, but the ethical significance of language exists precisely between these two stages. Thus Heidegger's investigation of language implies an ethical significance in his thought, but he never points this ethical significance out, rather he always wants to keep his ponderings on language in absolute neutrality. Yet, he also thinks that responsibility is a good thing and important:[93]

> [Heidegger's three lectures have tried]: to make us face a possibility of undergoing an experience with language, such that our relation to language would in the future become memorable, worthy of thought. […] Its [Language's] character belongs to the very character of the movement of the face-to-face encounter of the world's four regions [earth, sky, god, man]. […] Language is, as world-moving Saying, the relation of all relation.[94]

The point that is criticized by Levinas and others, however, is that even though Heidegger places an emphasis on the relation of saying and the nearness of the face-to-face encounter, there is still no ethical concern in his thought. Language is a genetic web that expresses thoughts. Thus language as intellect, in Heidegger, is a totality of speaking: the being of language is in its totality, a 'Saying'.[95] In this way, in order to explain the unity of the being of language, Heidegger draws on Humboldt's theory of language, and on his worldview with regards to 'the diversity of the structure of human language' and 'its influence on the spiritual development of mankind'[96] as we have discussed in the above section. From our previous discussion, Heidegger concludes his theory of language as:

> The encountering saying of mortals is answering. Every spoken word is already an answer: counter-saying, coming to the encounter, listening Saying. […] This way-making puts language (the essence of language) as language (Saying) into language (into the sounded world).[97]

Heidegger understands that his theory of language could give an impression of or lead to a selfish solipsism.[98] Thus he concedes that language is a monologue, even though it appears as a dialogue because the property of owning and appropriating language brings about this problem owing to Heidegger's separation of thinking and Being.

This problem is irresolvable in Heidegger, what Heidegger left for us is the way to detect the trace of this oblivion rather than to construct what has been forgotten, in other words, 'the experience of the history of thinking is the experience of a lack'.[99] Thus, for Heidegger, the encountering of the face-to-face is essential in his later thought in the sense of witnessing a

---

[92] Ibid.
[93] Ibid., p. 102.
[94] Ibid., p. 107.
[95] Ibid., p. 122.
[96] Ibid., pp. 117–119.
[97] Ibid., pp. 129–130.
[98] Ibid., p. 131.
[99] Bernasconi, p. 85.

transformation of language as an experience of language. However, from our forgoing analysis, Heidegger is not interested in moral judgments from his early thought in *Being and Time* to his later thought *On the Way to Language*. By distinguishing everyday language and philosophical language, Heidegger points out its relation to the distinction between inauthentic and authentic existence. And a person who is in an inauthentic existence cannot make a value judgment. Even though there is a term 'care' (*Sorge*) that Heidegger uses in his thought to describe Dasein's mode of being-in-the-world, it is a word used to describe the facticity of the existence of *Dasein*, which is value-neutral as well. Thus we can conclude by saying that Heidegger in his later thought reveals the relationship between the face-to-face and language, however, this relation is still neutral and not in an ethical mode.

Conclusion

Levinas's emphasis on the priority and exteriority of the Other's relation to language is, therefore, an ethical orientation that would clarify Heidegger's mystical approach to the significance of language. It would also point to the inherent 'metaphysical', in Levinas's approach. For, as we have seen, Levinas highlights the priority of the ethical face-to-face encounter as preceding 'ontology' (in the Heideggerian sense). As Caputo notes:

> The ethical is there from the start and does not require either ontological preparation (the Heidegger of *Being and Time*) or a deontological foundation (value theory, criticized by Heidegger). The ethical does not wait and does not need to have a space prepared for it.[100]

By criticizing, therefore, the priority of Being, knowledge, and the subject's understanding of Being (which Heidegger stresses), Levinas develops the priority of the Other, the necessity to explore the link between language and the subject's responsibility to (before and in front of) the other. Levinas also calls radically into question Heidegger's concept of understanding: the understanding of the other's being, which is derived from his attitude of neutrality.

     This problem, then, lies in the analysis of the relationship between ethics and language via the Other. When we consider language within the context of an ethical relationship, for instance, like responsible relationship, language is no longer an instrument for a human being to understand each other. Rather, it is a method that draws a human being face to face and reveals not only the present relationship of the interlocutors but also their past and future relationship in history. Because the Other is not only a phenomenal face in a positive sense and an appearance of the *Dasein* in a negative sense, it (the face) is always more than that: 'the Other commands from on high in a way that is beyond Being as phenomenality.' [101] Thus, on the one hand, language is the nature and mediator which connects the Other and the commandments in the form of responsibility; yet on the other, language and responsibility cannot be manifested completely by themselves, because they interpenetrate and inter-identify each other. Responsibility only can be accomplished in the consideration of the other by the means of language.

---

[100] Caputo, p. 197.
[101] See, Caputo, p. 199.

Avicenna (980 – 1037) on the Internal Senses, Emanation and Human Intellect

Denise Ryan
Maynooth University

ABSTRACT:

The focus of this paper is on Avicenna's treatment of the nature and possibility of human knowledge, paying particular attention to his theory of imagination and his theory of the intellect. Despite his dualistic approach to the nature of the human being, Avicenna can be interpreted as positing a link, albeit a weak link, between the body and mind. Avicenna develops the Aristotelian conception of imagination by positing five internal senses. An examination of each of the five senses will be helpful in understanding Avicenna's theory of imagination more clearly and his views on the relationship between body and soul.

Introduction

The theory of the internal senses in some form or other was widely accepted from the fourth to the sixteenth centuries. It was based on the psychology of Aristotle and on the anatomical discoveries of Galen. Discussion among medieval thinkers in relation to cognition centres on the philosophical issues associated with knowledge of particulars and knowledge of universals in human beings. Universal knowledge was knowledge based on general principles, such as the whole is greater than its parts but also abstract knowledge concerning, for example, the nature of God. Particular knowledge is knowledge of objects in the world and is closely related to our sense perception of things in our world. The mind or rational soul, for the medievals, is incorporeal but, following Aristotle, there are other cognitive processes which take place in bodily organs. Some of the problems associated with the relationship between the body and soul or body and mind can be traced to the 'Latinisation of Arabic thought and Aristotelian philosophy in the twelfth century'.[1]

Avicenna on the Internal Senses

A full account of the internal senses is to be found in Avicenna and while there are various combinations of the faculties in his different works it is stated that Avicenna 'means to contrast the two ways in which the internal senses may be viewed, the medical or physiological and the philosophical, without one's necessarily excluding the other'.[2] So he means to present his views from the perspective of the physician and the metaphysician. Each of the five internal senses is assigned a location within the ventricles of the brain; the belief that they were located in the brain was of Galenic origin.[3] The first internal sense is *fantasia*, also called the common sense (*sensus communis*); second is the retentive imagination or the

---

[1] Henrik Lagerlund, (ed.) *Forming the Mind* (Netherlands: Springer, 2007), p. 1.
[2] Harry Austryn Wolfson, 'The Internal Senses in Latin, Arabic, and Hebrew Philosophic Texts', in *Studies in the History of Philosophy and Religion*, Vol. One, ed. by Isadore Twersky and George H. Williams (Massachusetts: Harvard University Press, 1973), pp. 250 – 314 (p. 279).
[3] F. Rahman, *Avicenna's Psychology* (London: Oxford University Press, 1952), p. 79.

forming faculty (*ymaginacio*); third the imaginative, also called the sensitive imagination in animals, and cogitative imagination in humans when under the control of the intellect (*ymaginativa* or *excogitativa*); fourth, the estimative (*estimativa*); fifth, memory (*memorativa*).

The Five Internal Senses

The Common Sense

The *fantasia* or common sense is located in the front ventricle of the brain. This term is not to be understood in its modern context. The common sense receives the forms which are imprinted on it by the five external senses. This power is the centre for all five exterior senses. It is called the common or central sense and sometimes the formal sense. Central inasmuch as it facilitates an exchange between it and the acts of the particular senses; I see what I hear, and I hear what I see; it also has the power to unite sensations of the various senses, for example, seeing black and white, or, with regard to taste, distinguishing between sweet and savoury. It is called the formal sense because of its close connection to the second internal sense, the *retentive imagination* (*imaginacio*) which, as we will see, retains the forms of the sensitive objects which the common sense first receives from the external senses. Avicenna uses the example of a raindrop to explain the roles of the external senses, the imagination and the common sense.

> When you wish to know the difference between the function of the exterior sense, the common sense and the formal sense, consider the position of a single falling drop of rain, and you will see a straight line, and consider the position of something straight whose summit is moving in a circle and you will see a circle. It is impossible that you see either the line or the circle unless you are constantly looking: but it is impossible that the exterior sense sees it in two ways, but it does see it where it is; when, however, it is imprinted on the common sense and before the form is withdrawn and deleted from the common sense, the external sense sees it where it is, and the common sense sees it both partly where it was and partly where it is, and it sees straight or circular distension. It is impossible that it is furnished by the external sense, but the formal sense apprehends the two things and shapes them, although the thing is destroyed and already disappeared.[4]

The example of the raindrop is used by Avicenna to distinguish between the respective roles of the external senses and the common sense. It highlights the point that we are able to understand the location of the line in both places but that there must be something in the mind's structure to account for knowledge that goes beyond the senses. As in the case of the raindrop I distinguish between a straight line as 'there' at a specific point but I am also aware

---

[4] Avicenna, *Avicenna Latinus, Liber De Anima seu Sextus De Naturalibus* I-II-III, Édition critique de la traduction latine médiévale par S. Van Riet (Louvain & Leiden: E. Peeters & E. J. Brill, 1972). (Bk I, pp. 88-89 lines 30-43). Cum autem volueris scire differentiam inter opus sensus exterioris et opus sensus communis et opus formantis, attende dispositionem unius guttae cadentis de pluvia, et videbis rectam lineam, et attende dispositionem alicuius recti cuius summitas moveatur in circuitu, et videbitur circulus. Impossibile est autem ut apprehendas rem aut lineam aut circulum nisi illam saepe inspexeris; sed impossibile est ut sensus exterior videat eam bis, sed videt eam ubi est; cum autem describitur in sensu communi et removetur antequam deleatur forma sensus communis, apprehendit eam sensus exterior illic ubi est, et apprehendit eam sensus communis quasi esset illic ubi fuit, et quasi esset illic ubi est, et videt distensionem circularem aut rectam. Hoc autem impossibile est comparari sensui exteriori ullo modo, sed formans apprehendit illa duo et format ea, quamvis destructa sit res quae iam abiit. (Translation is my own).

of its previous existence even though it has disappeared in an instant. The common sense plays a 'transforming' role – transforming sensation into perception. The common sense and the retentive imagination are considered 'as if' they are one power. Avicenna's argument is that it is one thing to receive, another to retain. He demonstrates this by another example: water has the potential for receiving the images and the imprinted forms but it does not have the potential to retain them.

> You ought to know that the power to receive originates from a power which is other than the power to retain; consider this as water which has the power to receive inscriptions, depictions and, in general, form, but it does not have the power to retain, however we will add a proof of this later.[5]

The Imaginative Power

Next is the imaginative power, which is located in the middle ventricle of the brain, which has the power to combine and separate the forms as one wishes. When this is under the control of the intellect it is called the cogitative imagination and when under the control of the sensitive soul it is called the sensitive or compositive imagination. It is the power that explains how we produce images in dreams that are not subject to the external senses, it also happens in wakefulness, or daydreaming. Avicenna emphasises the active functioning of this internal sense. It is free to combine and separate the forms stored in the retentive imagination and free to compose forms that do not exist in reality. As Black sees it, 'in Avicenna the cogitative faculty – that is, the entity formed by the cooperation between the intellect and imagination is responsible for a good deal of what we would ordinarily call "thinking," including the analysis and synthesis of propositions and syllogistic reasoning'.[6]

The Estimative Power

The fourth interior sense apprehends what are called 'intentions' which are present in an object. Avicenna illustrates this by using the example of the sheep that judges that it must flee from the wolf and cherish the lamb. The theory influenced a number of important thinkers in the thirteenth century and it is also the most interesting because of its connections with the modern concept of intentionality as initiated by the founder of phenomenology, Brentano (1838–1917). There is the question of its meaning in Arabic philosophy and its use in the medieval Latin translation. According to Black[7] the English term 'intention' came to be applied to the Arabic concept through the translation of the Latin word '*intentio*' as the translation of the Arabic word *ma'na*. She states that although many philosophers in the Arabic world and also in the Latin West accepted Avicenna's positing of the estimative faculty, two of his immediate successors al-Ghazâlî (1058–1111) and Averroes (Ibn Rushd, 1126–1198) found his arguments problematic. Black provides an extensive discussion to include many other contexts in Avicenna's writings and she argues 'that an adequate understanding of Avicenna's reasons for positing the existence of an estimative faculty demands an integrated analysis of all these dimensions of Avicenna's theory, and that such an

---

[5] Avicenna Latinus, *Liber de Anima seu Sextus de Naturalibus* I-II-III (Bk. I, p. 88 lines 25-29). Debes autem scire quod recipere est ex una vi, quae est alia ab ea ex qua est retinere: et hoc considera in aqua quae habet potentiam recipiendi insculptiones et deptictiones et omnino figuram, et non habet potentiam retinendi, quamvis etiam postea addemus certitudinem huius. (Translation is my own).
[6] Deborah L. Black, 'Psychology: soul and intellect' in Peter Adamson and Richard Taylor (eds.), *Cambridge Companion to Arabic Philosophy* (Cambridge: Cambridge University Press, 2005), pp. 308-336 (p. 315).
[7] Ibid., p. 312.

integrated analysis can mitigate many of the objections of Avicenna's critics, even if it raises new questions for the Avicennian perspective'.[8] Black states that, in fact, 'Avicenna only argues that since intentions are different from sensible forms, […] another power besides sense and imagination is needed to apprehend intentions.[9] As she interprets it, 'estimation receives intentions which are not in their essences material'.[10]

Avicenna gives the examples of a baby grasping at something when he is about to fall and of a person's reaction to the inflammation of an eye, but as Hasse[11] states, commenting on this passage, these reactions are what we describe as reflex reactions. And it is difficult to equate these examples with the famous example of how the sheep fears the wolf. There is, however, a second mode in which estimation is combined with memory which is not just instinct or a reflex reaction — this explains how, for example, a dog associates a stick with a bad experience or when it delights when he sees his master. The estimative faculty, with the aid of memory, sensation and the imaginative combine the forms and intentions 'from a given object into a perception of a concrete whole'.[12] It makes sense to say that an animal will feel threatened if it has once been beaten and that it will at least be cautious of anything resembling a stick in the future. This is not a rational judgement as Hasse states.[13]

The theory of the internal sense of estimation, *wahm* in Arabic, and its objects, the 'intentions', *ma,ani*, is one of the most widely known theories of Avicenna, 'paralleled only by the distinction between essence and existence and the theory of the separate active intellect'.[14] He further explains that it is not correct to say that an 'intention' refers to certain knowledge which the internal sense possesses. The 'intention' is in the object perceived, imagined or believed. It conveys or indicates 'the significance or meaning of an image with which this indicator is connected'.[15] In the example of the wolf, the sheep perceives the outer appearance and also the 'intention' (in the wolf) as harmful and threatening, it then judges that it is harmful and flees. Hasse explains further that it is not the sheep's judgement, nor its fear, nor its pleasure or pain that are the 'intentions'.[16] The intentions are in the object, as 'hostility' is in the wolf. He describes it as a 'connotational attribute', the sheep is aware of more than the presence of the wolf. According to Hasse the fact that intentions exist in the sense-object distinguishes Avicenna's theory of 'intentionality' from many other theories on 'intentions' as the 'intention' is not in the perceiver but in the object. The 'intentions' are immaterial, they refer to what is good or bad, agreeable or disagreeable, the beneficial and the harmful; they exist accidentally in beings and are the objects of the estimative power.

Memory

The fifth and final internal sense, following the order given by Avicenna in the *De anima*, is memory and is located in the posterior ventricle of the brain. It is the power that retains what the estimative power apprehends of the intentions of sensitive objects. So just as the retentive imagination retains, and is the treasure house of the sensitive forms which the common sense

---

[8] Deborah Black, 'Estimation (*Wahm*) in Avicenna: The Logical and Psychological Dimensions' in *Dialogue, Canadian Philosophical Review*, Vol. XXX11, (No. 2 Spring 1993), pp. 219–258 (p. 220).
[9] Ibid., p. 222.
[10] Ibid.
[11] Dag Nikolaus Hasse, *Avicenna's De Anima in the Latin West* (London: The Warburg Institute – Nino Aragno Editore, 2000) pp. 134–135.
[12] Black, 'Estimation (*Wahm*) in Avicenna: The Logical and Psychological Dimensions' p. 226.
[13] Hasse, p. 135.
[14] Ibid., p. 127.
[15] Ibid., p. 131.
[16] Ibid., p. 132.

apprehends, so the memorative is the treasure house that conserves the intentions of the estimative power.

Avicenna justifies his 'positing of each of these sense powers by a set of principles for differentiating psychological faculties'.[17] The first is that the reception and retention of the sensitives must belong to different powers; the second refers to the sensitive objects; a diversity of objects requires diversity of powers and from these two principles he derives the five interior senses. It is important to note that each of the five internal faculties is assigned specific locations in the brain or the nervous system. As Burnett states, '[T]his orderly arrangement of faculties, in which physiology and psychology were brought together, had no equivalent in Aristotle, but owed more to Galen, and was to have a great appeal among Western scholars'.[18]

Avicenna's Theory of the Four Intellects

Avicenna's emphasis on the acquisition of knowledge, and, ultimately the goal of our human existence, is further explained by his theory of the four intellects. He is indebted to Aristotle for his distinction between the active and passive intellect. However, he goes further as he divides the possible intellect into what is called the 'doctrine of the four intellects'. Described 'as four different categories of relating to the universal forms'[19] the doctrine is also based in a theory of syllogistic intellection. Avicenna's distinctions between the various phases of the human intellect describe four different relations of the theoretical faculty to the intelligibles.

The stages through which the theoretical intellect passes may be illustrated through an analogy of learning to write.[20] The first stage is a state of absolute potentiality when the child has no knowledge of the art of writing or of anything connected with the art. The second stage 'marks the rudiments of the art of writing' when the child has learnt simple letters. The third stage is when the child has mastered the art of writing 'the whole art has been learnt in its completeness'.

The analogy helps to explain the four intellects with regard to the acquisition of knowledge; the first stage is the intellect beginning from a state of absolute potentiality. It is a 'mere potentiality of thinking'[21] and is the first stage given to us at the time of birth. The second is the intellect *in habitu*, that is, once the intellect has acquired some primary intelligibles it can proceed to secondary intelligibles. From the premises of a syllogism such as 'The whole is bigger than the part' one can make further deductions. The third is the intellect *in effectu* when the intellect has gone through an act of syllogistic reasoning. Thus the intellect has passed through two stages of potentiality to a third stage which is the 'perfection of this potentiality'.[22] In a further fourth stage (this stage is not referred to in the analogy) the intellect 'passes into absolute actuality' and so while the second and third stages can know the various parts of the syllogism the fourth stage, *intellect accomodatus* is the actual thinking of 'the syllogistic order which corresponds to reality'.[23] This occurs when the intelligible forms are actually present in the soul and connects with the active intellect. As Rahman states;

---

[17] Black, 'Psychology: soul and intellect' p. 313.
[18] Charles Burnett, 'Arabic into Latin: the reception of Arabic philosophy into Western Europe' in Peter Adamson, & Richard C. Taylor (eds.), *Cambridge Companion to Arabic Philosophy* (Cambridge: Cambridge University Press), pp. 370-404 (p. 377).
[19] Hasse, p. 178.
[20] Rahman, p. 87.
[21] Ibid.
[22] Ibid.
[23] Hasse, p. 183.

[The] actualization of the potential intellect presupposes another external intelligence which is always in actuality and which makes the potential human intellect actual. This is the active intelligence.[24]

The Function of the Four Intellects

In the analogy above we see that the primary intelligibles are present in the intellect through a natural inspiration (for example: 'Every four is an even number'). Knowledge of this kind is known through natural intelligence and does not need to be acquired.[25] The secondary intelligibles, however, are acquired by the third intellect, that is the intellect *in effectu*. Hasse states that Avicenna does not explain in his *De anima* how they are acquired but he provides the following example from another work by Avicenna, a short treatise on demonstration in his *aš-Šifa* which shows that 'the secondary intelligibles are reached by means of intuition or reflection, that is, by directly grasping the middle term of a syllogism'.[26] Avicenna's example, as Hasse states, comes from Aristotle's *Analytica posteriora*.[27]

> Intuition is the accurate movement of this faculty <i.e. the mind > towards tracking down the middle term on one's own. For example: if a person sees the moon and <realizes> that it only shines, according to its phases, on the side which faces the sun, then his mind by means of intuition tracks down the middle term, which is: the cause for the shining of < the moon> is the sun.[28]

Hasse reconstructs the syllogism as follows:

Premise One:	Everything, whose cause of light is the sun, shines only on the side facing the sun.
Premise Two:	The moon has the sun as the cause of its light.
Conclusion:	Ergo, the moon shines only on the side facing the sun.[29]

This is a syllogism in an Aristotelian sense. The middle term gives the real cause of the phenomenon described in the conclusion. The middle term in the example is 'having the sun as the cause of light', the secondary intelligible is the proposition 'the moon shines only on the side facing the sun' which is not based on observation but the knowledge rests on understanding the cause. The second and third stages in the process are described as knowing different parts of the syllogism. The actual thinking of the syllogism is the fourth stage which, in Avicenna's psychology, is the work of the active intellect. The active intellect is the next topic for discussion but the following explains just how the four intellects work alongside the internal senses.

> To return to the example of the moon and the doctrine of the four intellects; the intellectual state of the person who observes the moon is that of the intellect *in habitu*. Due to some natural inspiration he knows the primary intelligibles, but he can also

---

[24] Rahman, p. 88.
[25] Hasse, p. 180.
[26] Ibid., p. 181.
[27] Acumen is a talent for hitting upon the middle term in an imperceptible time: e.g. if someone sees that the moon always holds its bright side toward the sun and quickly grasps why this is – because it gets light from the sun; Aristotle, *Analytica posteriora*, in *The Complete Works of Aristotle*, ed., by Jonathan Barnes Vol. I (West Sussex: Princeton University Press, 1984), 1. 34, 89b11.
[28] Hasse, p. 181.
[29] Ibid.

work with the various sense data, which he may combine and separate with the help of the internal faculty of cogitation. In this phase, the soul can acquire an intelligible form 'if it actually begins to search for it'. Perhaps the observer of the moon has already attained a number of secondary intelligibles, which he may retrieve and consider again at will through contact with the active intellect; in this case, his intellect would be in the phase *in effectu*. He now observes the moon and sees that it shines only on the side facing the sun. Then follows the act of intellection: the person abstracts universal forms from matter, i.e. he attains the concepts 'being a moon', 'shining on one side' etc., he finds the middle term 'having the sun as the source of light' and finally establishes the above mentioned syllogism in which the intelligibles are put in the syllogistic order that corresponds to reality. The moment of this intellection is called 'acquired intellect'.[30]

The Active Intellect and the Theory of Emanation

The acquired intellect is the stage reached when a person is in contact with the Active intellect or Active Intelligence. The Active Intelligence is Avicenna's identification of creation with the Neoplatonic notion of intelligence. God, or the Divine Being, contemplating himself, produces a First Intelligence, also called a Second Being. This Second Being differs from the First Being, as the First Being contemplates himself, the Second contemplates the First Being. The act of contemplation produces the Third Being, this is the Second Intellect, and its contemplations produce the Fourth Being, and more heavenly phenomena. And so on until we come to the Eleventh Being or The Tenth Intelligence. This is the Active Intellect in Avicenna's theory as this is what actualises the human intellect. This is the 'sublunary' sphere which gives material forms to humans. This idea goes back to Greek astronomy. It is the region of space from the Earth to the Moon and it consists of the four basic elements, earth, air, fire and water. This may seem like a fairy tale to us, yet it is an attempt to bridge the gap between what Avicenna saw as the distance between our physical existence in the sublunary world and that of the heavenly bodies. While so much progress has been made in our understanding of the universe we are still asking the same questions with regard to explaining matter and the existence of the stars and the planets. The fundamental question – why is there something rather than nothing? It is an intriguing question today just as it was to the great thinkers through the ages.

Relationship between Body and Soul

Avicenna's theory of emanation helps to explain the relationship between body and soul. The soul and the body need each other but for very different reasons. The human soul comes into existence with the body and does not exist before its human embodiment. As Black states, whenever the appropriate material conditions are present the soul emanates from the agent intellect to inform that body. Black states that 'the soul and body are thus made for each other, and the soul has a special attraction to its own body, which aids it in the performance of many of its operations.'[31] Despite being a dualist, Avicenna's account of the body as a necessary condition for many of our common experiences establishes links with the soul if only in this life:

---

[30] Ibid., pp. 182-3.
[31] Black, 'Psychology: Soul and Intellect', p. 310.

Therefore all these dispositions arise only on account of the association with the body but in diverse ways: the body has some dispositions principally because it has a soul; the soul has some principally because it is in a body; while they share others equally. For sleep and wakefulness, sickness and health are dispositions of the body, the principles of which are in the body itself, but the body would not have them except that it has a soul. Imagination, concupiscence, anger and the like, however, belong to the soul but only because of the body, and they belong to the body principally because of the soul, although they belong to the soul on account of the body, I do not say that they originate from the body; similarly anxiety, pain and sadness and memory, none of these is accidental to the body because it is a body, but they are dispositions of anything connected with the body, they are present only when joined to the body: the body, therefore, has these on account of the soul: the soul has them principally, even if it has them on account of having a body, I do not say, however, that they originate from the body.[32]

Looking back to the process involved in the acquisition of knowledge by means of the internal senses we see that even at an advanced stage of abstraction in the employment of the estimative faculty, it is still associated with a particular. The sheep, as in the above example, understands the intention in the particular wolf, not the universal 'wolfness'. A human being cannot 'abstract intelligible thoughts by simply observing and contemplating the sensory images found in the faculties of sensation and imagination'.[33] The gap between sensation and the various stages involved in the process of imagination on the one hand, and, on the other, the intellect, is immense, yet, according to Yaldir, Avicenna acknowledges that the animal faculties can help the rational soul 'to train itself for the reception of intelligible thoughts from the emanation of the Active Intellect'.[34] Avicenna 'appears to suggest that the rational soul is able to apprehend and abstract universal intelligible thoughts from the particulars or imaginary and sensory perceptions that are provided by the faculties of the animal soul.'[35] If the forms are already abstracted the rational soul simply receives them. If not, it goes through the process of abstraction until it is understood apart from its material attachments. This can be seen in the fourth or final stage in the process of intellection, the *intellect accomodatus*, when the rational soul has achieved a disposition for conjunction with the Active Intellect. Until that point is reached the animal faculties assist the rational soul in a number of ways:

---

[32] Avicenna, *Avicenna Latinus, Liber De Anima seu Sextus De Naturalibus,* IV-V Édition critique de la traduction latine médiévale par S. Van Riet Riet (Louvain: Leiden: Édition Orientalistes; E.J. Brill, 1968), (Bk IV, pp. 60-61 lines 58-74). Haec igitur omnes dispositiones non sunt nisi ex consortio corporis, sed diversis modis: quasdam enim principaliter habet corpus sed ex hoc quod est habens animam; quasdam vero principaliter habet anima sed ex hoc quod est in corpore; quasdam vero habent aequaliter. Somnus enim et vigilia et aegritudo et sanitas sunt dispositiones corporis quorum principia in ipso sunt, sed non habet ea corpus nisi ex hoc quod est habens animam. Imaginatio vero et concupiscentia et ira et huiusmodi sunt animae sed ex hoc quod est habens corpus, et sunt corporis ex hoc quod principaliter sunt animae ipsius corporis, quamvis sint animae ex hoc quod est habens corpus, non dico ex corpore; similiter sollicitudo, dolor et tristitia et memoria, horum nullum est accidens corpori ex hoc quod est corpus, sed sunt dispositions rei coniunctae cum corpore, nec sunt nisi cum est coniunctio cum corpore; habet ergo ea corpus sed propter animam: anima enim habet ea principaliter, quammvis habeat illa ex hoc quod est habens corpus, non dico autem quod habeat illa ex corpore. (Translation is my own).

[33] Hulya Yaldir, 'Ibn Sina (Avicenna) and Rene Descartes on the Faculty of Imagination' in *British Journal for the History of Philosophy* 17 (2) 2009: 247-278 (p. 253).

[34] Ibid., p. 257.

[35] Ibid., p. 258.

We say that the animal faculties assist the rational soul in various ways, one of them being that sensation brings to it particulars from which result four intellectual processes.[36]

From this the 'soul gets the fundamental concepts by using the faculties of imagination and estimation'.[37] The soul 'requires the help of the body in order to acquire these principles of conception and judgement' but he continues 'having acquired them it returns to itself; if, after that, any of the lower faculties happens to occupy it, this completely diverts it from its proper activity'.[38]

[A] man may need a riding animal and other means of reaching a certain place; but when he has reached it and done his work and feels reluctant to leave on account of certain events, the very means which he employed to get there would indirectly prove an impediment.[39]

It can be seen, therefore, that while Avicenna establishes a connection between the rational and the irrational, the material and the immaterial, it is limited and temporary. While the animal faculties are a help to the soul they can also be a hindrance since the human soul has two different activities, one in respect to the body, the other in respect to itself but it cannot perform both at the same time.

The substance of the soul has two actions: one action is in relation to the body which is called the practical, and the other in relation to itself and its principles which is understanding by means of the intellect; and both are opposed to and hampered by each other, since when it is occupied with one it detracts from the other; for it is difficult to combine both at once.[40]

The lower faculties take possession of the intellect. This also occurs in illness when the activity of the intellect ceases but once the body has recovered from illness the intellect regains its knowledge of previous objects and events:

This is why the activity of the intellect ceases with illness. If the intelligible form were completely set at naught and reduced to nothing because of the organ, the return of the organ to its previous state would necessitate a complete re-acquisition of the form. But this is not so, for the soul often fully regains its intellection of all its previous objects. This shows then, that what it had acquired was in some manner present in it; only it was diverted from it.[41]

As Rahman explains the suspension of intellectual activity during illness is not because the intellect is dependent on the body but because the soul is preoccupied with the body during

---

[36] Rahman, p. 54.
[37] Ibid., p. 55.
[38] Ibid., pp. 54-56.
[39] Ibid., p. 56.
[40] *Avicenna Latinus Liber de Anima seu Sextus De Naturalibus* IV-V (Bk V, p. 99 lines 55-60): Dicemus ergo quod substantia animae habet duas actiones: unam actionem comparatione corporis quae vocatur practica, et aliam actionem comparatione sui et principiorum suorum quae est apprenhensio per intellectum; et utraque sunt dissidentes et impedientes se, unde cum occupata fuerit circa unam retrahetur ab alia; difficile est enim convenire utraque simul. (Translation is my own).
[41] Rahman, p. 54

illness. Once the body is restored to health the intellectual faculties return to their former activities and knowledge is recovered.

Concluding Remarks

On the one hand, Avicenna's theory holds that we must be able to find syllogisms 'to verify newly obtainable pieces of knowledge'.[42] So 'in order to detect the middle terms of syllogisms, our intellects, according to Avicenna, must come into contact with the active intellect'.[43] This cosmological entity 'bestows the human intellect with the secondary intelligibles it seeks, a process also described in terms of emanation and influx'.[44] On the other hand, we have Avicenna's theory of abstraction which begins with the external senses and is accomplished by means of the internal senses. According to Germann both are required:[45]

> Hence, taken as a whole, the acquisition of knowledge appears to be the result of the collaboration of two processes. It is characterised by a bottom-up abstraction of particular forms by the human soul, and the top-down emanation of universal concepts by the active intellect, at the interface of which cogitation is located and performs its activity, i.e., abstracting particular forms and exposing them in the correct way. Only at a later stage of human life, when one has already acquired a sufficient number of intelligibles, can one dispense with abstraction and concentrate upon considering syllogisms that consist exclusively of universal concepts (i.e., with the conclusion included).

Emanation occurs, therefore, when the intellect retrieves already perceived forms whereas abstraction is required for the first acquisition of knowledge.[46]

A related issue that received much criticism in the West was Avicenna's denial of intellectual memory. The intellect, as we have noted, is not a body and therefore it has no physical place to store the intelligibles when they are not being thought. Conjunction with the active or agent intellect is necessary as it is the foundation for all learning according to Avicenna and the storage place for the intelligibles. The human intellect, in other words, must 'have the perfect disposition' for conjunction with the agent intellect. Aquinas, in particular, strongly opposed the denial of intellectual memory, his objective being 'to sustain the thesis that the intelligibles remain in the soul even after death'.[47] For Avicenna, on the other hand, the soul is immortal but not the body. Each soul's fate in the next world is determined by the intellectual attainments in the present life. A soul, which achieves a perfect disposition for conjunction with the active intellect in relation to all possible thoughts and understanding, will enjoy *eudaimonia* in the next life. Avicenna accords several different grades of immortality to the souls and several measures of *eudaimonia* are meted out accordingly.

A major stumbling block for many is the role of the agent intellect in human understanding. According to John Haldane,[48] such questions concerning why do we not always understand; and why, when we do think, the scope of our thought is limited. As he

---

[42] Nadia Germann, *Ibn Sina, Abu 'Ali (Avicenna) Henrik Lagerlund, (ed.) Encyclopedia of Medieval Philosophy: Philosophy Between 500 and 1500* (Canada: Springer, 2011), pp. 515-521 (p. 518), p. 518.
[43] Ibid.
[44] Ibid.
[45] Ibid, pp. 518-9
[46] Hasse, p. 187
[47] Ibid., p. 190.
[48] John Haldane, 'Aquinas and the Active Intellect' in *Philosophy,* Vol. 67. No. 260 (Apr., 1992), pp. 199-210 (p. 205).

states it, if the Active Intellect is always in act, and the receptive (passive) intellect in potency with respect to it, surely one must understand all things? Avicenna would reply that the passive intellect only operates if it is properly disposed. In response to Haldane, he would say that the active intellect does not unite with the human soul. If it did the soul would at once know all intelligible thoughts and be ignorant of nothing, but this, according to Davidson is not the case.[49] Aquinas rejected the notion of a separate active intellect which he viewed 'as a return to Platonist epistemology'.[50] The active intellect is not something separate and external to the subject for Aquinas. It is not, as Avicenna held, a storehouse of intelligible ideas which the agent or active intellect conveys to the 'properly disposed' passive intellect of the human being. For Aquinas, understanding functions in two ways – first the mind is said to be passive (ST 1a, q.79, a.2), *it is a thing which can receive something without losing anything thereby*. Secondly, each human being has an agent intellect which accounts for the mind's ability to abstract universal concepts from particular sense experience. The agent intellect actualises intelligible things by abstracting *the thought of them from their material conditions*.[51] This is something human beings are capable of doing. We think through matter and for this reason we engage in abstraction.

In his work on the reception of Avicenna's *De Anima* in the Latin West Hasse highlights a number of thinkers in the early thirteenth century who understood that 'only some forms are abstracted through the active intellect; other forms, such as justice and prudence, are acquired through correct behaviour, still others are acquired through illumination from above, such as forms that concern God and divine things'.[52] To take, for example, Jean de La Rochelle (1190/1200-1245)[53] who interprets Avicenna's agent intellect according to a distinction which is to be found in Augustine's *Soliloquia*. Jean locates the agent intellect not only above the soul but also beside, within and below the soul. With regard to the act of the agent intellect Jean follows Avicenna as he states:

> It should be noted, following Avicenna, that the function of the active intellect is to illuminate or to diffuse the light of the intelligence upon the sensitive forms which exist in the imagination or in estimation; and by illuminating to abstract them from all material circumstances, and to join the abstracted forms or set them in an order in the possible intellect, just as through the action of light the form of colour is somehow abstracted and joined to the pupil of the eye.[54]

According to Hasse, the above quotation 'is a faithful interpretation, which surpasses much of what has been said on Avicenna's theory of abstraction in modern times'.[55] The Avicennian influence is particularly clear in Jean's presentation of the external and internal senses and his positing of the agent intellect as having both an external and an internal role in his understanding of the mind. Jean could be accused of being too free in his use of the doctrine

---

[49] Herbert Davidson, *Alfarabi, Avicenna, and Averrores on Intellect* (Oxford: Oxford University Press, 1992), p. 86.
[50] Haldane, p. 205.
[51] ST. 1a, q.79, a.3 (*Responsio*).
[52] Hasse, p. 202.
[53] Jean de La Rochelle, *Summa de anima*, Texte Critique Avec Introduction, Notes et Tables, ed. by Jacques Guy Bougerol (Paris: Vrin, 1995).
[54] Jean de La Rochelle, *Summa de anima*, C. 117, 1-7. Notandum ergo secundum Avicennam, quod operacio intellectus agentis est illuminare sive lumen intelligencie diffundere super formas sensibiles exsitentes in ymaginacione sive estimacione; et illuminando abstrahere ab omnibus circumstanciis materialibus, et abstractas copulare sive ordinare in intellectu possibili, quemadmodum per operacionem lucis species coloris abstrahitur quodam modo et pupille copulatur.
[55] Hasse, p. 202.

of the agent intellect as 'it would imply an intermediary between the soul and God in some aspects of illumination'.[56] However, Avicenna's theory of the Active Intellect had many followers and, although the theory was transformed in many ways it made a lasting impact on the content of Western psychology.

Avicenna is certainly indebted to Aristotle but his ultimate purpose would seem to be Platonic. He does, however, demonstrate that there is a relationship between body and soul, however temporal. Ultimately he separates the sensible soul from the act of intellect. Avicenna downplays the role of the internal senses in the acquisition of knowledge. He must in order to maintain the independence of the rational soul. Yet his theory of the four intellects demonstrates how information is transformed in stages and that with each stage the information becomes more abstract. There are, no doubt, strong religious feelings in Avicenna's writings – even mystical inclinations, yet, it cannot be denied that for Avicenna 'God's highest gift to man was not faith but reason'.[57] Avicenna's belief in man's ability to reason and acquire knowledge points to our ability to think beyond what is given to the senses and to rise to what Avicenna refers to as a 'properly disposed' passive intellect. We might conclude, that, as Gutas states, Avicenna's 'is a compelling theoretical construct reflecting an integrated vision of the universe and man's position in it, and it is rendered all the more powerful on account of its thorough rationalism, the cornerstone of Avicenna's philosophy'.[58]

---

[56] Leonard J. Bowman, 'The Development of the Doctrine of the Agent Intellect in the Franciscan School of the Thirteenth Century', *The Modern Schoolman*, (March 1973), 251–279 (p. 257).
[57] Arthur J. Arberry, *Avicenna on Theology* (Connecticut: Hyperion Press, 1979), p. 6. (Reprint of the 1951 edition published by J. Murray, London in the Wisdom of the East series).
[58] Dimitri Gutas, 'Avicenna: The Metaphysics of the Rational Soul' in *The Muslim World*, Vol 102, July/October 2012 (417-425), p. 425.

Beyond Toleration: Queer Theory and Heteronormativity

Declan Kavanagh
University of Kent

ABSTRACT:

The recent widespread transformation in the conjugal rights of Lesbian, Gay, Bisexual and Transgender (LGBT) people across much of the globe may seem to suggest that, at long last, the history of heterosexism has reached its terminus. In Ireland, the Equal Marriage Referendum in May 2015 offered the opportunity for the citizens of the Republic to extend the same rights, permissions, and privileges to same-sex couples that married heterosexual couples freely enjoy. The passing of that referendum and the extension of these rights to same-sex couples denotes a move beyond societal toleration toward societal acceptance, yet it remains to be seen whether or not the affordance of conjugal rights to LGBT people will necessarily mean that all queer subjects will be given the same acceptance.

This article examines equal marriage and its potential engendering of binary divisions between queer subjects who adhere to the logic of cultural heteronormativity and those who transgress its structuring forces. It aims to historicise the discourse that surrounds gay marriage by tracing these debates back to the Enlightenment's production of the companionate marriage. The works of Edmund Burke, his aesthetic writings and political speeches, provide the textual basis for an examination of 'normative desire' in the eighteenth century. The article contends that assessing the eighteenth century's regime of heteronormativity will allow us to see the provisional nature of our own heterosexist cultural formations.

Introduction

Over the past decade or so, we have witnessed a widespread transformation in the conjugal, and potentially, other civil rights of Lesbian, Gay, Bisexual and Transgender (LGBT) people across much of the Western world. As Ana de Freitas Boe and Abby Coykendall note in the introduction to their seminal collection *Heteronormativity in Eighteenth-Century Literature and Culture* (2014), this transformation may seem like an auspicious sign that the regime of heterosexism is drawing to a close in the West.[1] In 2013, Queen Elizabeth II granted royal assent to the Marriage Act of the British Parliament, thereby sanctioning same-sex marriage in England as well as Wales. Most recently, the Irish people passed equal marriage by popular vote in a referendum on marriage held in May 2015; while just a few weeks later, the United States' Supreme Court followed by ruling that same-sex marriage was now legal in all fifty states. This move towards marriage equality began over a decade earlier, outside of both the United Kingdom and the United States, when first the Netherlands (2001), then Canada and Belgium (2003), and finally Spain (2005), South Africa (2006), New Zealand (2012), France (2013) and nearly a dozen South American and European countries took successive turns legalising same-sex marriage.[2]

The aim of this article is to go some way to offer a queer-literary-historical context for this move toward marriage equality. Broadly speaking, the article's methodological approach is a blend of literary historicism and queer theory, and the archive in focus is British

---

[1] Ana de Freitas Boe and Abby Coykendall, 'Introduction' in *Heteronormativity in Eighteenth-Century Literature and Culture* (London: Ashgate, 2014), p. 1.

[2] Ibid.

Enlightenment literature. Chiefly, in tracing the development of LGBT politics toward its *telos* of marriage, the argument that follows is concerned with a re-tracing or, rather a tracing back. In particular, the work of that eighteenth-century Irish man of letters, Edmund Burke (1729-1797), namely his philosophical treatise, *A Philosophical Inquiry Into the Origin of Our Ideas of the Sublime and Beautiful* (1757), and some parliamentary speeches. Queer theory is a particularly illuminating, if albeit unlikely, lens through which to view Burke's aesthetic theory. Irish Feminist and psychoanalytic critic, Noreen Giffney, defines queer theory as:

> denot[ing] a collection of methods all devoted to examining desire and its relationship to identity. Queer theorists interrogate the categorization of desiring subjects (that is, the creation of identities based on desire), while making visible the ways in which some desires (and thus identities) are made to pass as normal, at the same time that others are rendered wrong or evil.[3]

Queer theory, then, interrogates the formation of desiring subjects along the fault line of the binary between normative, or heteronormative, cross-sex desiring subjects and supposedly non-normative same-sex desiring subjects. In blending queer theory with literary and aesthetic histories, my aim is to historicise some of the vocabulary that emerged during the Equal Marriage Irish referendum debates. In sum, this article addresses the ahistorical nature of much of the discourse surrounding the Equal Marriage referendum in Ireland in May, and the United States' Supreme Court's ruling in June 2015.

By ahistorical, I mean the way in which certain terms are invoked as if the signified of the signifier - of the term – exists in a vacuum. An obvious and recurrent example of this discursive ahistoricism is the use of the very word marriage. So called Marriage defenders and reformers alike tend to premise debates upon the casually anachronistic phantasm of the 'traditional marriage', otherwise known as the bourgeois companionate marriage, drawing upon that single formulation of matrimony as the sole incarnation of matrimony, irrespective of historical period or cultural context. Yet, as de Freitas Boe and Coykendall have shown, companionate marriage was itself initially denounced as a 'scandalous contravention of custom, the regulated and promulgated at the behest of the state during the eighteenth century'.[4] The 1753 Marriage Act, through which the British Parliament set the conditions for consensual heterosexual marriages, was itself initially thought to be an unacceptable redefinition of the very terms of marriage.[5]

It is no mistake that the companionate marriage — the most heteronormative of institutions — was engendered during the Enlightenment, as it was during the long eighteenth century that the rise of a large scale print culture helped to circulate and sustain Anglo-European configurations of the sex/gender system through novels, newspapers, educational tracts, fashion magazines, philosophical treatises, declarations of rights, and numerous other mass-reproduced texts of the period. In complex ways, the Enlightenment has bequeathed to us our modern regime of the heteronormative and, this article contends that a queer critical

---

[3] Noreen Giffney, 'Quare Theory', in *Irish Postmodernisms and Popular Culture*, Wanda Balzano, Anne Mulhall and Moynagh Sullivan (ed.), (Hampshire: Palgrave Macmillan, 2007), p. 200.
[4] de Freitas Boe and Coykendall, p. 2.
[5] The 1753 Hardwick Marriage Act prompted much controversy. The Thelyphthora controversy arose when Martin Madan attacked the Act, and in doing so, constructed a defence of polygamy. For Madan, polygamy is a serious solution to an epidemic of seduction and female ruin caused by false or bad marriages. See Felicity Nussbaum, 'The Other Woman', in Margo Hendricks and Patricia Parker (ed.) *Woman, 'Race' and Writing in the Early Modern Period* (London and New York: Routledge, 1994),
p. 147; Conrad Brunström, *William Cowper: Religion, Satire, Society* (Lewisburg: Bucknell University Press, 2004), pp. 85-86.

return to the texts of that period allows us to assess current norms, which, in any case, should not be privileged as stable but remembered instead as provisional and shifting. In what follows, we will first examine the historicity of 'homosexuality'- its historical development within an Irish context - before attending to the vexed ways in which Enlightenment texts attempt to uphold and perform heteronorms. For the purposes of this, I will examine two texts by Edmund Burke: the first, his 1757 *A Philosophical Inquiry Into the Origin of Our Ideas of the Sublime and Beautiful*; the second, the text of a speech, which Burke delivered to parliament in 1780 on the topic of the brutal mob murder of two pilloried sodomites. In examining these diverse texts – one philosophical, the other rhetorical – we can trace how the Enlightenment's heteronorms, insecure as they were, provide us with a basis for reconsidering, and, indeed, reconceiving, our own current formulations.

Love and Marriage: Historicising Homo and Hetero-normativities

Heteronormativity, as a term, requires some parsing. Lauren Berlant and Michael Warner, the first theorists to deploy the term, define heteronormativity as: 'institutions, structures of understanding, and practical orientations that make heterosexuality seem not only coherent — that is organized as a sexuality — but also privileged'.[6] Hetero norms are not reducible to hetero sex acts. As de Freitas Boe and Coykendall state, unlike the term '*heterosexuality*, which refers to the erotization of mutually exclusive yet attracted male-female sex partners, the term *heteronormativity* comprehends the entire array of polarised taxonomies that organise compulsory heterosexuality and generate its aura of obviousness'.[7] Furthermore, heteronormativity inflects judicial, medical, historical, sociological, and other cultural discourses so thoroughly that any intentional intervention in their everday workings is almost needless to bolster and perpetuate it.[8] Everday examples of heteronormativity are easily drawn upon; Berlant's and Warner's well-known example of campaining for president in the United States is a case in point. The office of the President of the United States of America is an office that is clearly heterosexualised with its inbuilt narrative expectation of a cis-gendered male President and cis-gendered female First Lady. From the sublime to the ridculous, we could also mention the well-documented experience of booking accommodation as a same-sex couple in the West, when, more often than not, the hotel's default position is to provide a twin bed room instead of a double bed room; as if two men or two women could not possibly wish to share the same bed; as if LGBT people never travel, or at the very least, as if they never travel together. As de Freitas Boe and Coykendall suggest:

> the 'hetero' of heteronormativity sets the conditions for who does — or who does not — signify as normally and rightfully human by producing and policing three interwoven categories of difference: *sex* (dichotomous male/female embodiment), *gender* (asymmetrically socialized roles, characteristics, or behaviours), and *sexuality* (the expectation, even obligation, to form heteroerotic attractions culminating in marriage, reproduction and kinship).[9]

It is important to recognise how these interwoven sets of conditions serve to define the heterornormative; we might note how marriage is a core part of heteronormativity; we might

---

[6] Lauren Berlant and Michael Warner, 'Sex in Public', *Critical Inquiry*, Vol. 24, No. 2, Intimacy (Winter, 1998), p. 547.
[7] de Freitas Boe and Coykendall, p. 7.
[8] Ibid.
[9] Ibid.

ask then how will equal marriage, the extension of the rights and privileges afforded to heterosexual couples in marriage to LGBT couples, revise, or renew, this heteronormative expectation? Some might say that the inclusion of those LGBT people who decide to marry into the conjugal fold will weaken the institution of marriage, yet, the mystique of marriage had been diminishing quickly long before the affording of legal status to same-sex marriage. For decades, the upsurge in elective singlehood, in protracted, serial, asexual, or polyamorous cohabitation, in divorce, in unmarried couples, or in non-biological, extramarital models of kinship have all done much to demonstrate alternative couplings or ways of living. We might even say that the opening up of marriage to LGBT people will do much to refresh the institution's mystique.

Even at the germinal point of traditional marriage, or companionate marriage in the eighteenth century, most people, as Susan S. Lanser has shown, lived outside of 'heterosexual dyads, unwittingly or wittingly transgressed heteronormative rubrics…'[10]. As this article explores, Edmund Burke's *Philosophical Enquiry* bears out this anxiety of Enlightenment hetero-normalization of desire; in other words, it attempts to heterosex subjects into the binary of desiring and gazing male subject, and its corollary of an objectified and stationary female subject. When discussing Enlightenment sexuality, we must be careful to consider anachronism. In the following oft-quoted passage, taken from *The Will to Knowledge: The History of Sexuality, Vol. 1* (1976), Michel Foucault historically locates the emergence of the category of the 'homosexual' in the West in the 1870s:

> As defined by the ancient civil or canonical codes, sodomy was a category of forbidden acts; their perpetrator was nothing more than the juridical subject of them. The nineteenth-century homosexual became a personage, a past, a case history, and a childhood, in addition to being a type of life, a life form, and a morphology, with an indiscreet anatomy and possibly a mysterious physiology. Nothing that went into his total composition was unaffected by his sexuality. It was everywhere present in him: at the root of all his actions because it was their insidious and indefinitely active principle; […] Homosexuality appeared as one of the forms of sexuality when it was transposed from the practice of sodomy onto a kind of interior androgyny, a hermaphrodism of the soul. The sodomite had been a temporary aberration; the homosexual was now a species.[11]

Advancing a debate that is now axiomatic in the field of the history of sexuality, Foucault argues that the contemporary notion of homosexuality is the product of a number of nineteenth-century institutional and discursive constructions such as psychology, sexology, education, law and medicine, as opposed to the Early Modern condition of a single discursive domain of the juridical. From the sodomitical, a category that figured a range of sexual and social transgressions emerged the homosexual as a species. Indeed, Foucault's argument is a foundational one for queer historical enquiry. The Foucaultian project demonstrates the cultural and historical contingency of all sexual identities – including heterosexuality.

As Alan Sinfield theorises, 'gay' as a term is historically specific and therefore unique in how it is currently.[12] The identity of 'gay' or 'homosexual' was not available in the

---

[10] Ibid., p. 9.
[11] Michel Foucault, *The Will To Knowledge: The History of Sexuality Volume 1*, Robert Hurley, trans. (London: Penguin Books, 1998), p. 43.
[12] Alan Sinfield, *Gay and after* (London: Serpent's Tail, 1998), p. 13.

eighteenth-century, and, curiously, as such, the absence of such coherence meant that heteronormativity must work harder against a range of transgressive figures – the molly, the fop, the Sapphic dame – to ensure its own stability.

Enlightenment Sex and its Aesthetics of the Normal

Edmund Burke's *Inquiry* typifies the circular logic of heteronormativity as it emerged during the eighteenth century. Notably, the philosophical treatise emerged at a time when many civic commentators were energetically establishing connections between luxury, effeminacy and national degeneration in their diagnoses of an enervated body politic. Rather than celebrating 'manly' behaviour, the theatre of the Seven Years' War (1756-1763) frequently cast back a distorted image of an incompetent elite officer class. The narrative of Admiral John Byng (1704-1757), who was court-martialled and executed for his failure to secure the trading post of Minorca against the French in May 1756, presents an episodic example of how imperial anxieties became condensed into broader fears over manliness and its antithesis, effeminacy. Foppish effigies of Byng were burned in symbolic executions throughout the country, rehearsing the belief that Byng's unmanliness had precipitated Minorca's fall. The phobic lampooning of generals for their unmanly failures functioned, with varying levels of success, in order to deflect criticism away from the more material shortcomings of Newcastle's Administration.[13]

It is within this particularly charged social context, fraught with gender and sexual panic that we should read Burke's explication of the desiring subject in the *Enquiry*. For example, a careful reading of Burke's aesthetic treatise betrays his anxiety over how to account for male beauty. Whilst beauty is eventually embodied in woman, for much of the treatise the category of beauty actually remains queerly un-gendered.[14] While there are difficulties with reading a straightforward gendered dichotomy in *A Philosophical Enquiry*, it is nonetheless clear that a process of gendering is operative throughout the treatise. Building on Alexander Pope's figuring of lust as the basis of society in Epistle III of *An Essay on Man* (121-135), Burke writes:

> The passion which belongs to generation, merely as such, is lust only; this is evident in brutes, whose passions are more un-mixed, and which pursue their purposes more directly than ours. The only distinction they observe with regard to their mates, is that of sex. It is true, that they stick severally to their own species in preference to all others. But this preference, I imagine, does not arise from any sense of beauty which they find in their species […] But man, who is a creature adapted to a greater variety and intricacy of relation, connects, with the general passion, the idea of some *social* qualities, which direct and heighten the appetite which he has in common with all other animals; and he is not designed like them to live at large, it is fit that he should have something to create a preference, and fix his choice; and this in general should be some sensible quality; as no other can so quickly, so

---

[13] Katherine Wilson makes the point that some extra-parliamentary campaigns *intensified* their attacks on the Government as a result of its attempt to foist blame onto figures like Byng. See Wilson, *The Sense of the People Politics, Culture and Imperialism in England, 1715- 1785* (Cambridge: Cambridge University Press, 1998), p. 181.

[14] Ana De Freitas Boe, '*Neither Is It at All Becoming': Edmund Burke's A Philosophic Enquiry, the Beautiful, and the Disciplining of Desire"*, Queer People V, Cambridge United Kingdom, July 2008 (unpublished conference paper).

> powerfully, or so surely produce its effect. The object therefore of this mixed
> passion which we call love, is the *beauty* of the sex. Men are carried to the
> sex in general, as it is the sex, and by the common law of nature; but they are
> attached to particulars by personal *beauty*.[15]

While brutes only adhere to distinctions of sex and species, the social, or what Burke terms man's 'intricacy of relation', works on the affect of beauty, which "connects with the general passion" some '*social qualities*' that serve to 'direct and heighten' the sexual appetite that is common to both man and animal.[16] Men are 'carried to the sex [women]' because of the 'common law of nature', and it is an attraction to the particulars of 'personal *beauty*' that helps them to fix their social-sexual choice.[17]

Contrary to Pope's assertion that 'Reflection, Reason, still the ties improve' (*Essay on Man*, III, 133) 'Reason' seemingly does not have a formative part in Burke's heterosocial order. As we are told, this social ordering of the sexes is pre-rational and based on the 'common law of nature', which is analogous to the foundation of 'natural pleasures' referred to in the 'Introduction on Taste'. Yet, Reason does guide men in the self-management of their erotic impulses. Burke makes clear that the frustration of the pleasures of the society of the sexes, the gratification of heteroerotic desire, causes no 'great pain', that the 'absence of [this] pleasure [is] not attended with any considerable pain'.[18] Moreover, men are 'guided by reason in the time and manner of indulging them'.[19] Whereas brutes obey 'laws', natural laws, which condition their 'inclination' to emerge during 'stated seasons', it is through the operation of the reasoning faculty that men, and men alone, direct their own pleasures. Extending on Pope's elevation of 'Reason … o'er Instinct', Burke foregrounds how pleasure is always within man's control.[20] Mankind's ability to exercise Reason as a self-controlling mechanism prevents over-indulgence in the 'pleasures of love'.[21] In this way, Reason ensures that the effeminacy brought about by an over-active heterosexual appetite is avoided. What is emphasised is pleasure, and in particular, hetero pleasure, in and of itself.

Yet, Burke must do further work to close down the queer potential of the spectator's desire for the beautiful man. Whereas personal beauty encourages men towards individual women, beauty is more capaciously conceived of as:

> A social quality; for where women and men, and not only they, but when
> other animals give us a sense of joy and pleasure in beholding them, (and
> there are many that do that) they inspire us with sentiments of tenderness and
> affection towards their persons; we like to have them near us, and we enter
> willingly into a kind of relation with them, unless we should have strong
> reasons to the contrary.[22]

Crucially then, beauty is first introduced as a 'social quality' that is not limited to the cross-sex gaze. Not only women, but also men, children and animals can excite 'love', which

---

[15] Burke, *A Philosophical*, p. 39.
[16] Ibid.
[17] Ibid.
[18] Ibid.
[19] Ibid., p. 38.
[20] Ibid.
[21] Ibid.
[22] Ibid., p. 39.

causes feelings of tenderness and affection.[23] Having outlined how beauty is a socialising force in the first part of the *Enquiry*, Burke then spends much of the third part limiting the erotic pleasure of the beautiful to the bodies of women. While men may excite the 'love' of other men, this 'love' is somehow always emptied of erotic feeling:

> We shall have a strong desire for a woman of no remarkable beauty; whilst the greatest beauty in men, or in other animals, though it causes love, yet excites nothing at all of desire. Which shews that beauty, and the passion caused by beauty, which I call love, is different from desire, though desire may sometimes operate along with it.[24]

Whilst beauty is grounded as a property of certain bodies, which causes 'love, or some passion similar to it', Burke ensures that only female bodies excite a love that is mixed with desire.[25] While this may seem like an unremarkable, and indeed, unavoidable qualification, it nonetheless determines Burke's vision of social order as heteronormative. Importantly, keeping social order largely independent of procreative instinct ensures that heterosexuality itself is not entirely reducible to its procreative function. More intriguingly, Burke's entire reading of beauty in the third part of the *Enquiry* rests on disinvesting male beauty of desire. If utility, proportion, or fitness determined beauty then the male body would be 'much more lovely than women; and strength and agility would be considered as the only beauties'.[26]

Burke's discussion of deformity is particularly interesting when read in dialogue with David Hume's comments on beauty in his 'Of the Standard of Taste'. For Hume, beauty exists only in the mind and cannot be assessed as a 'quality in things themselves'. Hume writes that:

> Beauty is no quality in things themselves: it exists merely in the mind which contemplates them; and each mind perceives a different beauty. One person may perceive deformity, where another is sensible of beauty; and every individual ought to acquiesce in his own sentiment…[27]

In contrast to Hume's libertarian aesthetic, Burke argues that deformity is not the opposite of beauty but of: '*compleat, common form*'.[28] Rather than allow individual sentiments free range, the import of Burke's discussion of deformity demonstrates a clear divide between the positive pleasure of beauty and its absolute opposite: '*ugliness*'.[29] Between the beautiful and the ugly exists: a 'sort of mediocrity, in which the assigned proportions are most commonly found, but this has no effect upon the passions'.[30] This grey area between beauty and ugliness ensures that when confronted with beauty, our passions are uniformly moved. In contrast to Hume then, Burke advances a concept of beauty as both grounded in bodies and uniformly

---

[23] Ibid.
[24] Ibid,, p. 83.
[25] Ibid., p. 106.
[26] Ibid., p. 96.
[27] David Hume, *Four dissertations. I. The natural history of religion. II. Of the passions. III. Of tragedy. IV. Of the standard of taste* (London: printed for A. Millar, in the Strand, MDCCCVII. [1757]), p. 209.
[28] Burke, *A Philosophical*, p. 93.
[29] Ibid., p. 95.
[30] Ibid.

affective: 'beauty is for the greater part, some quality in bodies, acting mechanically upon the human mind by the intervention of the senses'.[31]

Rather than read the *Enquiry* as simply presenting a gendered apartheid, we should acknowledge how Burke's delineation of the sublime and beautiful contributes to complex and interrelated discursive processes of heterosexualising Enlightenment pleasures. Part Three of the *Enquiry* culminates in the grounding of erotic beauty in the bodies of women. In arguing that 'perfection' is not the cause of 'beauty', Burke supports the claim with the observation that women: 'learn to lisp, to totter in their walk, to counterfeit weakness, and even sickness' in a performative effort to appear more feminine, and ultimately more desirable.[32] Beauty in distress is 'the most affecting', and aware that beauty involves weakness or imperfection, women, as 'guided by nature' regulate their behaviour accordingly.[33] In this way, performed delicacy or weakness is what constitutes a beautiful female body. We know that this weakness is, indeed, performed because Burke clearly states that any real weakness, such as that which arises from ill health, has no 'share in beauty'.[34] In delineating a range of recognisably feminine behaviours, Burke is in many ways theorising what Judith Butler terms 'intelligible genders'.[35] Rather than presenting the beautiful as feminine, Burke's deconstruction of the beautiful says more about his awareness of the socially constructed basis of both gender and the gendered structuring of desire. We might then say that at the core of heteronormativity's construction we find its potential de-construction.

Indeed, a recurring tension evident throughout the *Enquiry* involves the discussion of beauty as both learned behaviour and an inherent property of bodies. The serpentine '*S*' line, identified by Hogarth in *The Analysis of Beauty* as 'that [which] *leads the eye a wanton kind of chace*' and that gives pleasure, is found in the *Enquiry* in the curve of a woman's neck and in the swell of her breast.[36] While in agreement with Hogarth's line of beauty *S*, Burke queries the idea that this particular line is always to be found in 'the most completely beautiful'.[37] Burke, as Ronald Paulson notes, 'dissociates himself from Hogarth's epistemology of pursuit (Addison's Novel)'.[38] In Chapter V of Hogarth's *Analysis*, it is literally the hair on a woman's head that is most arousing: 'The most amiable in itself is the flowing curl; and the many waving and contrasted turns of naturally intermingling locks ravish the eye with the pleasure of the pursuit, especially when they are put in motion by a gentle breeze'.[39] While still describing the beautiful in terms of variety, the idea of pursuit is curiously understated, if at all present, in Burke's version of female beauty. Unlike the tousled hair of Hogarth's passing women, the woman in the *Enquiry* is observed in a much more intimate and stationary relation to the male spectator:

> Observe that part of a beautiful woman where she is perhaps the most
> beautiful, about the neck and breasts; the smoothness; the softness; the easy

---

[31] Ibid., p. 102.

[32] Burke, *A Philosophical*, p. 100.

[33] Ibid.

[34] Ibid. p. 106.

[35] Gender for Judith Butler amounts to 'the repeated stylization of the body, a set of repeated acts [or behaviours that operate] within a highly rigid regulatory frame that congeal over time to produce the appearance of substance, of a natural sort of being'. See Judith Butler. *Gender Trouble: Feminism and the Subversion of Identity* (New York: Routledge, 1990), pp. 45-46.

[36] William Hogarth, *The Analysis of Beauty*, Ronald Paulson, ed. (New Haven: Yale, 1997), p. 33.

[37] Burke, *A Philosophical,* p. 105.

[38] Hogarth, p. xlvii.

[39] Burke, *A Philosophical*, p. 34.

and insensible swell; the variety of the surface, which is never for the smallest space the same; the deceitful maze, through which the unsteady eye slides giddily, without knowing where to fix, or whither it is carried. Is not this a demonstration of that change of surface continual and yet hardly perceptible at any point which forms one of the great constituents of beauty?[40]

The most intensely affective form of beauty then, for Burke, is engendered through the cross-sex gaze, which excites love mixed with desire. Peter Cosgrove reads this passage as evidencing 'a complex fear of matriarchal rule': 'It is not merely variation that arouses Burke's anxieties but the simulation of power in an object too small to evoke the terror of the sublime'.[41] A reading of a woman's breasts as producing anxiety must be reconciled with the fact that an aim of the *Enquiry* is to show that, while clearly disorientating, beauty is ultimately a pleasurable experience. Moreover, Burke is quite clear that the power of an object is not dependent on its proportions, providing the example of the snake as a small creature that still produces feelings of terror. In contrast to William Hogarth's flowing curls, the fluctuating line of beauty is, according to Burke: 'a very insensible deviation [that] never varies … so quickly as to surprise, or by the sharpness of its angle to cause any twitching or convulsion of the optic nerve'.[42] While not denying that the beautiful is powerful, it would seem that Burke's unique and timely intervention in these debates is not to disarm the enervating force of the beautiful, nor render its transport less powerful, but curiously to intensify its emasculating power. What we find then in the *Enquiry* is a text, which attempts to heterosexualise the politics of the male gaze and the pleasure that the male gaze affords, but which, in doing so, unwittingly emphasizes the performative nature of all pleasures, as well as the power of female beauty to disorientate and to overwhelm for all of its supposed objectified passivity.

Conclusion: Shaming the Sodomite / The Shame of Gay Tolerance

In moving toward a conclusion, this article will refocus on a much later work in Burke's career, that is, to look at the text of a speech that he delivered on the punishment of two men who had been convicted of sodomy. In April of 1780, Burke made a brave speech in parliament, which denounced the crowd's brutal murder of a plasterer, William Smith, who was being pilloried as punishment for 'sodomitical practices'.[43] As Sally R. Munt argues, in addressing men who have been defined in legal terms as sodomites, Burke draws on the epistemological uncertainty that troubles all sodomitical representation.[44] He argues that the punishment received by the man was in excess of the crime and its conviction, as the pillory was 'a punishment of shame rather than of personal severity'.[45] Burke deploys a description of the scene in order to evoke sympathy from his fellow parliamentarians:

---

[40] Burke, *A Philosophical*, p. 105.
[41] Peter Cosgrove, 'Edmund Burke, Gilles Deleuze, and the Subversive Masochism of the Image', *ELH*, Vol. 66, No. 2 (Summer, 1999), p. 414.
[42] Burke, *A Philosophical*, p. 140.
[43] Burke, 'Text of Edmund Burke's Speech to the House of Commons on 12th April 1780', in Sally R. Munt, *Queer Attachments: The Cultural Politics of Shame* (Hampshire: Ashgate, 2007), p. 51.
[44] Munt, p. 41.
[45] Burke, 'Text', p. 51.

The poor wretch hung rather than walked as the pillory turned around … he had deprecated the vengeance of the mob […] he soon grew black in the face, and the blood forced itself out of his nostrils, his eyes, and his ears. That the officers seeing his situation, opened the pillory, and the poor wretch fell down dead on the stand of the instrument […] The crime was however of all crimes, a crime of the most equivocal nature, and the most difficult to prove.[46]

As Munt suggests, Burke's speech allows his fellow parliamentarians to imaginatively enter into the experience as a substitute for Smith.[47] Rather than the brutality experienced by Smith, Burke advocates a tactic of shame. The crime is of an "equivocal nature" and, by extension; the category of the sodomite is also unknown or unknowable. We could be tempted here to suggest that 'shame' could register in Burke's eighteenth-century parlance as near equivalent to our own definition of 'tolerance', in so much as society's contemporary toleration of the queer subject is animated by a kind of shame, which, in turn, perpetuates shaming practices. Yet if there is a lesson to be drawn from Burke's unlikely and compassionate defence of the pilloried sodomites, it seems to be more to do with the reification of sexual minority identity – he is warning against pretending to know what is unknowable – what the sodomite actually signifies. His illumination of the mysteriousness of the sodomite anticipates Eve Sedgwick's caveat about queer scholarship potentially reinforcing the perception that contemporary homo/hetero subject positions are knowable and privileged.[48]

In a sense, the passing of equal marriage may not signal the collapse of heteronormativity, but rather the affirmation of a competing homonormativity, with its corollary binary of good queers who marry and bad queers who do not. Should that unfold, it seems clear that heteronormativity, as a regime will have a renewed sense of who counts as legitimately human and who does not, who should be accepted and who should be tolerated, if at all. If Enlightenment literature has anything to teach us about heteronormativity, it is that the process of normalisation itself invariably illuminates counter points to resist and to subvert its certain forces; in welcoming acceptance in our own time we must not do so at the risk of stigmatising queer subjects who desire different lives and different loves

---

[46] Ibid.
[47] Munt, p. 43.
[48] Eve Kosofsky Sedgwick, *Epistemology Of The Closet* (Berkeley: University of California Press, 1990), pp. 47-48.

Nietzsche's Interpretation of Chladni's Sound Figures

Steven Lydon
Harvard University

ABSTRACT:

Friedrich Nietzsche's reference to Ernst Chladni in 'On Truth and Lie in an Extra-Moral Sense' (1873) could easily be overlooked as a casual analogy. Yet it emerges from a systematic engagement with the nascent field of acoustics. Chladni was among the discipline's founding fathers, having honed the application of rigorous empirical testing to sound and music. His name is most enduringly associated with the discovery of the 'sound figures', which rendered sound visible for the first time. To produce them, Chladni scattered sand onto a metal sheet. A note was then emitted by playing a violin bow against its side. The resulting oscillations prompted the sand to settle in a range of symmetrical patterns. The natural beauty of the shapes made them quite famous. Yet they also represented a mystery. Though the formula for calculating the oscillation of single strings was reliable, it could not easily be reconciled with oscillation in two dimensions. In lieu of an explanation, the sound figures became the object of speculative attention. Their existence posed a difficulty for the quantitative ontology of rationalist metaphysics. The inheritors of Schelling, for example, saw in the sound figures an undeciphered language of nature. But Nietzsche was implacably opposed to this position: for him, nature contains no inherent meaning, no rational order, and no divine teleology. The 'book of nature' was at best an anthropomorphic projection, and at worst a theological dogma. Thus reframed, Chladni's sound figures confront us not with the infinite mystery of nature, but our own cognitive impotence. The following essay therefore elaborates the provenance of Nietzsche's sound figure analogy: a rare intersection of scientific experiment and speculative philosophy.

In a well-known passage from 'On Truth and Lie in an Extra-Moral Sense' (1873), Nietzsche portrays the dependence of conceptual knowledge on sensible intuition.[1] It is pointless to expect truth to emerge through language, Nietzsche says: this would be tantamount to a deaf man looking at Chladni's sound figures, and then deducing their operation through the understanding.

> One can imagine a man who is totally deaf and has never had a sensation of sound or and music. Perhaps such a person will gaze with astonishment at Chladni's sound figures; perhaps he will discover their causes in the vibrations of the string and will now swear that he must know what men mean by 'sound'. It is this way with all of us concerning language...[2]

---

[1] Friedrich Nietzsche, 'Über Wahrheit und Lüge im außermoralischen Sinne' in *Kritische Studienausgabe III* ed. Giorgio Colli and Mazzino Montinari (2nd edn., Munich: dtv; Berlin and New York: de Gruyter, 1988), p. 373. Hereafter referred to as TL.

[2] Man kann sich einen Menschen denken, der ganz taub ist und nie eine Empfindung des Tones und der Musik gehabt hat: wie dieser etwa die chladnischen Klangfiguren im Sande anstaunt, ihre Ursachen im Erzittern der Saite findet und nun darauf schwören wird, jetzt müsse er wissen, was die Menschen den 'Ton' nennen, so geht es uns allen mit der Sprache...

Translated in 'On Truth and Lie in an Extra-Moral Sense', *Philosophy and Truth: Selections from Nietzsche's Notebooks of the Early 1870s*, ed. Daniel Breazeale (New Jersey: Humanities Press, 1994), pp. 79-91. The following essay refers to published translations where possible; when these sources are unavailable, the translations are my own.

This reference is quite obscure. It will require some exposition if Nietzsche's point is to be understood. To this end, section one will provide an overview of Chladni's scientific research, with reference to its interpretation by writers in the era. Section two will focus on Nietzsche's specific engagement with the sound figures via his contemporaneous notes.

I.

Ernst Chladni announced the existence of sound figures in a book entitled *Discoveries on the Theory of Sound* (1787).[3] He had been inspired by the scientist and philosopher Georg Christoph Lichtenberg, who traced the passage of electric current using fine powder. Chladni wished to achieve a similar result in acoustics. The experiment was carried out as follows. First, fine sand was scattered on a metal sheet which could be of varying shapes and sizes. A note was then produced by playing a violin bow against the sheet. The oscillations prompted the sand to settle in a range of symmetrical patterns, corresponding to the nodal lines (a node is an area that does not vibrate). Each frequency resonated differently with the sheet, producing a unique shape (see below, Figure 1: Ernst Chladni's sound figures, as presented in his *Akustik*).

Chladni's discovery rendered sound visible for the first time. The natural beauty of the shapes made them, alongside their progenitor, quite famous. But the project also represented a considerable scientific advance: once sound had been visualised, it became more readily experimental. Acoustical research had until this time been limited to the one-dimensional space of the Pythagorean monochord. Relinquishing the single string meant that sound could be investigated in two and three-dimensional objects. In modern terms, this constitutes a shift from a linear to a planar theory of sound.

But while the sound figures were experimentally groundbreaking, they nevertheless lacked a mathematical explanation. In 1795, Chladni had admitted that 'regarding the qualitative differences betweens sounds... what is essential remains unknown'.[4] Napoleon's request for explanation consequently went unsatisfied. To salve his curiosity, a prize was founded at the *Institut de France* in 1809.[5] It was not until its third year that a winner was found in Sophie Germain. But Joseph-Louis Lagrange, who sat on the judging committee, made his reservations known. This was significant, given that Germain's theory relied heavily on Lagrange's work; and Lagrange had elsewhere suggested that the sound figures required an entirely new type of mathematical analysis.[6]

---

[3] Ernst Chladni, *Entdeckungen über die Theorie des Klanges* (Leipzig: Weidmanns Erben und Reich, 1787).

[4] '[V]on der qualitativen Verschiedenheit der Klänge... ist das Wesentliche noch unbekannt'. Ernst Chladni, *Brief an den Herausgeber, Archiv der reinen und angewandten Mathematik* 1 (1795), number 44, pp. 5-6. Quoted in Dieter Ullmann, 'Chladni und die Entwicklung der experimentellen Akustik um 1800', *Archive for History of Exact Sciences*, Vol. 31, No. 1 (1984), pp. 35-52. See also Dieter Ullmann, *Chladni und die Entwicklung der Akustik von 1750-1860* (Basel; Boston: Birkhäuser Verlag, 1996). Hereafter referred to as Ullmann 1 and 2 respectively.

[5] H. J. Stöckmann, 'Chladni meets Napoleon,' *European Physics Journal Special Topics* 145 (2007), pp. 15–23.

[6] Curiously, Ullmann suggests that some aspects of the sound figures remain unexplained today. cf. Ullmann 1, p. 40. D'alembert tried and failed to deduce the result of Chladni's figures, but to no avail. See Hans Christian Ørsted, *Romantic Legacy in Science: Ideas, Disciplines* (Boston: Springer; 2007), p. 124.
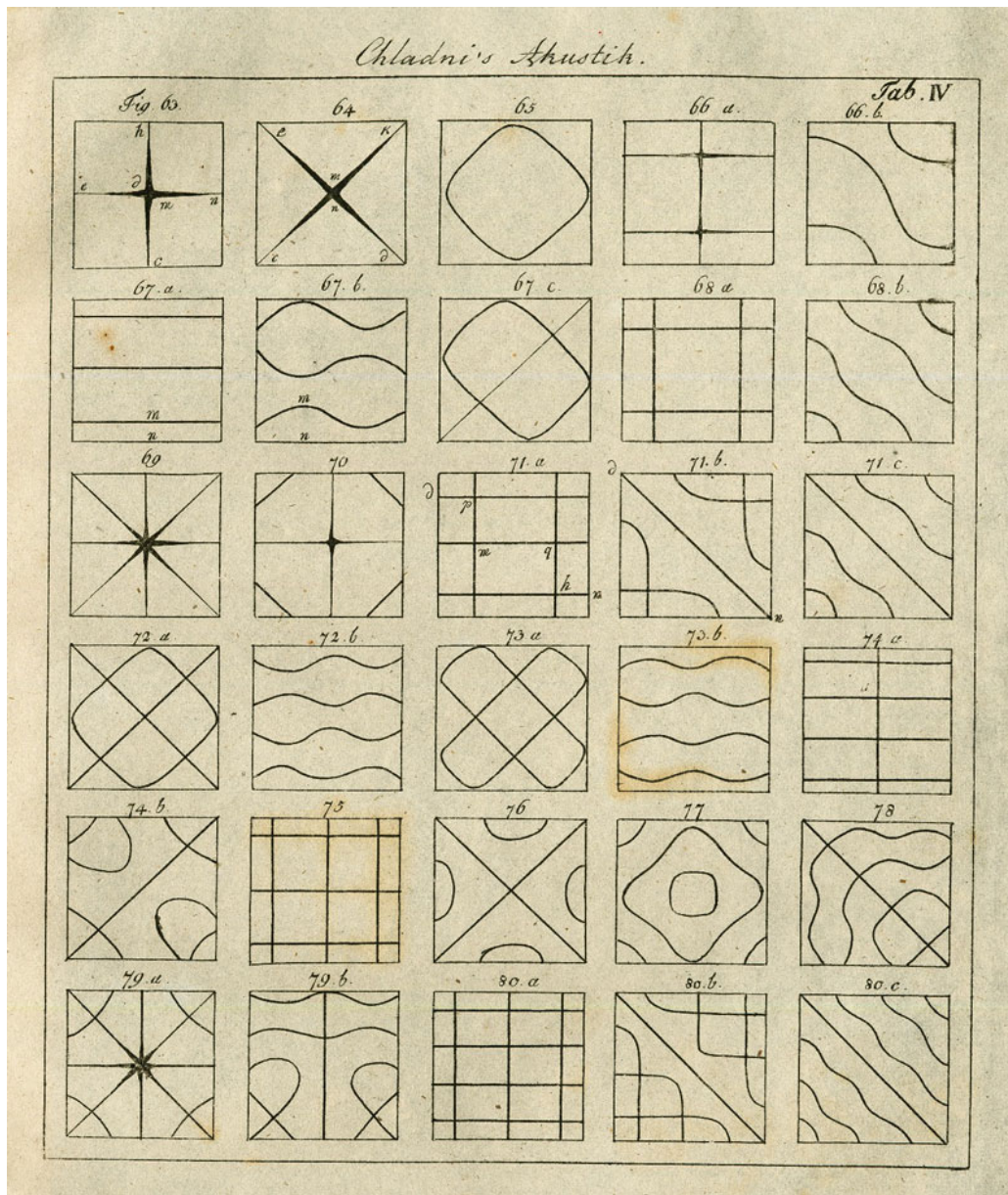
Figure 1: Ernst Chladni's sound figures, as presented in his Akustik[7]

But while the sound figures were experimentally groundbreaking, they nevertheless lacked a mathematical explanation. In 1795, Chladni had admitted that 'regarding the qualitative differences betweens sounds... what is essential remains unknown'.[8] Napoleon's request for explanation consequently went unsatisfied. To salve his curiosity, a prize was founded at the *Institut de France* in 1809.[9] It was not until its third year that a winner was found in Sophie Germain. But Joseph-Louis Lagrange, who sat on the judging committee, made his

---

[7] See, for instance, Aphelis, http://aphelis.net/representing-sound/

[8] '[V]on der qualitativen Verschiedenheit der Klänge... ist das Wesentliche noch unbekannt'. Ernst Chladni, *Brief an den Herausgeber, Archiv der reinen und angewandten Mathematik* 1 (1795), number 44, pp. 5-6. Quoted in Dieter Ullmann, 'Chladni und die Entwicklung der experimentellen Akustik um 1800', *Archive for History of Exact Sciences*, Vol. 31, No. 1 (1984), pp. 35-52. See also Dieter Ullmann, *Chladni und die Entwicklung der Akustik von 1750-1860,* (Basel; Boston: Birkhäuser Verlag, 1996). Hereafter referred to as Ullmann 1 and 2 respectively.

[9] H. J. Stöckmann, 'Chladni meets Napoleon,' *European Physics Journal Special Topics* 145 (2007), pp. 15–23.

reservations known. This was significant, given that Germain's theory relied heavily on Lagrange's work; and Lagrange had elsewhere suggested that the sound figures required an entirely new type of mathematical analysis.[10]

By publishing the sound figures in lieu of an explanation, Chladni demonstrates a predilection for experiment over theorisation. Goethe confirms this tendency in an 1803 letter.[11] The pair had conversed for several hours, during which time Chladni presented his *Akustik*; upon reading, Goethe finds support of his colour theory. He recommends to Schiller a meeting with the acoustician, which suggests an agreeable encounter. But one remark deserves attention:

> [Chladni] is [...] one of those happy persons, who have not even a notion that there is such a thing as a philosophy of nature, and who carefully endeavour to perceive a phenomenon, merely in order to classify and to use it afterwards as far as can be done, and as their innate talent, which has some experience in and for the matter, can accomplish.[12]

Goethe's words betray no little uneasiness about Chladni's approach to natural philosophy. Chladni was reluctant to venture beyond the experimentally verifiable, whereas Goethe demanded a holistic *Naturphilosophie* that could depict nature's living motion, not merely catalogue it. Later that week, he and Schiller attend one of Chladni's concerts. Goethe's misgivings never resurface.

Several years later, however, Goethe's 'Fate of the Manuscript' (1817) essay concludes with a short paragraph in homage to Chladni. Goethe's attitude appears to have changed. If the lack of *Naturphilosophie* was once to be lamented, now it is a virtue. Thanks to Chladni, Goethe says, the world can elicit sound from various bodies. Equally laudable are his observations of cosmic objects. Goethe is referring to Chladni's wider experimental interests. But he goes on to pose an unexpected question: what could unify these distinct endeavours? Nothing less than 'a mindful, attentive man who feels drawn towards two of the most distant natural phenomena, and now ceaselessly pursues one after the other.'[13] Goethe finds the unity of two disparate events in Chladni's personage.

This is surely an unusual comment for Goethe to make, given that systematic consistency was never Chladni's aim. The acoustician had bound speculation to mutable experiment, and displayed a proclivity for incremental progress. In this regard, Chladni embodies a nominalist strand of the emerging natural sciences. Wherefore, then, this unsolicited defence? The only explanation is that Goethe is responding to his own critique of Chladni, first articulated several years earlier. The moment registers an unmistakeable tension between holistic *Naturphilosophie* and its proto-positivist correlate.

---

[10] Curiously, Ullmann suggests that some aspects of the sound figures remain unexplained today. cf. Ullmann 1, p. 40. D'alembert tried and failed to deduce the result of Chladni's figures, but to no avail. See Hans Christian Ørsted, *Romantic Legacy in Science: Ideas, Disciplines* (Boston: Springer, 2007), p. 124.

[11] Johann Wolfgang Goethe to Schiller, '26. January 1803', *Sämtliche Werke Band 8.1* (München: Carl Hanser Verlag, 1990), p. 924.

[12] [D]ie Glückseligen, welche auch nicht eine Ahnung haben, daß es eine Naturphilosophie gibt, und die nur, mit Aufmerksamkeit, suchen die Phänomene gewahr zu werden, um sie nachher so gut zu ordnen und zu nutzen, als es nur gehen will und als ihr angebornes, in der Sache und zur Sache geübtes Talent vermag. Translated by L. Dora Schmitz in *Correspondence Between Schiller and Goethe, from 1794 to 1805, Volume 2* (London: George Bell and Sons, 1879), p. 438.

[13] Johann Wolfgang Goethe, 'Schicksal der Handschrift', *Sämtliche Werke Band 12* (München: Carl Hanser Verlag, 1989), p. 72.
[E]in geistreicher, aufmerkender Mann zwei der entferntesten Naturvorkommenheiten seiner Betrachtung aufgedrungen fühlt, und nun eines wie das andere stetig und unablässig verfolgt.

Why Goethe chose not to publish his criticism of Chladni will remain uncertain. Perhaps he wished not to hinder such promising research. After all, Goethe's words could devastate a struggling artist like Chladni, to whom he must have felt at least some sense of kinship. Another possible explanation is that 'delicate empiricism' could tolerate a plurality of approaches. Whatever the truth may be, the encounter unambiguously demonstrates an agnostic tendency in Chladni's thinking. The acoustician forebears to offer interpretation, being content to furnish data for posterity.

Yet Chladni's native caution belies the immense suggestive potential of the sound figures. Combined with a lack of explanation, therefore, it is obvious why they posed an attractive riddle for many speculative thinkers. But just how the experiment was utilised must carefully be examined; for the sound figures could never be called intuitively obvious.

II.

In the same year that Nietzsche refers to Chladni in TL, his unpublished notes expound 'scientific' and 'philosophical' thinking respectively.[14] This neo-Kantian distinction registers in a different way, what Goethe had earlier lamented: the lack of *Geist,* or living unity, within empirical research. For his part, Nietzsche finds a germ of speculation constantly at work within science. It supplies the initial idea, racing ahead of the understanding, which tries to establish causality in its wake. This is what separates 'fantasy' and 'reality'.

Reality is the product of human understanding, the extent of our ability to apply causal statements. Fantasy is a product of reason; its logic is not limited by practical cognition. Though separate, the two faculties work together: Nietzsche describes science as 'testing' (*prüfen*) the concept against its object, whereas speculative philosophy 'leaps' (*weiterspringen*) to new possibilities. The sketch of cognitive processes in these early notes forms the background against which TL should be interpreted.

Nietzsche's insistence that 'there is no *philosophy that is separated from science*' should be read alongside TL's central analogy: 'In the same way that the sound appears as a sand figure, so the mysterious X of the thing in itself first appears as a nerve stimulus, then as an image, and finally as a sound'.[15] Though this statement is often understood to emphasise the role of metaphor in knowledge, it also highlights the import of speculative thinking within science. Because this latter element is usually ignored, it now requires consideration.[16]

Nietzsche assumes that the transposition between word and image is unknowable. His notes explain why this is the case. Images are created by sight, whereas words are the substrate of thought. Being distinct, these elements require a shared medium. Nietzsche asks: 'What is actually "logical" in image-thinking (*Bilderdenken*)?' The need for a composite term 'image-thinking' already signals a difficulty in representing such mediating activity. 'Logic' conventionally refers to the association of subject and predicate in a judgement. Judgement is

---

[14] Friedrich Nietzsche, 'Sommer 1872 – Anfang 1873', *Kritische Studienausgabe III.4* ed. Giorgio Colli and Mazzino Montinari (2nd edn., Munich: dtv; Berlin and New York: de Gruyter, 1978), p. 32.

[15] Wie der Ton als Sandfigur, so nimmt sich das rätselhafte X des Dings an sich einmal als Nervenreiz, dann als Bild, endlich als Laut aus.

[16] The sound figures have been referred to by numerous commentators. One group emphasises their status as metaphor: Sarah Kofman, *Nietzsche and Metaphor*, trans. Duncan Large (Stanford University Press, 1993), p. 40; Babette E. Babich, *Words in Blood, Like Flowers: Philosophy and Poetry, Music and Eros in Hölderlin, Nietzsche and Heidegger* (State University of New York Press, 2007), p. 61. Laura Otis, *Networking: Communicating with Bodies and Machines in the Nineteenth Century* (Michigan: University of Michigan Press, 2001), p. 46. A second tendency emphasises the sound figures as example to make a cognitive point: Maudemarie Clark, *Nietzsche on Truth and Philosophy* (Cambridge: Cambridge University Press, 1990), p. 78. The argument which follows should reveal the shared ground between these positions.

the preserve of language and understanding, however, which implies that image-thinking must comprise something else entirely.

These early notes do not supply a missing theory of transposition, but they do frame the problem with especial clarity. Moreover, they do so in a systematic language that is rarely observed in Nietzsche's published work. This makes it possible to trace an otherwise invisible shift into a speculative register.

> The finest rays of nervous activity seen upon a plain: as Chladni's sound figures relate to sound itself; so do these images relate to the nervous activity that moves beneath them. The most delicate tremors and oscillations![17]

Nervous activity is described by the acoustic term 'oscillation'. The analogy thus constitutes a leap of the kind described in TL, and demonstrates the activity of thought within matter. The scientist scours objects for their essence, but discovers only the reflection of his mind's activity. This ostensibly materialist account therefore reveals a deep irony: for through it, Nietzsche implies that subjective experience cannot be extracted from the very thing which is supposed to explain it away.

It should be noted that subjective experience does not imply arbitrary convention. Nietzsche's further development of the analogy makes this point abundantly clear:

> The artistic process is physiologically absolutely determined and necessary. All thinking appears to us superficially as arbitrary: we fail to notice the infinite activity.[18]

Lacking the artfulness of his finished prose, Nietzsche's words are unusually direct. Thinking is strictly rule based; it only appears contingent because we are unable to comprehend its inner logic. In this sense, Nietzsche's certainty about the presence of a rule belies its obscurity. Image-thinking is the paradoxical unity of contingency and necessity, the locus of sensibility and understanding.

This is the basis on which 'oscilliation' can be characterised as a 'leap'. Oscillation refers to the model for single-string movements proposed by Leonhard Euler in the 1770s. Each recurring oscillation could be counted as one. Of course, this task exceeds the capacity of the human eye, so mathematical formulae are substituted. Such formulae constitute an abstraction from immediate experience. The concept of oscillation therefore constantly presupposes the idealisation of sound in one dimension.

In TL, Nietzsche wishes to demonstrate that this idealisation has been 'forgotten'. This is not meant in an everyday sense. Rather, forgetting refers to the unconscious ontological prioritisation of one representation over another. Oscillation is assumed to be the causal agent of the images. This is evident when Chladni attempts to explain the images qua oscillation, which is to say, attempts to explain them using mathematics. But this raises the question: why should one idealisation have priority over another?

By insisting on mathematical explanation, Chladni fails to acknowledge the radicality of his own breakthrough. Because the figures are not explained by oscillation, they hold open

---

[17] Sondern die feinsten Ausstrahlungen von Nerventhätigkeit auf einer Fläche gesehn: sie verhalten sich wie die Chladni'schen Klangfiguren zu dem Klang selbst: so diese Bilder zu der darunter sich bewegenden Nerventhätigkeit. Das allerzarteste sich Schwingen und Zittern!

[18] Der künstlerische Prozeß ist physiologisch absolut bestimmt und nothwendig. Alles Denken erscheint uns auf der Oberfläche als willkürlich, als in unserem Belieben: wir bemerken die unendliche Thätigkeit nicht.

the prospect of an entirely new paradigm of sound. It is possible, for example, to imagine a scenario in which the image of sound were ontologically primary. This would mean that quantification could be renounced entirely. The point is merely speculative, of course, but it is more than enough to cast doubt on the priority of oscillation.

Nietzsche does not pursue these implications. He is content merely to unveil the 'possibility' within the sound figures, the presence of which shows that every 'reality' has its founding idealisation. The point is hardly radical: Kant already argues that every science presupposes an 'idea'. Nietzsche's real target is the suppression of 'fantasy' in the sound figures. By assuming frequency to be the cause of the shapes, Chladni forgets the experiment's founding idealisation, and renounces the original imaginative impulse.

Nietzsche's technical vocabulary now reveals its utility. Two subtle cognitive moments can be distinguished within Chladni's explanatory gesture. The attempt to explain the images using mathematics is 'testing'. This represents the attachment of predicate to subject. But the seeking out of this predicate represents a separate process: namely 'leaping'. The terminology echoes Kant's 'determinate judgement' (the process by which a universal is applied to a particular) and 'reflective judgement' (the process which seeks out the appropriate universal for the particular) respectively.

In Chladni's case, determinate judgement would explain the images in terms of mathematics; forging a new reality, and overwriting the leap required to produce it. By not terminating in this way, however, the imaginative process is extended *ad infinitum*. Chladni's failure to reconcile image and oscillation therefore reveals the activity of imagination. Almost by accident, Nietzsche hits upon the aesthetic element of the sound figures: the 'artistic power' (*künsterlische Kraft*) which brought them into existence.

The suppression of fantasy is dramatised in Nietzsche's second reference to the experiment. By observing the sound figures, the deaf man is able to comprehend their function. Ultimately, he even claims to know 'what men call "tone"' Nietzsche portrays this as an absurdity, but it is worth specifying why. The deaf man has tried to recreate a sensible intuition. But the understanding can never replicate sound as it is heard. Instead, he has deduced sound by finding 'the *cause* of the vibrating string' (my italics). The deaf man thus relies on the understanding to determine a causal relationship, and buries the sensible intuition.

The deaf man is Chladni himself. By disavowing the imaginative foundation of his original idealisation, he relinquishes the richness of sensible intuition. He insists on applying a theoretical model of 'reality' that forecloses 'possibility'. The abstract concept of oscillation dominates his intuitive perception. This almost negates his original insight; yet precisely by virtue of this failure, the sound figures hold open the founding speculative gesture. To use Nietzsche's terminology, the 'science' of the sound figures has not yet achieved 'knowledge'; they occupy a median realm, and thus remain open to interpretation.