Wittgenstein’s War Poetry

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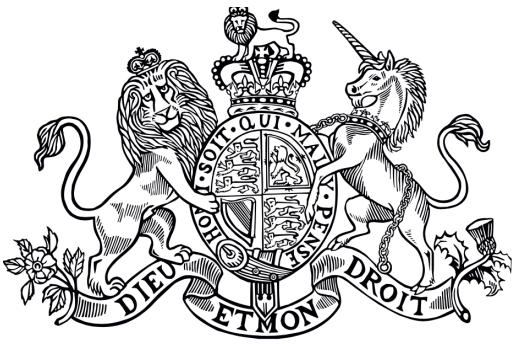

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Abstract

Since being injured while serving in the British military in Iraq I have explored and written poetry as a way of making sense of my combat experiences. In this PhD by practice I situate my own poetic work alongside a thesis which explores Wittgenstein's own 1919 philosophical work, the *Tractatus Logico-Philosophicus,* as a work of war poetry. I use reflections on my own life experience to direct a comparative literary analysis of work by myself and other poets in order to shed light on how Wittgenstein's war poetry operates and what it might tell us about the experiences he found impossible to communicate through words. In doing this I situate my thesis as a contribution to Marjorie Perloff's explorations of Wittgenstein's poetics.

In addition to this textual focus, this thesis also aims to make two further theoretical contributions to the discourse concerning war literature more generally: first, it aims to outline the contours of a radical reimagining of how war literature should be considered and studied, broadening its current position within an orbit of literature which is written descriptively about war or contemporaneously alongside war, as evident, for example, in Kate McLoughlin's scholarly analyses, to also include other works which demonstrate novel types of combat poetics which, I argue, emerge as psychological responses to combat experience and which lie latent within literary works that have not previously been considered as war literature.

Second, by making these contributions, and by doing so as a scholar who has been both an academic and a soldier, I also aim to shed light upon, and to some extent challenge, a proposed division between an older 'first wave' (Das, 2006, 'Introduction') tradition of scholarship, which exclusively discusses the literature of combatants, and a newer and contemporary 'second wave' tradition, which ascribes no privileged insight to literature written by combatants. In this vein, and to illustrate how an experientially informed analysis may offer valuable new perspectives, throughout this thesis I juxtapose my own experiences with the analyses of Santanu Das and Kate McLoughlin.

The first chapter begins with an introduction to the themes, methods, and primary material of the thesis. It proceeds to a literature review, which contextualises the thesis within the discourse concerning the study of war literature. There follows a section which situates the thesis within scholarship concerning the *Tractatus* in relation to both poetry as a literary form and Wittgenstein's war experience, establishing that the *Tractatus* is recognised as war poetry but that this poetry remains poorly understood. A methodology for analysing Wittgenstein's poetics which employs a combination of biographically informed self-reflexive empathy and comparative literary analysis is then proposed, before this first chapter concludes with an introductory textual analysis.

The methodology of the thesis is then applied in exploring three aspects of the poetics of the *Tractatus*. Chapters titled 'Structure', 'Compression', and 'Abstraction' explore different aesthetic responses to the experience of combat, and particularly the combat experience of the active vocational pursuit of imminent death.

'Structure' explores how a writer may need to rebuild a stable ideological anchoring architecture into their life and work and suggests that this need poetically expresses the unstructured and destabilising experience of its opposite. In this chapter I explore both my work and the work of the First World War Dada poet Jacques Vaché to shed light on the *Tractatus*.

‘Compression’ explores the techniques, some mathematical, which poets may employ to compactly represent the immense scales of unprecedented experience which warfare engenders and suggests that this urge to contain the reality of war aesthetically also implies an external and infinite perspective beyond that reality. I focus on the poetry of Tristan Tzara and the Oulipo writers’ group to explore this theme within the *Tractatus*.

‘Abstraction’, the concluding chapter, explores the unique challenge of descriptively expressing imminent death, and the methods for doing so, and suggests that aesthetic abstraction at the moment of linguistic failure becomes itself the poetic index of the inexpressible. This chapter begins by juxtaposing my reading of Wilfred Owen’s final poem, ‘Spring Offensive’ with that by Das.

The thesis concludes with reference to a work of philosophy-poetry of my own, which evidences notions of structure, compression, and abstraction. It provides an opportunity for some closing reflections on what may have changed and what may have remained the same within the experience of combat over the last century, and how considerations of these stases and evolutions may prove useful in helping us to think about how war poetry should be understood as a category. In the light of this I posit that many of the very technologies which have changed the experience of war over time may themselves bear the poetic trace of the combat experiences from which they emerged and may therefore themselves be considered as war poetry.

Contents

Editorial Note

In this thesis, citations are inset within the text and include the name of the author, the name of the book or article or the year of publication, and in the case of a book an indication of chapter or textual location. A bibliography provides full publication details. My citations do not include a page reference. This is because my method for accessing written material as a blind person would make this impractical. My method is twofold: in some rare cases textual material has been rendered as a commercially available audiobook, in which case there is no pagination. More commonly, material is not available in audiobook form. In this case my method is to first locate an online pdf file of the book or article I require, to then download and format that file into a text-edit version, to then use a further online programme to convert that text file into a synthesised voice file, and to then listen to that sound file through playback software. All quotations are written by me on a separate text document as a record of audio playback which is detached from its pagination, thus making pagination citations impractical. Textual location, e.g., chapter, is recorded by myself at that point from memory because there is at this point no page for me to consult. It is for these reasons that I request the acceptance of my citation method as a reasonable adjustment.

Chapter 1: The Supreme Night

Different Worlds and Chthonic Dialects

> *'About a year before becoming a prisoner of war I finished a philosophical work on which I had worked for the preceding seven years. It is essentially the presentation of a system. And this presentation is extremely compact since I have only recorded in it what – and how it has – really occurred to me ... The work is strictly philosophical and simultaneously literary, and yet there is no blathering in it.*
>
> *But now I am counting on you. And therefore it may be of some help to you if I write you a few words about my book: since – I am quite sure of that – you won't get very much at all out of reading it. For, you won't understand it; its subject matter will appear entirely foreign to you. But in reality it isn't foreign to you, for the sense of the book is an ethical one. I once wanted to include a sentence in the preface which doesn't in fact appear there now. But I am writing it to you now because it might serve you as a key: For I wanted to write that my work consists of two parts: the one you have in front of you and all that I have not written. And just that second part is the important one.'*
>
> (1919 letter from Wittgenstein to Ludwig von Ficker, editor of *Der Brenner,* a literary journal, concerning the potential publication of his *Tractatus Logico-Philosophicus*, quoted in Nordmann, 2005.)

Linguistics scholars and philosophers of language differentiate between *realis* grammatical moods and *irrealis* grammatical moods: *realis* moods express something the speaker or writer believes to be a factual state of affairs, whether in the past, present or future; for example, 'I am breathing', or 'a new year will begin on January 1st'. *Irrealis* moods, by contrast, express something which is imaginary or contingent, such as 'I hope I will be breathing on January 1st' or 'if I am breathing then I will be thinking'.

Saul Kripke was a pioneer of *modal logic*, the study of the logical validity of statements made in diverse moods. A simple example of a question in modal logic might be: 'If the above statements are true, and if it is true that I will be breathing on January 1st, is it true to say that I will be thinking at the beginning of a new year?' In a groundbreaking 1959 paper (written when he was only a teenager), 'A Completeness Theorem in Modal Logic' (1989), Kripke formalised a system for analysing different moods in a modal system which he described as 'many worlds'. The three key components of this many worlds theory are: (1) 'W', the set of all possible worlds being considered; (2) an evaluation function, which determines whether a given proposition is true in a given world; and (3) 'R', a binary relation which maps onto 'W' and essentially provides a map which illustrates possible and impossible connections between different possible worlds. These latter relations are thought of as relations of 'accessibility'. For example, the world in which I am thinking on January 1st is logically accessible from (although not a necessary logical consequence of) the world in which I am now breathing.

In his later work, Kripke (1982) attempted to mathematically formalise some ideas from Wittgenstein's later work *Philosophical Investigations* (creating an influential approach to Wittgenstein known as 'Kripkenstein'). But the main textual focus of my thesis is Wittgenstein's earlier wartime work *Tractatus Logico-Philosophicus,* and here I will introduce my thesis by using Kripke's own early work to think about Wittgenstein's epistolary introduction to that text, quoted above.

In his letter Wittgenstein presents two realities, two different worlds, and these two different worlds are not logically accessible to each other. The letter first gives some important context.

Wittgenstein states that not only has he spent a considerable period of time (seven years) completing the attached *Tractatus,* but he has also completed it and aims for it to be published, despite considerable external pressures (war and imprisonment) which one might have thought would have distracted him from his philosophical reflections. In other words, Wittgenstein is stating that this completed work, the *Tractatus*, has been, and remains, profoundly important to him.

Some detail on the 'seven years' during which Wittgenstein states he worked on the *Tractatus* is of vital importance to this thesis. Seven is a sacred number for Wittgenstein: I will later examine the seven-part construction of the *Tractatus* and its poetic relation to the similarly partitioned descriptions of the Creation and the Apocalypse as presented in the biblical books of Genesis and Revelation. It is thus plausible that Wittgenstein poetically gravitated towards a stated seven-year creative timeframe, although the text in actuality had gone through different iterations of scope and composition which make such certain dating difficult: one could, for example, claim that the first proposition which actually appears in the *Tractatus* was written in 1914 (Perloff, 2011), thereby giving a compositional timeframe of four or five years (1914 - 1918/19) rather than the more resonant seven. But I want to take Wittgenstein's poetry seriously in this thesis and, to use the language of his own Catholic liturgy, I do not claim a temporal sleight of hand here but rather the notion that we could date the composition of the *Tractatus* within a chronological 'Ordinary Time' or within a 'mystical' 'Sacred Time', and regardless of the complex chronology of the former, Wittgenstein's assertion of seven years gestures towards his own attraction towards the latter.

If we accept Wittgenstein's claim of seven years, and his stated claim that he completed the work the year prior to his letter to von Ficker, we can then date the composition of the *Tractatus* to the years 1911 to 1918. Indeed, this has a certain validity, as it was in the autumn of 1911 that Wittgenstein first travelled to Cambridge and began to study Logic with Bertrand Russell, and it was while he was on military leave in the summer of 1918 that Wittgenstein assembled his notes into the *Tractatus*. Importantly for this thesis, these seven years, between 1911 and 1918, when Wittgenstein was between the ages of 22 and 29, represent a period of the most extreme emotional and physical intensity during what would normally be a highly formative period in any individual's life. It is impossible to do full justice to the extreme nature of this experience, but it straddles on the one hand a life of study, friendship, love, and peace at Cambridge University, in the pre-War years, as the privileged Viennese scion of one of Europe's wealthiest families, and on the other a life of the most intense combat experience in World War One, the wartime death of David Pinsent, his lover at Cambridge, the wartime imprisonment of his Cambridge mentor Bertrand Russell for pacifism, the wartime death and injury of two brothers respectively, and the defeat, and collapse and dissolution, of his Austro-Hungarian homeland. Specifically in terms of his combat roles, Wittgenstein's military service could not have been more intense: he served continuously throughout the war apart from a period in hospital in 1915 to recover from an explosives injury, and he served in one of the most exposed and dangerous roles (as a forward operating artillery targeting officer) in one of the most bloody theatres of the War (on the Eastern Front during multiple Russian offensives). Wittgenstein was awarded one of his nation's highest military honours for his bravery (Monk, 1991, Part I, 1889-1919).

The context for the writing of the *Tractatus* which Wittgenstein gestures towards in his letter to von Ficker thus implies different domains: first, a domain of Ordinary Time and a domain of Sacred Time; second, a non-War or pre-War world of love, friendship, peace, and study at Cambridge, and a wartime world of killing, death, imprisonment, and destruction; and third, as I shall now attempt to further explore, two different conceptual regions which seem to emerge out of these wildly different experiential worlds but are linked through a domain outside Ordinary Time; this sense of split realities which exist *with* inherent Ordinary Timeframes but *within* a shared Sacred Time constructs a conceptual universe which

Wittgenstein claims access to but to which he claims the non-combatant von Ficker lacks access: *you won't understand it; its subject matter will appear entirely foreign to you*. These different domains – temporal, physical, conceptual – are thus seemingly linked but suggest different regions and different accessibilities. I illustrate this ontology with a very simple diagram of Kripke's modal logic:

First, we must imagine Ordinary Time as being represented as running upwards within the Y and from the base of the Y. Next, we imagine that the very base of the Y is the year 1911. Then we imagine that the nodal point at which the branches of the Y diverge is 1914. Next, we imagine that the left-hand branch represents an imagined world in which Archduke Franz Ferdinand was not killed by a bomb, and in which the First World War did not happen. In this world the Austro-Hungarian Empire did not collapse, and Wittgenstein continued to inhabit a conceptual world in which he remained in Cambridge with Pinsent and Russell. Next, we imagine that the right-hand branch of the Y is the world in which the First World War did in fact happen. Finally, we imagine that the end points of the upper two branches of the Y both represent the point in time, 1919, at which Wittgenstein is writing to von Ficker, but that point in time in different possible conceptual worlds: one in which the War happened, and one in which it did not. Looking at the diagram, we can perceive that both1919 worlds permit Kripke accessibility from the world of 1911, but there is no Kripke accessibility between themselves.

Wittgenstein's letter to von Ficker, introducing a work whose composition claims to straddle these separate war and non-war conceptual worlds, aesthetically evidences temporal, physical, and conceptual schisms which define two distinct worlds:

One world is written about *within* the letter, existing within the semantics of that text. In this world the *Tractatus*, the text Wittgenstein so valued, will not be understood: 'I am quite sure of that – you won't get very much at all out of reading it. For, you won't understand it; its subject matter will appear entirely foreign to you'. There is no subjunctive here, this is written in the realis as a statement of future fact. What's more, this factual claim that his work will be incomprehensible is given an implied factual explanation: 'I once wanted to include a sentence [later described as 'a key' to the text] in the preface which doesn't in fact appear there now'. Why, one might ask, does it not appear there 'now', bearing in mind that it is 'a key' to understanding the text, that Wittgenstein wants his text to be understood, and that even at the time of the writing of this letter the text had not yet been accepted by a publisher and so the sentence could easily still have been incorporated? This question of omission is made more valid by the presence of the optative mood, a grammatical mood of yearning or desiring, here orientated as *past* optative and signified by the statement 'I once wanted to…'. What happened? What prevented Wittgenstein from including that sentence? Sadly, in this world that possibility has seemingly passed: it is 'in fact' the case that the key sentence 'doesn't in fact appear there now'. This exclusion is not presented here as a choice on Wittgenstein's part, but rather as a state of affairs which is now a fact and must therefore be accepted.

Such is this one world, written in the realis and the past optative, in which Wittgenstein had wanted the text he so valued to be understood, and in which he had wanted to include a key explanatory sentence which would have potentially enabled such understanding; and yet that key, for reasons which remain unclear, was excluded from the text and consequently it is now the case that Wittgenstein's past desires will not be realised, and the *Tractatus* will not be comprehensible.

And yet there exists a second world, half written in the irrealis, half shown through the metapoetics of the text, in which the *Tractatus* can still be understood. In this contingent world some further explanation is both possible and also 'may be of some help to you', and the excluded sentence is resurrected, reincarnated, and still 'might serve you as a key'. Comprehension is not certain, but it is certainly not impossible. This world also inhabits the optative mood, but one which, rather than being semantically written through expressions of faded hope, as in that other world, is now instead shown through the metapoetics of Wittgenstein's letter, a submission to a publisher, and the future desires suggested by present action: 'now I am counting on you'; 'I am writing it to you now'.

Wittgenstein's repetition of words such as 'now', 'reality', and 'fact' silhouettes the different worlds being simultaneously inhabited: in one world Wittgenstein is present, interactive, and comprehensible: 'now I am counting on you'; 'I am writing it to you now', and 'in reality it isn't foreign to you'; and in the other world Wittgenstein is passively resigned to the incomprehensibility of his text and his own lack of life in being able to actively change this state of affairs: he is 'quite sure' that the work will be incomprehensible, and the key sentence 'doesn't in fact appear there now'.

What are we to make of this logical inaccessibility between two simultaneously presented coexistent worlds, only united through their shared modal yearning for understanding? The optative is an idealistic mood, yet I call its presence in Wittgenstein's writing paradoxical optative materialism: *there once existed a sentence which I desperately wanted you to read, for then you would have clearly understood me, yet you cannot now read it so you cannot therefore know me, but in order for you to perceive the pain of the loss of that once-hoped-for understanding, here now is that sentence for you to read, as I now hope that you may then be able to perceive what you have lost by your not having been able to have read it*.

And what are we to make of Wittgenstein's own voice, which constructs the whole letter and yet also seems to move between different worlds which that text itself constructs? If it is deployable within two logically distinct worlds, then from what other realm is his own voice emergent? To invoke my earlier Kripke possible worlds diagram, Y, what is that non-worldly blank space between the two worldly branches across which, and from which, Wittgenstein's voice emanates?

It appears that there are worlds of the living and a realm of the dead, and while the possible worlds are logically inaccessible, collision between their simultaneity is indeed possible through non-worldly intervention. In these two worlds past choices over textual ambitions and inclusions are both cemented into an ossified present reality from which an invariable predetermined future will emerge (and in this future the *Tractatus* will not be understood) and yet are also, through non-worldly intervention, simultaneously contingent: Wittgenstein can appear in this world as a ghostly external presence to offer gnomic counsel and thus potentially change the predetermined course of history: *'I am writing to you now'*. And what of this message from beyond the grave?

'I wanted to write that my work consists of two parts: the one you have in front of you and all that I have not written. And just that second part is the important one.'

It seems, therefore, that this desire for understanding leads to a problem of further regress: to understand the work we need an omitted key; but once given that omitted key, we perceive it to be merely a reference to an omitted 'unwritten part'. In this reference there is again a logical inaccessibility: the *Tractatus* is a written work, yet we are told explicitly that the most important part of this 'completed' written work is 'not written'. It appears we are again being presented with a *paradox*, and again with the *optative* mood of desired yet unrequited understanding. Where, then, is the material presence of this unwritten textual absence of the *Tractatus* within the writing of the work?

Something in the loss, grief even, of the optative mood, its past and present yearnings for connection, and the stark, irrevocable inaccessibilities of different worlds and different realities, in which elements are simultaneously present and absent, in which communication

is simultaneously impossible and possible, and yet even where it is possible seems to recede indefinitely into further shadow at the very moment of longed-for contact, and all of this within the context of Wittgenstein's transition from pre-War happiness to a deeply traumatic First World War service, numerous near-death experiences, and the *Tractatus* itself being dedicated 'To the Memory of My Friend David H. Pinsent', Wittgenstein's lover who died during the War, gives this letter, and the *Tractatus* as a whole, a mood of katabasis and anabasis, of Orphic transmission between chthonic and earthly realms. And yet while the language of the dead, if we can call it this, cannot, Wittgenstein claims, be written, it can, it is also claimed, still constitute the 'most important part' of the written work.

In his letter to von Ficker Wittgenstein presents a text in which the juxtaposition of inaccessible worlds of absence and presence within a shared mood of past yearning seems to gesture towards the answer to the very riddle of the omitted knowledge to which the resurrected sentence silently points. For this, surely, is a *poetic* mode and it is thus within the *poetry* and not within the articulated logic of written word sequences that we must locate the work's 'most important part'. And if we are to accept that in some way Wittgenstein's poetic is able to glimpse beyond the logic of Kripke semantics and into a state of being in which the living and the dead, the past and the present, are simultaneously certainly separate and yet also coexist and potentially inform one another, then the poetics of Wittgenstein's letter, and of the *Tractatus* of which it speaks, surely offer both a fundamental insight into Wittgenstein's work and also into the power of poetic language to express the inexpressible more generally.

I do not here intend to define poetry, for that is not the purpose of this thesis. However, it is helpful to note that English literature differentiates between poetry and prose, and that while prose as a category broadly describes a realm of meaningful linguistic communication, poetry claims communicative powers beyond prosaic meaning. What this 'beyond' is cannot, by definition, be prosaically defined. I have already presented one of my own poems in this introduction, but I shall now repeat it:

Y

This poem aims to use prosaic language (a single letter, Y) to symbolise different possible worlds of different meanings and experiences and the relations between them. But this feat could be achieved through prosaic language, indeed as I did when I described the meaning of the diagram. Indeed, Kripke himself could represent the relations through mere mathematical notation. But what neither I nor Kripke could achieve through logical sequences of prosaic words or mathematical symbols is to use the silhouette of the meaningful Y to draw attention to the vast, limitless non-meaning of the blank white non-worldly space within which the contained, compact, abstract, fragile structure of Y appears.

Later in this chapter I will relate this non-worldly blank space to Rabindranath Tagore's notion of 'Supreme Night'. Tagore was important to Wittgenstein, and while in the *Tractatus* Wittgenstein never explicitly uses a nocturnal metaphor to denote a domain he instead refers to as 'the mystical', the metaphor is indeed implied:

> 6.36311 That the sun will rise tomorrow is an hypothesis; and that means that we do not know whether it will rise.
> 6.371 At the basis of the whole modern view of the world lies the illusion that the so-called laws of nature are the explanations of natural phenomena.
> 6.372 So people stop short at natural laws as something unassailable, as did the ancients at God and Fate.

> And they are both right and wrong. but the ancients were clearer, in so far as they recognised one clear terminus, whereas the modern system makes it appear as though everything were explained. (Wittgenstein, 1922)

The 'terminus' referred to here is what my own poem represents as the glyphic boundary of the letter Y, and outside the presented worlds of Y the sun does not, and hence Wittgenstein's asserted uncertainty of consequence on this point, rise. The branches of the Y do not extend indefinitely. As total inhabitants of their worldly trajectories, humans cannot ever know if and when they will dissolve into the Supreme Night of the blank page. Of course, within this logic it would also be true to claim that even to be aware of the blank page, of the Supreme Night, from within the bounds of a world would appear logically impossible. And yet, mysteriously, some people do claim insight into the limits of the living world, as if they were astronauts perceiving the contained, compact, fragile Earth as a bright blue silhouette against infinite night. I contextualise this insight, which I controversially claim to be especially pronounced amongst combatant writers within the context of war literature, later in this chapter when I discuss so-called 'combat gnosticism' (Campbell, 1999). In that contextualisation, and in later chapters, I juxtapose my analysis against the beautiful and deeply moving work of Santanu Das, as a scholar of war literature who challenges the notion of combat gnosticism. I claim in future chapters that this proposed combat gnosticism presents itself aesthetically through its negation: just as the seemingly unstructured, infinite, immaterial domain of Space becomes apparent only through its contrast with the structured, finite, abstract geometrically defined constellations of planets, stars, galaxies, and larger and larger cosmological super-structures, and the blank space of the white page becomes apparent through the similarly structured, finite, and abstract symbol Y, subsequent chapters will explore structure, compression, and abstraction as poetic indices of combat experience.

On Remembrance Sunday 2006 I was seriously injured in an explosion which killed four others who were with me while I was serving as a British military officer with a special operations team during the Iraq War. Amongst the five of us who took the full force of that explosion – myself, Lee, Sharon, Ben, and Jason – I was the only one to have had university-level education. This was not unusual: most combat soldiers in Western militaries have no formal education beyond the age of sixteen. This has resulted in a lack of representation of the perspectives of actual combat veterans in higher education since the post-Vietnam War period and, specifically of note for this thesis, a lack of such representation in the study of war literature. As will be further discussed later in this chapter, it is to this chronological period, the transition from combat veteran representation in higher education to a lack of such representation, that one can date the transition in the study of war literature from what Das (2006, 'Introduction') refers to as a 'first wave' to a 'second wave' of scholarship: the 'first wave' 1975 study of war literature by Paul Fussell (a World War Two combat veteran), *The Great War and Modern Memory* (1975) which privileges the experience of combat, is followed by the 'second wave' study *Sites of Memory, Sites of Mourning*, by Jay Winter (a civilian) (1995) which was 'seminal' (Das, 2006, 'Introduction') in challenging an analytic focus on combat in war literature, which by 1999 was being critiqued as regressive and sexist (Campbell, 1999).

Five years prior to the bomb explosion, at the end of my first year as an undergraduate at Cambridge University, I had travelled out to Hong Kong to visit my then girlfriend. She too was a student at Cambridge, an undergraduate at Trinity College, Wittgenstein and Russell's alma mater. She was very kind, and also dazzlingly wealthy. Sitting beside her rooftop swimming pool in the first week of September 2001, with the towering skyscrapers of Hong Kong harbour spread out before us cinematically like a glass amphitheatre against bright blue sky, we, of course, had no idea how the world's horizon was about to change. I was twenty, and over the next year I was offered the chance to study for a doctorate in literature at Cambridge, received a job offer from JP Morgan, and was approached by recruiters for various British military and governmental agencies, all offering possible paths for the trajectories of my and others' futures.

The bomb was attached to a bridge on the Shatt al-Arab river. I was travelling alongside those four others in the front of a small rigid inflatable boat. The front of the boat had seating

for six: six stools were fixed into the boat, upon which we perched, just above the water, surveying our environment through the arcs and sightings of our rifles. Behind us, partly protected behind the engine block, was a driver and his navigator. When the bomb exploded it was difficult to understand that this was indeed what was happening. Yet I knew, as I saw and thought about my family, that I was passing out or dying, and I made an effort to fall left, into the boat; had I fallen right, and overboard, unconscious, with my body armour, weapons, and helmet, I may have sunk. Over the course of the next hour and a half I passed in and out of life and death.

I emerged, saw bodies, and submerged; I emerged, directed a Royal Marine to puncture my left lung with a needle in order to release excess air which was being sucked inside me through shrapnel wounds and whose tension would have otherwise internally asphyxiated me, and submerged; I emerged, requested morphine, submerged; emerged, was asked questions to test my level of consciousness but could not speak due to emergent facial swelling, submerged; emerged, I was on a jetty, with no radial pulse, submerged; emerged, on a stretcher at speed, submerged; emerged, in a helicopter, bound for a field hospital, submerged; emerged, my head was being shaved, prior to emergency surgery, submerged. Emerged, *'he's asking about his team?'*. For those alive around me there is perhaps a chronology to those events, but for me there are moments of total life and moments of total death, and they are all different worlds. And while there is Kripke accessibility between the different lives, there is no accessibility between the lives and death.

Even now, nearly twenty years on, those two inaccessible worlds coexist. Married now, with two young kids, I am sometimes moved to tears at the tragedy of how all this vivid life and love, which I value so much, was in fact made impossible when I was killed back in 2006. The seeming paradox of my life is my proximity to the intense emotional consequences of my own death.

Since Iraq I have devoted the majority of my academic working hours to building a work of philosophy-poetry which attempts to make sense of and express these experiences and, indeed, make sense of and express *all possible* human experience, both the living and the dead. *It is essentially the presentation of a system*. It has therefore necessarily been an attempt to study the unwritten, unspoken, chthonic dialects, to locate them in the poetry of what is communicated but not said, what is omitted but present.

In this PhD by practice, I situate my own poetic work alongside a thesis which explores Wittgenstein's own 1919 philosophical work the *Tractatus Logico-Philosophicus* as a work of war poetry. In the thesis that follows I use reflections on my own life experience to inform a comparative literary analysis of work by myself and other poets to shed light on how Wittgenstein's war poetry works and what it might tell us about the experiences he found impossible to communicate through words. By doing this, this thesis also aims to accomplish two theoretical goals: first, through a demonstration of the war poetry inherent to a work of analytic philosophy which at no point actually mentions war, to outline the contours of a radical reimagining and broadening of how war literature more generally should be categorised and analysed; and second, to provide a timely counterbalance to recent scholarly discussions of war literature which have admirably diversified their foci beyond the literature of the combatant and yet by lacking any experiential insight into war have perhaps failed to recognise the unique and defining role of the combatant which renders his or her aesthetic insights so profound: that alone amongst those whom war touches – refugees, civilians, medics, nurses, journalists, ammunition factory workers, and many more – alone amongst all of these it is the combatant who must commit to actively, repeatedly, and with both eyes open, run *towards* the blank white page of death.

Blind Spots

Santanu Das begins his beautiful and deeply moving *Touch and Intimacy in First World War Poetry* (2006), his 'recuperative and literary… [attempt]… to recover and analyse the sensuous world of the trenches and the war hospitals' (Das, 2006, 'Introduction') with an examination of John Singer Sargent's First World War painting *Gassed*. This work depicts a row of blinded soldiers leading each other, hand over shoulder, out of the trenches. Das uses this image, and indeed a discussion of Pieter Brueghel the Elder's 1568 painting *The Blind Leading the Blind*, to emphasise the importance of the sense of touch: while Sargent's work is a visual one, a painting, and while sonic context is implied through a background trench football match and an overhead airplane, Das attempts to inhabit the scene from the perspective of the blinded soldiers, their hands grasping one another for stability and orientation, their feet slipping upon the slimy mud, and concludes that 'they perceive the world through touch':

> Sargent distills the pity of war into a moment of blindness and touch. This book examines the central importance of the sense of touch and the experience of the First World War and its relation to literary representation. The writings of the First World War are obsessed with tactile experiences. (Das, 2006, 'Introduction')

In this passage Das moves quickly and seamlessly from a reference to a distillation of war as the twin experiences of 'blindness and touch' to an orientation of scholarly focus towards the singular 'sense of touch', before cementing the erasure of blindness and foregrounding its previously established companion, touch, with the concluding assertion that literary representations of the First World War are 'obsessed with tactile experiences'. Despite the proposed interest in 'experience', here the blindness of the combatants is not explored as an inherent and potentially multifaceted experience but is reduced to a mere scholarly conceit, a frame of non-sense, a blank white page of non-vision against which the alleged tactile 'obsession' of the trench poets can be silhouetted and explored. In Das's defence his book is explicitly concerned with the sense of touch, and not blindness. However, he did choose to frame the introduction to his book and theme with a notion of blindness as a neutral space for the experience of touch. I think he is missing something important here, and that this omission may point to a more general blind spot in his work and that of other contemporary scholars of war literature. For Das's conclusion that 'they perceive the world through touch' ignores both the complexity of the experience of blindness and the complexity of the experience of combat, a perception of the *non-world*.

The shrapnel which tore across my face when the bomb went off ripped through my right eye; it was gone instantly, and I did not feel it happen. When the bomb went off there was no sense of touch at all: a gentle tap inside my head, as if from God; a frozen flash-frame image of the boat, river, bridge, sky, colours instantly shifted to black, deep scarlet, bright magenta; and a low continual hum. I knew I was passing out or dying. I remember, some time after the explosion, Royal Marines from two other boats providing first aid. I lifted my left hand up to my face and said, 'I'm so wet'. You can't imagine there would be so much blood. My left tricep was shredded but I still retained some movement through my bicep. I felt none of this. Five ribs on my left side were broken, some fragmented shards pushing through my left lung. I did not feel any of this, only later becoming aware of my shallow breathing. I also had blood pouring out of a wound where a piece of shrapnel had torn through my neck. I did not feel this either, but I do remember juddering my legs as a marine asked me if I was paralysed, before he fashioned a neck-brace at my instruction; better safe than sorry. When someone is seriously injured one uses a system called AVPU to evaluate and document their level of responsiveness: Aware; Voice; Pain; Unconscious. My right arm and wrist were shattered, and I remember the marines twisting my wrist every so often to see if I was still alive: Pain. But when I think back on those moments, I do not even remember the morphine going in. I didn't even feel anything when I told them to stab me in the chest with a needle, under the third rib down on the left to avoid major arteries, to release trapped air. Gentle tap, wet face, wriggling feet, painful arm, that was it. I can describe it. But for me *that* is the neutral frame of touch against which I remember my experiences.

Reflecting on two deeply moving First World War narratives, one of a dying German boy-soldier being comforted by a British soldier who pretends to be the mother the young German is calling for, another of a soldier being kissed by a nurse before he too dies, Das states: ‘as words fail and life ebbs away the body moves in to fill the void. Touch becomes the final antidote against the desolation of death […] the last desperate clinging onto another human being becomes life’s last stand against the terror of the unknown’. (Das, 2006, ‘Introduction’)

There is an ambiguity here: within whom rises the ‘desolation’, within whom appears the ‘void’, for whom is the last desperate clinging onto another human being […] life’s last stand against the terror of the unknown’? Who is so fearful, the kisser or the kissed? It is the German soldier who calls for his mother, but it is the British soldier who takes his hand.

It is within this ambiguity that I contrast a distinction in emphasis between the interest of my thesis and that of Das: for he appears interested in the touch of the living, whereas I am more interested in the void of the dead. And I do not believe that this ‘void’ is a place of ‘desolation’ or ‘terror’. One of my colleagues in my unit in Basra, although not with us on the operation in which I was injured, was a man who was also called Alex. He was the most militarily experienced person in the team. He’d served as a trooper in the Special Forces for about fifteen years before leaving to qualify as a commissioned officer in the Medical Corps. After three years with the medics, he had returned to Special Forces and completely redefined combat first aid protocols. For example, the ABC (Airways, Breathing, Circulation) mnemonic of the civilian world was useless in the field because soldiers had often bled to death by the time you’d completed your ABC. Alex’s MARCH began with ‘Massive bleeding’ and prioritised tourniquets and specialist burning chemical agent powders to stem and cauterise massive bleeds. This training helped me a lot: in the moments after the bomb exploded, I was able to direct some of my own first aid provision. Alex was highly respected within the team. He had been in three helicopter crashes, was thus understandably wary of them, and so had special dispensation from the military to be ineligible for participation in helicopter-based operations. He had a lot of stories, and I remember him once telling me that more than ninety per cent of soldiers he’d been with as they died had called for their mothers. Das interprets this similar cry of the young German soldier as emerging out of a ‘terror of the unknown’ and a need to ‘fill the void’.

I can only speak for myself, not for that German boy or those British soldiers. But for me it was not as Das suggests. I mentioned a ‘gentle tap as if from God’ at the moment of explosive impact. I mentioned that I knew I was passing out or dying. But I glossed over important details. I did, as the common myth claims, perceive my entire life. I perceived all the relationships which constituted my life. I perceived the effect of my death on all those people. Honestly, I thought my fiancée would be very sad but could deal with it. But I did not think my mother, herself orphaned by the Second World War, would be able to cope. And I did not think my younger siblings and father would cope at all well. And I felt like I was given a choice: between death and peace, and life and struggle. And I chose life – not because of a ‘terror of the unknown’, but because of the opposite: at that moment of death, with death no longer an abstract idea but the imminent presence of absence, I was at peace with it. I felt no terror of the ‘unknown’. But I was terrified of precisely what I did know: the suffering I would leave in my wake. I didn’t call out for my mother, but she was in my thoughts. And this was not because I was ‘clinging on to life’ but because I was fearful of the consequences of her not being able to let go of mine. These thoughts all occurred instantaneously, and I fell to the left and got on with the gruesome business of keeping myself alive.

In later years, between 2010 and 2015, I felt comfortable returning to risky environments to pursue what I believed to be an ethical purpose: to record and communicate the experiences of civilians living amidst conflict. In another project I would like to write about these experiences, in Pakistan, Afghanistan, Iran, and Iraq, but my point here is that although the risks I took were all calculated, what enabled me to pursue that project was a sense of the illusory nature of worldly existence, and of the personal consequences within that illusion. It is an attitude I have seen amongst post-combatant militants in the Middle East and central Asia. This attitude in me shifted after I got married and had children. Family responsibility within the

controlled security of Britain has anchored me in a more materialistic and fearful world. Here is a sonnet I wrote in the summer of 2023 while I was part of a UK NATO delegation to Kyiv. I was there at the invitation of the Ukrainian government to advise on veteran welfare programmes. The week-long trip was very low risk. Yet I still felt fear, not for any unknown void towards which I may have been heading, but for the void of absence which I may have left behind for my then three- and five-year-old sons.

> Father, son, on leaving for Ukraine, June 2023
>
> He said: 'Where are you going daddy?'
> I said: 'Eastern Europe."
> He said: 'Don't go away daddy!'
> I said: 'Don't worry, I'll be back in a few days. You must look after mummy.'
> And it was so strange, to feel not fears of adventure, but betrayal,
> and to glimpse a uniform foolishness, Crécy, Flanders, to so lightly toss aside infinity.
>
> And the air
> as if the thick wet juice of Summer
> popped to crystal vacuum in a nanosecond's silent thunderstorm,
> to leave you, that I could feel you, clearly now: geometric, defined, sparkling, raw.
>
> As if, millennia away, two great binary Galaxies, so close,
> of blue, bright, newer stars,
> of red, swollen, older stars,
> in silence slipped their gravity, and moved apart.

This is how it was for me. I claim no universality of experience nor divine intervention at moments of death. Just because I felt I was given a choice in 2006 and chose life does not mean I could not have died. Two of my colleagues, Lee and Jason, had kids, and I'm sure they would have chosen life for their sakes. But in my poetry and my thesis I'm interested in what can be represented of the void, the unknown, as a place not of 'terror' but of awe. It is understandable why Das perceives death as a prospect of desolation and terror, but I don't think that these words are appropriate or adequate. But I don't think any words are adequate: how can one use the letter Y to signify the blank space within which it stands? And herein lies my own interest in Wittgenstein: the extraordinary lengths to which Wittgenstein, over four years of intense combat experience, went in order to delimit the boundary of language at the border of the 'void' which he called 'the mystical'.

I now have a prosthetic in my right eye socket. While my left eye was left intact by the explosion, through it I experienced a second blinding. The blast had come from the left side, and the entire left side of my head and face had cratered in. My left skull and cheekbone were subsequently rebuilt with titanium mesh and plate. In the immediate aftermath of the explosion I could still see out of my left eye, but the vision had slightly darkened, as though it were dusk. My eye was suspended in a smashed intra-orbital pit which was half full with blood, so my vision, as I propped myself against my seat, was like that of an amphibian: in the lower half of my visual field I was submerged in blood, lit bright red by the Sun; in the top half I saw the bodies of my colleagues in front of me.

Three days later I was in a military hospital in Germany. My mother was at my bedside. She had been visited at 10pm on the Sunday night, the day of the explosion, by a military priest who had been tasked with informing her that her son had died. The doctors were not sure what sight I might regain in my remaining left eye, but I had known that I could see before I had lost consciousness. Now, with some of my head bandages loosened, I became aware that I was beginning to see *light*. There was excitement in the medical room: I could perceive *light*. But the light was becoming brighter and brighter for me, and it was beginning to

become painful. Painful is not really the right word: this was not a pain I could locate or even describe. It was more a sense of being forced to see more than my capacity for sight. I asked for the room lights to be turned off. The light and pain were intensifying. I began pleading for all lights to be turned off. My mother told me that all the lights were already turned off. The light and pain became unbearable. This was not like any normal light, or any normal pain. To say that the centre of the sun was inside my entire being does not even capture it. I began screaming. Medics ushered my mother out of the room as another injected morphine directly into my neck. I continued screaming until they knocked me out with a general anaesthetic.

The injuries to my heart, head, face, neck, chest and lungs were unprecedented. It later transpired that the extremity of my head injuries had caused such intensity of damage that my own swelling brain tissue had internally crushed both my optic nerves, both that of the live eye and that of the dead. That total activation and total annihilation of my visual sensation is the most intense experience of my life. While my left optic nerve did subsequently repair somewhat, it still looks pale dead white under observation, not pink and alive, and I am now registered as fully blind. What I do see out of the periphery of my upper left eye is a world of shadows. The total activation and total annihilation of visual sensation was a profound experience for me, and one that I can only relate through poor abstraction. How could I do otherwise? Was that God? Was that life? So few people experience an explosion; fewer still survive one. This search for kinship of experience surely explains my interest in war literature, and particularly that of the first major industrialised explosive-driven conflict, the First World War. And maybe also the poetry of Wittgenstein, a poet whose life spanned Cambridge and combat and who explored the border between language and death. But here is the abstracted literary representation of a meeting with God by another philosopher and First World War veteran, the British writer Olaf Stapledon:

> So I, in the extreme moment of my cosmical experience, emerged from the mist of my finitude to be confronted by cosmos upon cosmos. That strange vision, inconceivable to any finite mind, I cannot possibly describe. I, the little human individual, am now infinitely removed from it. Though human language and even human thought itself are by their very nature incapable of metaphysical truth, something I must somehow contrive to express even if only by metaphor.
>
> All I may do is record, as best I may with my poor human powers, something of the vision's strange and tumultuous after effect upon my own cosmical imagination, when the intolerable lucidity had already blinded me, and I gropingly strove to recollect what it was that had appeared. For in my blindness the vision did evoke from my stricken mind a fantastic reflex of itself, an echo, a symbol, a myth, a crazy dream contemptibly crude and falsifying, yet, as I believe, not wholly without significance. This poor myth, this mere parable, I shall recount as far as I remember it in my merely human state. More I cannot do.
> (Stapledon, 1937, final part)

This piece of writing occurs near the conclusion to Stapledon's epic science-fiction space odyssey *The Star Maker* in which, like Swift's Gulliver, his narrator visits numerous planets with different systems of social and political organisation. The space traveller does, ultimately, meet his eponymous maker, a dispassionate spirit-demon who creates universes of both extreme pleasure and unimaginable suffering for purely aesthetic satisfaction. And yet, while I perceive some similarity of perspective between the above piece of writing and my own preceding narratives of being blinded, not once does Stapledon mention, for example, somatosensory experience, or even war. The experience he describes appears to be, *literally*, an otherworldly one, what we might call divine vision or, indeed, gnostic enlightenment. As with Wittgenstein's *Tractatus*, this renders his work invisible to contemporary scholars of war literature. The irony may be that the abstraction which the representation of intense combat experience may require may also render any such 'echo,… symbol,… myth,… crazy dream' of that experience invisible to the scholars who deny its possibility.

In an influential 1999 essay entitled ‘Combat Gnosticism: The Ideology of First World War Poetry Criticism’, James Campbell argues that any proposed link between battlefield experience and an asserted privileged insight into war, and indeed any asserted insight or knowledge which is only accessible to combatants, a concept he terms the eponymous ‘combat gnosticism’, is ‘an uninvestigated myth’ (1999). Furthermore, he claims that ‘combat gnosticism’ is a ‘exclusionary’ ‘phallic’ notion through which the earlier privileging of combat experience in the analysis of war poetry has served to suppress women’s war poetry because British and American women have historically been prevented from serving in combat roles. This argument built on Jay Winter’s earlier work and, in addition to coining an important phrase in the scholarship, provided significant permission and a prompt to writers such as Das and McLoughlin (2011) to locate the experience of war more widely than merely on the battlefield, and to analyse commonalities of representational technique across the work of diversely experienced writers. Yet, despite its influence and importance, I find Campbell’s argument disturbing. In the first instance I do believe that my combat experiences gave me profound insights into how I conceptualise reality and non-reality, which no other experience has afforded me. In that sense I can only say that my own life expresses to me that much of what Campbell states is false. And second, in Campbell’s critique there appears a hypocrisy: he claims the notion of ‘combat gnosticism’ suppresses the work of women poets, yet in his article he discusses no poetry by women. Rather, the first half of his article is a bitter critique of the then elderly academic and Second World War veteran Paul Fussell, and the second half is a critique of the work of Owen and Sassoon, invoking Yeats ‘withering’ critique of the former. While it is important, Campbell’s article certainly lacks the sensitivity and humility of Das’s later work.

For might not gnosticism exist? Tim Kendall (2009) critiqued Campbell’s claim on two grounds: first on grounds of hypocrisy, as I myself stated above. Second, Kendall suggested that ‘gnosticism’ is a trope that one might argue has been historically attributed to all poets, regardless of their experience.

While I was an undergraduate at Cambridge I studied medieval Persian and Arabic literature. I had to make many translations of the work of mystic poets, such as Attar, Hafez, and Ibn ‘Arabi. In the Sufi mystic tradition, there is a notion of either being ‘cooked’ or ‘raw’. To be ‘cooked’ is to have experienced embodied divine knowledge. Here is a translation I made, after I was injured, of the famous introduction to Rumi’s *Masnavi*, Spiritual Verses. I have translated the form into a strict twelve-line form of my own invention, which I call a *sestinet* because the end rhymes mirror those of the final lines’ rhyme scheme of a series of double sestina stanzas. It is heavily formally structured, compact, and abstracted through the translated work of another; but it reminds me of the explosion and my blinding:

> *Listen to the song of the rushes*
> *sing the separation of the mist:*
> *‘Long since severed from our home by rust,*
> *long since torn from the water’s meshes,*
> *we yearn reunion with our distance*
> *and seek release from the golden dust.*
> *Our song is fire, not vocal rushes,*
> *a fire that like nightingales in mist,*
> *or like a mirror polished of rust,*
> *burns through perception’s spider’s meshes*
> *to measure a measureless distance.*
> *For the raw cannot know of burnt dust.’*

In this thesis I advance an unfashionable premise within the discourse on war literature: I privilege the poetics of the combatant. To do this, I will sometimes, as I have above, juxtapose my own experiences and analysis against the work of Santanu Das specifically. However, I would like to make two things clear: first, I greatly admire Das’s work. It is written with incredible beauty, intelligence, compassion, and painstaking labour. On two occasions it has moved me to tears. Second, and to some extent to extrapolate from this last point, in my critiques and juxtapositions I do not intend this thesis as rebuttal but rather as extension: just

as Das exposed blind spots in the analyses of earlier generations of literary scholars, whether neglected perspectives or neglected types of literary material, I also aim to illuminate blind spots which remain.

As noted in an earlier section, the scholarship on war literature differentiates between two distinct strands in its discourse, distinguished both chronologically and theoretically. Fittingly, scholars have adopted the vocabulary of military assault in their definitions: a 'first wave' and a 'second wave'.

The 'first wave' is characterised by Das as 'a previous generation of critics who laid an exaggerated emphasis on the soldier-writer as representing the "truth of war" [a reference to Wilfred Owen's famous poetic ambition]' and who emerged out of 'the direct relation posed by Owen between combat experience and war knowledge'(Das, 2006, 'Introduction'). This 'first wave' also includes John Brophy, who anthologised the war poetry of only those who had experienced combat (1929); Jean-Norton Cru, who in that same year 'aggressively advanced' (Das, 2006, 'Introduction') the same position (Cru, 1929), and Paul Fussell in his *The Great War and Modern Memory* (1975)

The controversy surrounding this 'first wave' lies in the perception amongst many scholars that it privileges a particular construction of the notion of war which, through its emphasis on combat, marginalises women and civilians. Discussing Fussell's analysis particularly, but with a critique equally applicable to the first wave tradition more generally, Das claims that 'it became the defining narrative of the First World War, confining it narrowly to the trench experience of a group of educated, mostly middle-class British officer-writers'. In his later work (2022) Das does much to widen the earlier narrowness of the socio-economic and racial scope he here alludes to; I do not critique the brilliance and worth of that project. However, his own critique of 'first wave' scholarship elides a narrowness of socio-economic and racial scope with a narrowness of experience-based scope, specifically the experience of combat. And yet this critique of the earlier specificity of focus on the combatant as too narrow is asserted by a 'second wave' of scholars, including Das, who universally lack any combat experience. By contrast John Brophy, whom Das critiques for his narrow focus on combat, lied about his age to join the British army and fought continuously on the Western Front between the ages of fourteen and eighteen, when the war ended. Likewise, Norton Cru fought in the French army, and Paul Fussell fought in the Second World War and, like Wittgenstein, dedicates his book to a friend killed in his war (for which Campbell critiques Fussell, alleging a constructed foregrounding of the personal experience of combat). My own experience of one single bomb on one single day, Sunday 12 November 2006, was incredibly intense, as my above descriptions attempt to convey. That experience has given me a sense of some sort of indescribable and non-worldly knowledge, and that was just one day! Owen, Brophy, Cru, Fussell all experienced bombardment every day for *years*. When critiquing 'combat gnosticism', I would encourage late twentieth- and early twenty-first-century career academics to exercise some of the humility expounded by the poet Ian Duhig: writing a poetic response to a workshop he conducted with Second World War veterans and also to James Campbell's 1999 critique of 'combat gnosticism', Duhig urges humility when considering one's own empathetic and literary limits:

> '*How many old soldiers does it take*
> *to change a lightbulb?* asked one.
> *You can't know if you weren't there!*
> They all fell about. Now they'd won.'
> (Duhig, 2016)

While a perceived earlier bias 'has been challenged in recent years by the "second wave" of war criticism which has been marked by two important trends: interdisciplinarity and diversification of concern' (Das, 2006 'Introduction'), this 'diversification' has, I argue, come at the expense of a diversity of war experience. While I can only speculate here, I think maybe the dispute between the 'first wave' and the 'second wave' concerning the location of 'war knowledge' may come about through a confusion of language: I grew up as a child within a civil war context, the son of a Catholic father and Protestant mother within the euphemistically termed 'Troubles' of 1980s Belfast. I worked as an academic anthropologist

living in north-west Pakistan during the recent war there. And I also worked for one year as the assistant to a psychiatric nurse within an NHS hospital treating traumatised military veterans. These are all perspectives on different aspects of war, and I agree with the 'second wave' view that all these different perspectives carry their own interest and significance. But what turned me towards poetry and philosophy was the combat and the repeated, wilful, and ultimately near-fatal, gravitation towards, and exposure to, perceived death which combat demands as a vocation. This latter experience is so overwhelming and indescribable that when compared to those other mere daily events of a chronologically ordered life I can understand why Owen may have presumed it to be the essence of war experience. Indeed, it is certainly not just Owen, but rather an entire tradition of Western philosopher-poets for whom a proximity to death within the energy and ethic of combat led to profound reimaginings of meaning: Socrates, Sophocles, Aristotle, Horace, Marcus Aurelius, Cervantes, Dante, Descartes, Nietzsche, to name merely those who first come to mind.

Monk (1991, Part I, 1889-1919) claims that Wittgenstein believed in this conceptually transformational effect of combat, this *combat gnosticism*, so intently that Wittgenstein returned to Austria to join up, and then volunteered for and actively pursued the most dangerous front-line roles because he had been influenced by comments in William James' *The Varieties of Religious Experience* (1902) in which it is stated that experiences of death develop one's ability to perceive truth. Quoting Schopenhauer, Monk elaborates:

> 'Undoubtedly it is the knowledge of death, and therewith consideration of the suffering and misery of life, that give the strongest impulse to philosophical reflection and metaphysical explanations of the world.' (Schopenhauer, *The World as Will and Representation*, quoted in Monk, 1991, Part I, Chapter 7: 'At the Front')

Wittgenstein himself expresses this notion in his *Tractatus* from within the actual tumultuous flux of the very proposed psychological transformation. The juxtaposition of his terse, rigid, enumerated structure against both the flux he points to and the ambiguous psychology towards which he signals (what it is to be 'happy' is an ancient, ongoing, and open question) gestures towards a poetics of structure and anti-structure which I will examine further in the following chapter:

> 'In brief, the world must thereby become quite another, it must so to speak wax or wane as a whole. The world of the happy is quite another than that of the unhappy.' (Wittgenstein,1922, 6.43)

Despite his own focus on tactile sensation and diversity of perspective, this recognition of the overwhelming and inexpressible presence of death within active combat is something which Das movingly acknowledges:

> 'In the diary of Private A. Reid, the date "Sunday 29th July, 1917" is carefully inscribed in anticipation of the day's record but only a blank space exists: Reid was killed before the day ended. An empty page thus exposes the "truth of war" more devastatingly than all the words that have gone before.' (Das, 2006, 'Trench')

And what if Private Reid had survived that day? If the blank white page succeeds in 'exposing the "truth of war" more devastatingly than all the words', how could he have recorded his proximity to death that day without undermining the power of his very project? How can one represent absence without losing its presence? It is with this paradox in mind that I will now turn towards Wittgenstein's own wartime diaries and a method for perceiving the present absence of his poetry.

Material and methodology

Wittgenstein's War Poetry

While Wittgenstein is unquestionably considered a major twentieth-century philosopher his work is also considered obscure and esoteric. A.C. Grayling points this out with acerbic flourish:

> 'Once one has sifted his texts and has ceased to be dazzled by the brilliance of metaphor and the poetical quality, one finds much less argument and very much less definiteness in the crucial conceptions than is expected in and demanded from philosophical inquiry. This is disappointing.' (Grayling, 2001, concluding chapter)

Yet Grayling proceeds to offer a backhanded compliment:

> 'Wittgenstein is in some ways a poet [and] perhaps the value of Wittgenstein's work lies as much in its poetry […] as in its substance.' (Ibid.)

The dichotomy Grayling assumes between 'poetry' and 'substance' and his off-handed dismissal of Wittgenstein's work as merely 'poetical' is not unique. Bertrand Russell, for example, wrote of the young Wittgenstein in a letter of 1912: 'His disposition is that of an artist' (Russell, quoted in Monk, 1991, Part I, Chapter 3: Russell's Protégé). More specifically, Russell noted in a letter of the same year to Lady Ottoline Morrell:

> 'I told him he ought not simply to state what he thinks true, but to give arguments for it, but he said arguments spoil its beauty, and that he would feel as if dirtying a flower with muddy hands. He does appeal to me – the artist in intellect is so very rare. I told him I hadn't the heart to say anything against that, and that he had better acquire a slave to state the arguments.' (Russell, quoted in Monk, 1991, Part I, Chapter 3: Russell's Protégé)

That other great logician, and influence on Wittgenstein's *Tractatus* in particular, Gottlieb Frege, was less forgiving and enamoured of Wittgenstein than Russell was, mirroring Grayling's view. In a 1919 letter to Wittgenstein responding to a manuscript of the *Tractatus*, Frege wrote:

> 'The book thereby becomes an artistic rather than a scientific achievement. What is said in it takes second place to the way in which it is said' (Nordmann, 2005).

Rudolf Carnap, a prominent member of the Vienna Circle of logical positivism, echoed this privileging of Wittgenstein's aesthetic approach and the contrasting of it with a 'scientific' one: 'His point of view and his attitude toward people and problems […] were much more similar to those of a creative artist than to those of a scientist' (Perloff, 2011]). Similarly, the influential literary theorist I. A. Richards, who knew Wittgenstein at Cambridge, characterised him in a poem (Richards, 1972, quoted in Monk, 1991, Part III: 1929-41, Chapter 12: The 'Verificationist Phase') as 'The Strayed Poet' who had strayed into philosophy with the disposition of a poet: 'strayed' also captures in its resonance the notions of a 'strained poet' and a 'strange poet' which equally encapsulate something of Wittgenstein's personality.

While these various sources respond with different emotions to Wittgenstein's poetic flair, Russell with affectionate bemusement, Frege with cold confusion, Carnap with detached appreciation, and Grayling with sardonic dismissal, there is agreement that Wittgenstein had the mind of a poet and that his work should be understood as such, and also a second assumption that this 'poetical' quality in his work is in some way in an unhelpful tension with

the ‘substance’ of his ‘scientific’ work. These two notions can be helpfully contextualised through reference to his upbringing and the philosophical tradition within which he was working.

Wittgenstein was born into one of Europe’s wealthiest families and experienced an unusual education. His father held the view that his male children should study and practise business, while his mother was deeply interested in the arts, especially music. Wittgenstein grew up in a household in which Mahler, Schoenberg, and Klimt, amongst numerous others, would perform their music and exhibit their work. Poetry was also important to Wittgenstein, and when he inherited his father’s fortune, before giving it away to his siblings, Wittgenstein made generous gifts to several poets, among them Rainer Maria Rilke and Georg Trakl. Wittgenstein lived a peripatetic life of various exiles, but he was always surrounded by music and poetry. This aspect of his life was something which those who knew him clearly perceived.

Yet their assumption that the ‘poetry’ of Wittgenstein’s philosophy was in tension with its ‘substance’ neglects an important aspect of the tradition within which Wittgenstein was working. In addition to the presence of living poets, musicians, and artists within Wittgenstein’s life, it is also important to understand that Wittgenstein was influenced by, and operated within, a specifically German Romantic philosophical tradition which did not differentiate between ‘poetry’ and ‘substance’ in the manner of Grayling, Russell, and Frege, et al. While there are of course precursors to this notion, for example within the writings of the Pre-Socratics such as Heraclitus, one can trace the beginnings of this German tradition to the late eighteenth-century artistic movement known as ‘Sturm und Drang’ (storm and stress), in which writers such as Goethe reacted artistically to the passionate prose of Rousseau’s philosophy. The tradition developed through Novalis’ poetic-philosophical meditations on death, as exemplified in his *Hymns to the Night*, published by Schlegel (1800). Schlegel was himself very significant in theorising the importance of aesthetics in shaping philosophical reason, although here I quote the essay ’Oldest programme for a system of German idealism’, thought to be written by one of the Tübingen Three’, Hölderlin, Hegel or Schelling.

> ‘I am convinced that the highest act of reason, by encompassing all ideas, is an aesthetic act, and that truth and goodness are only siblings in beauty. The philosopher must possess as much aesthetic power as the poet […] The philosophy of spirit is an aesthetic philosophy. (Holderlin,1796)

Sensitive to this latter tradition, in a 1955 essay one of Wittgenstein’s former students alerts us to the possibility that it may be within Wittgenstein’s poetry that we can find the ‘substance’ of his work:

> “An aspect of Wittgenstein’s work which is certain to attract growing attention is its language.” Georg Henrik von Wright wrote this in a biographical essay about his teacher in 1955. The essay has been reprinted numerous times since then, with the prediction carried forward apparently unfulfilled. Indeed, philosophical readers of the *Tractatus* used to bracket or dismiss the idiosyncrasy of Wittgenstein’s language. (Nordmann, 2005)

In a series of articles and a pioneering book Marjorie Perloff attempted, from the perspective of a scholar of Modernist poetry, to take up von Wright’s challenge and to engage with Wittgenstein’s poetics. And yet, while she found much evidence in support of the need to treat Wittgenstein’s philosophical writings as poetry, she found the poetry itself impenetrable:

> ‘In a well-known journal entry of 1934, reproduced in *Culture and Value*, Wittgenstein remarks: “I think I summed up my position vis-a-vis philosophy when I said: philosophy should really be written only as one would write poetry” (Wittgenstein, 1970, p. 28). But how the two are related, how philosophy is to be written only as poetry: this remains a puzzle’ (Perloff, 2011).

Yet while Perloff may lack the key, in her identification of a poetic 'puzzle' and in her recognition of the importance of his wartime experiences in Wittgenstein's general philosophical approach, and also within specific statements, she must be commended for drawing our attention to the lock:

> The *Tractatus* is not, of course, overtly a book about World War One. It contains no brief against war as such, no images of horror or bloodshed, no transcendental truths about violence or slaughter, but it is a war book nevertheless, illustrating, as it does, its own theory that certain things cannot be said, they can only be shown. There is indeed the inexpressible […] When we come to the proposition "Death is not an event of life. Death is not lived through" […] this mystical insight has been earned […] In this sense the *Tractatus* must be understood as a poetic construct.
> (Perloff, 1999, Chapter 1: 'The making of the Tractatus')

Wittgenstein studied Logic compulsively in the years leading up to the First World War, primarily under the supervision of Bertrand Russell at Cambridge. But these years between 1911 and 1914 represent Wittgenstein's learning of a language and a vocabulary: the poetry itself, the *Tractatus*, was, as Perloff identifies, composed exclusively during the War, in scope, in ideas and as material content. I say 'composed' because it was not written in a conventional way but was rather assembled from a staccato series of aphoristic statements concerning concepts and lines of inquiry which Wittgenstein thought about deeply before jotting them down in quiet lulls before or between the fighting. Often he would note the date of these statements and where they were written, giving them the quality of textual relics of moments of intense experience. Nordmann writes:

> In his letters to prospective publisher Ludwig von Ficker, Wittgenstein [states]: "It [the *Tractatus*] is essentially the presentation of a system. And this presentation is extremely compact since I have only recorded in it what – and how it has – really occurred to me." This suggests that the *Tractatus Logico- Philosophicus* is a record of separate mental events. Many of these first appeared in the wartime notebooks, where they are dated like entries in a diary. (2005)

Poetry operates on many different planes of symbolic reference. As described above by Perloff and Nordmann, individual aphoristic statements in the *Tractatus* can themselves offer semi-opaque windows into a field of extreme wartime experiential pressure. But the *Tractatus* is also in sum a window into the psychological transformation which the pressures of war enforce. Through a cross-reading between biographical information and Wittgenstein's wartime notebooks we can witness this psychological transformation and the transformation of philosophical scope which they engender.

At the outbreak of the War the Austro-Hungarian Army attempted to protect Wittgenstein from the most dangerous front-line service on account of his education and the assessment that he would be more valuable elsewhere in the war effort; consequently he was deployed on a patrolling riverboat steamer in 1914. Yet Wittgenstein rejected this and repeatedly requested a transfer to active front-line service. In 1915 Wittgenstein was injured in an accidental explosion, recovered in hospital, and in 1916 was posted to an active front-line unit.

Monk, Nordmann, and Perloff all note a significant change in Wittgenstein's writings at this time, as his intellectual focus broadened out from logic and into ontological and ethical concerns. Through his wartime notebooks scholars can observe this transformation in real time. On 6 July 1916, during intense fighting on the Eastern Front, Wittgenstein writes: 'Colossal strain this last month. Have thought a lot about all sorts of things, but oddly enough, can't make the connection with my mathematical train of thought'. The next day he continues: 'But the connection will be made! What cannot be said, can be not said.' After a few weeks the transformation and the newly perceived connections have revealed themselves: "Yes, my work has expanded from the foundations of logic to the nature of the world" [Wittgenstein, in Perloff, 2011). The unusual scope of the *Tractatus* thus is also known

to carry a poetic weight which is itself an index of the environment of war from which it emerged, and this poetic weight operates in addition to the poetic power of individual statements.

The *Tractatus*, then, is recognised by scholars as a poem and is recognised specifically as a poem of war.

And yet, apart from the general recognition of a broadening of intellectual focus towards the ontological and the ethical, much of this war poetry remains a 'puzzle'. I will attempt to shed some further light on this puzzle, and to do so will use a methodology elliptically proposed by Wittgenstein himself.

Towards a methodology (1): Do as Wittgenstein says

In the Preface to the *Tractatus* Wittgenstein writes:

> 'This book will be understood perhaps only by those who themselves have thought at one time or another the thoughts that are expressed in it – or at least similar thoughts.' (Wittgenstein, 1922)

Wittgenstein is very precise in his use of language, indeed famously so (e.g., '6.211: In philosophy, the question "Why do we really use that word, that proposition?" constantly leads to valuable results' (Wittgenstein, 1922)). His understanding of the meaning of a 'thought' is specific to him but is defined within his own epistemological system as articulated by the *Tractatus*. By using the word 'thought' he is not loosely referring to a line of theoretical philosophical inquiry as others might. In the *Tractatus* he states:

> '3 The logical picture of the facts is the thought.
> 3.01 The totality of true thoughts is a picture of the world.
> 3.02 The thought contains the possibility of the state of affairs which it thinks.' (Wittgenstein, 1922)

A 'thought' for Wittgenstein is, in the first instance, a representation to the mind of the state of affairs within which the mind finds itself. It is a representation of a moment of lived experience, a fragment of the whole World from the perspective of that individual Self. The key point here is that a 'thought' is, in the first instance, fundamentally linked to a representation of experience. If you see an explosion and are aware of it, that is a 'thought'; if you are shot and aware of being shot, that is a 'thought'; if you see or are informed about the death of a loved one, that experience is also, for Wittgenstein, a thought. One could challenge Wittgenstein and ask whether a traumatic experience, which one may encode within the mind differently from normative memories, should constitute a 'thought' in this sense. But Wittgenstein does not tackle this and, indeed, his understanding of 'thought' as a single, fragmented, distinct, eternal instant of experience is very close to how contemporary psychologists might describe distinctly traumatic memories. For Wittgenstein, so much experience was so traumatic that it may be that traumatic experience was for him a normative engagement with the world at this point in his life and that this is represented within the *Tractatus*.

For Wittgenstein, then, 'thought' is initially a moment of experience. A thought can, then, latterly, be constituted imaginatively as a reconfiguration of previously experienced 'atomic facts' within the realm of possible states of affairs, but these imaginative thoughts, too, are happening to an individual within a specific real moment of lived experience.

If we then assume a private language within Wittgenstein's Preface and translate that private language into a public language through the definitions of the *Tractatus*, we read:

> ‘This book will be understood perhaps only by those who themselves have experienced at one time or another the experiences of the individual who wrote it – or at least similar experiences.’

Wittgenstein’s ‘experiences’ are unusually complex and often highly traumatic. But where an instance of a ‘similar experience’ does exist and does express itself within the spartan, calculated, cold, mathematical text of the *Tractatus,* it explodes within the mind of the reader like a flare which illuminates the entirety of Wittgenstein’s battlefield. It is this illuminated battlefield which I believe constitutes the ‘most important’ ‘unexpressed part’ of the *Tractatus*. Any reader can read the thought-flares, but only those who have experienced similar experiences to Wittgenstein can, as he himself wrote, perceive their illuminations. These experiences are complex, various, and unique to Wittgenstein. Yet I have attempted to allude in this chapter to some aspects of shared experience. Specifically, taking my lead from Perloff, Monk, and here Nordmann, within the *Tractatus* one particular set of experiences is more significant than others: ‘the *Tractatus Logico-Philosophicus* is a record of separate mental events. Many of these first appeared in the wartime notebooks’ (Nordmann, 2005). Consequently, in this thesis I will privilege a focus on that aspect of shared experience in my attempt to communicate Wittgenstein’s poetry.

Towards a methodology (2): Do as Wittgenstein shows

In a letter written from the Eastern Front in 1917 to his friend Paul Engelmann, Wittgenstein reflects upon a poem written by Count Ludwig Uhland in Paris in 1810, in the middle of the Napoleonic Wars. In twenty-eight lines the poem describes a young soldier heading off to fight in the medieval Crusades, plucking a sprig from a tree on his way out to the Front, planting the sprig on his return home from war, nurturing the growing tree, and growing old beneath its 'branching arch' which 'reminds him of the past'. Nothing is said of battle, of death, of grief. Wittgenstein wrote to Engelmann:

> '"And this is how it is: *if only you do not try to utter what is unutterable then nothing gets lost. But the unutterable will be – unutterably – contained in what has been uttered!*"' [my italics] (Wittgenstein, in Monk, 1991, Part I, Chapter 7: 'At the Front').

In the year before he wrote this letter to Engelmann, on 7 July 1916, and during intense fighting on the Eastern Front, Wittgenstein had written:

> '"Colossal exertions in the last month. Have thought a great deal on every possible subject. But curiously I cannot establish the connection with my mathematical modes of thought", before, the next day, continuing: '"But the connection will be made! *What cannot be said, can be not said*"' [my italics] (Wittgenstein, in Monk, Part I, Chapter 7: 'At the Front'1991).

We can here witness Wittgenstein perceiving the inexpressible wartime experience within the war poetry of another writer through the lens of his own experience and his own experientially generated war poetry. This methodology for perceiving the inexpressible in the war poetry of others through shared experience demonstrates the method I proposed in the previous section, albeit within a more overt context of poetry. However, Wittgenstein later abstracted this personal methodology for reading the war poetry of others into a pedagogical methodology for teaching his own *Tractatus* to others through the medium of a juxtaposed independent poetic text.

Rudolph Carnap recalled how, while Wittgenstein was teaching his *Tractatus* to the Vienna Circle in the mid-1920s, he would devote time to reading to them the work of Rabindranath Tagore. Monk (1991, Part II, 1919-28, Chapter 10: 'Out of the Wilderness') recounts Carnap's anecdote within the context of his documenting of the perceptions of some of Wittgenstein's colleagues, previously discussed in this thesis, of 'poetical' eccentricity in the 'scientific' work of Wittgenstein. The anecdote is related by Carnap as a slightly baffling interlude between more important philosophical discussions. But, despite his own intensely traumatic combat experiences on the Western Front, might not Carnap, the archetypal philosopher of science, have misunderstood Wittgenstein, the archetypal poet of philosophy? Might Wittgenstein have intended those interludes of poetic juxtaposition to have offered the most revealing insights into his own work? May he not have held up the work of Tagore alongside his own work as he had once himself, in battle, held up his own work alongside that of Count Uhland, in order to enable others to perceive his meaning more clearly? I think this may be the case, and I will thus follow Wittgenstein's guidance while learning his same text.

Thinking the inexpressible: the 'language of the dumb' at 'the brink of Nature's destruction'

Tagore's work is often very painful, speaking of people's hopeless attempts to superimpose emotional certainty and predictability upon a fluid and illusory reality. His stories often involve children being lost, dying, and being reimagined in the form of others. His stories universally emerge out of liminality, often staged at dusk, in darkness, and evaporating at dawn and involving narratives which dissolve boundaries between life and death, between present and past, and consequently between love and grief. For example, in 'The Kabuliwallah' (Tagore, 1892), an elderly street merchant from Kabul enjoys a tender friendship with the young child of a Calcutta client, only to be violently separated from her and for us as readers to later learn that his friendship with her was an attempt by him to reconnect with his own distant, and now aged and possibly dead, daughter from whom he was separated when she was herself a child; in 'The Postmaster' (Tagore, 1891), a seemingly innocuous breeze of air confirms the separation of the lonely protagonist from the orphaned girl who mirrors his lost family and who in him perceives recollections of her own lost father.

In classic Tagore fashion, 'The Hungry Stones' (Tagore, 1918[1895]) is staged within multiple liminalities. On a train journey through Bengal the narrator meets an enigmatic man, an Indian but placeless, dressed as an Englishman and quoting Shakespeare's *Hamlet* at the moment of dusk prior to the arrival of the ghost: '"There are more things in Heaven and Earth, Horatio, than are dreamt of in your philosophy'" (ibid.). The passengers stop at a junction station to wait for a connecting train and, just as our narrator settles down to sleep, his new companion, a mesmerising storyteller himself, begins a new tale. This story within a story describes how the man once took lodgings in the ruins of a Mogul emperor's castle and every night would slip into a world of the castle's past. Specifically, he begins a relationship with an imperial concubine, herself forcibly removed from a village in the Persian desert to exist in a new reality in the gilded cage of royal splendour within the Indian mountains. The boundaries between past and present, living and dead, and our new narrator's position within it become increasingly blurred. Indeed, the storyteller, dressed, in the train station, as an Englishman, performatively accentuates this blurring by dressing, in his recollected story, in medieval attire every day at dusk, only to be woken up the next morning by the wailings of a local madman: 'Stand back! Stand back! All is illusion!' We learn that this madman was himself the previous lodger of the castle, and that from this castle's illusion there is no escape. And yet the storyteller himself escaped to tell the story? Before learning how, suddenly the train arrives, breaking our connection with the inner narrative – it is dawn, and an Englishman ushers the mysterious storyteller alongside him into a First Class carriage, inaccessible to our narrator and thus to ourselves. The shock of this sudden narrative transition, and the loss of both the world of the internal story and its resolution, gives the reader an embodied sense of the painful breaking of a vivid illusion. The eponymous 'hungry stones' are the constituent building blocks, the atomic facts, of the vivid illusions of both the castle and the text. Inhabiting them can transport the visitor or reader between different holographic phantasms. By inhabiting shared situations one can perceive the worldly illusions of another, whether these are those of a writer, a writer's narrator, a writer's narrator's storyteller, or a writer's narrator's storyteller's ghostly medieval guide.

I described the 'hungry stones' as the building blocks of both castle and text, implying an illusion of language in addition to that of worldly experience. The illusion of language, as presented by Tagore, is the notion that language can never represent reality. This point is painfully made in the beautiful short story 'Subha' (Tagore, 1918a [1892]), in which a dumb girl is societally marginalised as a consequence of her disability and yet, according to Tagore, is more honest to others and more meaningfully connected to her experience precisely because she does not mediate the illusions of life through the illusions of language. This notion relates to the Wittgensteinian idea noted earlier, written to Paul Engelmann in a wartime letter, that nothing is lost if nothing is said. In the following excerpt I have underlined some words by Tagore which appear to me as though they would not seem out of place in the language of the formal philosophy of the *Tractatus*:

> All the world seemed to think that, because she did not speak, therefore she did not feel […]
> If Subha lacked speech, she did not lack a pair of large dark eyes, shaded with long lashes; and her lips trembled like a leaf in response to any thought that rose in her mind.
> When we express our thought in words, the medium is not found easily. There must be a process of translation, which is often inexact, and then we fall into error. But black eyes need no translating; […] But here Nature fulfilled her want of speech and spoke for her. The murmur of the brook, the voice of the village folk, the songs of the boatmen, the crying of the birds and rustle of trees mingled and were one with the trembling of her heart […] This murmur and movement of Nature were the dumb girl's language; that speech of the dark eyes, which the long lashes shaded, was the language of the world about her. (Tagore, 1918a)

Yet what if Subha had witnessed not only 'the murmur and movement of Nature' but also the brink, the end, the cataclysm, of that illusion? How then would her lips and heart have trembled? This is also important for Tagore and, I think, crucial for Wittgenstein's notion of 'the mystical'. For both writers there does exist a realm beyond the illusions of world and language. This place is referred to by Tagore in the following excerpt as a 'dark primeval realm of mystery', but it is equally denoted by the short story's title: 'The Supreme Night'. In this story two close childhood friends, a boy and a girl, once imagined by their parents to be future spouses, find themselves separated and their lives diverged. Later, by chance, they become aware that they live in close proximity, but the girl, Surabala, is by now married to another. During a dangerous night-time storm they meet, fleeing the flood, alone atop a precarious riverbank surrounded by raging floodwater. What interests me about the following passage is that both that their spirits appear to come from a realm 'of mystery' beyond lived experience, but also, and importantly for this thesis, that as they 'stood gazing at the darkness' we are repeatedly told that they do not speak to each other, and certainly do not touch, and yet we as readers are left, as the cathartic storm subsides, with the notion that everything that needed to be communicated has been communicated. As with Private Reid's unwritten diary entry, as with 'the mystical', as with the blank white page of death, here termed the 'darkness' of 'supreme night', language can say nothing of it:

> It was a time of cataclysm; the stars had been blotted out of the sky; all the lights of the earth had been darkened; there would have been no harm if we held converse then. But we could not bring ourselves to utter a word… Only we stood gazing at the darkness. At our feet swirled the dense, black, wild, roaring torrent of death. […]
> Today Surabala has come to my side, leaving the whole world […] In our far-off childhood this Surabala had come from some dark primeval realm of mystery, from a life in another orb, and stood by my side on this luminous peopled earth; and today, after a wide span of time, she has left the earth, so full of light and human beings, to stand alone by my side amidst this terrible desolate gloom of Nature's death-convulsion […]
> This one night, standing on the brink of Nature's destruction, I have tasted eternal bliss.
> The night wore out, the tempest ceased, the flood abated; without a word spoken, Surabala went back to her house, and I, too, returned to my shed without having uttered a word. (Tagore, 1918b)

There are elements within these stories which resonate with themes that permeate this thesis. We can perceive within 'The Hungry Stones' a poetic representation of Wittgenstein's pedagogical method: a holding up together of stories from mutually inaccessible worlds such that they bleed into and illuminate one another. In this thesis I will follow this method. In 'Subha' we perceive an idea of thought as a function of experience and language as an illusory medium for such thought, which also resonates strongly with Wittgenstein's conception of 'thought' and the limit of language as a medium for communicating experience, as previously noted. And in 'The Supreme Night' we perceive a notion of being able to

experience the ‘brink’ of death and yet an insinuation of the failure of, or lack of need for, language to represent this experience.

This chapter has attempted to illustrate an omission, combat experience, within contemporary studies of war literature and to demonstrate how such experience may offer illuminating perspectives on both theoretical debates and specific texts. It has also introduced Wittgenstein’s First World War text *Tractatus Logico-Philosophicus* as a war poem which may benefit from an experientially informed analysis, and has presented a method, guided by Wittgenstein himself, to undertake this analysis. I have also, as best I can, attempted to frame a notion of an experience of death within combat which Perloff and others have argued profoundly changed the philosophical scope of Wittgenstein’s wartime work. As I have stated, subsequent chapters will attempt to explore the literary representation of such experience of death in the work of Wittgenstein, myself, and others, but before doing so I will begin this journey into the *Tractatus* alongside Wittgenstein’s himself, at the beginning of his war.

From Wittgenstein’s wartime notebooks:

> ’21.8.14 Is my working over with once and for all?!! The devil knows! Will nothing ever occur to me again? I am completely “unfamiliar” with all the concepts of my work. I see nothing!!!
> 22.8.14 Have been stuck on a sandbank for 3 days now. Work frequently with many interruptions and up until now without any success at all. Still can’t come upon anything solid. Everything dissolves into smoke. Take heart!!! Logic must take care of itself.’ (Wittgenstein, in Nordmann, 2005)

Nordmann, from whose book these excerpts are taken, notes: ‘“Stuck on a sandbank” was the riverboat on which Wittgenstein was stationed.’ (ibid.) While, as we saw previously, it is indeed correct that in the early months of the War Wittgenstein was stationed on a steamer patrolling rivers on the Eastern Front, Nordmann misses an essential part of the poetry of these diary entries:

> ‘21.8.14 Is my working over with once and for all?!! The devil knows! Will nothing ever occur to me again? … 22.8.14 Have been stuck on a sandbank for 3 days now.’ Wittgenstein, in Nordmann, 2005)

As I discussed above, a ‘thought’ for Wittgenstein is both the representation of the immediate experience of the mind to the mind and the reconfiguration of such experiences through imagination. It is consistent with this clear link between immediate experience and conceptual ideas that Wittgenstein should find both his body and mind ‘stuck on a sandbank’.

> ‘Is my working over with once and for all?!! The devil knows! Will nothing ever occur to me again?’ (ibid.)

Friends reported that throughout his life Wittgenstein was extremely anxious that he would die before finishing what he considered to be his important philosophical work. Within the lived context of stasis, during a war, while waiting to be posted out to the front line, within the uncertainty over that, and the uncertainty of life, this anxiety must have been intense.

> ‘I am completely “unfamiliar” with all the concepts of my work. I see nothing!!!’

Here I merely note that the great Soviet literary formalist Victor Shklovesky, also a veteran of intense First World War combat, antisemitism, and the witnessing of the fragmentation and civil war in his own country, theorised that a capacity for ‘defamiliarisation’, the representation of a known reality in a new way in order to create a new reality, was an important skill of the poet and an attribute of a powerful poem. I would also hypothesise that Shklovsky and Wittgenstein were only able to enter this state, and thus perceive it, because they were

dissociating within a context of war trauma. I will engage further with this notion in Chapter Four of the thesis.

> ‘Work frequently with many interruptions and up until now without any success at all’.

As stated previously, there appears to be a blurring between, overlapping and simultaneity of ‘thought’ in terms of the bodily and the cerebral experience. Is this the ‘war effort’ or the ‘philosophical effort’ that Wittgenstein is discussing? This is a false question: the two are one and the same.

> ‘Still can’t come upon anything solid. Everything dissolves into smoke. Take heart!!! Logic must take care of itself.’

While serving in Basra with special duties my work rarely carried a high probability of imminent death. However, on occasion it would. While waiting for those events, often in the afternoon before a particularly risky planned night-time operation, I wouldn’t really know what to think. I wouldn’t really think. Most people would smoke and drink tea in silence, check their kit, disassemble, clean, and reassemble their weapons. Once I intended to write a long letter to my then fiancée, a young Jewish woman from Manchester who now lives in Israel. I wrote, on the back of a photograph I kept of the two of us: ‘I love you so much. I am so so sorry’. What is love? A magnetic attraction to life, to other living people? Why was I sorry? For leaving her, for dying and leaving her alive, for her loving of me, for not respecting, or for respecting, the miracle of it all? For the war? What is contained in those three iterations of the two-letter word *‘so’*? One who has not lived that experience could write volumes about it, but I had neither the time nor the ability. I could merely *jot down* a couple of sentiments. Would I see her again? Would I be alive the next morning? I could not think my way through or out of such things. I could merely experience my experience, experience my thoughts, experience my body’s responses and reactions to events, submit to the logic of the universe, which must take care of itself.

> ‘Stuck on a sandbank […] up until now without success […]’. It is from this stasis of fear and dissociation that Wittgenstein challenges himself to ‘take heart’ and, steadying his body and mind, he stumbles upon, seemingly arbitrarily, the first major philosophical breakthrough necessary for what would become the *Tractatus* – that he could not explain logic, he could only experience it:
>
> ‘5.473 Logic must take care of itself.’ (Wittgenstein, 1922)

This is the symbolic relic of the intense emotional experience of Wittgenstein’s early War. The relic is the part of his work which we read. The experience is the ‘most important’ unexpressed part of his work, which I have tried to show. The link between the two is Wittgenstein’s poetry. And yet this poetry, while certainly evocative of an extreme early War experience, occurred early in the War while Wittgenstein was performing a patrolling role and before the intense combat of 1916 to 1918 to which Monk, Perloff, and Nordmann attribute his change in philosophical interest from the merely logical to the ontological and ethical. By the end of the War Wittgenstein was writing poetry in the ‘language of the dumb’ ‘on the brink of Nature’s destruction’:

> ‘7. Whereof one cannot speak, thereof one must be silent.’ (ibid.)

It is this poetry of absence which the remaining chapters in this thesis will attempt to explore.

Chapter 2: Structure

This chapter is split into two parts. In the first part I intend to make three theoretical points:

First, I suggest that the chaos of war and the confusion of experienced death will require an individual to seek a new conceptual structure for themselves as a necessity for survival. I shall explore this idea through the poetic vision, sadly unfinished, of the First World War veteran Jacques Vaché.

Second, I argue that within the symbolic constituents of this new structure there exist the material relics and hence the poetic trace of intense prior emotional experience. I will explore this through the work of the First World War veteran Olaf Stapledon.

Third, and perhaps paradoxically, I claim that a significant part of the poetic insight of such reordered structures resides in their self-disintegration: they present a form which silhouettes itself against, and appears to dissolve into, an all-encompassing, formless void which in my previous chapter I described as the Blank Page or Supreme Night. I will explore this theme in relation particularly to the work of Vaché and Stapledon I have already considered, and in this chapter refer to it as an 'amphibious' perspective.

In the second part of this chapter, I turn my attention to Wittgenstein's *Tractatus*, using these theoretical notions of structural compulsion, material relics, and amphibious perspective to demonstrate how his seemingly abstract, mathematical, and emotionally detached philosophical work carries within it the intense poetic trace of his meaningful relationships, experiences, and beliefs both before and during the War.

Broken foundations and shattered axioms: disinterring fragments unstructured before their time

Three of the four subjects in *4 Dada Suicides* (Cravan et al., 1995) served in the French Army during the First World War, although so little is known of one, Julien Torma, that it has been speculated that his actual existence was an elaborate Dada hoax. Jacques Vaché, one of the four subjects, was cited by André Breton as his greatest creative influence, and indeed as the man he had most loved (*Jacques Vaché,* n.d.)

Vaché had been an art student before the War and had participated with three friends in an experimental literary movement in their home town of Nantes – this group developed various techniques which were later adopted by Surrealism. Of these four Nantes friends, three fought in the War, and of those three one was killed in combat in 1916 and the other two, including Jacques Vaché, died from heroin overdoses after the War. It is from the writings of the non-combatant survivor of that group, Jean Sarment, that we know of the existence and activities of this pre-war avant-garde literary circle in Nantes. Similarly, it is primarily through the writings of the non-combatant doctor André Breton that we read Jacques Vaché's wartime poetic legacy. Yet there are also illustrated letters, all written to Breton from the Western Front between 1916 and 1918, through which we can perceive a glimpse of Vaché's unfinished vision:

> *Dear friend,*
>
> *I've often thought of writing to you since getting your letter of 23rd July - but I couldn't ever quite settle on a definitive form of expression – and still can't – I think it's preferable to write to you on the spur of the moment – improvising on a theme of which you're almost aware, and which I've*

pondered to a certain extent. We'll see about producing something when the chance directions of our conversation have led us to a series of axioms based on the 'umrous' viewpoint we share[…]

And then, the whole TONE of our action remains almost to be settled – I'd like it to be dry, no literary flavour, above all not suggestive of ART […] *So we don't like ART, not artists (down with Apollinaire)* […]

So then, modernity – murdered and reborn every night – We know nothing Of MALLARME, no ill-will intended – but he's dead – We no longer know Apollinaire – FOR – We suspect him of creating art too deliberately, of doing a botched-up repair job on romanticism using electrical flex, and of not realising that dynamos exist. Reaching for THE STARS again! […]

Well then – I see two ways of letting this take its course – By creating one's own sensations with the help of a flamboyant collision of rare words […] *– or else by neatly drawing the angles, the squares, all the geometry of feelings – and just as they are experienced, naturally* […]

O ABSURD GOD ! – for everything is contradiction – isn't it? […]

and shall be called umrous he who understands that the universal simili-symbols are appalling optical illusions […] *The umrous person should not be creative* […] *Our 'air' needed to be somewhat dry; machinery – rotary presses stinking of lubricating oil* […]

the po-wet […] *tedium in prose – PUPPETS – PUPPETS – would you like some fine wooden puppets all in different colours! – Two eyes colour of dying flame* […]

(Letter from Vaché to Breton from the Western Front, 18th August 1917, in Sorrell, 1979)

['Umrous' is a word of Vaché's invention which relates to 'humorous' but forgoes any jollity and cathartic redemption, emphasising rather a detached indifference, contemptuous of the delusions of aesthetic or political purpose, instead passing the time within the sensation of bemusement. Vaché greatly admired the work of the then little-known French dramatist Alfred Jarry, whom he saw as a prophet of the 'umrous', and within this sensibility I would suggest a progenitor of notions of the 'absurd' found in the writings of such figures as Beckett and Camus.]

In his *A Discourse on the Method of Correctly Conducting one's Reason and Seeking Truth in the Sciences* (1637), Descartes established four principles for logically structuring knowledge. I will later relate Descartes' work to that of Wittgenstein, but here I use his four principles to consider a poetics of structure within the context of war: 1) to dismiss all uncertain, unreliable, knowledge; 2) to break up a challenge into a set of smaller challenges; 3) to procedurally work through the problem set; 4) to enumerate everything (Descartes, 2006). One of poetry's powers is that it makes it possible to simultaneously work through multiple problem sets – epistemological, ontological, theological, ethical – using the same symbols. I will express this process as a recursive algorithm:

"""An algorithm to construct poetry of certainty over a given cycle of trauma"""

1. First, learn symbols, as a child would, and rearrange them to describe one's childish world.

2. Second, chaos.
3. Third, assess learned symbols for certainty and security.
4. Fourth, dismiss all uncertain and insecure symbols as useless.
5. Fifth, from one's secure and certain symbols, define foundations and axioms.
6. Sixth, build out, extrapolate, deduce, from foundations and axioms a self-consistent, self-supporting, secure lattice, intricate as glass crystal, through which the world can be newly perceived and comprehended. Call this crystal faith.
7. Seventh, rest.
8. Eight, reborn, return to 1.

Wittgenstein was able to reconstruct various faiths from logical foundations inherited primarily from Bertrand Russell. Vaché, sadly, was unable to do so. To relate his poetics, as seen In his letter to Breton, to my Cartesian algorithm above we can glimpse (1) his childhood symbols, in the content of his work: art, poetry, theatre, friendship. We also glimpse something of (2) the chaos of his recent experience: 'So then, modernity – murdered and reborn every night – […] O ABSURD GOD ! – for everything is contradiction – isn't it?' By this point in the War Vaché had already been injured on three separate occasions. Additionally, since receiving the previous letter from Breton that he mentions, he had spent a brief period in a British military prison for an unspecified crime, speculated to have been that of abandoning his post when the British lines were overrun by German soldiers [from the website previously mentioned; see bibliography]. We also glimpse something of (3) his assessment of the symbols he had learned earlier in his dismissal (4) of conventional poetic language, contemporary and recent poets, 'the po-wet […] tedium in prose – PUPPETS', 'MALLARME […] he's dead!', 'down with Apollinaire', and suspicion of 'ART' in general. We also glimpse (5) his search for secure foundations and axioms: 'We'll see about producing […] a series of axioms', and even glimpse (6) his vision of an intricate glass lattice through which he will be able to comprehend the world: 'I see two ways of letting this take its course – By creating one's own sensations with the help of a flamboyant collision of rare words […] – or else by neatly drawing the angles, the squares, all the geometry of feelings'.

Yet Vaché, the great prophet of Modernism, like Joshua to the Moses of Breton, Beckett, Camus and Wittgenstein, never completed his work, never found rest:

> *'I couldn't ever quite settle on a definitive form of expression - and still can't'*

After I was injured in Iraq I spent about a year in hospital, initially American military hospitals in Baghdad and Germany but mostly at the Queen Elizabeth in Birmingham. I was blind and physically incapacitated, my head and face having been rebuilt with titanium mesh and plate and my ribcage and sternum having been sewn back together with steel wire.

I remember lying in bed, endless streams of broken sounds, words, noises, phrases, utterances, flowing through my head in an infinite non-sensical poetry. It was only when I came out of hospital that I taught myself how to use a computer and touch-type without vision, and when I did, I didn't want to record that endless and unstructured poetry. Something about its interminability and incoherence distressed me. I felt I could spend the rest of my life writing such an endless cacophony, and I still had hope to engage with fellow humans, which would require the structure of ordered symbol sequences. My poetic endeavours became increasingly structured: sonnets, triolets, englynion, sestinas, rhymed double sestinas, rhymed double sestinas with multiple invented formal and contextual constraints. Even such poetry was not structured enough for me, and I began to write poetry in Excel spreadsheets, grids of words tied together sonically or rhythmically in multiple dimensions.

This strange aesthetic compulsion made me concerned about my own sanity, and I was heartened to find historic precedents for it: in ancient Rome (the Sator Square); in 4th-century China (Su Hui, *Star Gauge*); in the ninth-century cryptographic grid poems of the Frankish

priest and poet Rabanus; in the enigmatic medieval grimoire *The Book of Abramelin*; and somewhat in the desired geometry of Vaché, and the rigorous structuring of the *Tractatus*. I felt no affinity for the loose free verse of much early twenty-first-century British poetry, and instead began to think about the aesthetics of this other tradition and its poetics of chaos and order, and to experiment towards my own aesthetic structure.

Material relics and amphibious visions

In the first chapter of this thesis, I drew attention to a difference of emphasis between my work and that of Santanu Das. I argued that Das was more concerned with the sensory world of the living whereas my own research and poetry is also interested in the non-sensory realm of the dead. I now suggest that a consequence of Das's emphasis on living sensation is a focus on the materiality which the poetic symbols signify, but that this focus occludes that which is immaterial and which the poetic symbols knowingly fail to represent, a dual poetry which I call amphibious vision.

This privileging by non-combatant scholars of signified materiality over non-symbolic immateriality has led to a rich and important textual afterlife in the analysis of trench literature: Das titles and situates his own analysis of the sense of touch within trench literature with the amorphous, fluid medium of 'Mud'. Das highlights the power of First World War trench narratives of mud in inspiring notions of corporality and abjection in the work of later philosophers:

> Sartre's exposition of slime is essentially a continuation of his fascination with the human body as evident in his novel Nausea (1938). Sartre's novel is deeply influenced by Céline's Journey to the End of the Night (1932) which, in turn, is shaped by the author's traumatic experience in the First World War trenches… [Sartre] quotes from none other than Jules Romains's First World War bestseller Preface to Verdun (1938)… Romains… novel evokes the 'pulpy, fluid' trench landscape… 'of glutinous sauce… It is worth noting, given its widespread influence on contemporary thought, that Julia Kristeva's Powers of Horror (1982) is permeated by Céline's Journey… At a time when the body was increasingly becoming a linguistic trace, Kristeva provided a powerful critical language to draw attention to its abject corporeality. (Das, 2006, 'Mud')

This tradition, though rich, may reflect a slight misrepresentation of emphasis concerning the semiotics of cultural memory. Rather than solely exploring mud as the material relic of intense trench experience it might also be possible to understand it as a failed symbolic referent for the non-symbolic realm of death and obliteration. In the language of Vaché we can understand references to mud as both material relics and also as 'universal simili-symbols' which operate as 'appalling optical illusions'.

In the previous chapter I described how, after the explosion, I sat propped up against my stool on the boat, looking at the world as if I was an 'amphibian': 'in the lower half of my visual field I was submerged in blood, lit bright red by the sun; in the top half I saw the bodies of my colleagues in front of me'.

Most people live their lives as terrestrial creatures, perceiving the sun, the sky, the clouds, the trees, the river, the bodies about them, the conceptual symbols through which we make sense of space, time, nature, and the relationships within which we find ourselves. Most people only submerge permanently and inescapably at the moment of death. And yet what would it be to live like an 'amphibian'?

This notion of an amphibian can usefully communicate an awareness of two very different realms. To exist in the realm of the living one must survive, and survival requires a conceptual structure which enables one to make decisions and actions: this is a thing I shall

conceptualise as food, this is one I shall conceptualise as shelter, this is one I shall conceptualise as a threat. To exist in the world, we need symbols and structure. Yet to be aware of the non-world is to be aware of a realm entirely devoid of symbol and structure. Were the amphibian merely to exist as an amphibian the distinction between these two realms would exist merely as a contrast of awareness. Yet if the amphibian were to attempt to represent its split vision it is condemned to failure, for the symbols of the upper world can never communicate the non-symbolic lower world.

The paradox of the poetic of the amphibian is that it evidences a structure which is both rigid and simultaneously self-dissolving. It is both rigid and material, and may specifically hold the material poetic trace of the moment of amphibious insight, and yet it is also anti-material, a rigid symbolic structure which points to the non-symbolic realm which exists outside it:

I have a recurring dream. It is night. I am on some kind of jetty or dock. Below me, in the water, is a small boat being tossed upon the waves. There are people in the boat. The people do not resemble people I know but they always remind me of people I know. Sometimes they wear jellabiyahs or burqas or military fatigues. I must get into the boat, but I do not feel it is safe. The passengers are friendly and laughing, they tell me everything is fine. Sometimes one or another will jump up and down or side to side to jokingly prove their point. I get into the boat.

Suddenly the boat plummets through the water. This is not a 'sinking', and this is not 'water'. There is no rushing froth, swooshing waves, icy coldness, bubbles streaming past one's face or the heavy, wet, cold pressure of a body amid the ocean. This is not a dream about the sensation of touch and bodily knowledge.

Rather, it is as though the world of reality is the surface of a glacier and we have just fallen into a crevasse. As the crevasse opens up, light from the world penetrates its darkness and depth, but only so far. And as this is ocean, and not glacier, the crevasse is closing in upon us. The shard of world within the void which we inhabit is closing in about us. In the final seconds before the void closes upon me, I recall a lesson from scuba-diving: at depth the water is so dark that it is impossible to know which way is up, which is down. However, if the diver takes air from the tank into their lungs, the buoyancy of this newly decompressed air will float them to the surface. In my dream, and as the void closes around me as I fall through a narrowing sliver of reality, I inhale one last gulp of that reality and close my eyes. The void closes about me. I exist, suspended in total void. I put faith in the buoyancy of my final reality. To live, one must have faith in one's last breath. I wake up, exhale, inhale, and open my eyes into the world.

What can we make of such an 'echo, a symbol, a myth, a crazy dream' (Stapledon, 1937, concluding part)? Clearly it is linked to the circumstances of the explosion in which I was injured, the small boat, the people, their clothing, my preoccupation with breathing and breath as a correlate to life. These symbols do relate to some material relics of that lived experience. Yet such constituents remain conceptual symbols, and language and metaphor are currencies of the world, of our reality. Although presenting the stuff of the world, my dream also appears to gesture my conscious brain towards recognising such 'simili-symbols' as 'appalling optical illusions' of something else: an awareness of something beyond the world and beyond its currencies of language and symbol: *This is not a sinking, this is not water, but as I can only speak to you in mere symbols, these are the symbols I must use to gesture towards the realm of the non-symbolic.*

In Freud's *Beyond the Pleasure Principle* (1920), he speculatively theorises a radical restructuring of his earlier notions of the subconscious. He begins his essay by reflecting on the presentation of recurring dreams among military veterans of the recent First World War. Freud argues that the presentations of military veterans are incompatible with his prior understandings of the human mind, which emphasised libido as a dominant subconscious drive, and he proceeds to hypothesise a drive towards death which he suggests exists in tension with that other drive towards life. While Freud's 1920 work does explicitly reference itself as a response to the recent War and its emergent psychologies, Freud's hypothesis of the death drive does not limit itself to those who have witnessed death or experienced near-

death. Rather, Freud suggests that the death drive is common throughout life and evolution. And yet was it only in 1920, and only in those combatants, that Freud perceived the symptoms which led to these new speculations? Perhaps another way of framing this tension might be to talk about ‘awarenesses’, an awareness of life and, in some, an awareness of death. In this framing, the ‘drive’ might be more a need to articulate one’s awareness, and the tension, perhaps irreconcilable and hence its repetition, comes about amid the challenge of representing one’s awareness of death through the symbols of life. I quoted the following passage from a First World War veteran in my previous chapter, but this tension between a known inadequacy of, and yet a compulsion towards, symbolic description captures this tension between drive and impossibility so well:

> So I, in the extreme moment of my cosmical experience, emerged from the mist of my finitude to be confronted by cosmos upon cosmos. That strange vision, inconceivable to any finite mind, I cannot possibly describe. I, the little human individual, am now infinitely removed from it. Though human language and even human thought itself are by their very nature incapable of metaphysical truth, something I must somehow contrive to express even if only by metaphor.
>
> All I may do is record, as best I may with my poor human powers, something of the vision’s strange and tumultuous after effect upon my own cosmical imagination, when the intolerable lucidity had already blinded me, and I gropingly strove to recollect what it was that had appeared. For in my blindness the vision did evoke from my stricken mind a fantastic reflex of itself, an echo, a symbol, a myth, a crazy dream contemptibly crude and falsifying, yet, as I believe, not wholly without significance. This poor myth, this mere parable, I shall recount as far as I remember it in my merely human state. More I cannot do. (Stapledon, 1937)

Stapledon’s writing appears to communicate an awareness of an inexpressible infinity beyond perceptible and expressible reality. This infinity appears to be accessed through a ‘blinding’ which is surely both the actual material experience of being blinded by blast and gas but may equally be understood as a vision of non-vision, a vision of death. Stapledon’s writing also conveys the compulsive and yet insoluble (and hence repeated) puzzle of how he can represent such a realm. The excerpt above, itself a description of an event but also a description of an intent to describe an event (‘All I may do […] . More I cannot do’) continues with an admission of the inevitable and repeated past and future failure of such intent:

> ‘But even this I cannot properly accomplish. Not once but many times I have written down an account of my dream and then destroyed it, so inadequate was it.’ (Stapledon, 1937)

And yet this claim of failure comes not only at the very moment of description but also at the textual culmination of a huge creative endeavour: Stapledon’s science-fiction epic begins humbly with the narrator walking out for an evening stroll from his home in a small town in provincial England, and develops over hundreds of pages into a complex cosmological web of numerous diverse alien cultures and biological, social, and political ecosystems, at stellar, galactic, and universe-sized macro-scales. This intricate structure is built up from the reordered material relics of Stapledon’s life, his family and home, his political, philosophical and ethical experiences and beliefs, and thus constructs from the stable symbolic fragments of a shattered former structure a new and highly sophisticated structure through which Stapledon can conceptualise his universe. Stapledon’s narrative is situated within the amorphous fluid medium of space, as the trench poets’ lyrics were situated within mud and my dream situated within water, gesturing to something beyond the ‘optical illusions' of its ‘simili-symbols’. And finally, at the crescendo to this voluminous reimagining of reality the novel conveys both the meaningless of all that has come before and the inexpressibility of the vision which led to this disintegrating conclusion.

Wittgenstein's Crystal

Wittgenstein never explicitly mentions his wartime experience within the *Tractatus*. Indeed, the only explicit statement concerning his personal life and emotional world is implied, in his brief dedication 'To the Memory of My Friend David H. Pinsent'. Yet I will argue that there exists a poetry within the work which, while obscure, can be perceived in its need for structure, in its structural components, and in its self-disintegrating 'amphibious' perspective. Within this poetry, Wittgenstein rebuilds a structure for his religious faith; encodes the intensity of his emotional dependence upon Russell, particularly within the present absence of his relationship with Pinsent; anchors his identity within a specific philosophical and ethical tradition and self-disintegrates his structure while silhouetting his disintegrating structure of reality against the insinuated infinity of a Christian 'mystical'.

Sure and solid foundations

Marjorie Perloff (1999, Chapter 1: The making of the Tractatus) refers to the unusual numbered structuring of the *Tractatus* as 'the number anomaly' and claims that 'critical comment on the *Tractatus* has shed little light on this subject'. She herself offers an explanation and two comments, first noting the influence of Tolstoy's enumerated *The Gospel in Brief* (1896) (Tolstoy, 1997) on Wittgenstein, and second observing that 'the neatly numbered propositions provide the reader with a sense of calm and order'. Discussing the heavy enumeration, she concludes: '[it is] where logic gives way to mystery' (Perloff, 1999, Chapter 1: The making of the Tractatus).

Wittgenstein was explicit in acknowledging the importance of the structuring enumerations of the *Tractatus*: when asked by the publisher von Ficker whether the enumeration was necessary, Wittgenstein's reply was unequivocal:

> 'And yes, the decimals were absolutely necessary "because they alone give the book lucidity and clarity, and it would be an incomprehensible jumble without them"' (Monk, 1991, Part II, Chapter 8: 'The Unprintable Truth').

The war-experienced philosophers and poets who are mentioned in this thesis all sought to disregard prior learning and build their worldviews from the most stable mathematical foundations available to them. Even Vaché, an avant-garde poet with no formal mathematical training, talks of 'axioms', 'geometry', 'angles and squares'. Descartes exemplifies this need for stable foundations.

Descartes was an orphan brought up in care, and later saw combat in the religious wars of seventeenth-century Europe; although Catholic, he fought as a mercenary in a Protestant army and subsequently, like Spinoza whom he so greatly influenced, lived in exile in the Netherlands. He also suffered the death, from fever, of his only child, a five-year-old daughter. Descartes' life is marked by the most pronounced and tragic loss and uncertainty, and his need to structure the certainty of his own being in the world emanates from all his writings. The following is from *A Discourse on the Method* (1637):

> Mathematics has very subtle techniques that can be of great use in satisfying curious minds, as well as in coming to the aid of all the arts […] I was most keen on mathematics, because of its certainty and the incontrovertibility of its proofs. I was astonished that nothing more exalted had been built on such sure and solid foundations.
> (Descartes, 2006)

Descartes' two most important philosophical works are structured as acts of ontological Creation. *The Discourse* is set over six parts; In *Meditations on First Principles* (1641)

(Descartes, 2008) Descartes is even more explicit, structuring his six meditations over six 'days', after which, with faith rebuilt upon stable foundations, both writer and reader may take the seventh day as the day of rest. The foundations from which Descartes builds his philosophy are, first, to ignore all prior knowledge which is not perfectly provable to himself; second, to break all problems into sub-problems; third, to proceed methodically through the deconstructed problem set from simplest to most difficult, 'and the last, in every case to make enumerations so complete […] that I might be assured that nothing was omitted' (Descartes, 2006). Over the six days of his *Meditations* Descartes, educated in a Jesuit orphanage, uses this method to rebuild out of logical deductive reasoning his entire faith and understanding of his world and his existence within that world from a single, solid, and in his view incontrovertible, trinity: *cogito ergo sum*. In this regard, Monk's comment on Wittgenstein would apply equally to Descartes, his philosophical forebear who was similarly Catholic and a veteran of combat:

> 'Now, it seems, having experienced the full horrors of the war for himself, he needed, not only a religious faith, but also a philosophy. That is to say, he needed not only to *believe* in God, to pray to Him for strength and for enlightenment, he needed to *understand* what it was he was believing in' (Monk, 1991, Part I, Chapter 7: 'At the Front').

Some may find the conviction with which Wittgenstein asserts, in the *Tractatus*' Preface, his belief, his *faith*, in both the infallibility of his work and its success in solving all philosophical questions, to be conceited. Yet I think this would be to misinterpret vulnerability as arrogance: Monk's comment above goes some way to giving an indication of why Wittgenstein did not kill himself in 1919, as Jacques Vaché did in that year, alongside presumably many more combat veterans of their recent War. Wittgenstein talked incessantly about killing himself at that time, to the deep distress and concern of his remaining family. He also bequeathed, mainly to his family but with small donations to some poets, one of Europe's largest fortunes, which he inherited that year as his father's eldest remaining son (Monk, 1991, Part II, Chapter 8: 'The Unprintable Truth'). It is as though Wittgenstein, in addition to talking about death, was also preparing for it. Whereas Vaché 'couldn't ever quite settle on a definitive form of expression', Wittgenstein dedicated himself to the *Tractatus*. In that sense that work's 'unwritten' 'most important' 'part' can perhaps be perceived as Wittgenstein's War experience, Wittgenstein's proximity to death, but more materially as the suicide note which Wittgenstein never wrote but which the *Tractatus* deferred, suppressed, and yet also channels and holds as its own shadow. Held within the text of the *Tractatus* which we read is the anti-suicide note, a praxis of the curiosity and investigation of a mind which kept the mind alive, through both war and peace.

Wittgenstein, like Descartes, bereft of meaning, needed to rebuild the logical foundations of *faith*. In the *Tractatus* Wittgenstein achieves this by establishing primitive ideas and propositions of his own creation. 'Creation' is an apt word here for, as with Descartes' *Discourse* and *Meditations*, the *Tractatus* is explicitly structured over six acts, concluding with silent reflection: it begins at proposition '1' with the creation of the world and ends at proposition '7' with the silence of rest. In the intervening propositions Wittgenstein constructs the atmosphere for, populates, sheds light upon, endows with 'sense', and gives laws for, this newly created world:

> 'The World is everything that is the case.' (Wittgenstein, 1922, 1)
> 'In the beginning God created the heaven and the earth.' (King James Bible, 1769/2017, 1)
> 'Whereof one cannot speak, thereof one must be silent.' (Wittgenstein, 1922, 7)
> 'And on the seventh day God ended his work which he had made; and he rested.' (King James Bible, 1769/2017, 2:2)

"In the beginning was the Word'. The *Tractatus* is a work about language, existence, and ethics, and in it Wittgenstein divides his theorised reality into what can be expressed and what cannot be expressed, what the light of knowledge can fall upon and what it cannot fall

upon, as in: ‘And God said, Let there be light: and there was light. And God saw the light, that it was good: and God divided the light from the darkness’ (King James Bible, 1769/2017, 1:3-4). In Genesis it is God’s *thought*, his *Spirit as Word*, which ‘moves across the face of the waters’ and constructs a mirrored reality in his own image, a *picture* of his *thought*. Similarly, to read the *Tractatus* is, as Nordmann (2005) has argued, to inhabit Wittgenstein’s ‘subjunctive reality’, a reality that exists as Wittgenstein’s ‘thought-experiment’.

A certain apparatus of undefined terms

Yet the rebuilding of faith requires more than conceptual operations. Wittgenstein needed to believe in his structure emotionally as well as intellectually. Like Descartes, Bertrand Russell’s early life was marked by extraordinary uncertainty and tragedy: between birth and his fourth birthday both his parents and his elder sister had all died from illness. He was subsequently brought up in a lonely house by a religiously strict aunt who instilled in Russell a belief in his own guilt as a cause of the world’s ills and also, unsurprisingly, a consequent lifelong commitment to atheism. Fortunately for Russell the house had a large library. As David Edmonds writes: ‘Salvation came in the form of mathematics… [As Russell writes] The world of mathematics is really a beautiful world. It has nothing to do with life or death and human sordidness, but is eternal, cold, and passionless’ (2020).

However, it would be wrong to say that Russell’s life and work lacked ‘passion’. Indeed, in other writings he describes the sensation of finding a mathematical solution to a problem as being akin to the ecstasy of a religious epiphany (see, for example, his chapter on Pythagoras in *A History of Western Philosophy* (Russell, 1946)). Additionally, his letters and diaries indicate a man of extreme and volatile passion, and Ray Monk’s biography (1996) of Russell describes the tragic effects of this turbulence on the lives of Russell’s various wives, lovers, and children. Mathematics provided an area in which the destructive capacity of his intense passion could be contained. It also provided an opportunity for him to attempt to abstractly address the painful source of his emotional turbulence: it offered him the opportunity to rebuild, from scratch, stable foundations.

Principia Mathematica is Russell’s attempt to prove the logical foundations upon which all mathematics is built. Russell was already convinced that all other branches of human knowledge were derived from rules of logic, whether deductive or inductive. The remaining question for him, therefore, related to the foundations of logical and mathematical operations themselves. This question was particularly pronounced at the turn of the twentieth century due to a number of inconsistencies, paradoxes, which threatened to unsettle the logical stability of mathematics. Simultaneously, several inconsistencies within the predictions of classical physics, such as the ‘ultraviolet catastrophe’, threatened the Newtonian foundations of science as it was then understood. Amid this theoretical uncertainty, and the increasingly worrying political uncertainty, of the pre-war years, the orphan and atheist Russell took it upon himself to conjure from his own intellect his own stable and secure foundations upon which he could build his interpretation of knowledge:

> Since all definitions of terms are effected by means of other terms, every system of definitions which is not circular must start from a certain apparatus of undefined terms […] Following Peano, we shall call the undefined ideas and the undemonstrated propositions primitive ideas and primitive propositions respectively. In the present number, we shall first enumerate the primitive ideas required in this section; then we shall define implication; and then we shall enunciate the primitive propositions required in this section. Every definition or proposition in the work has a number, for purposes of reference. Following Peano, we use numbers having a decimal as well as an integral part, in order to be able to insert new propositions between any two. A change in the integral part of the number will be used to correspond to a new chapter. Definitions will generally have numbers whose decimal part is less than ·1[…]

> Primitive Ideas:
> (1) Elementary propositions. By an "elementary" proposition we mean one which does not involve any variables. (Whitehead and Russell, 1910, p. 117)

I quote this at some length to first give an insight into the meticulousness and precision of Russell and Whitehead's approach to language that was so heavily structured by enumeration; second, to illustrate the compulsive rigour with which the search for stable foundations is being undertaken: this is page 117 and yet we are still only now defining the method we are going to employ to define the terms upon which the (eventual) logical argument will be premised; third, to illustrate the text's profound stylistic influence on Wittgenstein's *Tractatus*.

This shared aesthetic of enumeration, self-determined definition, proposition, self-created and self-consistent structure and heuristic architecture resonates with shared patterns in their uncertainties of ideology, family, state, and belonging. This aesthetic, seemingly so structured and certain, evidences a powerful poetics of uncertainty.

It is impossible to fully understand the poetics of the *Tractatus* unless one first understands Russell's language and his influence upon Wittgenstein. Had Russell not told Wittgenstein in early 1912 that he showed philosophical promise and should therefore stick with logic rather than return to engineering, Wittgenstein would not only have given up philosophy, but he would, as he told David Pinsent as they holidayed together in Norway that summer, have killed himself (Monk, 1991, Part I, Chapter 3: 'Russell's Protégé'). While it was to Pinsent that Wittgenstein dedicated the *Tractatus*, it was to Russell, in 1919 and soon after the death of Wittgenstein's actual father, that he sent his first manuscript (ibid.). Wittgenstein wrote the *Tractatus* in various languages, both public and private, but one of them was unquestionably the shared language of teacher and pupil, a secret code worthy of the Apostles Club, of which they were both prominent members, from one prisoner of war to another, a secret code which gestured towards happier, more secure, more stable, times amid the Fellows' Garden and Senior Common Room.

In the *Tractatus* Preface, Wittgenstein claims 'its object would be attained if there were one person who read it with understanding and to whom it afforded pleasure'. We may think of this 'one person' as three: in the first instance it is Wittgenstein himself, the son, forging a new way to make sense of a recently experienced incomprehensible world; it is also a prayer for David Pinsent, the ghost, Wittgenstein mirroring in his dedication to 'my friend David Pinsent' the desperate cry for 'my friend' which echoes through that pioneering novel of early twentieth-century homosexual love at Cambridge, *Maurice*, written by Wittgenstein's contemporary E. M. Forster (1971). But that 'one person' is also Russell, the father: Wittgenstein was bitterly frustrated by Russell's 1922 introduction to the *Tractatus*, helpful as it was for the work's publication and reception, considering Russell's summary a misunderstanding. However, when Wittgenstein submitted the work ten years later as his PhD thesis to enable his return to Cambridge, it was Russell who was his examiner. Those who read the *Tractatus* as cold and unintelligible are reading a love poem between orphans and ghosts whom they do not know, which offers a certainty they do not need, and is written in a language they feel no compulsion to learn. The foundations of that language, the *primitives*, are knowingly self-asserted by Russell, and they are self-asserted because amid the chaos of isolation, atheism, pedagogical anxiety and imminent world war Russell has nothing else to rely upon beyond his own faith in his own intellectual capacity: *cogito ergo sum*, and from that thinking of that living being emerge the primitive propositions. A decade later, and amid his own chaos, it is with these foundational hieroglyphs that Wittgenstein, Russell's protégé, steadies himself and begins to rewrite a way of comprehending his own confused world.

Name, Rank, Number

Although the scaffolding of the *Tractatus* may reflect his relationships and experiences with Russell and Pinsent, Wittgenstein was, unlike those other two, writing as a combat veteran profoundly shaped by his wartime experiences. Indeed Monk (1991, Part II, Chapter 8: 'The Unprintable Truth') describes how Wittgenstein continued to wear his military uniform for many years after the war had ended.

All soldiers, but particularly those under orders to pursue actions of value to the collective but which incur a high probability of their own individual death, must bear the tension between their individuality, their 'specialness', and their standardised numeric identity within a functional inventory of strategic assets. This tension is materially evidenced in a soldier's military identification card, which will contain their name, number, and rank – the position of that name and number set within a hierarchy of names and numbers. My own number was C900864F, a number I can recall as intuitively as my home telephone number, despite not having used it for over fifteen years.

This perspective gives added emphasis to the tension which Nordmann recognises between the propositions as unique aphorisms which express an individual moment of Wittgenstein's personal wartime experience and the propositions as mobilised numbered elements within a collective argument within a collective academic tradition:

> Here we approach for the first time a definition of Wittgenstein's writing as specifically "aphoristic." All writing has to negotiate the gulf between the particular and the universal, between the author's idiosyncratic voice and the printed word's claim to objectivity. While most writing seeks to blend these opposites, Wittgenstein's remarks dramatise their opposition. According to Gerhard Neumann [1933], this defines the aphorism. (Nordmann, 2005)

The *Tractatus'* mobilised collections of extended decimals echo lists of military ID numbers. Additionally, I agree with Perloff's identification of the influence of Tolstoy's *The Gospel in Brief*: Monk (1991, Part I, Chapter 6: 'Behind the Lines') recounts how Wittgenstein carried an increasingly worn copy of this book at all times throughout the war, and that he talked about it and recommended it to other soldiers to such an extent that he became known as 'the man with the Gospels'. I also believe there is a specific poetic weight to Wittgenstein's attraction to and companionship with Tolstoy.

Tolstoy's eponymous Chechen military commander *Hadji Murat*'s seemingly heroic dissociation from death, the uncontrollable rages of the war veteran Nikolai Rostov, the nihilistic cynicism of his comrade Prince Andrei, the cantankerous political realism of the older veteran Prince Bolkonsky, the latter three all characters from *War and Peace,* 1869 (Tolstoy, 1911) suggest to me that the traumas Tolstoy documented in his *Sevastopol Sketches*, an account of his own front-line military service in the Crimean War (Tolstoy,1911), never really left him. Wittgenstein would have read all these works. These temperamental characteristics of detachment, rage, nihilism, cantankerousness, all resonate with what we know of Wittgenstein's own post-war emotional world. They are temperaments which can be viewed by others as socially unpleasant rather than symptomatic of combat experience, and thus can also engender marginalisation and loneliness – emotions which also chime with our understandings of Wittgenstein's character. In the same way that I have been drawn to write about specific war veteran writers in this thesis, I think that Wittgenstein's stylistic resonance with Tolstoy's heavily enumerated *Gospels* carries the poetic weight of isolation of experience, empathy, and desired fraternity.

In addition to this literary allusion, the poetry of number, the 'number anomaly', also relates to the enumeration of biblical verse itself; to the gematria of ancient Greek thought, of Christian mysticism, of the Jewish Kabbalah, which for over two millennia had explored relationships

between numbers, spirituality, meaning, and phenomenological experience, and in doing so references Wittgenstein's own complex cultural heritage.

'The man with the Gospels' rewrote the foundations of his faith as a Proposition, and he built it up with solid, secure, numerical foundations given to him by Russell, shared with him by Pinsent, and which had stayed with him throughout the war as both military identifier and literary companion, and which evoke a style of philosophical poetics which belongs to the grand philosophical community of post-combat exile and to that of the logical Catholic.

Amphibious Perspectives

Perloff's comment that Wittgenstein's 'number anomaly' expresses 'where logic gives way to mystery' (Perloff, 1999, Chapter 1: The making of the Tractatus) gestures towards the tension between Christian and mathematical faith discussed above in relation to Descartes and Wittgenstein. But importantly Perloff does not say 'where logic defines mystery' or 'where logic structures mystery', but rather where logic 'gives way'.

'Gives way' has different connotations: one might, within a court or parliament, expect 'give way' to imply the allowed interjection of another's equally weighted point within a speech or argument; similarly, one might 'give way' on a busy road. With reference to the *Tractatus* I imagine the collapse of a Roman arch as the keystone 'gives way' or the screaming metal fragments of torn helicopter blades cutting through air as a rotor hub 'gives way'. In both cases the arch and the helicopter are highly sophisticated and aesthetically beautiful instances of human design and engineering. And yet it is at the moment of their breaking that their architectural and aeronautic brilliance is overwhelmed by both the scale of unbounded space within which those structures find themselves, and also by the adrenaline and cortisol surge of a human switching from aesthetic appreciation to imminent death by crushing or laceration. The structured gives way to the infinite but, paradoxically, in order to perceive the infinite, one needs first to perceive the structure: one cannot glimpse the power of the ocean unless one has been on a boat breaking up. A consequence of this is that in order to express the unstructured one cannot merely offer a structure; one must demand conceptual dependence upon a structure and then break that structure. To express the inexpressible, one must silhouette against it the outline of a collapsing logically coherent structure, for if a logically coherent structure is collapsing, what is it collapsing into?

St Thomas Aquinas, a Dominican priest and philosopher in the medieval period, attempted to reconcile tensions between (Aristotle's) logic and Christianity in his great work *Summa Theologica.* We have already seen how Descartes attempted to do the same. However, Aquinas' text was left unfinished: while celebrating Mass on 6th December 1274 Aquinas experienced some kind of seizure which Catholics believe to have been a powerful religious vision (in any case the incident nearly killed him: he never fully recovered and died the following year). Following his seizure/religious experience Aquinas stopped writing, famously responding, when asked to continue, '*mihi videtur ut palea'*, which translates as: 'To me all that I have written seems as straw'. With these words, and in the face of the lived experience of imminent death and God, the huge conceptual wave of the life's work of the great philosopher collapsed. Such a collapse is mirrored in the collapsing crescendo of Wittgenstein's own guidance to 'recognise all my propositions as nonsensical' (Wittgenstein, 1922, 6.54), his penultimate proposition before declaring he 'must be silent'.

There is a sense in the conclusion to both writers' work that words can only go so far, that in the face of death and the eternal infinity of God one must recognise the limits of what can be said. For Aquinas there is a near-death experience, and a pronunciation on the limits of symbolic communication, spoken or written, within the context of the eternal infinity of God. Similarly in Wittgenstein:

> 6.4311 Death is not an event of life. Death is not lived through.
> 6.522 There is indeed the inexpressible. This shows itself. It is the mystical.

> 6.54 My propositions serve as elucidations in the following way: anyone who understands me eventually recognises them as nonsensical, when he has used them – as steps – to climb beyond them. (He must, so to speak, throw away the ladder after he has climbed up it.)
> He must transcend these propositions, and then he will see the world aright.
> 7. Whereof one cannot speak, thereof one must be silent. (Wittgenstein, 1922)

Wittgenstein not only mirrors Aquinas' conclusion: he also mirrors Aquinas' project, just as Aquinas, and indeed Descartes, attempted to reconcile Christian faith with a faith in Aristotle's logic, Wittgenstein attempts to update this project, reconciling his own Christian faith with the deductive logic of Aristotle but also with the newly developed symbolic logic of Frege and Russell. In doing so Wittgenstein gestures towards his own near-death experiences in war and through the contemplation of suicide, and towards the importance to him of his own 'ladder': after the war Wittgenstein sought refuge in a *Dominican* abbey and inquired about becoming a *Dominican* priest (Monk, 1991, Part IV, 1941-51, Chapter 26: 'A Citizen of no Community'), perhaps seeking solace in the company of the order's most revered member. The importance of this is that while Wittgenstein's logic, his intricate logical structure, does give way to the mystical, this mysticism does not seem to overwhelm his notion of faith but rather defines it: in his relationship with Aquinas and Descartes Wittgenstein does appear to be expressing the limits of logic and conception but seems to be doing this within a more broadly defined tradition of Christian mysticism. This is the paradox of the amphibious perspective of the *Tractatus*: that Wittgenstein constructs his faith from logic and yet collapses his logic against his faith. In the *Tractatus* Wittgenstein textually embeds this Christian ouroboros through simultaneous biblical allusion to the Creation of Genesis (explored earlier) and the destruction of the Apocalypse.

The ancient Greek word '*apokalypsis*' translates into English as 'unveiling' or 'revelation'. It is the first word of the final book of the Christian Bible and consequently gives the book its name: 'The Book of Revelation' or, more simply, 'The Apocalypse'. 'Revelation' is split into two parts: an initial letter to a group of Christians informing them that everything their current priests and teachers are telling them is nonsense. This letter is then followed by a prophetic vision which gives a teleology, and therefore meaning and purpose, to both the past events of the Bible and the future of God's divine plan. This prophetic vision is in two parts: the first involves a series of apocalyptic world events which occur as seven seals on a divine scroll are successively opened. This section ends with the opening of the seventh seal, which I put alongside Wittgenstein's seventh proposition:

> 'And when he had opened the Seventh Seal, there was silence.' (King James Bible, 1769/2017, 8:1)
> 'Whereof one cannot speak, thereof one must be silent.' (Wittgenstein, 1922, 7)

At this point in his narrative Wittgenstein stops. However, John of Patmos is only just getting started: following a caesura of silence 'about the space of half an hour', there follows a series of descriptions of the total violent destruction of almost all humanity, the world, and the universe, the Second Coming of Christ, and the emergence of the divine city of New Jerusalem.

Revelation proposes a teleology but also a cyclical vision of creation and destruction which is able to look back from beyond the Apocalypse: as readers we witness the opening of the seventh seal from the perspective of the eighth book. Through John of Patmos' psychedelic vision, we are able to skip through the silence, through the day of rest, and find ourselves in the eighth day, which is also the first day of Creation.

Wittgenstein, by contrast, textually halts his own revelation with the silence he unseals with his seventh proposition. There is no eighth book from which we can look back. However, the *Tractatus* is similarly cyclical: first, within the context of Biblical resonance a process of seven implies the cycle of time. Second, the proposition immediately prior to '7' is '6.54', the

reading eye perceiving at the work's conclusion a reverse sequence of 7,6,5,4, drawing the mind back down Wittgenstein's ladder and into his created world at the very moment we reach its limit. Third, the *Tractatus* consists of 525 propositions, a palindromic number rotating around the axis of seven (5, 2, turn, 5, 2, turn, *ad infinitum)*.

[As a slight aside, palindromic numbers are very interesting because they force a recognition of the distinction between signifier and signified in number theory. This is because every number can be written as a palindrome, depending on the representational base system: for example, the concepts denoted 3 and 9 in Base 10 are palindromic numbers when represented in Base 2 binary, namely 11 and 1001 respectively. This is a particularly interesting and rich distinction for mathematical objects because while I can point to my table or chair as the material objects which I so name, mathematical objects do not exist phenomenologically. This realisation is not only of interest within the philosophy of mathematics, generating such theories as Platonism, mathematical realism, mathematical fictionalism, and mathematical structuralism; it also focuses the mind back towards those broader questions of ontology within the material world (of tables and chairs). I think Wittgenstein would have liked his theory to numerically inhabit a foregrounding of this distinction, and indeed by doing so to gesture towards a parallel, if not overlap, between Christian and Platonist notions of the mystical realm.]

Wittgenstein has led us up his ladder through Genesis towards life, meaning, and the ultimate dissolution of meaning. This part of his prophetic vision equally follows a Preface in which he writes to inform his readers that he has solved all the problems of philosophy and shown his metaphysical predecessors to be charlatans. While Wittgenstein, unlike John of Patmos, does not explicitly articulate that which follows Apocalypse, this is indeed equally expressed: first, in the cyclic rhythm within its skeletal form and within the complex thought of its abstract content we perceive the text as the intense labour of Wittgenstein's body and mind both during, and importantly after, his apocalypse: by 1919 the war was over, three brothers were dead, Pinsent was dead, millions of others were dead, the Austro-Hungarian Empire no longer existed, and Europe lay in ruins. Yet Wittgenstein lived. But second, against the silhouetted collapsing blades of Wittgenstein's intricate and beautiful revolving structure we can glimpse, shiver at, the sensation of something beyond even our notions of the infinite: the mystical domain beyond the personal apocalypse of death.

Chapter 3: Compression

The previous chapter aimed to show that for a person who has experienced trauma to be able to express anything, they need to feel that the symbols they are using to express themselves are stable and secure. A compulsion towards conceptual certainty thereby carries the poetic weight of the extreme uncertainty of a writer's embodied experience. Moreover, it was suggested that an evident structural fragility in both form and content enabled some writers to reveal an intimacy with death which surrounded the scaffolding of their lives. These premises led to a discussion involving the search for stable foundations of meaning and faith in the writing of Wittgenstein and others.

In this chapter, I will argue that for someone who has experienced extreme trauma it is not in fact enough to merely say *anything*, but rather one is compelled to say *everything*. Whereas, then, the previous chapter considered the challenge of representational *stability*, this chapter considers the challenge of representational *scale*. It will examine how poets can use different poetic techniques to compress infinite information into finite sequences of written symbols. In this way, just as the previous chapter argued that a tendency towards symbolic stability is a poetic representation of a poet's embodied chaos, this chapter suggests that a tendency towards symbolic compression is a poetic representation of the overwhelming scale of unprecedented traumatic information that a poet has experienced, both bodily and in terms of what they have witnessed.

This chapter also mirrors the last chapter in gesturing towards the awareness, and desire to represent, two different kinds of infinity: while it is true that the structures through which we conceptualise reality present us with various infinities – for example, time, space, degrees of human emotion and sensation – these are all infinities contained within reality. Just as the previous chapter argued that a representation of non-reality required the silhouetting against that non-reality of a fragile structure, this chapter suggests that a literary representation of non-reality also requires a framing, a finite representation, of earthly infinities. In this way, while we may not perceive non-reality we may, by perceiving the frame of reality, perceive that something unseen lies beyond.

Following a brief personal introduction, this chapter begins by discussing Kate McLoughlin's examination of the literary representation of scale in war literature (2011). I agree with her that a compulsion towards representations of scale is a hallmark of war writing, but I critique her proposed dichotomy between a 'taliation' mode, which *documents* scale, and a 'synecdochic' approach, which *insinuates* scale. This critique leads me to propose, first, an additional 'mechanics of poetic compression' and second, a 'poetics of beyond the infinite' which such compression can enable. The chapter then proceeds to demonstrate a compulsion towards compression in Wittgenstein's *Tractatus;* demonstrate the mechanics of poetic compression in the work of Raymond Queneau, François Le Lionnais, Henri Gaudier-Brzeska, Tristan Tzara, and Wittgenstein; and demonstrate the poetics of beyond the infinite in the work of Georges Perec and Wittgenstein.

Scale Models and Poetic Investigations

In the previous chapter I described how I began to write poetry intently following my injuries in Iraq, and how I noticed a compulsive aesthetic tendency towards increasingly structured forms. That tendency was an unconscious development in my aesthetic in that it had no instrumental purpose of which I was then aware. However, concurrently, I thought deeply about the poetic challenge of representational scale: the intensity of some of my combat experiences seemed to carry informational loads for which my prior understandings of poetic expression appeared inadequate. This was the case for my own personal sensations, but also for the scale of loss I had witnessed: if I felt my own life carried such informational loads, how could I adequately represent the informational loads of the lives of my four dead colleagues? And if I struggled to write elegies for individuals, how much more challenging was it to

ethically represent the scales of death, loss, and destruction which characterised the wars of the early twenty-first century collectively termed ‘the War on Terror’?

It was during periods of heightened stress that I made what I considered at the time to be poetic advances. From 2009 to 2015 I was travelling regularly through war zones in the Middle East and central Asia, partly because I felt it was ethically important to document the lived experiences of civilians in those regions. In 2009, while in northern Pakistan, I envisaged a book which was a box containing 180 sonnets which, by being removed and read in random orders, could carry very high combinatoric numbers of potential narratival permutations. I called this work *Bomb*. In the summer of 2011, while under armed guard, for my own safety, again in northern Pakistan and within the context of a battle between the Pakistani military and the Pakistani Taliban, I imagined the writing of poems in grids in which infinite combinatoric poems could be expressed through mathematical formula which denote differing relationships between words of differing Cartesian coordinates. Over the next several years these initial revelations developed into a practice which sees poetry as a series of investigations into the mathematical underpinnings of a theoretical structure within which all poetry can be mathematically modelled and produced.

Framing the infinite

McLoughlin begins the chapter ‘Detail’ in her book *Authoring War* (2011) with lists of casualty numbers, time durations, and resource usages for various historical wars, describing the numbers involved as ‘colossal’ and ‘ungraspable’. Stating that ‘huge quantities are [war’s] hallmark’, she proposes to explore the challenge war writers face in ‘how to frame the huge scale of war for human comprehension’.

McLoughlin identifies two modes ‘to frame the huge scale of war for human comprehension’: first she suggests a ’taliation’ approach, which ‘directs effort towards accounting for every element of the event, every one of the lost. Secondly, she identifies ‘what might be called the ‘synecdochic approach’: a single individual or detail comes to stand for the many or the whole.’ To represent the taliation mode she employs the US military’s Vietnam War memorial, a list of all the names of US casualties in that conflict, and the Tomb of the Unknown Soldier in Paris to represent the synecdochic approach.

McLoughlin concludes that the synecdochic approach is more effective because ‘the flaw in [taliation] is that expanding ‘everything’[…] would, in most wars, be beyond the scope of enumeration.’(2011)

McLoughlin supports this proposed distinction and judgment between representational modes by referencing Kant:

> For Kant, the mathematical sublime makes apparent “the very inadequacy of our faculty for estimating the magnitude of the things of the sensible world”. Kant further explains: “For the mathematical estimation of magnitude there is, to be sure, no greatest (for the power of numbers goes on to infinity); but for the aesthetic estimation of magnitude there is certainly a greatest; and about this I say that if it is judged as an absolute measure, beyond which no greater is subjectively (for the judging subject) possible, it brings with it the idea of the sublime, and produces that emotion which no mathematical estimation of magnitudes by means of numbers can produce (except insofar as that aesthetic basic measure is vividly preserved in the imagination), since the latter always presents only relative magnitude through comparison with others of the same species, but the former presents magnitude absolutely, so far as the mind can grasp it in one intuition”. (McLoughlin, 2011, pp.52-58)

I find this passage from Kant challenging, not least because of the dance between 'formers' and 'latters'. However, what I understand Kant to be arguing is that there exist two modes of representing quantities: he refers to one of these as 'mathematical estimation', but this might be more easily described as counting, *tallying*, or performing other mathematical operations upon numbers. The second mode he refers to is 'the aesthetic representation of magnitude', which implies a poetic or artistic abstraction that presents to an individual the limit of their conceptual capacity while simultaneously gesturing towards further unimaginable quantities beyond. It is through the experience of this second mode that we experience the 'mathematical sublime'. It is easy to see from this argument how McLoughlin has deduced a less successful 'taliation' mode and a more successful 'synecdochic' mode: within this conceptualisation a single name within a finite list of names at a war memorial would sink into the anonymity of a statistic, whereas the anonymity of the unknown soldier war memorial can be imagined as one's own lost family member while simultaneously gesturing to the unimaginable loss of an unknown number of similarly valued loved ones.

I do not agree with Kant's dichotomy: I am not convinced that there exists a clear distinction between mathematics and aesthetics. Rather, I think that there is something inherently poetic about mathematical abstraction. Consequently, I think there may be literary modes for the representation of the scales of war and death which McLoughlin does not address, poetic modes which are simultaneously taliations and synecdoches. I will discuss these modes through notions of the *mechanics of poetic compression* as well as the *poetics of beyond the infinite*. In homage to McLoughlin, I will first introduce these poetic approaches through allusion to sculptural war memorials.

I propose poetic devices which operate as mathematically informed and engineered machines for the compression of information, the mechanics of poetic compression. These create memorials which would allow one to sit before the Tomb of the Unknown Soldier but which would mechanically rotate through the memorial's crypt the individual corpses of the many millions, billions, trillions even, of potential war dead. In this chapter I suggest that this poetic approach, which depends upon abstraction and mathematical combinatorics, has two functions: firstly, as with McLoughlin's 'taliation' and 'synecdoche' representational modes, it serves as witness to the huge scale of earthly suffering and loss.

Second, this mode functions to hold, to grasp, to frame, that infinity of loss in order to gesture towards something beyond its frame, towards what I have called 'the night', 'the void', the subaquatic vision of the 'amphibian', and which Kant might call 'the sublime' and which in this chapter I refer to as the 'beyond the infinite'.

This poetics of beyond the infinite may be represented by Britain's National Arboretum War Memorial for the military casualties that have occurred since 1945. Remembering Das's acknowledged power of the blank page of a trench diary, what I find moving about this memorial are the rows of stone monoliths that are still blank, standing alongside those filled with the names of the already dead, which patiently await the war dead of the future.

Framings of the infinite are evident in these following two excerpts, the first from a poem by Henry Vaughan, written in the aftermath of his service as a defeated Royalist soldier in the English Civil War, and the second from a poem by William Blake, written in 1803, the year Britain declared war on Napoleon's France:

> 'I saw Eternity the other night,
> Like a great ring of pure and endless light,
> All calm, as it was bright'
> [Henry Vaughan, 'The World',1650. (Vaughan, 1957)]

> 'To see a World in a Grain of Sand
> And a Heaven in a Wild Flower
> Hold Infinity in the palm of your hand
> And Eternity in an hour'
> [William Blake, 'Auguries of Innocence', 1803. (Blake, 1950)]

Interestingly, while both poets perceive the divine within these framed conceptualisations of the earthly infinite, it is only the combatant, Vaughan, who concludes his poem by tracing a 'path' and 'way' *beyond* this conceptualised infinite.

Compulsive Compression

Perloff identifies an implication by Wittgenstein of heightened density in his writing:

> 'To say "Philosophy must be written only as one would write poetry" [as Wittgenstein himself said] is to be aware of the need for density and resonance – rather than logic and sequential argument – in the verbal construct.' (Perloff, 2011)

Yet Perloff notes that this propensity for 'density' in Wittgenstein's 'poetry' is not uniform throughout his writing career.

> 'In Wittgenstein's later writings, the propositional-aphoristic mode of the *Notebooks* and the *Tractatus* gives way to a rather different style […] the terse and enigmatic propositions of the *Tractatus* are replaced by what looks like a much more casual, free-wheeling discourse.'
> (ibid.)

Despite, therefore, being unable to interpret its 'enigmatic' compression, Perloff does imply, through descriptors such as 'terse' and 'aphoristic', and in contrast to words such as 'casual' and 'free-wheeling', that Wittgenstein's wartime 'poetry' of the *Tractatus* is significantly more compressed than his later work.

Norman Malcolm, one of Wittgenstein's students and 'chief disciples', also perceives this stylistic density, but rather than perceiving it as purely 'enigmatic' he argues for an opportunity for an 'unfolding' of the enigma:

> 'Wittgenstein compressed his thoughts to the point where further compression is impossible. What is needed is that they be unfolded and the connections between them traced out.'
> (Malcolm, in Grayling, 2001)

Yet whereas Malcolm correctly perceives potential meaning where Perloff sees only enigma, he, too, misses a crucial point: I agree that what is vitally needed is an 'unfolding' of Wittgenstein's densely compressed thoughts. However, what Malcolm misses is that in order to perceive the thoughts and the connections between the thoughts it is not simply a question of unfolding an accordion in order to see the designs upon the bellows, but rather one must also ask: why is this musician using an accordion? What thoughts are being communicated through the actual act of compulsive compression *in addition* to the thoughts which are themselves 'enfolded' within? This aspect of Wittgenstein's poetry carries a meaning as important as those meanings which are themselves compressed.

To address the challenge of representational scale mentioned above, post-traumatic writers adopt strategies of extreme hermeneutic compression in order to compress the conceptually incomprehensible into the conceptually manageable. They can even be seen to employ advanced mathematical techniques to mobilise the structures and datasets necessary to do this. This compulsion towards compression may intensify at times of overwhelming trauma and lessen at times of reduced pressure; this hypothesis would, at any rate, explain the transition from Wittgenstein's 'compressed' wartime writing style to his 'casual, free-wheeling' later style.

And his wartime impulse towards compression was, indeed, *compulsive*. In the Preface, Wittgenstein claims that through his book 'the problems [of philosophy] have in essentials been finally solved'. He claims his solution is 'unassailable' and 'definitive'. And Wittgenstein

completes his ‘definitive’ ‘solution’ to ‘all the problems’ in only 525 statements which comprise less than one hundred pages. Yet he further compacts this extraordinary claim of compressed thought into a mere *seven* primary propositions. He then, in a letter to the publisher von Ficker (quoted in Nordmann, 2005), claims that the book’s meaning can be further compressed into a mere *two* propositions, the first and the last. In his Preface he summarises in two clauses of only *one sentence*: ‘[the book’s] whole meaning could be summed up somewhat as follows: What can be said at all can be said clearly; and whereof one cannot speak thereof one must be silent.’ Yet, as shall be explored later in this chapter, in the motto of the book he claims everything known can be ‘said in three words’; and in Proposition 4 he declares that everything that can be known, and indeed the essence of the world, can be summed up in only three symbols.

In summary, the sheer force of Wittgenstein’s compression has, according to him, compressed the solutions to all philosophical problems into 525 propositions, compressed those 525 propositions into seven propositions, compressed those seven propositions into two propositions, compressed those two propositions into one sentence, compressed one sentence into three words, and compressed three words into three symbols.

The Poetic Mechanics of Infinite Compression 1: 100 Trillion Poems

Like many of the poets I discuss, Raymond Queneau lived a life characterised by uncertainty and unpredictability. Born in France, he was eleven years old when the First World War began and devastated his country (Mathews and Brotchie, 1998). He served compulsory military service in the French Army in colonised Algeria in 1925 and 1926 and was again called up for military service in the failed 1939-1940 attempt to repel the Nazi invasion at the beginning of the Second World War. As a young man in his late teens and twenties he began a relationship with, and later married, André Breton’s sister, and was consequently exposed to the wild, angry, mad poetics of such luminaries of Modernism, all back from the carnage of First World War front-line fighting, as Vaché, Paul Eluard, and Louis Aragon, as well as prominent non-combatants such as Tristan Tzara, and indeed André Breton himself. Following a violent confrontation with Breton, in 1929 Queneau parted company with the Surrealists. Queneau was passionate about poetry, and he was also a trained mathematician. In 1960 he founded the avant-garde poetry group Oulipo with François Le Lionnais. Le Lionnais, born in Paris in 1901, also spent his youth in a country at war. He was a trained chemical engineer who was a close friend of the pioneering French Nobel Prize-winning quantum physicist Louis de Broglie (who first theorised wave-particle duality). During the Second World War Le Lionnais was active in the French Resistance, was captured by the Gestapo, tortured, and spent 1944 and 1945 in a concentration camp.

These experiences, of war, hostile occupation, combat, torture, and imprisonment, are so extreme that it seems intuitive that the words and symbols learned prior to such experiences would not be adequate in their description. A different world of poetic expression would surely be needed. To someone who has fought against the Nazis, been tortured and imprisoned, has survived and is aware that six million people did not survive those camps, the notion that such an experience can be *described* with words learned as a child is surely an absurd delusion. Any poetic representation would be absurd. Yet the need to express such traumatic injustice is so compulsive that the only way to proceed is to embrace that absurdity, the ‘umour’, as Vaché might term it, and give the attempt one’s best shot with ‘dry’, iconoclastic, humour. So, let’s embrace the umrous: let’s imagine six million people died. Let’s imagine an average age of 46 years for each person at the time of their violent, premature death. Let’s write poems for every one of those six million people, one poem for every day of their terminated life. How many poems would that be? Approximately 100 trillion poems! Surely to write 100 trillion poems would be an impossible feat?

To achieve this, Queneau asked his friend Le Lionnais for mathematical assistance, and in so doing they co-founded Oulipo. The mathematician, poet, and Oulipo member Jacques Roubaud gives a description of the poem they developed in his heavily enumerated article ‘Bourbaki and the Oulipo’:

> 14. The first model Oulipian work was written by Queneau in 1961: *Cent mille milliards de poèmes* consists of a sequence of ten fourteen-line sonnets. Any line in any one of these sonnets can replace the corresponding line in any other sonnet. The rhyme scheme of the sonnet is uniform; grammatical correctness is assured, no matter what sequence of lines occur. The consequences of this interchangeability are not hard to see. Start with the first line, taken in isolation: there are, obviously, ten alternatives or possibilities for it. When we now add a line, we know that each of the ten first lines can be followed by any of the second lines: this gives us 10 x 10 = 100 possible combinations of two lines. Each of these combinations can in turn be followed by any one of the ten third lines, a step that will produce 10 x 100 = 1000 possible combinations of *three* lines. In similar fashion, every additional line raises the number of possible combinations by a factor of ten until, with the fourteenth line, we attain 10 to the power of 14 possible combinations of fourteen lines. Queneau calculated that someone reading the book twenty-four hours a day would need 190,258,751 years to finish it. (Roubaud, 2007)

In developing this new poetics and mobilising such structures, Le Lionnais took inspiration from mathematical associates. The Bourbaki were a 1920s group of avant-garde French, primarily Jewish, mathematicians led by André Weil, who had been required to teach themselves mathematics at university during the First World War because many of the teaching faculty in Paris had been killed during fighting. Motivated by Cantor, Russell, and another influential mathematician called Hilbert, they determined to rebuild mathematics from solid foundations based in Set Theory. They did this anonymously and collectively, as an intentionally ethical and political, as well as mathematical, project. Roubaud takes up the narrative. What he says begins with a reference to the need for secure foundations which relates to my previous chapter; however, he then goes on to describe the need for structure in developing a mathematics of scale and subsequently the parallel with the poetics of structure and scale in Oulipo:

> 42. Bourbaki's initial plan - to rewrite Mathematics in its entirety and provide it with solid foundations using a single source, Set Theory, and a rigorous system, their Axiomatic Method - was explicitly adapted by Francois Le Lionnais for the Oulipo.
>
> 44. Bourbaki worked with structures. A structure in Bourbaki's conception of mathematics is capable of producing an infinity of theorems, by deductions from its axioms.
> 45. The Oulipo works with constraints. A constraint is the oulipian equivalent of a bourbakist structure.
> 46. Bourbaki was concerned not with theorems but with the structures capable of proving theorems, in accord with the rules (constraints) of deduction.
> 47. A text written according to an oulipian constraint is the equivalent of.a mathematical theorem. But the work of the Oulipo is not the production of literary texts. What is intended is the invention, discovery and rediscovery of constraints capable of potentiality. (Roubaud, 2007)

It is important to note that in describing Queneau's poem, and Oulipo poetry more generally, Roubaud does not even mention the words in it, the theme of the words or meanings of individually constructed sonnets. This is because the individuated words and any emotions they attempt to express are of no importance: this is not the poetry of individual sentiment. This is the poetry of genocide, of unnamed millions in death camps. This is poetry which can only communicate its message through its structure, through what it *does to* the words and not through what the words themselves semantically express. It is a poetry in which the structure oppresses the words, in which the words have no agency as their individual meanings have no relevance, in which the agency of the constraint and the 'uniform' rhyme creates a machinery in which voiceless words, trillions of them, are 'replaced' in anonymised

'interchangeability'. Above all, and as implied by its title, it is a poetics of *scale*. In this poetry we cannot see the specific material details or emotional sentiments of inhabited environments and their lives: instead, we see trillions of voiceless words being momentarily exposed and crushed within the infinite uniform machinery of the poetic structure.

Neither Queneau nor Le Lionnais could write 'poems' which described their experiences using words. Even to have attempted to do so would have been, in the often-misquoted words of Adorno, *barbaric*. However, they were able to construct structures capable of poetically expressing something of the barbarism and scale of those of their experiences which they could not verbalise.

The Art of the Death Machines

By the time the second issue of the British Futurist-inspired Vorticist magazine *Blast* was published in 1915, several of its contributors had themselves experienced destruction similar to that witnessed by Futurism's founder Filippo Marinetti in the years preceding the First World War (Pound, 1916). 'VORTEX' is an essay in this 1915 issue of *Blast*, 'WRITTEN FROM THE TRENCHES' (ibid.) by the sculptor Henri Gaudier-Brzeska. Gaudier-Brzeska had served in the army for several months, including two of intense fighting, when he wrote his essay. In September 1914 he had survived a patrol in which seven of the twelve soldiers were killed. In November that year he was promoted to sergeant and was subsequently injured. He wrote the essay 'VORTEX' from the trenches and posted it to *Blast* editor Wyndham Lewis while spending three days receiving treatment for those injuries. Gaudier-Brzeska was killed within days of his return to the front line. The capitalisations in the excerpts from his text below are his, as he strives, with pen and paper, crouched in a trench, to aesthetically access registers of intensity which bear semblance to his experience:

> I HAVE BEEN FIGHTING FOR TWO MONTHS and I can now gauge the intensity of life.
> HUMAN MASSES teem and move, are destroyed and crop up again.
> HORSES are worn out in three weeks, die by the roadside.
> DOGS wander, are destroyed, others come along again.
> …
> THE BURSTING SHELLS, the volleys, wire entanglements, projectors, mortars, the chaos of battle DO NOT ALTER IN THE LEAST the outline of the hill we are besieging.
> IT WOULD BE FOLLY TO SEEK ARTISTIC EMOTIONS AMID THESE LITTLE WORKS OF OURS.
> THIS PALTRY MECHANISM, WHICH SERVES AS A PURGE TO OVER-NUMEROUS HUMANITY.
> THIS WAR IS A GREAT REMEDY.
> IN THE INDIVIDUAL IT KILLS ARROGANCE, SELF-ESTEEM, PRIDE.
> IT TAKES AWAY FROM THE MASSES NUMBERS UPON NUMBERS OF UNIMPORTANT UNITS.
> …
> I SHALL DERIVE MY EMOTIONS SOLELY FROM THE ARRANGEMENT OF SURFACES. I shall present my emotions by the ARRANGEMENT OF MY SURFACES, THE PLANES AND LINES BY WHICH THEY ARE DEFINED.
> Just as this hill where the Germans are solidly entrenched, gives me a nasty feeling, solely because its gentle slopes are broken up by earth-works, which throw long shadows at sunset. Just so shall I get feeling, of whatsoever definition, from a statue ACCORDING TO ITS SLOPES, varied to infinity. (from 'VORTEX', (Pound, 1916))

In Gaudier-Brzeska's 'VORTEX' the men, horses, dogs, are all killed. More 'come along' or 'crop up', but they will also be killed. It is as though they are being driven through an Oulipian machine. Gaudier-Brzeska's sculpting practice this anticipates is a poetry of 'PLANES' and

‘SURFACES’, akin to Vaché’s ‘geometry of feeling, all the lines and angles’, and Wittgenstein’s geometric matrices of atomic facts. Like Russell’s ‘beautiful world’ of mathematics, this is an abstract art that is ‘free of human sordidness’. Yet, as with Russell’s world, the ‘beauty’ is deceptive: such flights to abstraction offer escape, but by being propelled by such overwhelming fear and horror they simultaneously carry the poetic weight of experiences such as those they offer escape from. These poetries of warfare are depopulated space-scapes built out of the geometry of dead and dying matter moving interminably through death machines.

The Poetic Mechanics of Infinite Compression 2: a formula for everything

Two years after the 1918 publication of Tristan Tzara’s *Dada Manifesto* in which he claimed to be ‘against all systems’ and in support of unconditioned individual expression, he wrote what would become his most famous work: the construction of an algorithmic poetic system which appears to instruct the elimination of all individual creative autonomy:

> *How to Make a Dadaist Poem*
>
> *To make a Dadaist poem:*
> *Take a newspaper.*
> *Take a pair of scissors.*
> *Choose an article as long as you are planning to make your poem.*
> *Cut out the article.*
> *Then cut out each of the words that make up this article and put them in a bag.*
> *Shake it gently.*
> *Then take out the scraps one after the other in the order in which they left the bag.*
> *Copy conscientiously.*
> *The poem will be like you.*
> *And here are you a writer, infinitely original and endowed with a sensibility that is charming though beyond the understanding of the vulgar.*
> (Tzara, 1920)

It is interesting to speculate on why Tzara’s approach to poetry appears to shift so dramatically between 1918 and 1920. Although he was from a persecuted and peripatetic background, Tzara had spent the First World War in the security and social and political stability of Zurich, a safe harbour for boisterous dreams, of Tzara, of Joyce, of Lenin, amid the storms of conflict, memorably captured in Tom Stoppard’s 1974 play *Travesties* (Stoppard, 2010). Perhaps his wartime writings reflected something of that secure, Rousseau-esque rebellious pomp. Yet in 1919, after the War, Tzara moved to Paris and joined the staff of the literary magazine *Littérature*, a magazine founded by three veterans traumatised by their recent experiences – Breton, Louis Aragon, and Philippe Soupault. It may be legitimate to suggest that Tzara had absorbed something of the more structured, yet more volatile, visions proposed by Vaché, who died of a heroin overdose alongside a friend the year that Tzara arrived in France, that were embraced and proselytised by Breton. It is possible that Tzara saw, in the axioms and structures of Vaché, and those, too, of the Bourbaki mathematicians working in Paris at the same time, methods for addressing the artistic crisis he had diagnosed two years earlier. In terms of both motivation and method I see much of the Oulipian in the dogmatic constraint of *How to make a Dadaist poem*:

> 56. Whereas Bourbaki was trying to address the crisis of the foundations of mathematics, Oulipo wanted to address ‘the crisis of traditional forms in poetry and prose’.’

> 44. Bourbaki worked with structures. A structure in Bourbaki's conception of mathematics is capable of producing an infinity of theorems, by deductions from its axioms.'
> 47. A text written according to an oulipian constraint is the equivalent of.a mathematical theorem. But the work of the Oulipo is not the production of literary texts. What is intended is the invention, discovery and rediscovery of constraints capable of potentiality. (Roubaud, 2007)

During the War Tzara inhabited a safe country surrounded by violence, and that violence is reflected in his revolutionary battle-cry for unconstrained individual creativity. After the War Tzara lived as a living body surrounded by the ghosts of the recently dead and killed. To reflect the millions of lives and the infinity of lost experience Tzara adopts a structure which, like that of the Bourbaki, 'is capable of producing an infinity of theorems, by deductions from its axioms', but which, rather than producing 'theorems', is capable of producing an infinity of poetic experience:

> *The poem will be like you.*
> *And here are you…, infinitely original and endowed with a sensibility…*
> *beyond the understanding of the vulgar.*

Tzara's poem reminds me of a Turing machine in its simple process, offering a defined programme to algorithmically move through and reliably record a given dataset to produce a defined output.

There are only two independent input variables in the poem-process: a choice regarding the newspaper, and a choice regarding the specific article. As any specific newspaper article must invariably derive from a specific newspaper, we can generalise these two variables to one single variable, namely the choice of newspaper article. If we define a system in which a set of all the words in any chosen newspaper article is designated by the symbol [¯p]; and in which the *remainder* of words, held in a bag, from an initial given set [¯p] of words is designated by the symbol [¯ξ]; and in which an operating function (a process) exists through which an individual word is randomly removed from the remaining words in the bag [¯ξ] and recorded, and this operation is designated by the symbol [N(¯ξ)] (as in, record that which Is now Not in the bag (¯ξ)); then we could, were we compelled towards compression through traumatic overload, represent a system capable of producing an infinity of Dadaist poems with only three symbols:

[¯p, ¯ξ, N(¯ξ)]

How to write a Wittgensteinian poem

The lure of reincarnation is strong. After Descartes' five-year-old daughter died, he became obsessed with the new science of robotics, then called automata, and engineered his own automaton in the shape of a child [Kang, The Mechanical Daughter of Rene Descartes, 2016]. In 1919, Wittgenstein, like Tzara and Descartes, was also surrounded by ghosts, not least his three brothers, his father, his close friend and lover, and his First World War comrades and enemies alike. In Book One of Genesis we are told that God, having constructed during the first four days of Creation a universe of light, dark, stars, sun and moon, earth, seas, and land, spends days five and six populating his empty world with life.

> 5.471 The general form of proposition is the essences of proposition.
> 5.4711 To give the essence of proposition means to give the essence of all description, therefore the essence of the World.
> 5.472 The description of the most general propositional form is the description of the one and only general primitive sign in logic.
> 6 The general form of a truth-function is [¯p, ¯ξ,N(¯ξ)]. This is the general form of a proposition. (Wittgenstein, 1922)

And here are you…, infinitely original and endowed with a sensibility…
(Tzara, 1920)

In the *Tractatus* the world is created by Wittgenstein in Proposition 1. Wittgenstein's created world is the world of an individual living thing inhabiting a Berkeley-esque world of phenomenological solipsism. There are consequently as many Wittgensteinian worlds as there are living things, defined by experience – some people, for example, inhabit their own happy world, others inhabit their own unhappy world. Yet all living things, in Wittgenstein's system, similarly represent their own world to themselves. According to Wittgenstein this is not just their world, it is the essence of what it means to be alive in the world. In Proposition 6 Wittgenstein defines a process through which *everything* that *anyone* could *ever* experience could be generated, and in so doing so he shows us his understanding of the essence of life. Having established his system, he is able to do this with only three symbols.

The 'motto' which introduces the *Tractatus* is a quotation from the now largely unremembered 19th-century Viennese journalist and literary critic Ferdinand Kürnberger: '[...] and whatever a man knows, whatever is not mere rumbling and roaring that he has heard, can be said in three words.'

The newspaper article from which the motto comes concerns different modes of expression between educated and non-educated people when discussing different eras of art history (Knoten, 2010). But why should Wittgenstein, who chose every word so deliberately, open what he considered, at the time, to be both his life's masterpiece and a major work solving all metaphysical questions, with a quotation from a little-known nineteenth-century journalist? And to do so immediately following, in the book, his dedication to the memory of his recently deceased friend and lover David Pinsent? Wittgenstein had both the self-conviction – some might say arrogance – of a genius, and his letters also evidence a sense of humour towards those close to him, especially male lovers, which was quite childish, enjoying puns and unusual or absurd in-jokes relating to lowbrow culture such as the Hollywood flicks he loved to watch (always in the front row) and the detective thrillers he would read voraciously (Monk, 1991, Part III, Chapter 17: 'Joining the Ranks'; Part III, Chapter 11 'The Second Coming'). I think there is something of an in-joke with (the ghost of…) Pinsent here: *'we both know I'm a philosophical genius, but check out this banter from the trash press!'* (His enjoyment of the popular press with Gilbert Pattisson is documented in Monk, Chapter 11). Additionally, I think that the self-referential quality of the quotation, and the news article more broadly, appealed to Wittgenstein: 'in three words' is itself a three-word phrase. Kürnberger does not explicitly state this fact, but does explicitly state, equally self-referentially, that the three words are, in fact, 'in a nutshell': everything can be stated in three words, because everything can be said *in a nutshell*. And herein lies the *self-conviction* or *arrogance* of Wittgenstein's genius: the most famous and important three words in the history of philosophy, an intentional trinity articulated by a post-combat Catholic, Descartes, rebuilding his faith from first principles, are the self-referential triptych that first appeared in the six days of his *Meditations*' Creation, *cogito ergo sum*. For Wittgenstein, a word, a letter, a clause, are irrelevant units; for him 'the sign' of the 'thought', the expressed picture of facts, is the important foundation of communication. When Wittgenstein writes his motto, he is gesturing towards his own sixth day of Meditative Creation, Proposition 6, in which he populates his created world with human consciousness. Wittgenstein does this by showing us his experiences, through the record of his notebook propositions he presents in the form they occurred to him, by showing us his thought processes, and by telling us how this process works; and he sums all of this up in three symbols, [¯p, ¯ξ, N(¯ξ)], Wittgenstein's own *cogito ergo sum*, in which he expresses: *I am thinking, look, you can see my thought processes as they happen, and therefore I exist; and, self-referentially, this is also the space in which I will tell you what I have shown you, and I will do so in these three symbols*. In his motto Wittgenstein gestures towards this reframing of and positioning of himself alongside Descartes in terms of making a major contribution to philosophical consideration of the epistemological relationship between soul and universe; and he does so within the context of a simultaneous retelling of Genesis on the one hand and, on the other, a dismissive turning away from the academy as he turns back towards David Pinsent and smiles.

Beyond the infinite: glimpsing a void of the mystical

> 5.632 The subject does not belong to the world but it is a limit of the world…
> 5.6331 For the field of sight has not a form where the eye partakes in it…
> 6.431 As in death, too, the world does not change, but ceases.
> 6.4311 Death is not an event of life. Death is not lived through.
> 6.432 *How* the world is, is completely indifferent for what is higher…
> 6.44 Not *how* the world is is mystical, but *that* it is.
> (Wittgenstein, 1922)

Notions of infinity belong within our own 'field of sight'. For example, the nineteenth-century mathematician Georg Cantor, a pioneer of Set Theory and a major influence on the mathematics of both Russell and Bourbaki, discussed above, made extensive studies of infinity, leading to different categories of infinity with differing mathematical properties and usages.

Notions of compression, machineries of combinatorics and abstraction, and the notion of a formula for everything, discussed thus far in this chapter, belong to these comprehendible notions of infinity: they are conceivable, graspable, because in some sense their scales of input and output, however vast, can be understood and notationally represented. The poetry of Oulipo, the sculptural vision of Gaudier-Brzeska, Tzara's 'How to Make a Dadaist Poem', have a similarity with Wittgenstein's understanding of his *Tractatus* in that they too offer 'the presentation of a system'.

Wittgenstein's 'system' is built up over the first five parts of his work, culminating in his general formula discussed previously. This system associates sense perceptions with a 'picture' ('*bild*' in German) in the mind which functions as the abstract representation of a moment's experience. In Wittgenstein's system, such pictures may then be assigned a linguistic sign.

However, as the above extracts from the *Tractatus* illustrate, having built his logical picture theory of language and from around the fifth proposition onwards, Wittgenstein begins to gesture towards the limit of his own constructed infinity, indicating the limits of even natural language. This limit appears linked to death, and beyond it Wittgenstein claims a mystical dimension about which he can say nothing.

This dimension cannot, by definition, be described in any way by language. However, its existence can be pointed to through analogy, a process which can be illustrated through literary exemplification.

Georges Perec was born in Paris in 1936 to parents who had fled antisemitic persecution in Poland during the 1920s (Mathews and Brotchie, 1998). His father died from gunshot and shrapnel wounds while serving in the French army's defence against Nazi invasion in 1940, and his mother was killed in a concentration camp, probably Auschwitz, in 1942. Georges grew up with an aunt before attending the Sorbonne and then spending two years as a French paratrooper in north Africa at the height of the Algerian War in 1958 and 1959. He spent the remainder of his tragically short life (he died aged 45) working as an archivist in Paris.

Perec's writing is characterised by wordplay, multilingual punning, the use of elaborate mathematical structures as textual structures, and a wildly innovative literary experimentalism with the material of language in his quest to articulate inexpressible loss.

In *La disparition* (1969; 1994, translated into English as *A Void*), Perec writes an entire novel without any instance of the use of the letter 'e', the most common letter in the French language. 'E' has been entirely eradicated from the text, resulting in a strange and strained style, lacking the linguistic colour and scope afforded by a full alphabetic complement. This,

of course, was the point: the compositional constraint of the book, the extermination from language of the letter ‘e’, creates a new linguistic reality. Readers are given, whenever they become aware of the constraint, a poetic glimpse into what it would be like to inhabit a smaller, impoverished, *waned world*, one in which groups or individuals who had never been known or appreciated enough to have even had their presence knowingly missed, were absent. How many more words are possible with the letter ‘e’? How many more plots, sensations, emotions? How many as yet unimagined words and phrases, as yet unwritten poetries, might be possible with the letter ‘e’? To unconsciously inhabit a world of 25 letters Is to unconsciously inhabit a world which is a factor of 26 smaller than that which is enabled by a full alphabet. It is to inhabit a world which has waned.

A key aspect of Perec’s poetry here Is not just the presentation of two worlds but that, by analogy, we are able to comprehend that we are ourselves always unknowingly inhabiting a world defined by its limit: Perec presents an unknowing reader with the barren vistas of a 25-letter world so that we can perceive this limited consciousness compared to the novel’s unspoken infinity that lies beyond in what is to us, as readers, the still very much conceivable 26-letter world. By immersing us in a 25-letter world, Perec first fully acculturates and acclimatises us to a worldview, which then enables us to step outside that worldview (into our previously experienced worldview of 26 letters) from which we can look back at our smaller world and perceive its limit. Yet the poetic power is that, by analogy, we glimpse into unimaginable infinities beyond the limitations of our own dimensions of comprehension, including every single structure of meaning with which we engage with Perec’s book. *A Void* does not merely show its own constraint; it also gestures towards the conceptual constraints with which we read it, and the unlimited void which lies beyond.

In Perec’s poetics we are presented with constrained worlds so that we might be able to look back upon them and perceive their respective boundaries. By perceiving the conceptual limitations of a smaller world we have only recently inhabited ourselves, we are able to glimpse that infinity which we cannot conceive of, but which we now understand to exist beyond the limitations which we cannot perceive. For Perec, this unimaginable infinity appears to be a space of extraordinary loss.

> 3.1431: The essential nature of the propositional sign becomes very clear when we imagine it made up of spatial objects (such as tables, chairs, books) instead of written signs. The mutual spatial position of these things then expresses the sense of the proposition…
> 6.124 The logical propositions describe the scaffolding of the world, or rather they present it…
> 6.54 My propositions serve as elucidations in the following way: anyone who understands me eventually recognises them as nonsensical, when he has used them—as steps—to climb beyond them. (He must, so to speak, throw away the ladder after he has climbed up it.)
> He must transcend these propositions, and then he will see the world aright.
> (Wittgenstein, 1922)

Wittgenstein guides us up his ladder, through the scaffolding of his expressible world, to the border between that realm and his own inexpressible convictions. He does this by using natural language, a language characterised by poetic richness and potentiality, to construct a smaller world, a purely logical language of symbols and axioms. Wittgenstein writes his *Tractatus* in a poetic language, a 26-letter world, but defines within it a purely logical language, a 25-letter world. Ethics cannot be sensibly spoken of within Wittgenstein’s logical language because ethical beliefs for Wittgenstein lie outside the picture theory of immediate sense perception. And yet Wittgenstein claimed in his letter to von Ficker that the 'sense of the work is an ethical one’. By expressing the limitations of his linguistic world Wittgenstein is able to point to a distinction between his linguistic, sensory world and something else beyond that which he believes in: *nothing can be sense-experienced or logically expressed about ethics, and I present this smaller system to you to prove that, and yet I do have ethical sensations and the sense of this work is an ethical one*.

This juxtaposition of worlds allows Wittgenstein, in his penultimate proposition, 6.54, to gesture towards the limitations of even his larger, poetic, ethical language and intent with which he has written his text. Not only is his logical language limited, but the frame within which his logical language sits, a frame the sense of which Wittgenstein has described as ethical, is similarly limited. What, then, can be said of that which lies beyond those limitations? What can be said of the linguistic richness we lose through not having access to languages of 27, 28, 29, 30… letters *beyond infinitum*?

Exiled to an extralinguistic void of the mystical, the reader is left blinking into a discombobulating dimension outside time, space, and conceptualisation. I think that this sensation of a conceptual rupture and fragmentation, also emergent in the works of Stapledon, Vaché, and Gaudier-Brzeska , as discussed above, aesthetically evokes something of the experience of being in an explosion.

Chapter 4: Abstraction

Explosion and the Flight to Abstraction

> ‘Halted against the shade of a last hill,
> They fed, and… slept.
> But many there stood still
> To face the stark, blank sky beyond the ridge,
> Knowing their feet had come to the end of the world…
> For though the summer oozed into their veins
> Like the injected drug for their bones’ pains,
> Sharp on their souls hung the imminent line of grass,
> Fearfully flashed the sky’s mysterious glass.
>
> Till like a cold gust thrilled the little word
> At which each body and its soul begird
> And tighten them for battle.
>
> So, soon they topped the hill,…
> And instantly the whole sky burned
> With fury against them;… and the green slopes
> Chasmed and steepened sheer to infinite space.
>
> Of them who running on that last high place
> Leapt to swift unseen bullets, or went up
> On the hot blast and fury of hell’s upsurge,
> Or plunged and fell away past this world’s verge,
> Some say God caught them even before they fell.
> But what say such as from existence’ brink
> Ventured but drave too swift to sink.
> The few who rushed in the body to enter hell,..
> And crawling slowly back, have by degrees
> Regained cool peaceful air in wonder—
> Why speak they not of comrades that went under?’

‘Spring Offensive’ (1918) was Wilfred Owen’s last poem before he was killed. Owen’s last poem situates itself seasonally within its text, here in spring, and in so doing also situates time itself as a textual and epistemological coordinate of significance only to the merely living: like the final date written into Private Reid’s diary, a date silhouetted against the blank page of absence, ‘Spring Offensive’ inscribes the finitude of temporality against the blank page of Owen’s subsequent death.

I think of ‘Spring Offensive’ as akin to Wittgenstein’s Proposition 6.54: certainly, it draws the eye back, 6,5,4, back down the hill of Owen’s assault, back over the now dead and mangled bodies and propositions of Owen’s military corps and poetic corpus. It is this latter backwards look towards the corporeal and sensuous property of the poem that Das focuses on in his analysis:

‘The sense of touch […] was particularly acute in the case of England’s most famous war poet [Owen] and is fundamental to understanding his art […]
‘Halted against the shade of a last hill’ (‘Spring Offensive’). Reading these opening lines is like observing the male body in slow motion […]
These verbs [of ‘Spring Offensive’], implying movement, drama or contact, suggest an acute awareness of the embodiedness of the subject in a material universe’ (Das, 2006, Chapter 4,’Wilfred Owen and the sense of touch’).

Yet ‘Halted against the shade of a last hill’, like the shadows of the slopes which so terrified Gaudier-Brzeska before he, too, was killed, also suggests a border or a limit beyond whose threshold the body cannot pass and beyond whose experience the body cannot tell. This limit is fittingly represented as a line of present absence: shade, the absence of light. Again and again in ‘Spring Offensive’ bodies hurl themselves against this limit, this ‘last hill’, ‘[blank sky beyond the] ridge’, ‘end of the World’, ‘line of grass’, ‘last high place’, ‘World’s verge’, ‘existence’ brink’, all words and phrases which end Owen’s lines, demarcating the border beyond which the text gives way to the blank white page.

Poetic text can distinguish itself from prose through its morphology and, in ‘Spring Offensive’ specifically, its line breaks. The poetic dimension of ‘Spring Offensive’ incorporates both the text and the blank space around it. One might even say that the blank space is ‘the most important part’. What I feel Das’s analysis misses Is that in ‘Spring Offensive’ the physical is presented as a limit, a limit of text and experience. At the moment the advance into battle is sounded, ‘like a cold gust’, like the ‘gentle breeze’ which cruelly and conclusively separates the loving couple in Tagore’s ‘The Postmaster’ (mentioned in the first chapter of the thesis), a flexible, malleable, and perishable bond between body and soul is foregrounded:

> ‘At which each body and its soul begird
> And tighten them [the soldiers, but also body and soul themselves] for
> battle.’

This foregrounding is built on a premised dichotomy between body and soul which permeates the poem, the body a bag of abject bones into which a soul may (or may not) seep like the summer which may follow spring or the morphine which may follow spring’s injuries. However, as the poem runs on, more and more bodies crash into their end lines, ‘chasmed and steepened sheer to infinite space’, and more and more souls dissipate into the blank page:

> ‘To face the stark, blank sky beyond the ridge,
> Sharp on their souls hung the imminent line of grass,
> Fearfully flashed the sky’s mysterious glass.’

I wonder whether this juxtaposition of dimensions, a ‘line of grass’, below which the dead are to be buried, beyond which the battlefield stretches, and ‘the sky’s mysterious glass’, beneath which the battlefield is to be observed and through and beyond which the soul may pass and sit alongside the divine, was inspired by the poet John Clare’s 1844 meditation upon existence, pastoral Eden, and death:

> ‘I am, and live – like vapours tossed
> Into the nothingness of scorn and noise, […]
> I long for scenes where man hath never trod […]
> There to abide with my Creator, God,
> And sleep […] where I lie
> The grass below – above the vaulted sky.’
> John Clare, ‘I am’ [1844] (Clare, 2003)

The ambiguity of Clare’s final line does indeed position the body lying upon the grass, facing up towards the sky. Yet it also separates body and soul, placing the body of the ‘I’ buried below the grass and situating the soul of the ‘I’ somewhere undefined beyond the sky.

I have argued previously that Das’s foregrounding of the ‘embodiedness’ and ‘corporeality’ of First World War poetry perhaps misses part of its function as the presentation of a border or limit from which the numinous can be gestured towards and glimpsed. This is most evident in Owen’s final poem. ‘Spring Offensive’, in which Owen gestures towards the unsealing of his own seventh proposition of silence. In this gesture we also glimpse a non-corporeal, non-expressible, realm, a realm we may consider the ‘most important’ and ‘unwritten’ part of Owen’s work, and a realm which, in the context of what we know of Owen’s life and death, presents an awareness of a limit which carries the poetic weight of premonition.

Owen differentiates between the body and the soul and uses the body of his text to define the limits of what he can express. Yet while his poetry incorporates his text, his poetry is not defined by it but rather spreads out into the blank page against which his text is written. This juxtaposition of the textual amid the poetic, in which the textual self-referentially defines its own limit against an unspoken poetic backdrop, and in which body and soul are ascribed differing properties of union and access, shares some parallels with how I have presented Wittgenstein's juxtaposition of the logical and the mystical, the properties of sense and nonsense, within the *Tractatus*. In this context it is also useful to draw a parallel between how both texts conclude:

> 'But what say such as from existence' brink
> […] rushed in the body to enter hell,[…]
> And crawling slowly back, […]
> Regained cool peaceful air in wonder –
> Why speak they not of comrades that went under?' (Owen, 1918)

> 6.431 As in death, too, the world does not change, but ceases.
> 6.4311 Death is not an event of life. Death is not lived through.
> 6.54 My propositions serve as elucidations in the following way: anyone who understands me eventually recognises them as nonsensical, when he has used them—as steps—to climb beyond them. (He must, so to speak, throw away the ladder after he has climbed up it.)
> He must transcend these propositions, and then he will see the world aright.'
> 7: Whereof one cannot speak, thereof one must be silent.
> (Wittgenstein, 1922)

A way into usefully exploring this juxtaposition might be to isolate a conversation between the two final lines:

> 'Why speak they not of comrades that went under?'
> 'Whereof one cannot speak, thereof one must be silent.'

Both poems are interested in what can be expressed about life and death. Both poems present their best efforts at expressing truths of life and death within their respective texts (Owen's textual descriptions and Wittgenstein's constructed logical language). And both poems use these modes of description to define models which demarcate comparable boundaries they present between body/soul and logical/mystical respectively. And most importantly, both poems self-referentially acknowledge that what they have written is insufficient because their own descriptions are themselves stuff of the body and the stuff of logic, and in this acknowledge a gesture towards something beyond what they have constructed: Owen, who has himself literally just 'regained cool peaceful air in wonder' after 'crawling slowly back' from 'existence' brink', and is then – at this very moment – writing about 'comrades who went under', asks why people like himself are not writing about the people who died. Similarly, in Proposition 6.54 Wittgenstein self-deconstructs his entire preceding argument.

In this sense, the blank space which surrounds Owen's textual poem is the Proposition 7 which answers the Proposition 6.54 of Owen's final line. This is why Wittgenstein's final proposition seems to answer Owen's question so neatly, because Wittgenstein is stating back to Owen what Owen has stated throughout his poem, that the body can only speak of the bodily, and the living cannot speak of the now dead:

> 'Why speak they not of comrades that went under?'
> 'Whereof one cannot speak, thereof one must be silent.'

Yet the discourse is not merely one way, and there is more than one answer to Owen's question, answers which illuminate the more abstract poetry of Wittgenstein.

Guilt, Anger, Fear, Impotence

In 2018 I sat with a qualified psychologist. This was not, however, an official appointment. It was ten years since I had come out of hospital, post-Iraq, but the last few years had been intense, both personally and professionally. I had done a lot, but I was now struggling to do anything, and specifically was struggling to complete the one project which I felt should be easy and which I felt was necessary: to write up the stories of various communities living amid war with whom I had spent time living during the previous years. So I sat with a psychologist while taking MDMA, an amphetamine that is illegal within the UK but that is a recognised and widely used auxiliary mental health medication for military veterans elsewhere in the world such as the United States.

The conversation went as follows:

> 'It sometimes helps to have a question to think about, to act as a point of reference for where your mind may go. Do you have a question?'
> 'Why can't I do what I need to do?'

A little while later the psychologist, non-judgmental, non-directive, suggested that sometimes in the way we express a question we find clues that may help us answer it. He asked me what emotions I heard in my voice of my question. I said that I heard anger and frustration.

There is no doubt that I was (and am) angry and frustrated about a lot of things. I am disabled, I know a lot of disabled people, so I've experienced and witnessed suffering related to that. But some of my anger and frustration was related to my doctorate at the time, a project to write up the stories of people living amid war: Iraq and Afghanistan had been disastrous campaigns, and initially I had thought that this were a consequence of poor judgements derived from a lack of knowledge. But by 2018 the UK had also, directly or indirectly, set fire to Libya, Syria, and Yemen. I had begun to think that it wasn't that people didn't know what was going on 'on the ground', but rather that they did not care. These were my feelings not just about government policy, but also about what contemporary academics, artists, writers, and the public more generally were concerned with. And I was beginning to think that whatever I did, whatever I described, none of my descriptions would change anything. I felt angry about all of this, but also frustrated and guilty at my own powerlessness to do anything about it. At some level I also felt fear, fear at having been in war environments, and guilt at this fear: I had been shot, bombed, interrogated, and incarcerated, yet now I lived in north London with my wife and young son, and I wasn't going back. I, too, had abandoned the living and the dead of our wars.

Even if I had completed my descriptive project it would have carried the weight of its own failure, and in that failure something of its anger, frustration, impotence, fear, and guilt. I think there is something of this in the concluding paradox to Owen's 'failed' description. Wittgenstein's emotional conflicts play out at a much more abstracted level, but they are still recognisable: after a long poem in which he describes, to the best of his ability, solutions to all philosophical questions, he answers the question: 'Why cannot philosophers answer philosophical questions?' While this, and his claim to have answered all philosophical questions himself, may appear to be arrogant and dismissive, I do not believe this to be true, any more than I believe Owen's final line to be an arrogant dismissal of the work of his friends Siegfried Sassoon et al. Rather, I think they are both saying with anger, frustration, fear and guilt, that there is a realm about which poetry cannot speak, there are feelings and emotions which poetry can never communicate, and that in comparison to that realm and those sensations all that of which poetry can indeed speak is as straw.

Abstract Rupture

The conclusion that human communication, even at its most poetically and artistically sophisticated, is limited, and can never carry the informational intensity and urgency of life or death necessary for empathy, is painful. Yet this painful realisation does not necessarily hide itself but can communicate its presence through a radical shift in a writer's or artist's practice into a new field of poetic abstraction. Abstraction in this sense carries the poetic weight of extreme emotional paradox: a compulsion to both engage with and run away from an experience within a context in which both communication and escape are impossible. Whenever David Jones' combat memories become too painful in *In Parenthesis* (1937), his epic war poem published two decades after his First World War combat experiences, characters from Welsh mythology appear, as if Jones is being forced into a fantastical abstract realm by the pressure of violence. Similarly, Kurt Vonnegut, in his 1969 novel *Slaughterhouse-Five* (Vonnegut, 1981), published over two decades after his Second World War experience, retreats into disturbingly zoologically erotic science-fiction fantasies at moments of extreme pain. Similarly, Joseph Heller's comedy becomes increasingly absurd and farcical at points in which the subject matter of his *Catch 22* (1961), published nearly two decades after his Second World War experiences, becomes most painful (Heller, 2011). After the First World War ended, Siegfried Sassoon began to write spiritual prayers which were published independently by Catholic monasteries decades after his combat experience ended (see, for example, *Lenten Illuminations*, published by Downside Abbey in 1959, and *The Path to Peace*, published by Stanbrook Abbey Press in 1960). In 1934 Robert Graves wrote a fantastical historical autobiography about the violence and sadism of imperial Rome at war, *I, Claudius* (Graves, 2006).

Samuel Beckett's rupture into new abstraction emerges at the precise moment following his description of a reimagined explosion. Before the Second World War Beckett had been deeply interested in literature, both academically and, famously, while working for James Joyce.

Beckett's early pre-Second World War work clearly evidences Joyce's influence in its playful and sonically dense use of the material of verbal language and its literarily informed and often obscure allusion. The opening of his 1934 short story collection *More Pricks than Kicks* demonstrates this:

> It was morning and Belacqua was stuck in the first of the canti in the moon. He was so bogged that he could move neither backward nor forward. Blissful Beatrice was there, Dante also, and she explained the spots on the moon to him. She shewed him in the first place where he was at fault, then she put up her own explanation. She had it from God, therefore he could rely on its being accurate in every particular.
> (Beckett, 2010)

During the war, and amid the intense pressure of fleeing the Gestapo as a hunted Resistance volunteer, Beckett's style appears to change dramatically. *Watt*, written while on the run in occupied France in 1944, appears far more interested in spatial and temporal coordinates and relations than it does in the Joycean sonics of his earlier work. Yet putting Watt to one side, in the immediate aftermath of the war he attempted to describe something of the destruction France had experienced in the war and specifically at the hands of Allied bombing. In 1946 Beckett described for Irish Radio the workings of an Irish-run hospital in Saint-Lô in France. 'The Capital of the Ruins' begins with a detailed description of the material set-up, architecture, working conditions, and operations of the hospital. It then proceeds to what appears to be a level of realistically described emotional reflection quite unlike his absurdist plays of the 1950s and indeed quite unlike anything else Beckett wrote either before or since. It appears to both acknowledge the limits of empathy and, in its sparse, direct, emotionally detached conclusion, to gesture towards the notion that it would be pointless to use any further words to describe the destruction of a bombing, for further words could do no more than repeat the emotionally inaccessible fact:

> When I reflect now on the recurrent problems of what, with all proper modesty, might be called the heroic period [of post-war reconstruction], on one in particular so arduous and elusive that it literally ceased to be formulable, I suspect that our pains were those inherent in the simple and necessary and yet so unattainable proposition that their way of being we, was not our way and that our way of being they, was not their way. It is only fair to say that many of us had never been abroad before.
>
> Saint-Lô was bombed out of existence in one night.
> (Beckett, 1997)

Beckett wrote the above text in 1946. By 1948 he had begun writing *Waiting for Godot*. This is an extraordinary literary transformation. It is as if the explosive force of his wartime years blew out the two-dimensional Joycean and Proustian richly literary textuality of his 1920s Paris into a four-dimensional post-apocalyptic realm of spatial and temporal disorientation, post-genocidal human sparsity and emergent cruelty, emotional detachment, alienation, and aesthetic purposelessness. Here Beckett no longer uses words to textually allude to Dante, as he did in 1934, but instead places his characters and audiences within his newly conceived living hell.

By 2020 I was no longer writing figurative descriptions but was instead working towards the completion of the abstract poetic project I had first glimpsed while under house arrest in north-west Pakistan in the summer of 2011. I was conducting hundreds of 'experiments' within a highly abstract field of poetic semiotics in an attempt to identify the 'poetic moment' or 'poetic event' at its most fundamental level. I include ten of these such experiments, rendered by a graphic artist working from my algorithmic instruction sets, as part of this doctoral submission. Initially I called this project *Quantum Poetics*, as I was searching for the most foundational and invisible poetic quanta. I later called the project *Vector Poetics*, represented as $\vec{P}$, as I had determined upon vectors, simple mathematical objects which carry an orientation and magnitude, as a fundamental unit.

I was particularly interested in the work of the pioneering computer scientist Claude Shannon, who in *A Mathematical Theory of Communication* (1948) developed a formal system for modelling communication. I was also interested in the Soviet mathematician Andrey Kolmogorov's post-retirement attempts to analyse poetry using Shannon's model (see Dmitri Manin's (2021) article 'Running in Shackles: The Information-Theoretic Paradoxes of Poetry', Kolmogorov confronted a number of challenges. By 2021 I felt I had found interesting solutions to these theoretical problems.

Kolmogorov's analysis failed, as I saw it, due to two primary misconceptions: first, he understood poetry as a purely word-based art form. Second, he understood poetry as resulting from an ergodic input set. I shall explain what these misconceptions mean.

First, Kolmogorov perceived poetic information as being carried only by semantic word meanings. Because of this he could not understand how poetic constraints (such as the requirement to rhyme), which one might think would limit informational potential, resulted in what he accepted to be more informationally dense text. I, on the other hand, understand poetic information as being carried upon multiple different symbolic channels and not merely the channel of semantic meaning carried by words and analysed by Kolmogorov. For example, sound, colour, rhythm, allusion, gesture, touch, environment, and material medium could all equally be used as fields of symbolic transmission. I believe new channels of symbolic transmission, which allow for increased informational density, can be opened by the very patterns of poetic constraint which Kolmogorov assumed would limit informational capacity.

Kolmogorov's second assumption relates to the modelling of the process of symbol construction and the construction of new symbolic transmission fields. Shannon's theory relies upon an ergodic set as an input set. An ergodic set is a finite (even if massive) series of

known symbols. For example, the alphabet, a known set of twenty-six symbols, is an ergodic set; Tristan Tzara's 'bag of words' for his 'How to Write a Dadaist Poem', and the internet-scraped 'bags of words' (BoW) used in AI Large Language Models (LLMs) are also ergodic sets. Kolmogorov understood poetry as the creative sequencing of such an ergodic set of defined and finite input words. I, however, conversely understand poetry as an anarchic cauldron from which novel symbols emerge. I believe poetry to be a fundamentally non-ergodic field of symbol creation.

Why I believe this to be the case and how I overcame this challenge is not the subject of this thesis. However, what is important for this thesis is that I recognised that while I considered what I was doing to be poetry it was also very different from the kind of figurative poetic descriptions which I had written before Iraq and which I believe much contemporary poetry still consists of.

Specifically for this chapter, in my solution to the 'Kolmogorov problems', in which I developed an ergodic system to model a non-ergodic system and thus use symbols to self-referentially illustrate the communicative limits of symbols, I perceive, even at this abstract level, something of the paradoxes with which Owen and Wittgenstein self-referentially unravelled their own descriptions.

More broadly, in my abstract language I perceive something of the disillusion, sadness, and fear about human affairs from which Russell and others sought refuge in the world of mathematics. I also believe this sentiment carries the poetic weight of an emotional sense that something had gone very badly wrong, politically and culturally, and that what was required was an attempt to analyse, structure, and rewrite a new source code for communication with stable foundations.

In my attempts to build my system out of three foundational primitive notions and to symbolically represent every single possible poem that has ever been written and could ever be written through axiomatic extrapolation, I perceive something of the scales of experience and loss which war involves.

None of the emotional responses to war discussed in this thesis through their emergent aesthetic effects, the experience of disillusion, sadness, chaotic uncertainty, of being overwhelmed, of loss, of anger, of frustration, of fear, of guilt, of alienation and detachment, are stated explicitly, or even implicitly, within my *Vector Poetics*. War is not described. And yet I believe that these non-expressed emotional responses to the non-expressible experiences of war may constitute the most important part of my project. And while the symbols I use may differ from those used by those post-combat writers of a century ago, while I may use symbols drawn from fields of quantum physics, machine learning, and Group Theory, to which they had no access, I believe the common factor is a compulsive attempt to utilise all available symbols to grapple with complex experiences which are themselves surely historically invariable emotional responses to war.

Science as Poetry

I will end this thesis by suggesting an avenue of potential further research. One of my aims in this thesis has been to direct the reader towards a spectrum of 'war poetry' stretching from that which is clearly recognisable as such – for example, Wilfred Owen's 'Spring Offensive' – through the more abstract mathematical mechanics inherent to the still recognisable poetry of Oulipo, towards Wittgenstein's highly abstract wartime philosophical writings which, despite appearing mathematical and detached, nevertheless appear to carry a 'poetical' [Grayling, 2001] quality and indeed, as I have argued, can be understood as poetry.

It may be that current notions of poetry, particularly in Britain, born out of eighty years of peace and influenced by movements such as Romanticism, high Modernism, and the post-war US and UK poetry of daily life (I'm thinking particularly of Auden, Larkin, Language Poetry and the New York School) understand poetry as an experience of emotions and sensations evoked by descriptions of recognisable scenes and physical objects: Tintern Abbey, a patient etherised upon a table, a red wheelbarrow, high windows. In other words, contemporary understandings of what poetry is may situate poetry at the more figurative, rather than abstract, end of the spectrum which I have proposed.

I have proposed in this thesis that poetry that is at the abstract end of this spectrum, specifically poetry by Wittgenstein and potentially poetry by myself, poetically evokes something of the experience of combat which words cannot express. But not only do I now argue for an understanding of Wittgenstein's philosophy as poetry, I also suggest that poetic criticism can travel even further down that spectrum of abstraction.

In 1905, at the outset of a century of unprecedented social upheaval, Einstein's theory of Special Relativity entirely upended prior notions of time and space (Open University, 2021; 2021a; 2022). Einstein famously alighted upon his theory while sitting alone on a tram as it moved away from a static clocktower, as he pondered how the speed he was travelling at and the speed of the light carrying the clock's image to his subjective experience were together affecting his understanding of the time passing at the actual clock. What is of interest to me is that at some, highly abstract, level Einstein's metaphysic poetically transcribes something of the upheavals in time and space, something of the tension between an individual 'observer' or participant and external, but no longer eternal, authorities, and something of the mechanistic and solipsistic lived experience of the modern human. While written in ancient Greek symbols repurposed as signifiers of novel mathematical concepts, symbols that are no longer intuitively literary, Einstein's equations poetically evoke something of the anxiety and confusion of early twentieth-century political and technological uncertainty.

Written during the First World War, Einstein's lecture (1915) and publication (1916) on the General Theory of Relativity structured his concept of the malleability of space and time he had posited earlier within a gravitational cosmology of huge masses and energies which reshape the structure of their surrounding universe. At this time of massive global confrontation and violence, when relatively newly unified countries (Germany and Italy) and older empires (British, Austro-Hungarian, Russian) were in unstable tension and alliance and at once pulling together and disintegrating, Einstein's destruction of some Newtonian certainties is a similarly apt poetic evocation of its moment.

Alfred Wegener was a German meteorologist who was also interested in the collisions and ruptures of huge masses and energies. In 1914 he was called up to serve on the front line in Belgium, but following two injuries and hospitalisation he was medically discharged from front-line service and reassigned to staffing German weather stations. In 1915 he published a paper in which he invented the theory of 'plate tectonics' and 'continental drift' (Wegener, 1961), and over the remaining years of the war published papers on vulcanology, explaining the violence of volcanic eruption as the consequence of fissures and collisions between continental land masses. His theories were dismissed until the emergence of new empirical evidence in the 1950s.

Karl Schwarzschild was a German astronomer who volunteered to serve on the Eastern Front at the outbreak of the First World War. In 1915 Einstein published the Field Equations of his General Theory of Relativity. These equations essentially structure the relationship between, on the one hand, energies and masses, and on the other the shape of the specific spacetime within which those energies and masses move. Einstein presented the equations, this relationship between the contents and shape of a part of the universe but offered no solutions. Schwarzschild worked out the first solution to Einstein's Field Equations, and he did this while fighting on the Eastern Front in 1916. The solution Schwarzschild discovered, from the front line of a war that drew his entire world into its destructive orbit, proposed a singular point of massive energy which sucked all surrounding spacetime towards its destructive core. At the time this solution was considered a merely mathematical result, but now Schwarzschild's solution is understood to represent the structure of a non-rotating Black Hole, an astronomical object only experimentally observed in the 1960s. Schwarzschild himself died in 1917, a year after his discovery.

Georges Lemaître was a Belgian physicist, and later a Catholic priest, who served as a decorated soldier with the Belgian army on the Western Front during the First World War. He survived multiple explosions, injuries, and hospitalisations. During his military service he invented the 'Big Bang' theory that suggests that the universe began as a single explosion of unprecedented energy. His theory was discredited for decades, largely because Einstein continued to believe in the Newtonian notion of a static and eternal universe.

Alexander Friedmann was a Russian, and later Soviet, physicist. During the First World War he served as an early aeroplane bomber. It is difficult to imagine the experience of piloting this early, unreliable, highly dangerous, technology, to fly close to the ground, to drop explosives, to be blasted upwards by the force of explosion and torque of one's own acceleration. While serving, Friedmann developed his novel theory of an expanding universe. He wrote his equations in a letter to Einstein but Einstein, owing to his own belief (stated above) in a static and eternal universe, dismissed the theory and attempted to rewrite Friedmann's equations for a static universe. Experimental observations by Hubble in the late 1920s, after Friedmann's death, lent credence to Friedmann's now accepted view.

Gaston Julia was a French mathematician who was seriously injured in an explosion while serving in the French army during the First World War. While recuperating in hospital, only twenty-five years old and while perhaps processing the unfathomable scale of his experiences, he wrote a groundbreaking and highly acclaimed paper in which he invented what he called 'infinitesimal geometry' (Julia, 1936), a way of writing highly compressed equations which represent infinitely diverse sequences of mathematical shapes. Julia was a shy and withdrawn person during his professional career, probably the result of having to wear a leather mask over his face for the remainder of his life due to horrific facial injuries. He was neither self-promotional nor prominent following this early professional success. Yet in the 1960s his student Benoit Mandelbrot rebranded his infinitesimal geometry as 'fractals', used emergent IBM software to visualise Julia's infinity of shapes, and published a book on fractals for a general readership. Julia's discovery is now known as the Mandelbrot Set.

Louis de Broglie was a French physicist who, like his brother, served with the French military during the First World War. While de Broglie was not a combatant, being tasked with matters relating to communication technology, the trench experiences of others must have hung over him in Paris. In any case, at the very moment that machine guns were, for the first time, converting gunshot particles into lethal waves of firepower, de Broglie invented the concept of wave-particle duality which is of central importance to quantum physics.

Werner Heisenberg was too young to serve in the German army during the First World War. However, he did serve in the Freikorps, an armed militia which attempted to maintain order amid the chaos, confusion, and revolution of post-war Germany. Specifically, in 1919 Heisenberg was deployed to Munich as part of the German state's effort to end the Bavarian Soviet Republic which had been established a year earlier. After this campaign he completed his physics PhD on the mathematics of turbulence, and in 1927 published his 'uncertainty principle', a foundational contribution to quantum mechanics which precisely and mathematically defines the limit of what can be known about a quantum system (Heisenberg,

1927). Interestingly, at the same time Kurt Gödel, amid the chaotic ruins of his own collapsed Austro-Hungarian Empire, was himself precisely and mathematically defining the limits of defined mathematical proof in his own ‘Incompleteness Theorems' (Gödel, 1986). To interpret these projects as destabilising is to miss the point: their authors, emerging out of the chaos of war and its aftermath, knew with certainty that their world was unstable, and the purpose of their projects was to precisely understand, define, and control that instability.

I myself, having studied both poetry and astrophysics to degree level, have developed my own speculative cosmological theory which I call *Disintegrating Universe Theory* or, for shorthand and in homage to Basho’s most famous haiku, *Frog Universe*. Here is a section from my notebooks, several hundred thousand words of fragmented thoughts, poems, and notes, to illustrate how different systems of thinking sit alongside one another in my creative process and contribute to my poetic practice:

———————
First Law of Anarcho-Poetics:

If,
The arc of the Universe is long, but it bends towards Justice. [Martin Luther King]
And,
The entropy of the Universe tends to the maximum. [Second Law of Thermodynamics]
And,
Entropy is a measure of chaos, chaos being understood as configuration potential. [Boltzmann]
Then:
There exists a positive correlation between Chaos and Justice.

The Anarcho-Poetic Conjecture:
That the correlation between Chaos and Justice is explained by the distance between human regulations and a divine order whose gravitational pull tears apart such human injustice.

That poetry is trusted due to its closer proximity to Justice than other texts, and that this closer proximity to Justice is demonstrated by a higher degree of configurational, and thus interpretational, potential. In other words: Poetry is defined by its linguistic entropy, its mediation of human meaning and divine chaos.

———————
Disintegrating Universe Theory:

As the Universe expands, so too is it disintegrating into ever smaller particles.
The rate of disintegration is proportional to the acceleration of the expansion.
The size of the smallest particle is inversely proportional to the size of the Universe.
The Universe is not expanding into a void, but into an asymmetric energy field, i.e. an energy field for which our own physical laws do not apply.
The ExtraVerse is composed of disparate energy domains.

——————
Think about Carnap and ‘primitives’;
Begin the TSP with An Axiomatic Foundation for Poetry, in which the primitives, primitive notions, are:
Existence
Distance
Gravity
[this could potentially be refined further, to merely ‘existence’ and ‘gravity’ (or not, actually: see below), by preceding the New Foundations with a section which describes ‘the disintegrating universe model’ / ‘the plug Universe’, in which Gödel’s Metric is adjusted to imagine a universe

which is not so much ‘expanding’ but rather being stretched into a sinkhole, in the same way an individual falling into a black hole would be ‘spaghettified’; in the plug universe model, the big bang was not something that happened ‘at the centre’ of the universe’ in our conception of what the universe is, but rather was a frog-like object that jumped into a plane from a different plane, causing a ‘splash’ and a subsequent wave effect going out and whirlpool effect dragging in; what we understand as the big bang happened around the ‘perimeter’ of the whirlpool effect, as the ‘water’ plane was ripped from itself’; different solutions for the field equation may all be correct, operating at different orbits of the whirlpool, all, however, being drawn into the centre – a force / motion which the field equations do not account for or, indeed, which may be accounted for by the Cosmological Constant;

Once the ‘Disintegrating Universe Theory’ has been outlined, then the Axiomatic Foundations of Poetry can be outlined:

Existence: an energy value, *n*.
Distance: a measure of non-*n.* For example, if n = 3 and n = 8 and n = 1 and n = 11 before a further n = 3, then the ‘distance’ between n = 3 is ‘4’ existences;
Axiom: Existences possess a relational property, *distance*, where distance can be 0 >/equal infinity.
Gravity: All existences attract other existences. Distance tends to zero.

From Existence, Distance, and Gravity, deduce: Vector Space.

—————-
While esoteric and eccentric, there is I feel something in *Disintegrating Universe Theory*, or *Frog Universe*, of a world that was once thought to be united by globalisation, a ‘global village’, that now appears riven by division and fragmentation; a world in which frog-like tyrants draw in about themselves and drive apart away from themselves with waves of violent and populist forces carried upon abstract informational planes and media. Like many of the wartime writers explored in this thesis, I am unsure as to whether my assemblages of salvaged and repurposed hieroglyphs constitute art, politics, mathematics, or science, but I call it poetry.

Afterword

Reviewing my thesis, and in light of some extremely insightful commentary from my supervisor Jonathan Miles, I would like to make a few final points.

The first thing to be noted is that I make these points in an afterword, rather than adapting or adding to earlier relevant sections within the body of the thesis. This reflects my fear that were I to begin that process I could become engaged in an infinite cycle of revision. I could imagine myself adding more and more, being forced therefore to cut more and more within the constraint of the thesis word limit and, before I knew it and six months later, be presenting to my supervisor an entirely new thesis. This fear in turn reflects an awareness of a condition which I draw attention to during the thesis: a difficulty in defining or adhering to pedagogical limits and boundaries.

A boundary or limit determines a difference but by determining a difference it also determines a measure of proximity. My cognitive or conceptual difficulty in defining boundaries therefore also presents a difficulty in holding things together.

This challenge of 'holding things together' perhaps finds some poetic evocation in my speculative attempt, alluded to at the end of my thesis, to define, and thereby control, a *Disintegrating Universe Theory*. This challenge perhaps also evidences itself poetically in the tension throughout my thesis between aphoristic assertions, structured, compressed, statements of proclaimed certainty, and a somewhat loose style of discourse which appears as more an accumulation of gestures than a logically structured argument.

And finally this challenge of boundaries perhaps also presents itself in my reliance on Wittgenstein: Wittgenstein for me in this thesis is not merely an academic interest but is also a crutch, an anchor, whose life and work in some way presents its own boundary to which I can return and try to make sense of such places as to which my mind may have wandered.

This latter reflection concerning a need for me in my thesis to have defined frameworks within which my own fragmenting, disintegrating, unbounded thoughts could somehow and somewhat be corralled and mobilised for a quasi-functional purpose also reminds me of my own poetic-philosophical practice: I began writing poems in grid form in north west Pakistan in 2011, within the context of a local war, and my continuing use of this aesthetic is evident in the ten poetic experiments presented in my sample of practice.

My theory of *Vector Poetics* which emerged out of and alongside these poetic experiments, equally defines itself within a very rigid coordinate system albeit one at a more conceptually abstract level than a physically rendered visual grid. As bizarre as I appreciate it may sound, I have attempted to define a theory of poetics which is consistent with scientific and mathematical models such as Set Theory and General Relativity. Again, I suppose I saw these incredibly beautiful, and one might say metaphysical, structures as conceptual possibilities for corralling and mobilising my own thinking about poetry.

Vector Poetics is the work of which I am most proud and I continue to derive much satisfaction from inhabiting, developing and populating this theoretical landscape. Yet it only exists in a disintegrated form, notes, fragments, equations, poems, thoughts. I would like to corral and mobilise this work, and this wish motivates an unspoken admiration for or desire for encouragement from Wittgenstein which perhaps defines my interest in him and specifically his *Tractatus*. The question which haunts my thesis is one expressed in awe: *how did Wittgenstein take his war notes, find a possible language and structure for them, and corral and mobilise them within that structure in such a way that the work is both uniquely and authentically his own and is also visible to others?* For me this is not just an academic question, it is also a question of how to proceed.

I used the word 'haunts' to describe the presence of an unspoken question within my thesis. There are many ghosts in my thesis, indeed I do not reference a single living poet. Yet the

haunting presence of a ghost is itself the living echo of a temporally unrequited love. Love is not a word which occurs frequently in my thesis, if at all, but I feel is a notion which animates every page. After Iraq I imagined a fantasy of creative collaboration with such fellow travellers as Jacques Vaché, Paul Éluard, Louis Aragon, and Gala. Yet in the years of the War on Terror and Hostile Environment I did not find that company. But love retains its inescapable demand for resonance.

This latter point is not merely the feeble battlecry of a dying and defeated soldier from a forgotten battlefield. It also relates to a theoretical point: while in my thesis I problematise boundaries between poetry and philosophy I never explicitly define how either of these complex concepts might be understood independently. How should I argue for an elision in Wittgenstein if I cannot define the partition I am attempting to break? Stretching back to ancient Greece both discourses have rich traditions of self-conceptualisation. From Aristotle to Wittgenstein different philosophers have attempted to grapple with the question of what it is that they are doing. Similarly, Aristotle, Sidney, Coleridge, Eliot, amongst many others, all present different properties and purposes of poetry. I present *Vector Poetics* as one further schema amongst many.

For myself, I perceive all human connection as existing within a plane of symbol exchange, even such embodied forms of interaction as fighting or sex. I understand all symbols as having differing relations of specific degree to all other symbols. We ascribe symbols to mutually agreed symbol sets. In this way we understand that to punch a fellow academic in the face or kiss them on the lips as a way of defining philosophy or poetry would be a socially non-agreed deployment of symbols from symbol sets deemed so diverse as to be incompatible. Yet (as with Russell's Theory of Types) there exists an infinite hierarchy of sets, each set denoted by its own symbol; and also, as previously asserted, there exist relations, associations, between all symbols. Texts are comprised of multitudes of symbols, all with their own associations, all operating at certain levels within the hierarchical architecture of symbol sets. Humans are not necessarily aware of the symbols they distribute or exchange. Yet I believe that it is the vocation of poets to perceive and construct patterns within architectures of symbols. As my thesis has claimed, I have sat with Gaston Julia's work on infinitesimal geometry and read within it the symbols of overwhelming battlefield experience. I have read his mathematical equations as both the founding stone of fractal geometry and also as love letters to the war dead. Is one of these two readings more valid than the other? Is one symbol pattern more present? Is it relevant that Julia himself may have only perceived his symbols as mathematical? Similarly, whether one chooses to describe a text as philosophy or poetry is, for me, a question of describing to oneself which patterns of symbols in a text one will pay attention to. And this brings me back to my mention of love: I believe love is a connection with another person through a resonance of experience. Shared experience in this context involves a recognition of resonant patterns within a presented symbolic architecture. I can read Gaston Julia's equations as both mathematics and war poetry; and I can read Wittgenstein's *Tractatus* as both philosophy and war poetry. This is because I love them both. Ultimately, the question of where one draws the line between different pedagogical systems is this: how much experience do you share with this person, how much time are you willing to sit with their symbols, how much attention are you willing to give them and, in short, how much are you willing and able to love?

[Word Count: 39,930]

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