Robopoetics: The Robot-Lyric Voice

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Abstract

This thesis develops a 'robopoetics' for reading and writing lyric poetry. The thesis is both an exploration of the lyric voice/voicing and a cultural study of the robot as icon. The central premises of this robopoetics are these: robots and poems share lyric substance; lyric voicing renders the voicer indeterminate and lyric poems effectively make robots of poets; we can hear lyric voice in the way we hear robot voices; these voices are uncanny.

The thesis first establishes the im/material substance of the robot, its status of both metaphor and ontology as anthropomorphic man-machine and person simulator. Lyric poems share this im/material substance and anthropomorphic function in that they too confirm and construct the human subject. The thesis shows that the ambiguous in/humanness of robots forms the basis of their uncanny vocal effects; it identifies a group of uncanny voice-forms through analysis of robots in popular culture and argues that, because of their material identity and anthropomorphic function, these forms can be heard in lyric poems too. The thesis expounds a view of lyric as ritual voice event and of the lyric subject as a principle of unity whose voicing renders the writing subject indeterminate, so that poems in effect automate the poet. Lyric poetry can be understood as simulation and lyric voicing as ventriloquism, so that the writing subject can neither fully own nor disown the lyric voice. These ideas are demonstrated via analysis of the work of four poets, to which the voice-forms audible in robot voice are applied to explore sounding/silence and absence/presence.

The purpose of this robopoetics is not to discredit the lyric subject nor to dehumanise the writing subject; it is to suggest a modern way of approaching the lyric subject, and to seriously consider the humanity of the writing subject such as it manifests in lyric poetry.

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Introduction

It is possible and even desirable to read poems as robotic. Here, 'robotic' need not denote a stifling mechanicity or the disappearance of the human writing subject. Instead, 'robotic' may evoke the complex cultural, social and philosophical associations that we have with the figure of the robot, associations which prove relevant to our reading and writing of poetry. 'Robotic' may also describe an effect close to, if not self-same with, the effect of humanness as it is produced in poetry. That is to say that to describe poetry as 'robotic' is one way among many of engaging with the process by which human subjects are produced through the artifice of poetry. It is possible to hear the lyric voice as we hear robot voice and to regard poems as robots, because the trope of the robot engages the uniquely immaterial materiality of poetry. 'Immaterial materiality' is a quality of matter, matter which has been produced lyrically, which has traversed from the immaterial to the material world through the process of troping, whereby a powerful metaphor brings an otherwise unintelligible thing to intelligible reality. That which is unintelligible and therefore unreal becomes real, begins to matter, only after lyric troping has brought that thing into intelligibility and therefore also to reality. Like robots, poems have an anthropomorphic function. What they bring into reality is, first and foremost, the human subject. A lyric poem particularly is a tropic construction through which we are able to recognise and acknowledge a human subject as giving voice.

But robots do not stand inertly as a sign of anthropomorphism or lyric material, as that sign they bear a freight of associations, of uncanninesses and indeterminacies which inflect the robotic trope and the way in which it functions. The robot engages the materiality of poetry because the trope of the robot questions what it is to be human, and more specifically, what it is to create the human, to understand and then produce and reproduce it anthropomorphically. Because the robot engages this material it also reveals those elements characteristic of itself in poetry, that is to say that it reveals those philosophical associations, those forms of the uncanny and those indeterminacies characteristic of robots in poems. To read a

poem as robotic therefore returns to us the uncanny, indeterminate nature of poetry which required the trope of the robot to reveal it. In other words, a robotic mode of reading is true to what poetry is in the material sense described above, at the same time it enables a new but fully appropriate engagement with poems.

The voice stands crucially at this intersection of poetry and robots. 'Voice' in this sense exceeds both message and medium; a collection of randomised words on a page is insufficient to be a 'voice', as is the inarticulate howling of an animal or the wind, 'voice' is instead intangibly and implacably elsewhere than these and it is also something that can be sensed as present or absent. When we read a poem, a voice appears to traverse the otherwise silent and inchoate inscription, but when we discover that that poem has been produced by a text generation program, the voice that we sensed invariably seems to die in our ears. What remains is something far stranger, a voicing apparently without those qualities which would qualify it as a voice, though a voicing which evidently has the capacity to contain them nonetheless. Voice then, is something that can be bestowed or dissipated, it is the difference between a randomised collection of words or an inarticulate noise, and a meaningful, real utterance which matters and which has matter. This voice without message or medium is an inaudible, invisible but recalcitrant material, it is the strangely immaterial materiality which underpins the ideality of meaning. Without voice the subject is an empty entity, so that the subject can be seen as the negative ideality to the voice's positive materiality. Voice in this sense renders positive the otherwise negative subject, and so this voice is the sign by which we recognise subjects as subjects capable of voicing. Voice then pertains to both the im/materiality of matter and to the anthropomorphic troping which brings human subjects to intelligibility and therefore reality, which is to say that voice pertains to both poetry and robots in a way which intimately connects the two. In poetry, voice is a typical indicator of humanity; in robots (typically held at a distance from the human and in contradistinction to it) voice is correspondingly disruptive of such notions of humanity, instead the robot voice invokes the inhuman and invokes the uncanny presence of the inhuman *in* the human.

The robot voice presents a provocation to poetry in that it marks 'voice' as something other than the simple transmitter of human subjectivity. The robot does not simply lack the voice that the human subject has, rather humans and robots

share the same ambiguously silent voice form. While both robots and humans can possess an audible voice, they also possess a silent voice which remains between the materialised intelligible and the un-materialised unintelligible. If poems are instances of voicing, of giving voice (which is more than either message or medium), then the voicing of poems is not simply expressive in the sense of a transmission of subjectivity from inside to outside, nor is it wholly dissociable from the writing subject. The subject that is voiced in a poem cannot be a simply pre-existent, simply transmitted subject perfectly homogeneous with the writing subject, because the voicing subject is something materialised and made real at the site of the poem. And yet it would be wrong to say that that subject bore no relation to the writing subject, because the subject which has been materialised as a real subject capable of voicing in a poem is recognisably and really that of the writer of that poem.

In this way a poem establishes an indeterminate and hyperreal subject. A poem simulates a voicing human subject, but in the manner of simulations, a perfect simulation of a voice *is* a voice. It is revealed that there was never any difference between the simulation and the so-called 'real'. Instead there is a feedback loop where the poem crystallises the writing subject as a subject and points back towards the writer who recognises themselves in the poem that they wrote. Robots too are simulations of this order, a 'robot' (as distinguished from mere machine) simulates 'personness'. In the cultural imaginary, robots strive toward the apex of personhood such that they facilitate our ever-changing reflection upon what personness is. Each new simulation alters the 'real'. Robots and poems therefore perform the same lyric process.

Reading in this way is particularly relevant and useful for lyric poetry because it presents a way of moving through dialectical reading and writing practices which have developed around the lyric subject during the twentieth century and which continue into the twenty-first. At the risk of generalising the theories of New Criticism and its critics, by dialectical practices I refer to (very broadly) two opposed approaches to reading and writing poetry, both of which have developed from institutionalised New Critical reading strategies.

Prompted by John Stuart Mill's claim that poetry is 'overheard', influential textbooks of the twentieth century advocated a dramatic-fictional mode of reading

poems which bypassed historical, formal and contextual specificity. This mode idealised the central figure of a lyric subject who was defined by a speech act, specifically their isolated, emotional and 'personal' soliloquy, a soliloquy regarded as the quintessence of poetry. In *Sound and Sense*, we read:

To aid us in understanding a poem we may ask ourselves a number of questions about it. Two of the most important are Who is the speaker? and What is the occasion?...assume always that the speaker is someone other than the poet...we may think of every poem, therefore, as in some degree dramatic – that is the utterance not of the person who wrote it but of a fictional character in a particular situation that may be inferred.¹

and in *Understanding Poetry*:

But if poetry is "a saying", there must be a "sayer" and what we have postponed is the question "Who does the saying." And that leads to another question: "What provokes the saying?"...a situation underlies every poem, and the poem is what the situation provokes. The poem is a response to a particular situation. It is, then, a little – or sometimes a big – drama.²

This mode of reading conflates writing with speech, but with speech as an exclusively dramatic construction distanced from the person of the poet and from the context of writing. Such a conflation is therefore necessarily ahistorical. Here, poetry is to be taken as straightforward fiction, as though 'fiction' were the opposing ground to the straightforward 'fact' of the poet. If biography can be inferred, it can be done within these recommended parameters only as a fictionalisation, as a performative but false version removed from the real body that issued it.

The poetry which leaned in to this reading came to represent a substantial part of the American mainstream, and much poetry (both in and beyond America)

¹ Perrine's Sound and Sense: An Introduction to Poetry, Greg Johnson and Thomas R. Arp ed. 14th edition (Wadsworth, 2013) p.27.

² 'Poetry as a Way of Seeing' in *Understanding Poetry*, 4th edition, Cleanth Brookes and Robert Penn Warren, (Holt Rinehart and Winston, 1976) p.13.

was and continues to be written in a style which accordingly narrativises what has been described as 'personal experience' by presenting an isolated 'self' such as can be delimited by an apparently simple speech act. That said, at the same time there were and continue to be poems taken by critics as representative examples of just such 'personal' and dramatic-fictional writing, but which do not necessarily deserve that label. Gillian White, in her book on the shame associated with the lyric subject of this reading and writing style, considers a number of twentieth century poets (including Elizabeth Bishop and Anne Sexton) who, she argues, have unfairly attracted the shame associated with being such writers of 'personal experience'. I mention this partly in order to avoid any implicit reduction of the twentieth century American mainstream and partly in order to briefly point toward the particular force of this reading strategy and the complexity of its aestheticisation into writing practice. Institutionalised shaming is certainly something that ought to be manoeuvred out of, not least because it is a deeply unfortunate and unpleasant way of reading which complicates the practice of writing with unnecessary anxiety and so discourages the production of poems. Such shaming is also an analytical blind alley, it potentially ends at the identification of the poem's (or the poet's) shame and as in the case of Bishop, Sexton and others, steers us away from more interesting and productive readings so that we might not recognise a poem's true contribution in the midst of all that shaming.

There are a number of reasons why this approach to reading and writing poetry might strike us as dissatisfying or perhaps even distasteful. Firstly, this approach oversimplifies the poem's status as a voice event subject to context. Attention to 'speaking' as such, threatens to bottom out at character study or psychological analysis, with little if any consideration of the poem as writing, and without consideration of the poem as uniquely poetic writing either. Not only can this limit be quite boring, it also positions analysis so as to write out the material bodies of writer and reader in space and time and in relation to the immateriality of the poem. It also frustrates the expression of and identification with the actual thoughts and feelings of real writing subjects who neither intend nor desire to be fictionalised. Such analysis results in a politically dubious isolationist ahistoricism, but it also homogenises the variety and subtlety of lyric utterances under a simplistic lyric ideal wherein the lyric subject is merely a dramatic figure defined by self-

expression in writing as speech. White also considers this ideal, she describes the deeply negative, deeply shameful, associations which it has since developed in academic discourse; 'lyric' in the above sense derived broadly from the legacy of New Criticism is seen, as White puts it, as 'unmitigated individualistic subjectivism, self-absorption, leisured privilege, and ahistoricism'. In other words, 'lyric' in this sense is a metonym for the poetic mode of the self-expressive humanist subject and has the unpleasant side effect of attracting affects of shame. This situation is particularly problematic while such a 'lyric' is given as poetry's quintessence, because it threatens to relegate poetry in general to the category of merely 'nice but irrelevant' or worse perhaps, to the category of 'harmless but embarrassing'.

In response, (and again, broadly speaking at the risk of generalisation) a counter approach developed, and with particular prominence in American academic discourse. This response constituted what has been called an anti- or non- lyric and has become an influential mode of reading and writing in the American avant-garde. While the exponents of anti-lyric reading and writing rightly point out some of the limits and frustrations of the lyric ideal as derived from New Criticism, their reaction nonetheless remains within the purview of that same ideal. The Manifesto 'Aesthetic Tendency and the Politics of Poetry', authored by a group of prominent avant-garde poets and critics (Ron Silliman, Carla Harryman, Lyn Hejinian, Steve Benson, Bob Perelman and Barrett Watten) provides an excellent summation.

If a wider, more inclusive address in the poem has been a central concern of our poetics, this openness to the world has taken place at a point where language occurs as a "not-I" that, by definition, is beyond the poet.⁵

In their own words, these poets position their work 'against the canonical individual of the "expressivist" tendency' as 'a poetry whose formal values may be the

³ Gillian White, *Lyric Shame: The "Lyric" Subject of Contemporary American Poetry* (Harvard University Press, 2014) p.5.

⁴ Ron Silliman, Carla Harryman, Lyn Hejinian, Steve Benson, Bob Perelman and Barrett Watten 'Aesthetic Tendency and the Politics of Poetry: A Manifesto' in *Social Text*, No, 19/20 (Autumn, 1988) p.264.

⁵ 'Aesthetic Tendency', p.269.

⁶ 'Aesthetic Tendency', p.273.

obverse of the autonomous, New Critical Lyric'. If this is indeed an anti- or non-lyric, it is so in the sense of a counter to the expressive lyric subject *itself* along with that subject's 'personal' utterance, rather more than it is a counter to New Critical reading and ideals generally (indeed, the claim to get 'beyond the poet' should alert us to the similarity) Which is to say that both the New Critical 'lyric' and 'antilyric' hold to the same construction of the lyric subject, and rather than challenge that construction and offer alternatives, some critics and poets (certainly those influential ones represented in the manifesto) have instead challenged the *product* of that construction, claiming to remove it, to render it 'non', and quite aggressively at that.

The individual is seen as under attack, and this is largely true: the self as the central and final term of creative practice is being challenged and expanded in our writing in a number of ways. What we mean by the self encompasses many things, but among these is a narrative persona, the fictive person (even in autobiography) who speaks in his or her poem about experience raised to a suitably aestheticized surface.⁸

While this approach has produced a wealth of interesting and valuable criticism and poetry, it has not (I think) truly extricated us from the New Critical legacy. Although anti-lyric reading and writing has expanded the bounds of what it is to be in a poem beyond the New Critical lyric utterance, its position as against 'lyric' sets the limit of its revolutionary practice. The anti-lyric mode has, by establishing itself as the negative to a positive, confirmed that New Critical legacy, and has also helped to cement a limiting binary based on its single 'lyric' ideal.

A central premise of this anti-lyric counter seems to be its strong investment in the New Critical identification of the 'individual artist' or 'human experience' with a simplistic and reductive understanding of writing as 'speech'. If representatives of the anti-lyric avant-garde did not take this simplistic version of the lyric subject so seriously, then writing it out in the greater interests of poetry would not seem like such a serious endeavour. The idea that, in a poem, one *can*

⁷ Ibid.

^{8 &#}x27;Aesthetic Tendency', p.263.

simply 'speak oneself' or a 'persona' (signified simply by 'I') on the one hand, and the idea that one can simply absent oneself as poet or absent the lyric subject (signified by the absence of 'I' or by an attempted 'non-I') on the other, supports a false dichotomy and misrepresents all of the strange, uncanny inbetweenness that exists in all forms of poetry, from the 'personal' to the avant-garde. When it is considered even possible for the signs of the 'self' to be linearly transmitted by the fictive narrative persona of a poem, or when refusal to self-express after the fashion of a personal utterance is considered grounds enough to claim the exorcism of the 'lyric subject', then the anthropomorphic, immaterial nature of the poem as it stands in relationship with the person who wrote it and with the person/people who read it, is not being fairly considered. Anti-lyric reading and writing certainly prompts us to acknowledge and consider the forming and function of the 'I' as a written artifice, but I am not convinced that such a practice absents or opposes the lyric subject in the fullness of what that term can mean. Furthermore, the notion of 'speaking' as opposed to 'writing', does not touch on the complexity of 'voice' which is exhausted by neither. If we render the terms of the lyric/anti-lyric binary in their most reductive form, then either poetic writing is 'speech' or it is 'not speech', either the lyric subject is present or absent, and in both cases the person of the poet can be neatly divided from the 'I' of the poem, so that either 'I' is the 'poet' or 'I' is 'not the poet'. Neither position in the binary truly moves beyond the idealised shame-inducing 'lyric'; no amount of support for or denial of that shameful 'lyric I' can ameliorate its problems. If we limit ourselves to an idealised, binaristic choice of 'lyric' or 'anti-lyric', then we reiterate a stalemate. We might consider this stalemate as it interacts with that original interpretive limit, the question of 'Who is speaking?'. In a strictly binaristic discourse the answer to that question would begin with either 'someone' or 'no one'. To answer in the former risks repeating the dissatisfactions of the New Critical method, while to answer in the latter is a refusal to really engage with that question, it risks non-engagement with the potential complexity of all that that inquiry can open out onto.

From the point of view of robopoetics it is hard to take some of the claims of this anti-lyric manifesto seriously. While I would support anti-lyric aims (sparing poetry from atomisation and irrelevancy, expanding the terms for acceptable modes of being, moving the mainstream beyond moralising personal experiences aestheticised away into nothing) I do not share a faith in the efficacy or the appropriateness of anti-lyric methods. Robopoetics does not abide by the version of 'lyric' and 'lyric subject' around which both the so-called 'lyric' and 'anti-lyric' positions revolve, so it does not suppose that the problems of New Critical 'lyric' can or should be ameliorated by frustrating or removing signs of the lyric subject as it is constituted by expressive speech. Instead, what is required is a different way of understanding the lyric subject and a different way of reading poems, such that we might take a middle way which does not default to an antagonistic (certainly where shame is concerned) binary.

Previous attempts to think through this problem and expand the discourse have certainly been made and have over time constituted an alternative discourse to the binaristic one most familiar in American institutions. In truth, the actual scope of lyric criticism since the rise of the New Critics has been wide and varied, with many critics proposing ways of reading poems and of understanding 'lyric' which attempt to transcend the binary and the limiting lyric ideal it is based upon. Some early examples of such criticism are collected in *Lyric Poetry: Beyond New Criticism*, later in *New Definitions of Lyric: Theory, Technology and Culture*, and more recently in *Theory into Poetry: New Approaches to the Lyric*. Recent criticism has offered some interesting alternative approaches to reading lyric poems as well as some more flexible theorisations of and around the concept of 'lyric'.

One of the most influential for this thesis is found in Jonathan Culler's *Theory of the Lyric*. The particular 'theory of the lyric', if it might be called that, upon which robopoetics is based, is derived in large part from Culler, who supports an understanding of 'lyric' as a real-time, ritual voice event, where the lyric subject exists not first as a person or character, but as a principle of unity in a triangulated address. This understanding does not necessitate a totalisation of specific lyric forms under one arch lyric quintessence, as does the New Critical lyric ideal, rather it acknowledges a mode native to instances of lyric writing as 'lyrics' have altered and adapted over a long history. Culler's approach to lyric can be contrasted to the approach taken by Virginia Jackson and Yopie Prins in their editorial of *The Lyric Theory Reader: A Critical Anthology*. Here the term 'lyric' is taken to be an invention of twentieth century criticism derived from nineteenth century theorisations of the lyric and readings of Romantic Poetry as representing a self-

expressive, individualist poetic ideal. In this case, 'lyric' is given as a generic term which homogenises specific poetic forms with its ahistoricism. A counter to Prins and Jackson's claim can be found in Marion Thain's *The Lyric Poem and Aestheticism*. Here Thain re-historicises Aestheticism as a necessary engagement with the meaning of 'lyric' at the onset of modernism, rather than as nostalgic Neo-Romanticism in reaction to modernity. In doing so she demonstrates that 'lyric' was and still is a critically useful term, not an invention of the twentieth century following the disruption of modernity, but a term whose meaning had to be reengaged with because of the pressure it faced during a time of transition. Thain demonstrates that the 'lyric' of Aestheticism is much more than simply self-expressive individualism.

The principles of robopoetics also bear a good deal of similarity to Nuar Alsadir's concept of the fourth person singular. Alsadir takes as her point of departure the theory of relativity and with it the macro relations between objects in space and time. I take as my point of departure quantum theory and with it the micro relations between objects in space and time, as inspired by Daniel Tiffany's materialist concept of lyric substance in Toy Medium: Materialism and Modern Lyric. Still, Alsadir and I arrive at very similar conclusions and propose expanded modes of lyric subjectivity which include others or otherness, and where the 'I' of poetry does not and cannot indicate the simple singular. This thesis is also inspired by and finds affinity with Mutlu Konuk Blasing's Lyric Poetry: The Pain and the Pleasure of Words. Blasing's focus on the concept of the 'mother-tongue' and the role of language itself in the construction of the voicing lyric subject is, like robopoetics, posthuman in nature, and it expands the sphere of influence in the poem beyond the writing subject to include the constraining and perhaps even dictatorial force of language itself, so that the voicing of a poem is held firstly in the voice of the intimate and unsettling 'mother-tongue'.

Other alternative approaches to reading lyrics include Angela Leighton's in *On Form: Poetry, Aestheticism and the Legacy of a Word*, where reading centres on the pleasure of form, and Susan Stewart's in *The Fate of the Senses*, where the senses are shown to function in poetry as a means to access shared humanity. The readings in the final chapter of this thesis have affinities with both these approaches

in that they are directed towards the experiential and affective dimensions of poems as examples and agents of humanness, an end which may be pleasurable in itself.

This thesis contributes to such alternative discourses by reconciling the expression of lyric subjects with poetic artifice by means of a posthuman, materialist, lyric poetics. The poetics of this thesis is one that envisions matter so as to move beyond interpretive limits of factual and fictional, dramatic and biographical, real and fake, poem and poet, instead refusing to clearly distinguish these. In doing so it incorporates the bodies of writing subjects into the reading and writing of poems, therefore bringing the abject uncanny back home to poetry. This gives a middle way through to lyric poetry. Without denying the expressive lyric subject we might look again at the unfamiliar and yet strangely present humanness of lyric, and look also at its source in uncanny simulation, anthropomorphic trope and im/materiality, which stretch beyond the scope of individual expression only to include it. This would be a robopoetics.

A robopoetics in this sense frames the writer's act of apparently externalising an internal existence so that we might also understand that act as being the internalising of an external existence, a feedback loop between writer and written. Giving voice lyrically can also be understood as a public offering and an act of ventriloquism, a voice which incorporates subjects and produces subjectivities but does not necessarily exclude or linearly express. Rather than denying the human, the figure of the inhuman robot represents a potential profusion of the human to be written and read/heard in poetry. This human would emerge from a field of voicing and listening (a field which importantly includes many kinds of silence), it would be human without appealing to exceptional origins or narrow boundaries, it would be thoroughly lyrical and therefore real. This thesis pursues the relation between robots and poetry to that end, identifying in their shared substance and lyric function the vocal, materially immaterial, uncanny and present/absent human thing in poetry which escapes dialectical impasse, and which requires the figure of the robot to become intelligible. That human thing is to be acknowledged and interacted with, its affects are to be explored and its possibilities manifested, and importantly, this engagement does not come at the sacrifice of a more discerning critical engagement with poetry as writing, rather they are one.

Chapter 1, Lyric Substance and Robot Substance places robots in the context of philosophical materialism and establishes their cultural relevance in terms of how they reflect upon subjectivity specifically as images of personhood. This enables us to see robots and poems as composed of the same substance and as serving similar ends as materialisations of subjectivity. The chapter establishes key concepts of im/materiality and lyric substance which form the basis of the connection between poetry and robots, allowing for new analytical perspectives later on in the thesis.

Robotics research is in many ways aspirational, but it is aspirational also in that the definition of 'robot' continually shifts as it approaches human-likeness. 'Robot' necessarily remains out of reach, an unreal category, never to be realised. The category of 'robot' is itself loosely defined, it need not refer to embodied machines, and may instead describe immaterial and abstract processes regarded as a kind of subject. At the same time the robot's ideal and most intuitively real instantiations belong to science-fiction as part of a cultural imaginary which nonetheless influences the science-fact of robotics development and design. The mode of a robot's being is im/material in that robots straddle the material and immaterial, but also in that their immateriality produces material things as things which matter. Meanwhile, what specifically identifies a robot as opposed to a mere machine is the degree to which a robot simulates and so seems possessed of personness, that is the degree to which a robot may be recognised as an image of personhood. What a robot brings to material reality is an image of human subjectivity.

We can better understand the relationship between the im/material figure of the robot and personness when we consider it in the context of AI, which can be regarded as a subset or manifestation of the 'robot'. The fundamental stumbling block to the realisation of AI is not a technical one, it is our unwillingness to accept the validity of a general intelligence which is artificial, in other words it is our unwillingness to accept the validity of an artificially designed person. It is impossible to produce a clear transition from the thing simulated to the thing itself, and the separation of the two, usually done by changing the terms of what constitutes general intelligence/a person (again keeping the robot aspirationally and ir-really one step behind) is a defensive gesture, not a debunking of such intelligence. However, the validity of simulation *can* be argued for if we remember

that a simulation is a sign for a thing which is also the thing itself. We can also ground simulation as appropriate to reality by aligning it with the equally blurry reality of quantum physics. By identifying robots as simulations in this sense we can see that robots and their personhood are in fact hyperreal after Jean Baudrillard's fashion. This can even be demonstrated by inserting robots into Baudrillard's phases of the image. In the case of the hyperreal, the real is substituted for the signs of the real, and robots are robots by their personhood because persons are person simulators, that is (hypperreally) robots.

The notion of im/materiality becomes clearer and more grounded when positioned within a wider conception of matter as immaterial and inscrutable, such as can be derived from atomism. In the Western tradition of materialist philosophy, the basis of material existence must go without a stable and coherent objecthood and be instead a kind of sensibly imperceptible abstract. The existence of atoms, of which all things are composed if they are real, is ambiguous, in which case being and nothing are not antithetical but interrelated. All things, if they are real, possess im/materiality, a claim which decouples reality from physicality. This is in line with Daniel Tiffany's concept of lyric substance wherein im/materiality is such that a phenomenon enters the category of the real only by way of immaterial images, that phenomena enter intelligibility as real only as images. Things become real by a lyric process, a process of troping which renders the inscrutable scrutable and therefore real and really possessed of matter. This lyric substance revolves around the figure of the automaton, in that, as the metaphor which is the thing itself, the automaton embodies this process of making matter lyrically. These ideas are grounded in Paul de Man's concept of anthropomorphism and trope. Anthropomorphism sets up a relation wherein the properties of the human are given, therefore producing a truth of human experience. The automaton, as an embodied image of the human which brings the human into intelligibility as the grounds upon which things are intelligible, confirms the human and in that confirms the basis for lyric troping itself. This im/material lyric substance reconciles the physical but fictive, metaphorical aspects of robots and in such a way that we may regard the robot as both a poetic object and as an object of poetry. In this way robots and poems are identifiable with one another on a material level, in which case the robot's voice owns some significance for poetry in particular.

If robots are poetic objects then we can, to some extent, see them as being structured linguistically. Robots belong to an existing critical tradition surrounding dolls and puppets. By looking at this critical tradition it is possible to explore the nature of robots' relation to an im/material linguistic medium, and to identify a shared grammar consistent with lyric substance between robots, dolls and puppets. Firstly, robots, dolls and puppets are connected by a shared theme of automatism. Heinrich von Kleist, Rainer Maria Rilke, Mamoru Oshii and Roland Barthes have all considered the ambiguous connection between the doll's or puppet's soul and body. They note that the doll or puppet body is ambiguously ensouled, the soul seemingly prior to the body, even autonomous to the body, the material body of the doll or puppet therefore refers us intuitively to the immaterial. In this sense dolls and puppets may also be thought to possess lyric substance in the way that automata and robots do. Both Barthes and Hans Bellmer imagined doll/puppet bodies in terms of grammar and inscription. Bellmer's artistic doll arrangements were constructed along anagrammatical lines; Bellmer drew comparisons between the body of the doll and a sentence to be reconstructed, which suggests the permeability of the boundary between material and immaterial, between text and body in a way that recalls the materiality of atomism. Barthes argues that the puppet is composed of language, specifically in the form of three writings inscribed upon the body but which also constitute the body. This 'writing' refers to an object between the seemingly immaterial message and the seemingly material medium. Both Bellmer and Barthes would appear to argue that the im/materiality of the doll/puppet, its lyric substance, can be figured as in some way linguistic. If robots indeed belong to this emblematic im/materiality then (along with dolls, puppets and automata) they may also be considered as lyrical objects in a more literal sense, firming the connection between poetry and robots via the im/material.

Chapter 2, The Unease of the Robot's Voice, analyses a number of robot voices in popular culture. A core uncanniness is identified at the centre of those voices and that uncanniness is found to revolve around the construction of humanness versus inhumanness, in particular the inhuman's coming home to the human. Robots elicit unease to the extent to which they are inhuman and so elicit the return of the automaton in the human. The chapter demonstrates how this unease is played out through the robot's voice and in so doing suggests a set of

paradoxically silent vocal modes pertinent to the robot; the silent/absent interiority, the silent scream, the 'subtitle' and mouthlessness. These modes are based around the silent unintelligible and the audible intelligible and bear upon the human as a bounded construct lyrically materialised through tropes of voice. These vocal modes both characterise the robot voice and provide a mode of listening appropriate to the robot but also to poems. The purpose of this chapter then is to ultimately enable this robotic listening, to provide an analytical framework derived from robot voices and applicable to poetry, thus developing upon the link between poetry and robots already introduced in a more specific way.

The robot 'baddie' and the robot 'buddy', is a dualism common to pop cultural representations of robots. Representations of robots as extremely negative and representations of robots as correspondingly very positive often exist within the same text. Uncanniness facilitates this dualism. If we analyse the overlap between Freud's theory of the uncanny and E. Jentsch's (whose paper provided the impetus for Freud's), we see that the figure of the automaton links the two. In Jentsch's estimation the most reliably uncanny scenario is 'Doubt as to whether an apparently living being really is animate and, conversely, doubt as to whether a lifeless object may not in fact be animate', 9 and in Freud's theorisation this doubt plays out in the particular form of Olympia, the automaton of Hoffman's Sandman. The ultimate or original uncanniness, the uncanniness to which all experiences of the uncanny can be related, is the particular uncanniness of the automaton, in that the automaton returns the inhuman, artificial machine to the human and threatens to reveal that we are in fact automata, so that doubt over the integrity of the human subject is the basis for uncanny effects. In this way, we can see a link between robots, lyric substance and poetry via the uncanny.

But to return to the robot 'baddie' and 'buddy', we can explore the inhumanity at work in these representations through analysis of robot voices; such analysis enables us to uncover the specific operations and managements of the uncanny in both cases. First, we should remember that robot and automaton are distinguished etymologically, the distinction amounts to robots not *just* being

⁹ Ernst Jentsch, 'On the Psychology of the Uncanny' Roy Sellars trans., in *Angelaki: Journal of the Theoretical Humanities*, Vol. 2.1 (1997) p.11.

images of man-as-machine, they are also 'human-but-not'. Inhumanity refers not to the non-human but to that which is tacitly acknowledged as human but which nonetheless does not conform to the boundaries which implicitly mark the fully human. An apt descriptor for robots. This brings inhumanity into the field of uncanniness in that the charge of inhumanity which distances the robot from us also brings it in. The 'buddy' and 'baddie' must work from and with an assumed uncanny inhumanness in order to produce their different effects. If close attention is given to the representations of robot voices in instances of the 'baddie' and 'buddy', it becomes clear that what is being managed or exacerbated in each case is a vocality which is the sign of the apparent presence or absence of a human interior to the robot and the extent to which that apparent humanity either impinges upon or respects the boundaries of the human.

The human experience of interiority is dialogical and even as a robot speaks, presenting the illusion of that dialogical state, it betrays a non-dialogical interiority which resists representation and is therefore silent/unintelligible. In line with Mladen Dolar's concept of object voice, voice which is neither message nor medium renders positive the otherwise negative subject. Voice is a material which materialises subjects and as such voice is silent. In this sense voice is both lyrical and uncanny. Given this, the robot's vocal interiority is only ambiguously there, at the same time it is silent and therefore intuitively no interiority at all. This collapses absence and silence into one. This perceived lack of interiority, or the perception of an alien interiority as characterised by internal voices, is an enduring sign of robots' uncanny inhumanity. The uncanny threat presented by robots is firstly their implication (after the fashion of automata) that perhaps we are indeed like robots, that we too lack the interiority definitive of humanity, and secondly their implication that another consciousness, different to human consciousness and unknowable to us, might exist despite our exclusive claim.

But robot interiority need not be conceived of as a void. If we take Rousseau's 'Essay on the Origin of Languages' as a starting point, we can draw a contrast between the human cry of nature and the robot's lack of that cry which corresponds to an apparent lack of human passion. Those moments when robots are seen to cry after Rousseau's fashion, or when they ought to cry but do not, can be highly uncanny and deeply unpleasant. A Cry of the Machine is suggested, not so

much as a version of Rousseau's human cry, but rather as an acknowledgement of an alien and humanly unintelligible vocal robot interior, inaudible but intuitable in robots. In literature this machine cry is often represented as provisional, as a negativity in tension with the written word. In such cases robot voices suggest an unintelligible but original nature which is not translated into English as such, but rather 'subtitled'. The rendering into any human language is always insufficient or inappropriate to the cry, the translation from one language to another is not a suitable metaphor. But the subtitle makes the robot cry intelligible to us only in that it conspicuously covers over that cry rather than relating it in a derivative form, this leaves the cry still present but only as intuitable rather than audible. The subtitle brings the cry into human intelligibility and therefore audibility, but this renders that true vocal interiority unheard at the same time that it makes the robot's intelligible vocalisation possible. The robot is therefore effectively muted beneath a subtitle.

The machine cry can also be brought into contact with physicality by considering the robot's voice in terms of its mouthlessness. In the psychoanalytical account of the human cry the child's cry arises out of hunger and lack of the mother's breast so that the breast is replaced by the voice. In this version of the story of language development humanity is defined by an orientating hunger with the mouth as our point of contact with the world. The robot's mouthless speech is uncanny because it is independent of this physiology and narrative. As a mouthless speaker the robot is inhumanly whole and apparently undead. Mouthlessness is strongly associated with inhumanity, and mouthlessness can imply (certainly in representations of the mouthless robot as 'baddie') not just body horror but also the preclusion of the more honourable human passions, so that mouthless speakers also carry unpleasant moral implications.

Chapter 3, Robopoetics, outlines a theory of robopoetics particularly pertinent to lyric poetry. This establishes a coherent framework through which to understand poetry, particularly lyric poetry, as robotic. Here robopoetics describes a mode of reading and writing which takes into account the automation of poetry, it is a poetics wherein lyric shares its voice with robots and so can be heard in the way we hear robot voices, and wherein the writing subject's being is rendered indeterminate in line with im/materiality. In this way robots and poetry are linked

via a shared uncanniness, and lyric poetry in particular is shown to be appropriate to such a robopoetics.

Robopoetics does not transcend automation but is about automation, and in this way robopoetics is in opposition to a concept of lyric poetry as the genre of subjective self-expression. It is not that there is no self-expression or subject as such, rather self-expression alone is not what makes lyric poems lyric; that subject and its expression are complicated, pointing instead to the ambiguity of lyric voicing. 'Indeterminacy' is the condition of the writing subject's neither being the lyric subject of their poem nor not-being the lyric subject of their poem, a state achieved where the hyperreal simulation of the lyric poem has destabilised reality. Because of the ambiguous im/materiality of lyric substance, to give voice lyrically, to manifest oneself as a voicing lyric subject, is to invite indeterminacy of being upon oneself. The poem feeds back upon the writer so that they can neither claim it nor be rid of it. This indeterminacy is the essence of 'automation', the process by which poems make robots (in the im/material, lyrical, anthropomorphic sense that this thesis conceives of them) of poets. The lyric 'voice' in this sense is neither content nor style but mode. This mode is in line with Dolar's concept of object voice in that it has the capacity to materialise the immaterial. In this way voice is that which silently grounds the real and constructs and identifies a subject. Lyric voice has this constitutive silence in common with robot voice.

Lyrics may be the self-expression of a writing subject to the extent that they are constructions and simulations of poets, so that the ultimate lyric trope may be the trope of the lyric poem as subjective self-expression, a trope which then confirms all others anthropomorphically. If this is the case, then lyric poems perform the same tropic function and occupy the same position as automata. In this sense at least, lyric poems are robots. This kind of automation is then distinguishable from the mere acknowledgement of inherent automatic processes in writing and reading poetry. 'Automation' in the sense developed in this thesis refers to the particularity of the automaton's automatism, in that it encapsulates the dual and paradoxical meaning of being both moved and self-moving, or self-moving by dint of being moved. 'Automation' refers to the poet's ambiguous condition of being neither/nor. What exists silently and therefore only intuitively between neither and nor, between metaphor and metaphorised is a remainder constitutive of the

poet's indeterminate being. This remainder is a voice. It should be remembered however, that although the above may be the case this does not mean that there is analogy between poems and the code on which robots run. While poetry and robots are similar on a lyric level, natural language and programming language are in no way similar. The conceit of analogy is both incorrect and irrelevant to the argument here. The two languages are functionally very different and incompatible on this basis.

Robopoetics as conceived of in this thesis is distinct from robopoetics in the way the term is currently understood. The new robopoetics as developed in this thesis expands beyond the limited field of computer generated poetry currently associated with the term, and also beyond negotiation and re-negotiation of inherent automatisms and loci of control. However, this expanded robopoetics still belongs to the long-running discourse about automatism in language and poetry, but it does so insofar as those automatisms point to automation. Two good examples of this can be found in, firstly, the restriction or constriction to the terms of the language we speak and secondly, in the power of phonic patterning, rhyme and rhythm. The lyric poet is prescribed by language into existence as a linguistic subject and this is the automatic movement through which they come into being as self-moving subjects. This describes a state of indeterminacy irresolvable into control or freedom so that the automation of robopoetics exceeds that dialectic. Furthermore, the idea of being manipulated, whether by the poet, by phonic pattern, by language, is misrepresentative. Instead, this automation may be a coming into one's own. In this way robopoetics is not about undermining the human by drawing out its uncanny automation, instead it is about revealing the human for what it is and in so doing, robopoetics expands and deepens our experience of that humanness.

Robopoetics can also be aligned with a particular understanding of lyric and lyric voicing, the alignment of these demonstrates the relevance of robopoetics to lyric and shows in greater detail the ways in which robopoetics can inform our reading and writing of lyric poetry. As touched upon earlier, the definition of 'lyric' is here aligned with the ideas of Jonathan Culler and his suggestion that lyric is a linguistic event which takes place in real time, which utilises performative triangulated address forms, and for which the lyric subject who gives voice in the poem is a principle of unity in the poem. In line with my robopoetics, Culler's lyric

expands our terms of understanding beyond a dialectic of fact or fiction, identification or dis-identification. Culler's understanding of lyric marks lyric poems as very different utterances to the dramatic or fictional utterance. Instead the poem is an enactment of voicing which offers itself for re-voicing by the reader. Lyric poems ventriloquise in this sense. The originator of the poem may also be thought to ventriloquise because it is only by ventriloquism that one speaks with lyric voice. As we identify ourselves and our own voices with a general and public act of voicing we volunteer ourselves not as an individual speaking subject but as a lyric poem's unifying principle of subjectivity, this does not cause the writing subject to disappear but to become the Poet. The triangle of triangulated address incorporates the writing subject, implicating them. Poet here refers to Author after the fashion of Foucault's author function, but Poet is distinguished from this particular Author in that the Poet is not detached from the writing subject as Foucault has it, instead the Poet and writing subject are engaged in an uneasy feedback due to the indeterminacy of simulation and ventriloquism. Because of the ventriloquism of lyric voice lyrics necessitate an encounter with indeterminacy. Of course, there are alternatives and objections to this version of the lyric, a particularly interesting one is to be found in T.S. Eliot's 'The Three Voices of Poetry'. Eliot's understanding of lyric voice is based on authorial intention and context of reception, but this understanding seems to be less about what is truly unique about the lyric genre and more about preserving the writing subject's integrity in the face of automatism. As such, Eliot's argument actually points to and highlights the silent unsayable thing central to my robopoetics, rather more than it exorcises it.

By turning to Paul de Man and using his concept of autobiography as defacement, we can elucidate the looping movement with which writing subjects identify with or as their lyric subjects, as well as the peculiar nature of the silent/absent, constitutive remainder which necessarily attends this transaction. De Man figures writing as a revolving door where writing effectively writes the writer, where a life can crystallise upon a page and is recognisable as the subject who wrote. The contractual moment of self-recognition in writing is the simultaneous acknowledgement that the T both *is* and *is not* 'me'. This engenders de-facement in the sense of writing's speaking through, for or over the writer. The pre- or unwritten is rendered into inaccessible silence/absence under what is figured as the

epitaph of autobiographical writing. William Wordsworth and Jean Jacques Rousseau provide excellent demonstrations. As described in their own writings, writing for them entails a supplement which supplements only to replace, so that words are an extension of the writing subject's power, an extension which necessarily compromises that subject. The figure of the mask is useful here; insofar as the writing subject must occupy the lyric subject position that lyric subject becomes the deadly de-facing mask which nonetheless always was the face. For Wordsworth this constitutes a figurative muting and for Rousseau a death. Both are forms of absence and together suggest that the de-facement of writing, which is indeterminacy, entails an absence interchangeable with silence. The much more recent centos of Sophie Collins are an interesting example of the embrace of this indeterminacy.

Lyric voice can be heard in the way that we hear robot voice; what is uncannily silent or absent in the lyric may as well be that which is absent or silent in the robot, that which is special about the object voice of lyrics is also that uncanny thing which is heard in the voices of robots.

Chapter 4, Lyric-Robot Voices: A Listening, applies the concepts of robot and lyric voice developed throughout the thesis to a reading of four texts, Dollie Radford's 'Song', Adam Warne's Suffolk Bang, Andrea Brady's 'Book of the City of Ladies' and Sam Riviere's 81 Austerities. Each are read in light of an aspect of robot voice (silent interiority, the silent scream, the 'subtitle' and mouthlessness) This demonstrates that such a robotic mode of listening is indeed applicable, and that in applying such listening it is possible to produce new readings and allow for new engagements with those texts.

The specific use of robot voice in this thesis can be clarified if we first situate robots in a history of technologies which have had a supplementary effect upon voice, and so align robots with print and with the telephone and phonograph. It is not that robots have recently altered what voice is but that due to the supplementary effects of these technologies (robots being one of these) one can no longer hear voices as they may once have been heard. This is not to say that the nature of voice has changed but that there has occurred a revelation about what voice always was, such that an auditory technology (and here it is the robot) was always required as a trope in order to bring about that revelation. What is revealed is

not just that the lyric voice bears traces of automaticity but that it is also uncanny and im/material. These technologies enter both death and the machine into the voice, identifying these as integral and original features. The telephone and phonograph have inserted uncanniness and im/materiality into the voice, creating a legacy which the robot picks up and develops upon.

Both Radford's 'Song' and Warne's *Suffolk Bang* are readable in terms of the silent interiority. By negotiating sounding and silence and figuring silence as the generative ground for a voice which cannot then be compromised by silence, Radford produces material and affirmative effects of presence in her poem, neutralising uncanny effects. In *Suffolk Bang* a silent/absent unintelligible thing implicitly figured as place is made to shadow what is said, creating an indeterminate lyric subject who appears to emerge from place or placeness and to then feed back uncannily onto the writing subject. In contrast to Radford this intensifies uncanniness.

In Brady's long cento a pointedly feminine silent screaming is discernible, contrasting an audible 'men's language' to a never-audible, non-linguistic female cry, gestured to but not manifested as audible by Brady's re-appropriations. This reading does justice not just to the poem's political position but also to its particular form as a cento.

Riviere's 81 Austerities can be read in terms of mouthlessness, this kind of reading identifies the collection's key figure as the ideal subject under austerity who always starves but never dies. As such we find that the Austerities are remarkably without substance and in such a way as implicates the writing subject himself in their emptiness. In this way the collection can be understood as a project of familiarisation with inhuman nothingness.

Chapter 1 - Lyric Substance and Robot Substance

1. Ascending Mt. Fuji

Here I consider the problem of identifying 'robots' as opposed to computers or mere machines when, as an object of the cultural imaginary and also as an actual object of use and scientific study, 'robot' often straddles or vacillates between a number of categories. I suggest that a 'robot' has a particular cultural value more specific than that of a 'machine' and that this value is derived from the robot's status as an image, symbol or working model of personhood in the continually revised scientific-cultural discourse of that personhood. The aesthetic of this image is not unaffected by science-fiction. I discuss the reciprocal relationship between science-fiction and science-fact and suggest that, through this relationship, robots possess a strangely liminal identity, part 'real' and part 'image'. Later this will enable us to place robots in a materialist context alongside other such problematic and subtle types as images, atoms and poems.¹⁰

It is evident from the contrary statements of robotics researchers that there is no official consensus as to what counts as a robot (though some have pronounced views on the subject). Indeed, the field of robotics brings together many different specialisms and approaches, and robots are designed and built for such a huge variety of purposes that, while there are of course better and worse designs for fulfilling a particular function, the robots that have been built and those which are being developed around the world are unique and often very different machines. The meaning of 'robot' reveals itself to be conjectural or tangential not just to the average non-specialist, but also to the robotics expert, and the 'robots' described by roboticists are ongoing and continually mediated constructions. In *Robots that Care*, a documentary for BBC Radio 4 aired in 2011, Maja Mataric, a leading roboticist

¹⁰ I use 'subtle' with reference to Daniel Tiffany's conception of 'subtle bodies', a term he borrows from corpuscular philosophy and which is indicative of the discourses of philosophical atomism. 'A subtle body', writes Tiffany, 'consistently evokes a paradoxical sense of bodies suspended between matter and immateriality' (Daniel Tiffany, *Toy Medium: Materialism and Modern Lyric* (University of California Press, 2000), p.96). I explore this notion of subtle bodies in section 3 'Lyric Substance'. The materialist context within which I will place robots is pertinent to these bodies, that is, not in the tradition of Marx but of Lucretius and Spinoza, and after the manner of Kepler's snowflakes.

based at the University of Southern California, put forward a criterion by which to distinguish between those machines which count as robots and those which do not

...we [roboticists] have a general notion that it's a machine, that it can kind of perceive its world and it can do something in that world, usually involving movement, because if it doesn't move it's not much of a robot. But there's not even necessarily agreement on whether the robot should be autonomous, meaning it should make its own decisions entirely, based on its own knowledge and sensing, or whether it can even be remotely operated. In general, we agree that (well, I'm just going to go out there and say what we agree) it's very important that the robot has the physical body, if it doesn't have a physical body then it's not a robot.¹¹

The criterion of physical embodiment may at first seem helpful, even if Mataric does introduce a number of other problems which threaten the authority of the criterion. The proviso of physical movement, however achieved, would rule out disembodied but artificially intelligent computer programs for example, consequently assigning them to a different class of machine. We would easily be able to identify the robot as the one that can act in some way upon its environment. But this distinction does not necessarily ring true in an intuitive way. Within the category of the physical and moving there are very many kinds of machine; rather than narrowing the pool of potential robots, Mataric's distinction may have expanded it. Then too, the distinction admits varying degrees of complexity, from an autonomous vacuum cleaner to a Mars Exploration Rover, and yet the distinction collapses them into one class of robot, as distinct from non-robot. We may well feel that there is something intuitively more robot-like about a NASA space probe than an automatic floor cleaner, even though both have physical bodies and rely on powers of perception (one admittedly more rudimentary than the other) to affect their worlds. Finally, what is meant by 'perceive its world' and 'do something in that world'? The worlds which Mataric refers to here are most often the tightly

¹¹ Maja Mataric in 'Robots that Care: episode 1', *Robots that Care*, Jon Stewart, BBC Radio 4, London (2011, September 26, 11:00).

controlled environments of robotics labs, which bear only a passing resemblance to the complexities and unpredictability of the real world.

When a robot functions well in the 'natural' world it constitutes a huge success. Very often a robot's world is a simulated or representational test world and it is upon these worlds that robots produce specific effects relevant to those specific worlds. Given the state of the world in which a robot usually acts, the actions of programs in simulated worlds might be admitted a similar value, although of course, they cannot be described as physical. Developed between 1968 and 1970, Terry Winnograd's influential natural language program SHRDLU virtually manipulated a set of 'blocks' on a 'table', it exercised its capacity for understanding natural language by following written commands (in English) for moving the blocks and responded (again in English) to questions put to it about the blocks and its 'actions' upon the blocks. 12 Whether this kind of simulated world is to be considered a working environment in its own right or not has been a matter of some contention. Artificial Life worlds, virtual ant colonies and evolution simulators often tempt one to believe in the living reality of algorithmic creatures with their struggles, lives and deaths. One might warn against the trap of mistaking the visual representation of an algorithmic model for that which it models, but then again, one might also argue for the validity of the simulated thing within the world of its simulation. ¹³ In any case, what constitutes action in a robot's world may be divided into matters of physical and non-physical, not so much into action in a world and no action in no world. If we accept that what programs like SHRDLU do constitutes some kind of action in some kind of world, then the physical body may not seem as intrinsic to robots as Mataric makes out. Though this is of course, only on the condition that we accept

¹² For a more contemporary equivalent of a program-robot which perceives and causes effects upon its world consider Google's image recognition neural network, which recognises shapes in random, un-patterned images. In doing so the program produces pictures out of those images, distorting them into eerie, surreal landscapes. The process might be compared to the way human beings see pictures in random cloud formations and is, in this very narrow sense, akin to imagination. Distorting the world with one's imagination can be regarded (not unreasonably) as producing an effect upon that world. The release of these images was followed by headlines such as 'Yes, androids do dream of electric sheep' (*The Guardian* http://www.theguardian.com/technology/2015/jun/18/google-image-recognition-neural-network-androids-dream-electric-sheep [accessed 18.06.15]) in oblique reference to the sci-fi classic by Philip K. Dick, showing how the perceived inner-mind-world of the program has captured our own imaginations, going so far (in the case of the above quoted headline certainly) to inaugurate it into the science-fictional robotic canon.

¹³ Here I gesture toward Daniel C. Dennett in the case of the former and to Hans Moravec in the case of the latter. I explore the subject of simulations and their in/validity in greater detail later.

the validity of the virtual world; the way we choose to conceptualise and describe a program like SHRDLU reflects the way we conceive of robots and what a robot means for us intuitively.

In fact, Winnograd called SHRDLU a robot, and not exclusively either.

One of the basic viewpoints underlying the model [SHRDLU] is that all language use can be thought of as a way of activating procedures within the hearer. We can think of any utterance as a program – one that indirectly causes a set of operations to be carried out within the hearer's cognitive system....In this program we have a simple version of this process of interpretation as it takes place in the robot...The program that is created is then executed to achieve the desired effect.¹⁴

Winnograd uses his terms somewhat fast and loose, using 'program', 'model', 'robot' and 'system' almost interchangeably, and implying an equivalence between robot and human hearers through his identification of natural language with computer programming. For Winnograd, unlike Mataric, the distinction between robot and non-robot (that is, not just between robot and 'machine' or 'program') lies elsewhere than in the physical body, if there can be said to be a meaningful distinction at all, 'robot' being as good a term for his creation as any other. If physicality is irrelevant or too problematic to be useful, what else might it be about SHRDLU and programs like it that makes the title of 'robot' appropriate? Many 'chatterbots' have been developed since, not all with the extent (or any) of SHRDLU's complex understanding of natural language, while others perform astoundingly well. These program-robots converse, or rather appear to converse, with an interlocutor. The effect of such 'bots' is at times convincing and at others uncanny. Is Joseph Weizenbaum, who developed the early chatterbot (and 'virtual

¹⁴ Terry Winnograd quoted in Douglas Hofstadter, *Gödel, Escher, Bach: An Eternal Golden Braid*, 20th Anniversary Edition (Basic Books, 1999) p.629.

¹⁵ I once demonstrated the online chatterbot 'Cleverbot' to a colleague. She felt disturbed by the program and described it as being like 'talking to the dead'. So much do we sometimes believe in these autonomous, disembodied person-voices, even against our own scepticism and better judgement, that using chatterbots may indeed take on this séance-like quality. For an in-depth discussion of the ghostly effects of machine voices, see the section 'Voice, Death and the Machine' in Chapter 4 of this thesis.

psychotherapist') ELIZA (1964-66), describes the peculiar effect that his program had on some of its users

ELIZA created the most remarkable illusion of having understood the minds of the many people who conversed with it...They would often demand to be permitted to converse with the system in private, and would, after conversing with it for a time, insist, in spite of my explanations, that the machine really understood them...Most men don't understand computers to even the slightest degree...they can explain the computer's intellectual feats only by bringing to bear the single analogy available to them, that is, their model of their own capacity to think.¹⁶

According to Weizenbaum, ELIZA came across as a thinking mind to the uninitiated, and if not as a human mind, then as an equivalent. This appearance of mind is apparently impressed only upon those who do not understand how ELIZA creates that appearance. ELIZA's mind is a cleverly designed illusion, it is not an example of the conscious understanding of natural language but a product of basic pattern recognition. But it would seem that for such people this is not the case. Rather, ELIZA is a kind of person to be believed in, a coherent subject. One might well object to Weizenbaum's suggestion that the perception of a personality in ELIZA can be attributed only to ignorance, to an uncritical projection, especially given that ELIZA's design capitalises on the mechanism of projection, as I will discuss momentarily. In any case, as a program-person ELIZA has in some sense a perceived body; 'her' identity is not commensurate with the procedures and components of which she is composed, just as a human person is spoken of and therefore conceived of (in English certainly) as a kind of detached whole rather than as the sum of their parts, as in, I possess my hand, my hand is not me. Because she is believed to understand, to respond, to have a sense of herself and her interlocutors, she is perceived to have some sort of a personhood located neither in the physical machine on which she runs, nor in the coded procedures which run on the machine. The relationship of ELIZA the person to her various hardware and software is

¹⁶ Joseph Weizenbaum quoted in Hofstaster, *Gödel, Escher, Bach*, p.600.

similar to that between a human person's mind and their body in the humanist tradition. This is not the only way that the body of a chatterbot might be perceived. Douglas Hofstadter, in *Gödel, Escher, Bach: An Eternal Golden Braid*, describes how some colleagues interacted with the chatterbot PARRY, a contemporary of ELIZA. When diagnostic messages appeared onscreen as well as replies from PARRY, the interlocutors perceived all of the text as originating from the same 'person', rather than from separate programs which ran on the same machine, and they questioned PARRY about it. Hofstadter writes

...to my friends both PARRY and the operating system were just "the computer" – a mysterious, remote, amorphous entity that responded to them when they typed...The idea that PARRY could know nothing about the operating system it was running under was not clear to my friends. The idea that "you" know all about yourself is so familiar from interaction with people that it is natural to extend it to the computer – after all, it was intelligent enough that it could "talk" to them in English! ¹⁷

The assumption that PARRY was a kind of person was simultaneous with the identification of that person with the physical embodiment of the computer itself. This identification would see PARRY part way to robot status under Mataric's more modern distinction, or alternatively, it could be indicative of a tacit assumption on the part of PARRY's audience, that embodied persons are in fact a kind of bot.

Indeed, to view a computer as a kind of robot appears to be quite natural, provided it is the right kind of computer. The idea is of course a popular one; the super-computer-robot is not an uncommon trope in science-fiction. Theologian Douglas E. Cowan, in *Sacred Space*, his study of transcendence in science-fiction, asks 'what is a robot but an ambulatory computer?' suggesting that the natural precondition for 'robot' is 'computer' over 'ambulatory'. Isaac Asimov, who had a profound influence on the representation of robots, has suggested that what makes a

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¹⁷ Hofstaster, Gödel, Escher, Bach, pp.300-1.

¹⁸ Douglas E. Cowan, Sacred Space: The Quest for Transcendence in Science Fiction Film and Television, (Baylor University Press, 2010) pp.42-3.

computer a robot is its degree of intelligence and/or personality, ¹⁹ and distinguishes between classes of mobile and immobile robots, both being robots all the same. This seems to reflect the case of ELIZA and PARRY. Does 'robotness' then lie in the degree of Artificial Intelligence possessed by a machine, or perhaps in the appearance of intelligence? If either, I would recommend the latter. As we will see in greater detail later, Artificial Intelligence is itself fraught and difficult to define, so that it may be impossible to say whether or not a machine has intelligence at all. What ELIZA, PARRY, SHRDLU and Asimov's immobile robots have in common is the impression of being persons. A person in this case is a sufficiently intelligent, apparently autonomous being, who causes us to believe (through whatever convincing method is at their disposal) in their 'personality'. A person is also such that we might identify with them (however loosely) by referring to our own personhood and seeing in them that personhood echoed (however faintly). In ELIZA's case this process of identification is overtly manipulated; ELIZA, in her capacity as a 'psychotherapist', diverts all questioning back upon her interlocutor, so that any line of questioning which does not cause the interlocutor to bear their own personality to ELIZA meets with resistance.²⁰ It is understandable therefore that ELIZA might be perceived to have empathy and depth of emotional understanding; the interlocutor invests part of themselves in discovering her personality. I mean to say that 'personhood' is a mental phenomenon. In this case, robotness would not be derived from function or degree of sophistication, but rather from appearances, from the appeal of a given machine to a set of cultural imaginaries. Of course, the successful projection of such appearances may depend greatly on the level of sophistication with which a machine carries out a certain function.

Might the category of robots be an aesthetic one? If this is indeed the measure of robotness then we could account for the ways in which 'robot' has been

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¹⁹ From the introduction to 'Some Immobile Robots' in *The Complete Robot: The Definitive Collection of Robot Stories* (Voyager, 1995) p.53 '...it is not always easy to decide where the dividing line is. A robot is, in some ways, merely a mobile computer: and a computer is, in reverse, merely an immobile robot. So for this group, I selected three computer stories in which the computer seemed to be sufficiently intelligent and to have sufficient personality to be indistinguishable from a robot.'

²⁰ Versions of ELIZA are available to download and to chat with online, for example at http://www.manifestation.com/neurotoys/eliza.php3 and http://nlp-addiction.com/eliza/ [accessed 10.09.15] where this effect can be demonstrated.

defined and redefined throughout the history of robotics. Winnograd belongs to a generation of programmers and roboticists before Mataric, and though Winnograd's generation was and still is influential to Mataric's, his writing reflects a necessarily different perception of robots and of persons too. These two attitudes towards robots/non-robots, which I have symbolised here using Winnograd and Mataric, reflect two different constructions of both robots and of the human person. Winnograd may be read as representing a cybernetic version of personhood in which the human can be mapped onto the machine, a top-down approach in which mind precedes and is conceptually separate from the body; Mataric may be read as representing the later bottom-up approach in which mind is embodied and is shaped and impacted upon by the world as it shapes and impacts the world, this would be a more truly posthuman²¹ version of personhood.²² Even though Mataric did not imply equivalences between humans and robots like Winnograd did, in setting her criterion the importance which that criterion places upon the physical body, upon movement and interaction, recalls the shift in robotics and computer science from top-down to bottom-up constructions, that is from a cybernetic, humanist picture of the mind, to an embodied posthuman picture of persons. Of course, it is not as if robotics and the philosophy of the self have both glided smoothly and unanimously from one era to the next, and so it is not that Mataric's approach necessarily represents the current vogue for human identity.

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²¹ I invoke here an understanding of 'posthuman' consistent with the one described by N. Katherine Hayles in How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics (University of Chicago Press, 1999) which Hayles contrasts to humanism and the cybernetic. 'The chaotic, unpredictable nature of complex dynamics implies that subjectivity is emergent rather than given, distributed rather than located solely in consciousness, emerging from and integrated into a chaotic world rather than occupying a position of mastery and control removed from it.' p.291. ²² This view of robots and persons is echoed by many contemporary researchers. Martin Rees anticipates that "...once robots observe and interpret their environment as adeptly as we do, they will truly be perceived as intelligent beings, to which (or whom) we can relate – at least in some respects - as we relate to other people. We'd have no more reason to disparage them as zombies than to regard other people in that way.' (Martin Rees, 'Organic Intelligence has No Long-term Future' in What to Think About Machines That Think, John Brockman ed. (Harper Perennial, 2015) p.10.) Murray Shanahan suggests that this vision may come to include and co-opt even static AIs -'Awareness of the world, I would argue, is indeed a necessary attribute of human-level intelligence...In an embodied creature or a robot, such an awareness would be evident from its interactions with the environment (avoiding obstacles, picking things up, and so on). But we might widen the conception to include a distributed, disembodied artificial intelligence equipped with suitable sensors.' (Murray Shanahan, 'Consciousness in Human-level AI' in What to Think About *Machines That Think*, p.2.)

Perhaps we could rather see each approach to robotics, to the meaning of 'robot', as representing competing models of personhood; personhood is, I believe, ultimately the distinguishing (and not unproblematic) marker of robotness. A robot is not just a real-world machine or program, but is also a culturally constructed image, an image which is the joint product of science-fiction and of the everchanging metaphors which stand for, explain and influence our experience of human being. Indeed, science and fiction are not easily separable, as we will see, they require considering together. The power of metaphor in scientific discourse cannot be underestimated or overlooked. Although the way that metaphors have been used and applied has changed²³ and although prominent metaphors have varied over the history of the sciences, metaphor itself has long been indispensable not just for communicating complex concepts, but also for establishing the discursive ground from which it becomes possible to conceptualise scientific principles at all. We speak, for example, about the realm of observable physical phenomena as describing the 'laws' of physics, a metaphor which suggests at once the continuity of and the causal relationships between phenomena as well as the immutability, firmness and correctness of the abstraction itself. In other words, 'the laws of physics' is a metaphor which disguises its identity as a metaphor. It presents itself as 'reality', that is as a fundamental and representative 'law' of which these phenomena are the subjects. Indeed, a metaphor is not necessarily to be thought of as a mere tool for conceptualisation, a poetic affectation that serves the work of science in a secondary role. In the service of science, a metaphor (or perhaps I should say, in the service of a metaphor, science...) becomes a truth; the mode of representation prescribed by the metaphor becomes analogous to the 'reality' of the phenomena. This is a move which can be extremely productive to the sciences. An excellent example is to be found in the metaphor of the human body as a machine. Randolph Nesse has commented that

The metaphor of the body as machine is so pervasive in medicine that no one even thinks of it as a metaphor. It's all parts that are connected by cogs and

²³ For some thought on the subject of metaphors in the sciences and their changing applications through history, see 'The Shift from Metaphor to Analogy in Western Science' Dedre Gentner and Michael Jeziorski in *Metaphor and Thought*, A. Ortony ed., Second Edition (Cambridge University Press, 1994) pp.447-480.

wheels, chemicals and electrical impulses, and it serves us very well in medicine. Probably the greatest advance in medicine over its entire history is adopting the metaphor of body as machine.²⁴

This quote is an interesting one; Nesse implies that figurative 'cogs and wheels' as well as the far more literal 'chemicals and electrical impulses' belong to the same family of metaphorical stuff. It is as if the literal functions of the body have been coopted into the machine allegory, as if our hormone squirts and synaptic firings quite literally are machinic functions, in their turn a metaphor for some other bodily function or aspect. Yet, adoption would suggest a free and deliberate choice. To say that the machine metaphor is adopted is to imply that we may have just as easily adopted some other image, as if the body and its metaphor were in fact so easily separated, so linearly related. This is telling of the relationship between the object of science and that object's metaphor or that metaphor's object; a metaphor which is as essential to medical science as the machinic body may be both a metaphor and the thing itself. N. Katherine Hayles remarks upon this peculiar status with reference to another scientific metaphor, what she terms the 'Computational Universe', which casts the universe itself as a computational process running on a cosmic machine. She locates the production of these phenomena in feedback loops which connect 'culturally potent metaphors with social constructions of reality', ²⁵ highlighting the importance of resisting what she regards as a contemporary temptation to linearise, flatten out and disentangle the looping process. So it is with the body as machine; it is possible to see the advent of robots as a consequence of the 'adoption' of this medical metaphor, or rather, after the fashion of the loop, to see the concept of robots as the simultaneous and inevitable product of that metaphor, if it were even possible to say which came first, the concept of robots or the machine metaphor. In other words, if a person is a machine then it follows that a machine may be a person. Robots may be possible because our understanding of who we are and how we work is heavily influenced by metaphors, to the extent that the metaphor of the body as machine has become ontology. What's more, the machine metaphor implies and

²⁴ Randolph Nesse in 'Digital Human: series 8, episode 5/6, Body', *Digital Human*, Peter McManus, BBC Radio 4, London (2015, November 9 16:30)

²⁵ N. Katherine Hayles, *My Mother was a Computer: Digital Subjects and Literary Texts* (University of Chicago Press, 2005), p.20.

anticipates an imagined future where the human machine has been completely schematised, the effect of which is to cycle back and affect the bodies and the machines of the present. This process becomes quite plain if we consider the relationship of mutual feedback between science and science-fiction, which we will discuss later. Indeed, it can be no wonder that the realisation of a perfect, artificial humanoid is traditionally held up as the ultimate fulfilment of robotic technology in popular culture and sometimes within scientific communities as well, the perfect machine would be a person after all. The ontology of the machine metaphor is culturally and socially supported so that robots are not mere incidental products of scientific truth, but rather a physical (or sometimes physical-ish) manifestation at the confluence of metaphors.

Our understanding of what a robot is, and also our need for distinctions in order to understand what a robot is, noticeably change as robotics engineering and computer science change and develop. Mataric also comments on this change

...most robots in the world today are still working on gene sequencing, so they're basically doing very uninteresting work to humans, precisely moving bits of genetic material. That's called 'automation', we don't even think of that as robotics any more...The robots that we're interested in creating today and in the future are robots that move around freely in some environment.²⁶

Mataric makes clear how fluid the definition of 'robot' is even, or especially, among professionals. The moniker of 'robot' may be removed from old technologies, presumably down-grading them to mere machine status ('automation' in this case) and the term is then carried over into whatever areas are currently interesting, challenging or important, which will presumably change in time also. The terms that define robots are therefore continuously and substantially revised. Currently, for Mataric and many other roboticists, robots are physically embodied autonomous agents, or the remote-controlled extensions of human agents, who necessarily produce effects upon their environment. But between embodied, moving, not necessarily autonomous 'robots' and personable 'robots', how might we

²⁶ Maja Mataric in *Robots that Care: episode 1*.

characterise for example, the system of self-replicating blocks or the 'adaptive' robot developed at Cornell University?²⁷ Or the more recent 'Mother' robot at The University of Cambridge, which builds its own robot 'Children'?²⁸ These are certainly robots to their creators and to the media, but it is possible that, should the technology pertinent to these robots greatly progress, should it become naturalised and 'boring', such robots will become just another machine, and the new robots will be distinguished by whichever 'robotic' technology is only yet potential or in early stages.

Masahiro Mori, an early robotics engineer, has phrased the problem poetically

You can't define a robot. It's the same as trying to define Mt. Fuji. If a steep hill suddenly protrudes from the flatland, you can draw a line to show where the mountain starts, but Mt. Fuji becomes higher so gradually that you can't draw a line. Robots are like Mt. Fuji. It's hard to separate what is a robot from what is not. Asimo is so near the peak, anyone can easily call it a robot. But what about a dishwasher? It can automatically wash dishes, so you might call it a robot. The line is blurry.²⁹

Clearly, there would be something self-defeating in the project of striving for a *truly* robotic technology and one might wonder why we study under the heading of 'robotics' at all. What recommends the term, always variable, for continued use?

The words 'robotics' and 'roboticist' were coined in the early 1940s by science-fiction writer Isaac Asimov. In fact, Asimov's writing inspired Joseph F. Engelberger, science-fiction fan and founder of Unimation inc., to develop Unimate,

http://www.news.cornell.edu/stories/2006/11/cornell-robot-discovers-itself-and-adapts-injury [accessed 22.08.15].

²⁷ For self-replicating blocks see Bill Steele, (2005, May 5) 'Researchers Build a Robot that can Reproduce', http://www.news.cornell.edu/stories/2005/05/researchers-build-robot-can-reproduce [accessed 22.08.15] for adaptive robots see Bill Steele, (2006, November 16) 'Cornell Robot Discovers Itself and Adapts to Injury When it Loses one of its Limbs',

²⁸ See *University of Cambridge* (2015, August 12) 'On the Origin of the (robot) Species', http://www.cam.ac.uk/research/news/on-the-origin-of-robot-species [accessed 10.09.15]. ²⁹ Masahiro Mori quoted in Norri Kageki (2012, June 12) 'An Uncanny Mind: Masahiro Mori on the Uncanny Valley and Beyond' in *Spectrum*

http://spectrum.ieee.org/automaton/robotics/humanoids/an-uncanny-mind-masahiro-mori-on-the-uncanny-valley [accessed 10.02.15].

the first 'robot arm' for use on assembly lines. At the very least, the fantastic vision of science-fiction's robots lies at the heart of real-life robotics etymologically. To call science-fiction originary however, is problematic. In the above case of Asimov, it might seem as though, by taking on the banner of 'roboticists', real scientists are playing at being the fictional scientists of Asimov's world, or that their current real work is the genesis for fictitious robots iterated in the past. In the case of Unimate, it may seem as though a fictional world prompted its own genesis, so that the trajectory of robotics is from fiction into reality and back again into its original fiction. Such is the apparent nature of this strange loop.

Jet packs, exoskeletons, self-driving cars, cyborg enhancements (to name a small fraction) are all things first imagined in fiction as technological possibility and which are currently under development. At the same time there exist many technologies once fantastical, now mundane, video conferencing for example, or touch screens. The early science-fiction of the nineteenth century now strikes one as quaint indeed, while watching an early episode of Tomorrow's World is often a cringe-inducing experience. Then, in the other direction, discoveries and advancements in Artificial Intelligence, physics, space travel etc., provide the grist for the mill of our ever-evolving science-fiction. Such instances of seeming cause and effect are quite plain to see, but the relationship between fact and fiction is not necessarily so linear, or even so simply causal. Currently, the gap between sciencefictional fantasy and real-world possibility is narrower than ever before. Where once science-fiction looked far ahead into distant and fabulous futures, it has increasingly been looking at future visions nearer and nearer (in character and/or time) to our own present. In the 1980s, Cyberpunk was influential to this move. Science-fiction's robots have begun to take on innovative and practical designs beyond the traditional shiny metal humanoid, thus anticipating, reflecting and inspiring contemporary robotics design in an immediate way. One excellent example is found in the 2014 film Interstellar, the robots in which (named TARS, CASE and KIPP) have an adaptable, all terrain design which alternates from an immobile slab shape, to a cantering W, through to a high-speed asterisk (one might discern something of the adaptiveness in Cornell's robots here). Witty reference is made to the more traditional robot tropes, which the film subverts through the robots' changing

percentile levels of Humour, Trust and other traditionally unquantifiable and exclusively human attributes.

Let us then consider this; if fiction precedes fact, then which instantiation of a technology, the 'fictional' or the 'factual' one, is to be credited with the greater 'reality' or the truly originary status? In the cases noted above, real-life produces a representation of a fiction, that is, a representation of a representation. Are reality and originality even appropriate values in this case? How and when exactly is the scientific event iterated? And are the divisions between science -fact and -fiction really useful or productive when we consider the origins of new ideas and technologies within the loop? It may be justifiable to consider some science-fiction as a legitimate part of the scientific processes of discovery, design and development. What then is its status in terms of the real?

In 1970, Masahiro Mori published 'The Uncanny Valley', a warning against the folly of designing and developing high-fidelity humanoid robots because of their unique and insurmountable uncanniness. This was despite there being no humanoid robots in existence at that time. Humanoids were very prevalent, however, in science-fiction and then, as now, they constituted a large part of the cultural imaginary concerning robots. Now, and despite Mori, humanoid androids are being built, and the mission for exact likeness is headed by roboticists in Japan, the country from which the original warning issued. 'Movie' robots often do not provide helpful templates for real-life robots who must work practically and specifically in real-world situations. Such projects as inspired by the ideals and aesthetics of sci-fi may reveal much for example, about the workings of human bodies, or the models by which we might understand the mind. But this may represent advancement for other fields, bio mechanics or philosophy, and not necessarily for robotics. For practical robotics, science-fictional ideals may represent a diversion from other more valuable areas of research. There has been much excitement for and encouragement of the design and building of humanoid robots, with competitions run by DARPA and MIT among others, for the best designs. The major flaw of these bipedal humanoids is however, that they just keep falling over. The struggle to overcome this far from simple problem reveals, if anything, the essential unsuitability of the humanoid form for many of the tasks we would like robots to perform, such as search and rescue or the housework.

With the exception of those who work on or with robots, science-fiction is perhaps the most usual, or at least the most frequent mode of contact that we have with the concepts of robots and robotics. It should come as no surprise when our expectations and assumptions about what modern robotics is capable of, or even what it is for, shoot past the mark. Alex Lenz describes a common interaction between himself and non-specialists who ask about his work

People ask me 'oh, what do you do?' 'Oh, I build robots.' 'Oh wow, that's so cool. So, can they do *this*?' 'No, not really. Sometimes, you know, if everything is right, if the context is right in a lab, if there's no sunlight in the eyes of the robot then everything works.' To make things really work, generically, I wouldn't want to put a number on how many years that would take.³⁰

The average non-specialist tends to anticipate (with no small excitement) robots having the degrees of freedom and the perceptive and mental capabilities of the robots promised in the fictions of popular culture. However, they are inevitably disappointed. Lenz's experience is not unique among robotics researchers either. Lenz goes on to say however,

I have some sort of feeling that we're doing something fundamentally wrong about building robots...Robots are very advanced in motor control, in reaching, sensory perception for hands, but then they can't do any other thing. I'm not sure if you can just add all the different parts together and then believe 'oh, now we have a robot that can do everything.' To integrate this all in a smart, cognitive way is really hard and at the moment I can't see how we can do this with our approaches to software development.³¹

Integration, the 'robot that can do everything', is not necessarily a waste of time (although we might infer that from Lenz's comment) rather it might be a matter of enough time and a better approach. Popular expectations may yet be met.

³⁰ Alex Lenz in *Robots that Care: episode 1*.

³¹ Ibid

Might Lenz's interlocutors think of his work as constituting a class of machines which are not fully robot or not-robot-yet? I do not intend to set up a dichotomy between robotics experts and laypersons here, such that we might distinguish between, on the one hand, a 'truth' about robots held by robotics experts and, on the other, a set of misguided presumptions to which the general public cling.³² In the case of Lenz's anecdote, it is not to the point that Lenz is correct and his interlocutor is mistaken, or even that Lenz is the one who is mistaken, after all he has not built a 'real' robot yet. We need not dwell on the disparity between what scientists do and what many non-scientists think they do, as indicative of some failing on the part of either side. Rather, we might consider the way in which a scientific field may come to absorb a cultural image into its practise, to incorporate the fantastical into the world of the technical. We might also consider the extent to which the cultural imaginary is a driving force in the field of robotics, the extent to which it supplies the end goal, whatever that might be. Such encounters as Lenz's may as well give opportunity to analyse the points of contention between fact and fiction in the midst of their complex exchange, the shifts of influence, the resistance of one to the shaping forces of the other. It is not, after all, as if this sort of dichotomy is absent or unimportant where the discourses of robots meet; the rhetoric of a scientific-true versus a pop-cultural false serves to conceal or minimise the conceptual nature of a robot's construction, the way it is discursively negotiated in a manner that other technologies, like toasters and TVs are not. An argument such as this one, which seeks to identify robots as necessarily bound up in a shifting matrix of metaphor and anthropomorphism, must recognise the 'true/false' dichotomy and its rhetorical effect.

I suggest that what constitutes a robot's ascent of Mt. Fuji is its participation in the ever-changing discourse (biomedical, neuroscientific, cultural etc.) of personhood. That is, the discourse or the intersection of multiple discourses which produce sufficiently advanced, sentient, and ultimately human minds, bodies and consciousnesses. The robot closest to the peak of robotics functions as a truth-test in

³² To assume such a dichotomy would suggest, contrary to the argument I have been advancing, that there is both a coherent Science of Robots and a delimitable Fiction of Robots, such that innocent confusions between the two can be dismissed. I hope that the above quotes from these scientists have pointed towards the conceptual and discursive basis of robots, the ongoing negotiation between culture and the field of science, and between scientists within the field too, rather than suggesting a truthful unity and authority of the scientific specialism we call 'robotics'.

which some or all of these things, or whatever is then held to constitute them in essence, are replicated and represented in an inorganic medium. As the terms of this personhood change however, the peak recedes into the distance. Robots ultimately serve as emblems for the human person, whatever features are taken to constitute 'person' for the scientific-cultural context in which the robot is found. The robot constant is a model or an image, but such that it is a certain kind of 'real' and therefore has materiality, which is to say that robots require us to reposition materiality as distinct from physicality, to rethink the 'solid' basis of the physical. An intuitive descriptor for this kind of real might be found in 'im/material'. This 'im/materiality' will be explored in greater detail later.

To clarify, the cultural-scientific value of the robot lies in its being an image of personhood, not in its being a person, even though the ideal state of the latter drives the production of the former. The less a robot merely imitates life and instead *is* life, the less of a robot it becomes. This is the distinction between an inorganic construction which models life and for example, a clone, or a genetically modified or engineered human, who is no less constructed and yet *is* life. The one thing that roboticists would agree on is perhaps, as Mataric said, that 'it's a machine.' The path towards greater robotness then ultimately negates that same robotness. The ultimate robot ceases to be a robot and becomes instead a person, even a human person, just as Pinocchio becomes a real boy. However, where that point is may be impossible to tell as it necessarily remains contingent upon the human observer.

2. Artificial Intelligence

The im/material nature of robots is particularly visible in their manifestation as Artificial Intelligences, the project of which is based on the idea of modelling the mind, of constructing simulations by which to see mind, or to perform it. Artificial Intelligence wavers constantly between image and the thing itself; this ambiguous irreconcilability is a defining characteristic of AI. This section of the thesis looks more closely at the im/material robot introduced above; here I discuss what AI is and what it is envisioned as potentially being. I identify some pertinent difficulties facing the realisation of AI and consider the validity or invalidity of simulations.

Finally, I argue that as a simulation, a robot is a sign for a thing which is also the thing itself, and so robots belong to the hyperreal as defined by Jean Baudrillard's 'phases of the image'. I will show how the im/material image of the robot is consistent with these phases.

There are different kinds and degrees of Artificial Intelligence. Artificial Intelligence might be adequately described as a certain level of intellectual complexity necessary for a computer to carry out a particular function. It may, for example, be necessary for a program to 'learn', to alter its own programming in order to adapt to a situation, or it may need to assess information, even sensory information, and react appropriately. In essence, AI simulates aspects of what we understand to be intelligence. These simulations perform intellectual tasks with speed, comprehensiveness and diligence completely beyond the bounds of human capability. Because of these capabilities Artificial Intelligence is used routinely in speech recognition, translation, behaviour modelling, robotic control and risk management to name a few. It is also very useful to the military in its manifestations as autonomous missiles, missile defence systems, drones, robot submarines, self-driving vehicles, high-frequency trading systems and cyberdefence.³³ AI is also useful in the stock market, medical diagnosis and gene sequencing.

This Artificial Intelligence is far from a complete or faithful replication of human intelligence; Steve Omohundro describes AI succinctly: 'AI systems can be thought of as trying to approximate rational behaviour using limited resources.'³⁴ This is a very practical definition and compared to the fabled super-intelligences of sci-fi it may, I imagine, be a little disappointing. But this is not to say that human-level intelligence or even super-intelligence is impossible, or that sci-fi is 'wrong' and science is 'right' - far from it. Many scientists believe that we are heading towards an age not just of human-level intelligent machines, but of machine super-intelligence. As Martin Rees observes 'assessments differ with regard to the rate of travel, not the direction of travel. Few doubt that machines will surpass more and more of our distinctively human capabilities — or enhance them via cyborg

³³ The lists here are taken from Steve Omohundro 'A Turning Point in Artificial Intelligence' in *What to Think About Machines That Think*, pp.12-14

³⁴ Omohundro, 'A Turning Point in Artificial Intelligence', p.12.

technology'. There may be much disagreement on exactly what future we're heading for - whether robots will be our slaves or masters, whether superintelligence will be silicon or carbon based, whether AI will want to conquer the stars – but the general consensus among scientists is that 'The Singularity', the point in time where Artificial Intelligence equals or surpasses human intelligence, is not just possible but inevitable. In a purely technical context, this view is reasonable. It is true that we do not fully understand how the biological 'machinery' of the brain produces the effect of an intelligent self-consciousness, yet we are proof that it is possible. There is nothing in the 'laws of physics' which prevents us from creating human-level consciousness artificially. Factors more likely to impede this creation include finance and resource consumption. In any case, we are not there yet. For the astronomical speed with which Artificial Intelligence (that is, compared to biological intelligence) has emerged, progress in AI research is in fact 'hypedefyingly slow', 36 with human-level intelligence always estimated to be 'the standard fifteen to twenty-five years away'.³⁷

Aside from their practical uses AIs also function as working versions of theoretical models of the mind, as simulations of intellectual functions which are based on how we think aspects of intelligence might work. Some are developed for use as neuro-scientific tools with which to study the mind, or as in the case of social robotics, they facilitate socio-psychological research by appearing to replicate a mind, to represent themselves as a mind to human beings in social situations. The contribution that AI makes is often philosophical, psychological or sociological as well as military, corporate etc. It is from these AIs that we would expect humanlevel intelligence to emerge.

The argument of AI is this: firstly, human-level intelligence, i.e. the mind, is a formal system, where mind is perhaps best thought of as 'what the brain does'. The mind is a rule-bound, well-defined, abstract system such as used in mathematics. No matter how messy, complicated and counterintuitive the brain, as the seat of mind, may be, there is a system underlying it which can be understood, or at least approximated. Secondly, like any formal system, this formal system can

³⁵ Martin Rees, 'Organic Intelligence Has No Long-term Future', p.9.

³⁶ Steven Pinker, 'Thinking Does Not Imply Subjugating' in What to Think About Machines That Think, p.7.

³⁷ Pinker, 'Thinking Does Not Imply Subjugating', p.6.

be translated isomorphically into another medium, even a non-biological medium.³⁸ Because of its essential formality, that thing which mind is, and which may include self-consciousness, understanding and all, can be translated via an informationpreserving transformation. There is no loss of meaning or fidelity in such a transformation. It is not like the translation from one language into another, where language consists of the arbitrary assignation of symbols and meaning is, in a sense, negotiable. Rather, in an isomorphic transformation, meaning is intrinsic to the language and that meaning is preserved in the new medium. If an AI of human-level intelligence could be produced, then the validity of the argument would be proved. If this were to happen, then the AI in question would no longer be a simulation of intelligence, it would no longer be a model, it would instead be intelligence. This human-level AI is sometimes called 'strong' AI, as opposed to 'weak' AI, which I think does great discredit to the AI we currently possess, as well as betraying an unconstructive anthropocentric bias. A better term, I think, is Artificial General Intelligence (AGI), which we may use as a way of distinguishing between the kind of AI that monitors the stock market, and the kind that imitates the flexibility of the human mind.

The AI argument does not necessarily mean that AI researchers attempt to meticulously recreate neural networks, although some do believe that this approach is the correct one, and programs to build computers which function like the cerebral cortex are currently underway at Berkeley, MIT and other universities.³⁹ Rather, the argument represents faith in some 'skimmable' property of synaptic firings, hormonal squirts and so on. However, some believe that the fabrication of neural networks is necessary, that The Singularity will be a consequence only of *wetware*. One such is Paul Davies.

³⁸ Nick Bostrom describes it this way, as 'The substrate-independence thesis': 'mental states can supervene on any of a broad class of physical substrates. Provided a system implements the right sort of computational structures and processes, it can be associated with conscious experiences. It is not an essential property of consciousness that it is implemented on carbon-based biological neural networks inside a cranium: silicone-based processors in a computer could in principle do the trick too...Neurotransmitters, nerve growth factors and other chemicals that are smaller than a synapse clearly play a role in human cognition and learning. The substrate-independence thesis is not that the effects of these chemicals are small or irrelevant, but rather that they affect subjective experience only via their direct or indirect influence on computational activities.' Nick Bostrom, 'Are We Living in a Computer Simulation', *The Philosophical Quarterly*, Vol 53, No. 211, pp.244-5.

³⁹ See *What to Think About Machines That Think* for a brief introduction to current thought on the

potential of cortical micro-circuitry.

Discussions about AI have a distinctly 1950s feel about them, and it's about time we stopped using the term *artificial* in AI altogether. What we really mean is "designed intelligence" (DI). In popular parlance, words like *artificial* and *machine* are used in contradistinction to natural and carry overtones of metallic robots, electronic circuits and digital computers, as opposed to living, pulsing, thinking biological organisms. The idea of a metallic contraption with wired innards having rights and disobeying human laws is not only chilling, it's absurd. But that's emphatically not the way that DI is heading.

Very soon, the distinction between artificial and biological will melt away. Designed Intelligence will increasingly rely on synthetic biology and organic fabrication, in which neural circuitry will be grown from genetically modified cells...⁴⁰

I very much agree with Davies. Not because I deny the argument of AI, as I said, there is nothing in principle, according to the 'laws of physics', to prevent us from creating AI. Rather, I mean to highlight that the notion of artificiality acts as a preventative to the fulfilment of AI; if 'AI' is to reach its potential, it can do so only as a legitimated 'I', in which case it would no longer be AI. In fact, in Davies' future vision there is no room for A if we wish to truly fabricate I. This is to say that the barrier to AI is not a technical one, but a perceptual one. The classification 'artificial', as Davies suggests here, will maintain the status of the intelligence as simulation, as model. The aims of the AI project, the goal of human-level intelligence, necessarily entails the assumption of a kind of moment of transition, a transition from *the thing simulated*, to *the thing itself*, predicated on the successful simulation of all aspects of human-level intelligence or mind. First of all, is it even possible to reach a level of complexity at which we can all agree that human-level

⁴⁰ Paul Davies, 'Designed Intelligence' in What to Think About Machines that Think, p.29.

⁴¹ Machines along the lines of Davies vision (if only at the very earliest of stages) are currently being built in the form of Kevin Warwick's 'rat-bots'. The rat-bots are cyborgs; small, wheeled machines controlled by a collection of cultured rat brain cells and not by a computer program. The cells die off after a short time and new ones must be grown. Each new rat-bot displays unique individual behaviours and learns to interact with its environment. The rat-bots certainly appear to be a fitting precursor to the DI revolution. Other experts see the future of AI in its integration with the human body, in a cybernetically augmented human race, rather than a society of man and machine. It is possible that the rat-bots will lead to some such practical applications.

intelligence has been replicated in its entirety? The problem of what intelligence *is* anyway, what abilities and features it consists of, is a troublesome one for scientists developing AGI, and it poses no small problem. If the project of Artificial Intelligence has taught us anything about the nature of intelligence it is, as Douglas Hofstadter has observed, that

...once some mental function is programmed, people soon cease to consider it as an essential ingredient of "real thinking". The ineluctable core of intelligence is always in that next thing which hasn't yet been programmed..."AI is whatever hasn't been done yet."⁴²

If the concept of intelligence was exhausted by the ability to perform complex and abstract processes in a logical and methodical way, to reason like for example, a calculator, then we would have long ago accepted the average Casio as a genuine AGI. But this wouldn't much credit the valued concept of intelligence and it certainly does very little by way of describing it; a calculator is not creative for example, it has no complex understanding of self, no way to perceive the outside world and to engage with it based on those perceptions, it has no understanding of others, it has no 'feelings' at all, but this is obvious. A calculator does not provide an adequate model for the human mind, even if it can be said to be 'intelligent' in its own way, and modelling the mind is the imperative of the Artificial General Intelligence project. Of course, the word 'computer' refers to just such a calculating function, as in 'to compute'; computation is still at the heart of what even the most advanced computer does. Interestingly, the original 'computers' were not machines at all; 'computers' were originally human beings, often women, employed to compute data before the commercialisation of digital computers for just this purpose. I do not intend to argue for some essential equivalence between 'the ineluctable core of intelligence' and the ability to crunch numbers (although comparisons have been drawn between computers and brains in terms of base-level processing) but to demonstrate how mental functions which were once thought to be the exclusive province of human beings, may become even the simplest and most

⁴² Hofstadter, *Gödel, Escher, Bach*, p.601.

mundane function of a computer. Even the word 'computer' is part of the historical transformation of the concept of intelligence. 'Is an ability to play checkers well a sufficient indicator of intelligence?' asks Hofstadter.

If so, then AI already exists, since checker-playing programs are of world class...Historically, people have been naïve about what qualities, if mechanised, would undeniably constitute intelligence. Sometimes it seems as though each new step towards AI, rather than producing something which everyone agrees is real intelligence, merely reveals what real intelligence is *not*.⁴³

To divide humans and robots in terms of discrete intellectual abilities, to organise them as two halves of a binary opposition, standing either side of a constantly shifting line, one denoting the genuine and the other denoting a hopelessly inadequate fake, is a typically defensive gesture and characteristic of humanist philosophy. The moving of epistemological goalposts emerges as a recurring theme in discussions about Artificial Intelligence, and it seems to describe the preservation of the humanist subject rather more than it elucidates the problem of what intelligence is. Recourse to such a defence would suggest that notions of the 'human' and of the 'self', are dependent upon equal and opposite notions of the machinic, and must be continually recalibrated in such a way as to preserve this relationship between the human and the non-human machine. There is also a moral imperative to maintain the distinguishing distance between the two, as Jane Bennett notes in *Vibrant Matter: A Political Ecology of Things*

...the fear is that in failing to affirm human uniqueness, such views [as collapse distinctions between persons and objects] authorise the treatment of people as mere things; in other words, that a strong distinction between subjects and objects is needed to prevent the instrumentalisation of humans...the *ontological* divide between persons and things must remain lest

⁴³ Hofstadter, Gödel, Escher, Bach, p.573.

one have no *moral* grounds for privileging man over germ or for condemning pernicious forms of human-on-human instrumentalisation...⁴⁴

However, Bennett is quick to challenge the efficacy of this moral imperative

...pointing out that the Kantian imperative [is] to treat humanity always as an end-in-itself and never merely as a means does not have a stellar record of success in preventing human suffering or promoting human well-being...⁴⁵

This is not to say that an anti-instrumental view of humanity is wrong or redundant, neither is it Bennett's argument. I mean to point out that the humanist defensive gesture that separates subject and object, human and robot, does not necessarily have the preserving or illuminating function it would seem to suggest, and that the humanist defensive position is not to be taken for granted. For this discussion, the importance of the theorem 'AI is whatever hasn't been done yet' is its implication of infinite, never culminated, progress. A perfectly reasonable and valid Artificial Intelligence is created if one limits one's goal to the replication of only a certain number of intellectual features. But the idea of replicating everything, as though the limit of 'everything' could be clearly and exhaustively defined so as to satisfy everybody, presents an impossible goal. If Hofstadter is right (and the progress of Artificial Intelligence since the time of his writing would suggest that he is) then even if 'everything' were achieved, the real ineluctable core of intelligence would still be 'everything +1' and so we have another case of Mt. Fuji.

Secondly, even if we did succeed in creating a fine simulation of the mind in all its complexity, a simulation whose imitation of human-level intelligence was comprehensive, what would there be to recommend to us the idea that the simulation is now in fact the thing itself, that the working model is that which it models? The difference between AI and DI is that AI simulates, but DI *is*. Even if, in designing a mind, we treat the brain quite literally as a machine, what we design would undeniably be *a brain*, and we are at this point in history accustomed to believing in biological brains as the medium of minds. I predict that whatever

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⁴⁴ Jane Bennett, Vibrant Matter: A Political Ecology of Things (Duke University Press, 2010) p.12.

⁴⁵ Bennett, *Vibrant Matter*, p.12.

difficulties we would have in relating to designed minds would eventually be overcome for this simple reason. IVF treatment and gene therapy both represent medically institutionalised forms of genetic tampering, and thus stand as precursors to a designed biology, and we do not tend to regard patients in receipt of these treatments as inhuman machines to be tweaked, edited or built. As late as 2003, Jürgen Habermas concluded that genetic intervention would result in a species who lived in 'a moral void, a life not worth living'. 46 This statement not only reflects a highly negative anthropocentrism developed from humanism, but also disregards human kind's participation in evolution by foreclosing the validity of potential future iterations of the human subject, as though human subjects as they currently are represent the unchanging apex of a now complete evolutionary process. If genetic intervention necessarily results in a 'moral void', then that void can only exist inside an evolutionary vacuum. Then and today, it is unusual to think of people born through IVF, or people cured of genetic diseases as possessing 'a life not worth living' or as products of an immoral practice. Critics, certainly those who share Habermas' view of the human, would no doubt find much reason to balk at Designed Intelligence, but I believe that the biological basis of this intelligence would lead to acceptance and normalisation of DIs in the human social sphere (at least, as much acceptance and normalisation as one can reasonably expect for any 'other' human group).

We are not, however, accustomed to granting that a simulation, whatever its verisimilitude, *is* the thing it was constructed to simulate. The uncanniness which the particularly convincing AIs elicit must in part be derived from that convincingness, from the observer's conviction that the simulation has defied all common sense and become real, that there might in fact be no meaningful distinction between real and simulated, thus shaking the foundations of human reason. Daniel C. Dennett, writing in 1978, warned against the mis-interpretive impulse to take the model for the modelled

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⁴⁶ Jürgen Habermas quoted in Jairus Victor Grove, 'Must We persist to Continue? William Connolly's Political Responsiveness Beyond the Limits of the Human Species' in *Democracy and Pluralism: The Political Thought of William E. Connolly*, Alan Finlayson, ed. (Routledge, 2009) pp.183-202, p.190.

The research strategy of computer simulation has often been misconstrued by philosophers...it is never to the point in computer simulation that one's model be *indistinguishable* from the modelled. Consider, for instance, a good computer simulation of a hurricane, as might be devised by meteorologists. One would not expect to get wet or wind-blown in its presence...The fact that such a simulation program is ultimately only a high-speed generator of the consequences that some theory assigns to various antecedent conditions is often obscured by the mode of presentation of input and output. It is often useful, convenient, or just plain exciting to use the output to drive a visual display, a raster or TV screen on which appears, say, a swirling vortex moving up a map of the East Coast, but that swirling vortex is a sort of epiphenomenon, the tail that doesn't wag the dog. The theory incorporated into the program directs the behaviour of the presentation, which itself plays no role in the simulation beyond its role as a convenient display.⁴⁷

Dennett's dismissal is quite reasonable and puts the convincingness of intelligence simulations into a wider context. In a broad sense, an Artificial Intelligence is not so different from a weather simulator, and in the case of a weather simulator there is no temptation to take the visual representation of mathematical processes, themselves based on theories, for real weather. We could compare the visual display of an artificial hurricane with the visible signs of intelligence that we see in an AI. The above quote comes from Dennett's essay 'Why You Can't Build a Computer that Feels Pain', in which Dennett suggests that a computer, in principle, cannot be made a 'feeler of pain', although it could be made a very faithful simulator of pain behaviour, or of the mental processes involved in the feeling of pain. What might make a computer a feeler of pain, however, is our acceptance that what goes on inside the computer is the same as what goes on inside us. Indeed, it is easier to believe in the realness of simulated intelligence than in the realness of simulated weather. It is quite natural, quite human, to attribute consciousness to a thing which shows signs of intelligent behaviour and this attribution is, as many argue, a feature of our social evolution as human beings, but it would be misguided to allow an AI

⁴⁷ Daniel C. Dennett, 'Why You Can't Make a Computer that Feels Pain' in *Brainstorms: Philosophical Essays on Mind and Psychology* (Harvester Press, 1981) pp.191-2.

to exploit this evolutionary feature. Artificially intelligent robots are often designed to amplify the appearance of real intelligence; design plays an enormous role for example, in the success or failure of social robots, who depend on the human observer's belief in and about them. The ways in which robots are presented to us by their creators or by the media often reinforce the perception of robots as living beings, this is very noticeable in the case of 'predator and prey' robots, who simulate co-evolution. However, this encourages a sensationalist vision of robots based on science-fictional ideality, against which a supposed science-factual world of not-robots-yet could be contrasted. The drama of intelligent robotic lives is a popular spectacle; in 2015 an interactive Artificial Life (AL) display was installed in the departure lounge of Auckland International airport, replete with the lives, deaths and eventual vanishing away of tiny living pixels.⁴⁸ But this goes to show the extent to which AI is part of spectacular culture, and not necessarily the extent to which AI is really I, or even L. Dennett would argue that it is both wishful and unwise to mistake today's visual representations of human-like intelligence for the real thing, just as it was in the 70s. This is because of the essential identity of AI as a model, a model whose function is dependent upon an outside interpretation - mind is not intrinsic to it. But it is noticeable how this position cannot close the book on the question of whether or not AIs could be in some sense feelers of pain (a point which instead becomes contingent upon the observer) or for that matter, possessors of any or all of the neurological quirks which we believe make us human.

For all its reasonableness, Dennett's distinction between the simulation and the thing itself is not representative of physical reality, at least not as physicists understand it. Furthermore, as helpful as the example of simulated weather is for reminding us of the model-nature of AI, intelligence is not weather, and it is precisely to the point that the intelligence model be indistinguishable from the modelled in the search for AGI. It can be equally reasonable to argue that mind is itself akin to a simulation, in which case there would be little or no difference

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⁴⁸ I saw this installation on October 31st 2015. It was run on a motion-sensitive screen; when the array detected movement, for example the movement of soon-to-be passengers walking to their gate, virtual 'food' was generated by the residual patterns of movement which were still visible on the screen, hanging in the virtual air as a cloud of coloured particles. A swarm of green pixels emerged to feed on the 'food'. The pixels eventually 'died', at which point they turned red and then disappeared. The installation gave me an eerie sense of being involved in the lives of these pixel creatures, and I felt uncomfortably responsible for them.

between simulator and simulated where minds are concerned, unlike hurricanes. In any case, here Dennett only considers the (ir)reality of the outer, representational element of a computer simulation, he does not consider what claim the inner world of the simulation might have to reality.

This is, however, exactly what Hans Moravec discusses in his 1999 paper 'Simulation, Consciousness, Existence'.⁴⁹ Moravec provides an alternative perspective on the nature of AI simulations by seriously entertaining what it might mean for a human consciousness to exist in a simulated world.

If damaged or endangered parts of the brain, like the body, could be replaced with functionally equivalent simulations, some individuals could survive total physical destruction to find themselves alive as pure computer simulations in virtual worlds.

A simulated world hosting a simulated person can be a closed self-contained entity...Conscious inhabitants of simulations experience their virtual lives whether or not outsiders manage to view them. They can be implemented in any way at all.⁵⁰

Simulations may run at irregular rates, be copied or run on different machines for example, without any inconsistencies detected by entities within the simulation. Dreams may provide a useful analogy; in dreams we are aware of moving in physical spaces, of sensations, we are even conscious of other inhabitants of the dream. In retrospect, dreams may have been erratic, one dream merging into another, time may move at inconsistent rates, the dream physics may change at random, yet all this appears to form a continuous experience during and only during the dream time. That we can suddenly realise that we are in fact in a dream, as in the

⁵⁰ Original publication: Hans Moravec, 'Simulation, Consciousness, Existence' in *Intercommunication*, Vol. 28 (1999) pp.98-112. The essay text used here was sourced from https://www.frc.ri.cmu.edu/~hpm/project.archive/general.articles/1998/SimConEx.98.html [accessed 06.06.15].

⁴⁹ Moravec's paper was published in the same year that sci-fi blockbuster *The Matrix* was released. This period saw a popularisation of the concept of a subjective state of reality and of hyperreality. The film's character Morpheus (Dream) famously references Jean Baudrillard's *Simulacra and Simulation* (English translation released 1994) when he reveals the desolate real world 'Welcome,' he says 'to the *desert of the real*.' *The Matrix*, (1999) The Wachowski Brothers dirs., US: Warner Bros. Studios.

case of lucid dreaming, goes to show just how real a dream world can be. There is no need for an outside observer, observing by means of a visual display, to convince us of that reality. One might object to this analogy in that, as weather is to intelligence, dreams are not mathematical processes. Although, this would indeed seem to be the case if we held to the argument of AI. 'What does it mean for a process to implement, or encode a simulation?' asks Moravec 'Something is palpably an encoding if there is a way of decoding or translating it into a recognizable form.'51 This interpretation follows the logic of AI; brain functions constituent of mind can be 'decoded' and 'translated', they can in theory be implemented as a simulation. But this interpretation also admits of everything conceivable, abstract and physical, being encoded and as such decodable or translatable. This does of course, open up a vast number of distressing moral and ethical issues. 'If past physical events could be easily altered...real life would acquire the moral significance of a video game. A more disturbing implication is that any sealed off activity, whose goings on can be forgotten, may be in the videogame category.'52

But to return to the technicalities of simulation, Moravec is arguing that the abstract basis of the simulation (and everything, according to Moravec's theory, would have an abstract basis) is the operative part of that simulation and the visual element of any simulation distracts us from or confuses us about the nature of its reality. The visually representative element of any computer simulation is, he reminds us, separable from the mathematical processes underlying them, and here Moravec appears to be answering Dennett (or at the least, weather simulators) directly

A simulation, say of the weather, can be viewed as a set of numbers being transformed incrementally into other numbers. Most computer simulations have separate viewing programs that interpret the internal numbers into externally meaningful forms, say pictures of evolving cloud patterns. The simulation, however, proceeds with or without such external interpretation.⁵³

⁵¹ Moravec, 'Simulation, Consciousness, Existence'.

⁵² Moravec, 'Simulation, Consciousness, Existence'.

⁵³ Moravec, 'Simulation, Consciousness, Existence'.

This bypasses Dennett's objection; the visual representation of the mathematical processes involved in simulating phenomena are not the extent of what that simulation is. The simulation need not be visually convincing to anybody in order to be an accurate simulation, rather, the simulation at the mathematical level may be recognised as a reality in and of itself, independent of observation. Indeed, consciousness itself may be thought of as just such a simulator, without which brain processes would be incomprehensible. Indeed, some theorise that consciousness is a natural by-product of any sufficiently complex system, a higher order language that refers to that system. This is a useful theory which connects the seemingly irreconcilable 'machine language' of the brain with the mysteriously unified experience of being an I. In this theory the conscious I takes on the role of a symbol, albeit the arch symbol, for the physical processes of the brain, which are in turn affected physically by that symbol. But we will look at these ideas in greater detail later. Moravec's position might at first seem far less reasonable than Dennett's, but Moravec points out that the physical world, that is, the assumed realm of real as opposed to unreal, is far from reasonable.

Known as the 'spooky' science, quantum physics is the study of the thoroughly unreasonable behaviour of the particles which make up the basis of our firm and physical world, and Moravec draws on the quantum nature of that physical world to support his argument for the reality of simulations, simulations like the mind.

When an object travels from one place to another, common sense insists that it does so on a definite, unique trajectory. Not so, says quantum mechanics. A particle in unobserved transit goes every possible way simultaneously until it is observed again.⁵⁴

What this means for Moravec's argument is that, rather than living in a stable world where there are real things and not-real things, we in fact live in a world of many possible worlds. Our sense of the continuity and firmness of reality is derived from

⁵⁴ Moravec, 'Simulation, Consciousness, Existence'

our observation, and reality amounts to an interpretation of which we ourselves are but a part.⁵⁵ This is to say that a view of simulated AI minds consistent with the nature of the physical universe admits that these minds have a reality, even if they are not biological. To discredit the AI mind on the basis of interpretive error is to misunderstand the role that observation and interpretation play in the production of reality, and thus to misunderstand the basis of reality itself. Moravec's position is therefore also quite reasonable.

My purpose is not to convince the reader either way on the subject of whether machines can or cannot think. There are many interesting theories about why they can or can't, ranging from the seemingly arbitrary to the rigorous. What I hope I have shown is that whether we are convinced of the existence or potential existence of artificial minds or not, AI remains something symbolic. *Artificial* Intelligence does indeed have a 1950s feel about it, recalling the clanking figures and tired apocalyptic narratives of a genre always reminiscent of *The Day the Earth Stood Still*. This is because unlike *D*I, AI necessarily exists as a science-fiction; always visible as a possibility but disappearing if it becomes real, an un-reality on which the real is built and in which the real is reflected. The impossible vision of AI is more real than the real kind, and it derives its symbolic power from its Ouroboros nature. For this reason, a 'real' associated with the physical, or with the somehow scientifically vindicated, is inappropriate to robots, or is insufficient for robots; the class of robots are perfectly *hyperreal*.

⁵⁵ Moravec provides a helpful analogy of this, our world in the form of a Borgesian library – 'the library of all possible books written in the Roman alphabet, arranged alphabetically'. '... The library as a whole has so little content that getting a book from it takes as much effort as writing the book. The library might have stacks labelled A through Z, plus a few for punctuation, each forking into similarly labelled sub-stacks, those forking into sub-sub-stacks, and so on indefinitely. Each branch point holds a book whose content is the sequence of stack letters chosen to reach it. Any book can be found in the library, but to find it the user must choose its first letter, then its second, then its third, just as one types a book by keying each subsequent letter. The book's content results entirely from the user's selections; the library has no information of its own to contribute. Although content-free overall, the library contains individual books with fabulously interesting stories. Characters in some of those books, insulated from the vast gibberish that makes the library worthless from outside, can well appreciate their own existence. They do so by perceiving and interpreting their own story in a consistent way, one that recognizes their own meaningfulness---a prescription that is probably the secret of life and existence, and the reason we find ourselves in a large, orderly universe with consistent physical laws, possessing a sense of time and a long evolutionary history. The set of all possible interpretations of any process as simulations is exactly analogous to the content of all the books in the library. In total it contains no information, yet every interesting being and story can be found within it.'

Indeed, in light of these two views of simulation, Baudrillard's Simulacra and Simulation provides an invaluable perspective. What does it mean after all, to simulate something, as opposed to merely representing it?

"Whoever fakes an illness can simply stay in bed and make everyone believe he is ill, whoever simulates an illness produces in himself some of the symptoms" (Littré). Simulation threatens the difference between the "true" and the "false", the "real" and the "imaginary". Is the simulator sick or not, given that he produces the "true" symptoms?⁵⁶

Is the intelligence simulator intelligent or not, given that it simulates the 'true' signs of intelligence? It is unsurprising that the advent of AI has necessitated the continual renegotiation of the meaning of intelligence. Because it simulates, AI has initiated a destabilisation of meaningful boundaries. In this hyperreality intelligence is reducible to the signs of intelligence so that all intelligence is the simulation of intelligence, so too with personness. I therefore, is AI and robots are robots by their personhood because persons are person simulators, that is, robots. In the manner of hyperreality, the real is substituted for the signs of the real, and these signs mask the fact that the real never existed in the first place.

However, that the robot always exists as a set of signs allows us to maintain the illusory distinction between ideal or imaginary robots and the robots produced by science. The notion of 'real' then, appears as though it were safely unmolested. This action can also be extended to science-fiction more generally. Robots cannot be said to belong either to a constellation of representations or to a finite branch of the sciences. Their symbiotic relationship of continual, mutual feedback is not consistent with the notion of representation, but perhaps it is consistent with the notion of simulation. Baudrillard differentiates between the two - 'Representation stems from the principle of the equivalence of the sign and of the real...Whereas representation attempts to absorb simulation by interpreting it as a false representation, simulation envelops the whole edifice of representation itself as a

⁵⁶ Jean Baudrillard, Simulacra and Simulation, Sheila Faria Glaser trans., (The University of Michigan Press, 1997) p.3.

simulacrum.'⁵⁷ Robots go beyond mere equivalence of sign and the real i.e. representation. The project of robotics (and of AI) is predicated on the idea that the sign and the real can be as one, or rather, that they already are. A robot is the sign for a thing which is also the thing itself. This being the case, we can insert the robot into Baudrillard's 'phases of the image'.⁵⁸ Such would be the successive phases of the robot:

The image of robots in fiction represents the capabilities of science (which is grounded in reality) and the future that will result from those capabilities.

The fictional robot image has replaced the real; co-extensiveness with the image is a sign of the real, thus detracting from 'real' robots.

The generic distinction between science and science-fiction maintains the illusion of a distinction between 'real' robots and 'imaginary' robots; which is to maintain the illusion that there *are* 'real' and 'imaginary' robots.

Robots only ever really existed and only can really exist as a dream, nonetheless this dream is 'real', that is - *hyperreal*.

Certainly, in the case of robots it is the image that always asserts itself over the real, the image that turns out to be the real. A robot constitutes a simulation, a sign of intelligence and/or personhood at the same time that robotic simulation robs and replaces the reality of intelligence and personhood. The science-fictional robot ideal becomes the sign of a 'true' or 'real' robot at the same time that science fact and fiction become integrated through the robot, while the 'true' or 'real' robot disappears at the moment of its attainment. A transition from simulation to thing simulated, or from not-robot-yet to robot, is not possible because there is no transition to be made from one to the other, rather one *is* the other. Simulation, symbol, image, are integral to the reality of robots.

⁵⁷ Baudrillard, Simulacra and Simulation, p.6.

⁵⁸ 'Such would be the successive phases of the image:

It is the reflection of a profound reality;

It masks and denatures a profound reality;

It masks the absence of a profound reality;

It has no relation to any reality whatsoever: it is its own pure simulacrum.' Baudrillard, *Simulacra and Simulation*, p.6.

3. Lyric Substance

So what then is a robot made of? It follows that we question the nature of robot materiality in light of robot hyperreality and their dual status as both metaphor and ontology. If we are to seriously explore the nature and effects of robot voices, we cannot very well disregard the specific material conditions of that voice. Voice does not transcend materiality and the way in which we conceive of the material conditions of a speaking subject influences the way we read the relationship/s between that subject and their voice. In other words, we cannot ask what it means for a robot to speak, or what effects that voice has and why, without first identifying the material ground from which that voice emanates. Our analysis so far has complicated the notion of a robot's material ground, identifying them with a liminal state for which the terms 'material' and 'immaterial' may seem insufficient, a state wherein metaphor and the thing metaphorised converge and wherein representation is absorbed by simulation. Robots aren't exhausted by reference to an easily identifiable physical body and yet they cannot be written off as 'not real' or merely fictional. I have gestured towards an 'im/materiality' and towards a need to reposition materiality as distinct from physicality, to reconsider what 'matters'. I must expound upon those ideas, to do so will not only place robots within a materialist context but will also allow us to draw some interesting and perhaps unexpected connections between robots and language, between robots and poetry.

In this section I establish a concept of matter as necessarily immaterial and therefore inscrutable; this concept will be specific to a tradition of philosophical materialism grounded in atomism. From there I consider the materialism of lyric substance and the ways in which it is bound up with the figure of the automaton.

It is necessary at this stage to clarify what is meant by 'materialism', and to state what materialism, for the purposes of this argument, is not. Firstly, I wish to distinguish the philosophical materialism that will be used here from the Marxist methodology of historical materialism. Robots and intelligent machines certainly have an impact on the material conditions of production, and the economic impact of their various implementations forms a substantial topic indeed for Marxist critique, but these are not the relevant material terms. I am not interested in how robots materially affect complex economic and social systems, rather I am interested

in the bodily composition of robots, in robots as 'stuff'. Secondly, we may be considering robots as 'stuff', but this is not to align robots with western consumerist materialism, even though robots are often marketed as luxury consumer goods, expensive toys and status-projecting appliances. Jane Bennett has called this form of materialism 'antimaterialism' arguing that 'the sheer volume of commodities, and the hyperconsumptive necessity of junking them to make room for new ones, conceals the vitality of matter'.⁵⁹ The practice of consumerist materialism actually requires a great disregard for the materiality of the objects of consumption, and therefore its particular view of materiality is not useful to us. Finally, by 'materialism' I do not mean to imply a doctrine of the strictly physical and tangible, such that privileges sentient subjects (particularly human subjects) as dynamic agents and actors in a world of inert, discrete and massy things.

Instead I place robots within a materialism which emerges from the tenets of atomism, with the atomist philosophies of Democritus, Epicurus and Lucretius, thus aligning robots with the metaphysical claim of atomism, that there is nothing that is not made of atoms, unless it is unreal, that is 'only material bodies exist.'60 We can understand this as a claim that all things, whatever they are, have a substance of sorts, that substance however, cannot be consistent with a doctrine of discrete, massy bodies. According to Daniel Tiffany's reading of atomism, atoms themselves, out of which all perceptible things are made are 'being[s] of reason', this is because the imperceptible and inscrutable atom is 'perceptible only to the intellect'.⁶¹ Atoms are, in this sense, hypothetical objects only, yet real and foundational, much like numbers. Modern science is, of course, better equipped to render atomic phenomena sensible; microscopic events are now available to perception in ways unthinkable to the original atomists. However, modern physics finds that it is ultimately impossible to ascribe to the atom a single, stationary and tangible state. In quantum physics the materials of the atom are often hypothetical and are inextricable from the act of perception or rather, from the act of taking scientific measurements of quantum phenomena. In this sense too, the atom is an abstract or mental phenomenon, a being of reason, and yet real. It is within this context of thought that Tiffany makes

⁵⁹ Bennett, *Vibrant Matter*, p.5.

⁶⁰ Tiffany, Toy Medium, p.44.

⁶¹ Tiffany, Toy Medium, p.44.

the claim that 'Western Materialism therefore depends, paradoxically and irremediably, on the equation of materiality and invisibility'.⁶² In other words, the Western tradition of materialist philosophy necessitates that the essential basis of material existence be apparently immaterial, that is, the basis must go without a stable and coherent objecthood and be instead a kind of sensibly imperceptible abstract.

The atomic bodies of Lucretius' atomism are bodies which emerge from movement and encounter, bodies which are events.

At times quite undetermined and at undetermined spots they [atoms] push a little from their path: yet only just so much as you could call a change of trend. [For if they did not]...swerve, all things would fall downwards through the deep void like drops of rain, nor could collision come to be, nor a blow brought to pass for the primordia: so nature would have never brought anything into existence.⁶³

This conditional play of encounters and transformations, of collisions that are and those that are not, that melt into the void, all between bodies of reason, is in a way similar to our modern quantum physics. Although, where Lucretius' atoms swerve through space, the electrons of modern quantum physics swerve in and out of existence. These atoms are not so much stable bodies as event dependant potentialities. Both versions feature transformation, changes of state and a conspicuous nothingness ('the deep void'). As Erwin Schrödinger 's Cat Paradox famously renders intelligible, 64 'the essential characteristic of matrix mechanics was

⁶² Ibid.

⁶³ Lucretius quoted in Bennet, Vibrant Matter, p.18.

⁶⁴ The Cat Paradox originally appeared in Schrödinger's essay "Die gegenwärtige Situation in der Quantenmechanik" in *Naturwissenschaften*, *Vol.* 23, Issue 48, (November, 1935) pp.807–812. The thought experiment was intended as an illustration of the problems with the Copenhagen interpretation of quantum mechanics, in which multiple states are superposed until resolved into either state (the collapse of the wave function) by observation. Schrödinger's intention was to show the naivety of a 'blurred' model of reality. The translation of the original Cat Paradox below is from *Quantum Theory and Measurement*, John D. Trimmer trans., J.A. Wheeler and W.H. Zurek, eds., (Princeton university Press, 1983), p.157. 'A cat is penned up in a steel chamber, along with the following device (which must be secured against direct interference by the cat): in a Geiger counter there is a tiny bit of radioactive substance, *so* small, that *perhaps* in the course of the hour one of the atoms decays, but also, with equal probability, perhaps none; if it happens, the counter tube discharges and through a relay releases a hammer which shatters a small flask of hydrocyanic acid. If

the final recognition of the impossibility of ascribing a physical reality to a single stationary state'.65 Atoms cannot exist in the tangible, consistent sense that, for instance, a table does. Indeed, there are great differences in the observable behaviour of matter at the micro and macro levels. Under scrutiny, atoms at this micro level are more like hypothetical pictures until they are observed, at which point their ambiguity collapses. Or, depending on the interpretation of quantum events, there may be infinitely many, equally real picture-like forms, only a limited amount of which can be observed. In any case, there is not some single stable form of existence prior to that observation, which is proper to the phenomenon. Yet, if we are to follow the line of atomism, there is nothing which is not composed of atoms. In that case either everything is composed of atoms which do not exist or, the material basis of physical reality is immaterial. Such a conclusion would seem deeply contradictory, a better refined conclusion would attempt to reconcile the seemingly contradictory positions of materiality and immateriality. In which case, atoms exist but ambiguously so. This ambiguity is such that existence as we understand it incorporates or is even necessitated by non-existence as we understand it, which would suggest an interrelation of being and nothing such that the two terms become less distinct and less antithetical. We might then revise our understanding of atoms' materiality as such: all things, if they are real, possess im/materiality. I say possess, because the nature of im/materiality would seem to foreclose the possibility of matter strictly being anything; im/materiality is perhaps better regarded as a kind of property rather than as a fixed state, because some properties may be gained or lost or even traverse bodies and a property is not a prior condition of a thing's realness but rather an effect of it. If this were the case, then our notion of 'real' would need to decouple and move away from physicality and scrutability.

The materiality of matter then, cannot be persuaded to give up any sign of matter's, or a specific arrangement of matter's, 'absolute', to give up any sign of the powerful thingness of the thing, of a whole and definite essence to an existence. In any case, absolutes would not be applicable to a materialism of ambiguity and

one has left this entire system to itself for an hour, one would say that the cat still lives if meanwhile no atom has decayed. The psi-function of the entire system would express this by having in it the living and dead cat (pardon the expression) mixed or smeared out in equal parts.'

uncertainty, where im/materiality adheres to or traverses across material phenomena. The notion of the absolute in matter has its own philosophical tradition of inscrutability, of utter recalcitrance, such that the *realness* of a real thing is a kind of product of its inaccessibility. Discourse around the vibrancy or animation of matter converges with im/materiality (as we might well think of atomism and quantum physics) on this score. Jane Bennett, pursuing her theory of vibrant matter, its agency and affect, considers Spinoza's principle of conatus, the *being power* of material objects. She notes that

Spinoza ascribes to bodies a peculiar vitality: "Each thing [res], as far as it can by its own power, strives [conatur] to preserve in its own being." Conatus names an "active impulsion" or trending tendency to persist. Although Spinoza distinguishes the human body from other bodies by noting that its "virtue" consists in "nothing other than to live by the guidance of reason," every non-human body shares with every human body a conative nature (and thus a "virtue" appropriate to its material configuration). Conatus names a power present is every body: "Anything whatsoever, whether it be more perfect or less perfect, will always be able to persist in existing with that same force whereby it begins to exist, so that in this respect all things are equal."

The idea of conatus, while it confers a persistent, quasi-agentic nature upon material objects, also serves to deepen the mystery of those objects' power. Spinoza's reference to an intractable and specific force of existence forecloses conceptual access to that force. We may accept the presence of conatus but, not sharing the conatus of a particular object, we cannot know it. Bennett provides an excellent summary of the philosophical problem: 'In the presence of the absolute, we cannot know. It is from human thinking that the absolute has detached; the absolute names the limits of intelligibility.' Is the absolute of matter by its nature, hopelessly occulted? There but continually deferred? Or is it that the absolute is beyond the limits of intelligibility because it is a negative and not a positive quantity, a kind of

⁶⁶ Bennett, Vibrant Matter, p.2.

⁶⁷ Bennett, Vibrant Matter, p.3.

nothing? In any case, matter must escape our thinking of it, it is impalpable and inscrutable.

It is this type of inscrutable im/materiality, along with the ontological properties of metaphor, which prompts Daniel Tiffany's idea of lyric substance, which ambiguously, 'bodies possess, or are possessed by'. 68 The concept is developed from the idea that this im/material substance shares properties with the pictures used to make them accessible, that a phenomenon enters the category of the real only as a picture.

We are confronted with the idea that a material body, insofar as its substance can be defined, is composed of pictures, and that the conventional equation of materialism and realism depends on the viability of the pictures we use to represent an invisible material world.⁶⁹

This mode of materiality is proper to both scientific explanations of matter and to the materials of poetry, and therefore, according to Tiffany, science and poetry are connected by a shared lyric substance. This idea not only confers a pictorial nature upon the substance of real things, but also implies that we must regard pictures, or any lyric material, as a corporeal object, real and substantial.

The emblem of this lyric substance is the automaton, ancestor to the robot, which for Tiffany is analogous to atoms and to poetry. Not only has the automaton or 'mechanised toy' historically played a major role in depicting the workings of the body, but for Tiffany it also encapsulates and represents the essential principles of a philosophy based on the doctrine of the atom, a philosophy which seeks to make the intangible tangible and the invisible visible.

...the automaton clearly becomes something more than a mere image or representation when it is situated at the convergence of mechanical and corpuscular philosophies. Indeed, in this context, the automaton no longer functions as a picture of anything; rather, the organic body depicts and confirms the ontology of the mechanised figure. The toy becomes the

⁶⁹ Tiffany, *Toy Medium*, p.9.

⁶⁸ Tiffany, Toy Medium, p.15.

metaphysical ground of the organic body, which nevertheless exceeds, in its infinite mechanicity, any man-made machine.⁷⁰

The relationship between the automaton and the body of which the automaton is the constitutive image, 'reiterates the dialectical substance of the atom',⁷¹ the im/material, the metaphor which is the thing itself. This is how the automaton functions as an emblem of the immaterial basis of the material world and of the phenomenological life of pictures. To Tiffany, automata are manifestations of the principles of matter but also of animation, of the principles of life, because it is that animation which categorizes automata as distinct from mere pictures or stationary models. For this reason we may decide as Tiffany does that, not only is the artefactual automaton an emblem of the abstract principles of materiality, but also that 'the soul is an artefact' that it is (certainly in the case of the lyric poem) 'something that the poet makes'.⁷² This claim represents the most radical extent of the reversal performed by lyric substance: the most ethereal and abstract element of a subject (the soul) is exposed as physical, tangible and *constructed* while the material substance of a subject (the matter) is rarefied and occulted.

It is important to note at this point that these ideas of Tiffany's owe much to Paul de Man and his reading of Nietzsche and Baudelaire in 'Anthropomorphism and trope in the Modern Lyric'. When Nietzsche declares 'What therefore is truth? A mobile army of metaphors, metonymies and anthropomorphisms'⁷³ this is not to despair at the impossibility of any true knowledge of reality, or even to claim that we are subject to cruel misguidance through troping. Rather it describes the distinctly metaphorical ways in which things enter the world of the known or rather the known-to-be-true. A key point of Neitzche's declaration for de Man is that 'tropes are neither true nor false and are both at once. To call them an army is however to imply that their effect and their effectiveness is not a matter of judgement but of power'.⁷⁴ Anthropomorphism, like trope (but more than just trope)

⁷⁰ Tiffany, *Toy Medium*, p.51.

⁷¹ Tiffany, Toy Medium, p.54.

⁷² Tiffany, *Toy Medium*, p.19.

⁷³ Friedrich Nietzsche, 'Truth and Falsity in an Extra-moral Sense', M.A. Mügge trans., in *ETC: A Review of General Semantics*, 49, No. 1 (March, 1992) p.63.

⁷⁴ Paul de Man, 'Anthropomorphism and Trope in the Modern Lyric' in *The Rhetoric of Romanticism* (Columbia University Press, 1984) p.241

is particularly powerful in that, according to de Man, it is not a 'proposition but a proper name'

Anthropomorphism is not just a trope but an identification on the level of substance. It takes one entity for another and thus implies the constitution of specific entities prior to their confusion, the taking of something for something else that can then be assumed to be given.⁷⁵

Anthropomorphism sets up a relation wherein the properties of the human are given and pre-known, so that this relation produces a truth of human experience, a relation of correspondence between a human inside and an otherwise alien outside, enabling the articulation of a lyric voice. In Baudelaire's poem 'Obsession' it is the employed anthropomorphism, the correspondences that link man and nature which, for de Man, mark that poem as lyric. While Baudelaire's poem 'Correspondences', which instead lists the correspondences that might be made in the service of anthropomorphism, in the service of writing a lyric poem, is wholly unlyrical. 'Correspondences' suggests an entropic enumeration which is essentially unintelligible, and which is yet the blueprint from which lyric poems are written, a blueprint for lyric intelligibility. It is possible for anthropomorphism as lyric principle to be applied beyond poetry if we agree with de Man that 'the lyric is not a genre, but one name among several to designate the defensive motion of understanding, the possibility of a future hermeneutics'. ⁷⁶ In this sense, automata belong to the lyric because of the anthropomorphic troping which they are and which enables intelligibility. In the automaton the principles of atomism are brought into correspondence with human form and human endeavour (i.e. with the concepts of man as man-machine, man as creator of machines, man in the image of god creator of perfect machines) in an anthropomorphic image which can be taken as given. Automata can then be seen as materialisations of lyric processes. The equivalence of picture and material thing can then be understood to occur at the site of the automaton, this would be Tiffany's lyric substance.

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⁷⁶ De Man, 'Anthropomorphism and Trope', p.261.

This concept of lyric substance, emblemised by automata, provides us with a way to conceive of robots which is consistent with their peculiar mode of being. The notion that robots are composed of or traversed by a lyric substance seems to reconcile the physical and fictive as well as the shifting, metaphorical aspects of robots. If the automaton possesses and also symbolises lyric substance, then we may regard it as both a poetic object and as an object of poetry. I mean to say that what we write about when we write poetry is that very mode of making scrutable the inscrutable, of conjuring or invoking the material, which the automaton both is and represents. This is a condition which one would expect to carry over to the automaton's successor, the robot. However, to characterise robots as being or possessing lyric substance would not be a mere repetition of Tiffany's ideas; for example, while robots have much in common with their analogue predecessors, robots are also encoded objects, and in this way, go beyond automata. Robots contain a literally linguistic and informational element, although, we must not forget that code and poetic language are two very different forms with different functions and effects. Not only that but robots have accrued a wealth of cultural, social, philosophical and affective meanings on top of those which have already built up around and stuck to automata. If it is possible that robots are such loaded poetic objects, if they are poetry's object, then what particular significance would a robot's voice take on? How might the concept of poetic voice interact with robot voices? Indeed, how would the concept of voice function in poems composed by robots?

But is the lyric substance of robots close enough in nature to actual lyric poetry to permit us to ask these questions? To permit us to call robots poetic? Aside from their matter, the connection between atoms and poems appears to be in their shared poetic technique; images and metaphors, a common creative principle, and in this we have lyric substance. But while we might see robots as linguistic because of their encoding and thereby afford another degree of likeness between robots and the artefacts of poetry, just how linguistic or grammatical is the matter of which it is composed? How deeply poem-like is a robot then?

To consider the linguistic qualities of lyric substance and therefore, the deeper linguistic qualities of robots, we might look towards the famous analogy of

Lucretius, that 'atoms are to bodies as letters are to words'. 77 The analogy draws on the double meaning of the Latin *elementum* meaning both 'a complex whole... and a letter of the alphabet. 78 The pun is taken quite literally. This analogy does not just imply a construction of larger parts from smaller parts, as might the image of an atom as a building block, or as yet another ball in the cosmic ball pit; it carries the suggestion of a message, of meaning, and of the word as magical property. This grammatical conception of matter may be said to go even further than a vision of the physical universe composed of pictures because, while it too suggests the essential im/materiality of the atom, it also implies encryption and therefore the possible decoding (or even re-coding) of the universe. It also implies the anagrammatical, implies matter as the permutation and transformation of signs into and through other signs, *word games* in other words. Michel Serres describes the implications of this concept for texts

the idea that atoms are letters is a thesis which inaugurates the great classical philosophies – the idea of encrypting or encoding the global functioning of physical science...physics is really an activity of decipherment or decoding...physics is faithful to the world, since the formation of its text is isomorphic to the construction of natural tissue.⁷⁹

This is to imply a complete equivalence, not just in appearance or function, but in *identity*, between the notations and images (might we say, the *poetics*?) of physics and the phenomena of the physical universe. This is matter as symbols and combinations of symbols bearing information, information which is both message and medium, and which can be preserved across languages. This would suggest a similar tissue-like quality to all forms of writing; to write would be to perform the constitutive act of material existence. In the light of this idea, would the coding necessary to robotics take on a further role as that of a simulation? Would it instead translate the inaugural basis of physics (code itself also being predicated on a series

⁷⁷ Tiffany, *Toy Medium*, p.99.

⁷⁸ Ibid

⁷⁹ Michel Serres quoted in Tiffany, *Toy Medium*, p.99.

of isomorphic transformations) thus producing phenomena that we might regard as material? This would be the thrust of the Computational Universe metaphor.

1. Dolls, Anagrams and Disarticulation

But to return our discussion to a more modest level, robots may be thought of as proceeding from or existing as words in other ways too. If we are able to relate robots to dolls and puppets, we may identify between them a shared grammar, or kind of grammar consistent with lyric substance. A relation seems viable; robots, dolls and puppets are all semblances or models of life, even or especially human life. Dolls and puppets have both been drawn into the discourse around robots as appropriate comparisons or touch stones, and many philosophical and critical ideas about dolls and puppets may be applied to robots too. However, while we might see a historical link between automata and robots, there may appear to be less of a link between automata or robots and dolls or puppets, which often share a common physical shape or theme but are lacking in terms of animation. Dolls and puppets rely on being moved; they are not autonomous. But we needn't see these two groups as indissoluble, at least not while we are regarding automata as emblems of materiality.

Here I question the extent to which this lyric substance can be related to the literal form of lyric poetry. I relate robots to dolls and puppets by arguing for a shared theme of automatism in terms of autonomy, which will allow me to place robots in a critical tradition which interprets dolls and puppets as linguistic objects, not only lyrical in Tiffany's sense, but also grammatical and written. This will demonstrate the extent to which we may regard robots as poetic objects and/or as objects of poetry.

It can be argued that puppets and dolls represent the culmination of autonomy in the sense of an autonomy from the mechanism of the physical body itself, an autonomy which always seems to recall the concepts of im/materiality and lyric substance. In Heinrich von Kleist's 'On the Marionette Theatre' it is the puppet whose grace exceeds that of the dancer, freed from the physical restrictions of the human body under gravity and thus able to trace the perfect 'path to the soul of the

dancer'. 80 While for Rilke, the 'doll-soul' suffers the degradation of the doll-body, so that the authenticity of the doll lies elsewhere than in its physical portion, much beleaguered by the humans who might try to care for it. This construction of the doll is very like Mamoru Oshii's conception of 'innocence', expressed so clearly through the image of his gynoids (we will explore Oshii's innocence further in the following chapter). In this case, there is a disconnect between body and 'soul'; while the two are bound together (the body apparently acting as some sort of cause for the soul), the essence which we might call the 'true' doll is in reality a free-floating entity, as though a visitant to the body, or at worst, its captive. In a sense the doll-body is a picture of the doll-soul. This concept of the disconnection of soul and body is a traditional one for the puppet theatre. Stephen T. Brown tells us that, from the 17th century, 'enormous 'dashi karakuri', parade float mechanical dolls...were traditionally intended not only to entertain the gods but also to serve as vessels into which the gods were thought to descend.'81 For Roland Barthes, the puppets of Japanese Bunraku theatre experience freedom from the restrictions, limitations and pitfalls of the human actor's mortal body. As Christopher A. Bolton explains:

The body of the Western actor or actress claims a wholeness based on organic (biological) unity, but he or she ends up as a fragmented series of parts and gestures onstage. The puppet makes no claims to wholeness but emerges more graceful and more perfect than the human, which for Barthes is the final defeat for the putative organic unity of the actor's human body. 82

The essential lack or disjuncture between the puppet's parts, its exclusion from internal unity, is the source of grace for the puppet, the source of our belief in that character, whereas the revelation of disjunction would be death for the actress onstage (it is not for nothing that actors call the moment of dropping character 'corpsing') The puppet seems to waver always upon the brink of death without

⁸⁰ Heinrich von Kleist and Thomas G. Neumiller, 'On the Marionette Theatre' in *The Drama Review: TDR*, Vol. 16, No. 3, *The "Puppet" issue* (Sep., 1972) p.23.

⁸¹ Steven T. Brown 'Mechanic Desires: Hans Bellmer's Dolls and the Technological Uncanny in 'Ghost in the Shell 2: Innocence' in *Mechademia: limits of the human*, Vol 3 (2008) p.231.

⁸² Christopher A. Bolton, 'From Wooden Cyborgs to Celluloid Souls: Mechanical Bodies in Anime and Japanese Puppet Theatre' in *Positions: East Asia Cultures Critique*, Vol. 10, Number 3, Winter 2002, p.751.

actually being dead and being not-dead it cannot die. There is similarity between the puppets that Barthes observes and Kleist's puppet dancer; as Kleist asserts 'the spirit cannot err where it does not exist'. 83 One might also think of the horror trope of the haunted, cursed or evil doll, which perhaps find its apotheosis on Isla de las Muñecas, Mexico's Island of the Dolls. Here hundreds of dolls in various states of decomposition and disarticulation adorn the small island, and it is believed that the dolls are possessed by the spirit of a young girl, that they move their arms and heads and open their eyes.⁸⁴ The doll and the puppet have long been accorded a form of freedom from various material constraints. They are ambiguously ensouled objects; while the crafting of a doll-body seems to call up a doll-soul (and not necessarily a soul unique to that body, or even just one soul) that soul cannot be felt to fully lodge within that body as the consequence of that body, in some sense it may be felt to be uncannily prior to that body. The soul and body of a doll or puppet are interdependent certainly, but dolls and puppets will always refer (intuitively it seems) to the im/material. If the automaton represents im/materiality, then the doll or puppet does more so. In which case, we might conclude that dolls and puppets also possess lyric substance in the way that automata and robots do.

As for the grammar of the doll, Hans Bellmer's surrealist dolls, ⁸⁵ which were incidentally a major influence upon Oshii's gynoids, were conceived along anagrammatical lines proper to such artificial bodies. Bellmer's commentary on his dolls, on anagrams and on the image, provide great insight into this grammar of the doll. Bellmer tells us

...it is clear that we know very little about the birth and anatomy of the 'image'. Man seems to know his language even less well than he knows his

⁸³ Kleist, 'On the Marionette Theatre', p.24.

⁸⁴ See the *Isla de las Muñecas* website for visitor information, http://www.isladelasmunecas.com/ [accessed 03.03.16].

⁸⁵ Bellmer made two dolls between 1933 and 1935, the later doll was the subject of Bellmer's series of photographs 'Les Jeux de la Poupee' (The Games of the Doll) first appearing in *Minotaure* 8 and 10 in 1936 and 1937. It was this doll that was such an influence on Mamoru Oshii, the aesthetic of which Oshii used to represent and build upon themes already familiar in Rilke's writing. The dolls were never themselves displayed, only published as the subject of photographs, compounding the im/material image quality of the doll. They were composed of a series of interchangeable body parts which rotated around ball joints, allowing for grotesque multiplications, distortions and rearrangements of parts which described the iterability of bodies, as well as the fetishism and violence that the body is subject to. They were originally intended as a powerful visual statement against fascism.

own body: the sentence, too, resembles a body which seems to invite us to decompose it, so that an infinite chain of anagrams may recompose the truth it contains.⁸⁶

Here 'body', 'image' and 'sentence' are drawn together (in an impressively broad gesture) via a shared grammatical materiality for which the doll is the appropriate emblem or even, the appropriate invocation. Matter is a message which is also the medium, a body and a word. Interestingly, it is not the body that resembles a sentence, but the sentence that resembles a body, presupposing both the primacy of the linguistic and grammatical as well as the ready decomposition of the physical body, as though the ease of its re-composition was more immediately obvious than that of a sentence. Bellmer's anagrammatical body also suggests a permeability of the boundary between material and immaterial, between text and body and it suggests the potential for radical rearrangement among those terms. The doll's body is both literally and figuratively *disarticulated* in a way that recalls Lucretius' punning upon *elementum*.

For Rosalind Kraus, Bellmer's doll represents 'construction as dismemberment' which would suggest that in the context of the anagram and of the equivalence of sentence and body there can be no 'proper' shape for the doll, its 'truth' is indeed negotiable, in fact it depends on negotiation and renegotiation. To build the doll-body in any arrangement is to *misa*rticulate, to speak for and speak over, to inscribe and rewrite. It cannot be for nothing that Bellmer made 'poupées' (dolls) related etymologically to 'puppets' in both French and German, rather than 'models' or 'mannequins', names which better describe the life-sized, bald and naked grotesques that he constructed. Bellmer placed his surrealist figures in the context of existing thought on toys, dolls and the puppet theatre, inviting us to read his dolls as part of an ongoing conversion in which dolls proclaim the interdependence of bodies and images or words, in which the doll-soul attests to the persistence of the im/material, and in which substance is (in Tiffany's formulation)

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⁸⁶ Hans Bellmer quoted in *Toy Medium*, p.91.

⁸⁷ Rosalind Kraus quoted in Allison de Fren, 'Technofetishism and the Uncanny Desires of ASFR (alt.sex.fetish.robots)' in *Science Fiction Studies*, Vol. 36, No.3, (November, 2009), p.424.

lyrical. We find, for instance, a strong connection between Bellmer's theory of the doll and Barthes' theory of the puppet theatre.

Barthes saw puppets as disassembled figures upon whom the signs of what we might call a soul are inscribed. For Barthes, a puppet appears at once divorced from language (or from any language that it could call its own) and at the same time essentially *composed of* language. Barthes offers up a construction of the puppet via 'three writings', the 'writings' of body, voice and action, in 'A Lesson in Writing', a revised version of which was incorporated into his *Empire of Signs*. Conceived as one of these three writings, the puppet's body is presented as equivalent to inscription, but so too are its voice and actions, which are co-opted into the puppet-body anagram.

It is difficult to separate message and medium in this writing metaphor; 'writings' would suggest both a thing which is written and a thing which is written upon, and yet Barthes' three also includes the medium (body) upon which, we might suppose, the message is to be written. The concept of the puppet's body as writing needn't be regarded as a contradiction in terms, nor need it pose a problem, rather it can be seen to reflect the nature of writing itself. 'Writing' suggests a liminal ground; like 'voice' it refers to an object between the seemingly immaterial message and the seemingly material medium, a thing which is neither, which is a point where message and medium meet. There can be no inscription without a surface upon which to inscribe, while marks upon a surface become inscription only at that moment when they are perceived to contain information, or a message, even if that message says no more than 'I am writing' as might some invented written language. Barthes' puppets are very like Bellmer's dolls in the sense that they are im/material, simultaneously physical and grammatical, and the body itself is a language inscribed upon the body. They are also in a way like Rilke's dolls; if the puppet's body is written into it, if it is as inscribed upon the puppet as a voice or action is, then the puppet's body, like the doll-body, is something other or additional to the puppet as well as constitutive of it. The philosophy of the doll then (if there can be said to be such a thing) might find its motto in Hans Bellmer's aesthetic conviction that 'the object identical to itself remains devoid of reality', 88 for the reality of the doll

⁸⁸ Bellmer quoted in De Fren 'Technofetishism', p.431.

always seems to be in some way multiplied, divided, dematerialised and materialised, both more and less than how it appears.⁸⁹

The im/materiality, the lyric substance of dolls and puppets, may (and traditionally has been) regarded in linguistic terms, in terms of grammar and inscription. If robots share that im/material substance, if they too possess and emblemise it, then they too may be considered as lyrical objects (if not beings) in a rather more literal sense than we may at first expect. They may be regarded as poetic objects.

⁸⁹ 'Chikamatsu [Monzaemon] argued that drama featuring artificial bodies succeeds by filling up those bodies with the humanity that they lack, until they become both more and less real than the flesh' Bolton, from 'Wooden Cyborgs', p.739.

Chapter 2 - The Unease of a Robot's Voice

The moral or ethical interrogation of artificially intelligent and/or robotic technology is an established trope of narratives which focus upon robots. In such interrogations human beings frequently provide a moral or ethical counterpoint to robots. The early science fiction film, Fritz Lang's *Metropolis* (1927) may have been foundational for this trope, its robot and human Marias respectively forming a black swan white swan dualism (even being played by the same actress) of immoral and moral extremes. In *Metropolis*, Maria, a human girl characterised as a virginal mother saint, is kidnapped in order to produce a soulless robot version, robot Maria, characterised as a witch whore. Not only is the robot Maria framed as demonic and morally repugnant (as are machines in general throughout the film) but her deployment leads to catastrophe, social breakdown and humanitarian disaster. A cautionary tale indeed.

More subtle and complex variations on the theme have since emerged, for example in the ethical and ideological tension between the humans and replicants of Philip K. Dick's Do Androids Dream of Electric Sheep (1968) and later of Ridley Scott's film adaptation Bladerunner (1982) or in the religious conflict between humans and Cylons in Ronald D. Moore's Battlestar Galactica (2003), or in the hypocrisy and prejudice of the Frankenstein Complex of Isaac Asimov's fictional universe. These narratives do not replicate the original binarism of Lang's film, but rather use humans and robots to pose difficult and perhaps unanswerable questions about the ethical and moral credibility of either side and of their relationship with one another. Indeed, contemporary representations of robots and our dealings with them tend towards this subtle complexity and moral greyness, robots serving as a means to reflect upon ourselves and the meanings and conditions of humanity. Lang's film can be read as an act of resistance against an oppressive and non-human menace (who, importantly, it is still in our power as humans to resist). But recent products of the genre, for example, Alex Garland's Ex Machina or the Channel 4 series *Humans*, can be said to instead represent a world in which we are already irreversibly merged or enmeshed with technology, in which the potential of technology is perhaps limitless, unpredictable and uncontrollable, in which something about being human has changed or become unstable. As Daniel Mendelsohn comments in a review of *Ex Machina* and Spike Jonze's *Her* 'in the latest incarnation of the robot myth, it's the people who seem blandly interchangeable and the machines who have all the personality'. ⁹⁰ Indeed, in popular science-fiction it would seem that the human can no longer be defined in simple antagonistic opposition to robots and that the robot resists our attempts to do so.

At the same time, science-fictional narratives have developed a dualistic pair of stock robot characters which have become instantly recognisable and familiar. Firstly, the robot antagonist, usually cold, palpably mechanical and maniacal. Examples include Arthur C. Clarke and Stanley Kubrick's HAL 9000, Harlan Ellison's AM and more recently Andrew Stanton's Auto (all of which we will look at in more detail later) Secondly, the generic robot friend, often but not always secondary to the main protagonist and invariably cute and friendly, for example R2D2 of Star Wars, or recently Baymax of Big Hero 6. These two figures respectively represent forms of 'robot bad' and a 'robot good', a robot 'baddie' and a robot 'buddy'. These representations of robots seem to recall the binarism of Metropolis, but the fact that they can exist as accepted tropes simultaneously, even within the same text, betrays a deep ambivalence, firstly about the ethical and moral status of artificially intelligent and/or robotic technology, and secondly about what kind of relationship that status determines between robots and ourselves. If sciencefiction does seek to morally interrogate the concept of robots (and I believe it does) then it has posed for itself an unanswerable question. How then, without recourse to moral and ethical reasoning, can we account for the complexities and contradictions in representations of robots? How can the robot baddie and buddy exist side by side? And what, if anything, do these representations have to do with their human counterparts?

I suggest that a deeper understanding of the complex representations of robots can be gained by studying the uncanniness of robots and the type of unease that this uncanniness elicits. In this chapter, I argue that representations of robots require a displacement or management of uncanniness which is proper to all robots

⁹⁰ Daniel Mendelsohn, 'The Robots are Winning!' in *The New York Review of Books*, June 4, 2015 www.nybooks.com/articles/archives/2015/jun/04/robots-are-winning/ [accessed 08.06.15].

both loveable and detestable, an uncanniness which lodges in the voice. This uncanniness is the common ground between representations of robots and thus accounts for the paradox of the robot as baddy and also as buddy. I identify robots as being not-yet-human or human-but-not. This develops upon the previously discussed concepts of robot personness and the deferred n+1 by suggesting that uncanniness properly emerges from a core concept of 'inhumanity', so that robots elicit unease only to the extent to which they are inhuman, that is the extent to which they elicit the return of the automaton in the human. Our ambivalence towards robots is in actuality an engagement with the uncanny and it is from the uncanny that robots gain their cultural meaning and significance. This chapter analyses representations of robots through the lens of the uncanny, focusing on what I suggest is a key factor in the construction and mediation of the robot uncanny, the robot voice. It is by analysing the voices of robots that we arrive at a more nuanced understanding of the role that robots play in the cultural imagination. More importantly however, it is by analysing the voices of robots in this way that we come to a fuller understanding of the uncanniness of voice and voicing in general, such that we might gain a deeper understanding of the particular connections between robot and lyric voice and of the implications of these for poetry. In this chapter I develop a set of paradoxically silent vocal figures with which we might hear, or rather intuit, the robot voice: the silent/absent interiority, the silent scream, the subtitle and mouthlessness.

1. The Robot Uncanny

Here I establish a definition of the uncanny which acknowledges the overlap between Freud's theory and E. Jentsch's, whose ideas Freud responded to in his influential paper 'The Uncanny'. This overlap consists of the figure of the automaton, which appears in both essays in the form of Olympia, the love interest of E.T.A. Hoffman's *The Sandman*. By looking closely at this mutual point of intersection we will see that doubt over the integrity of the human subject is the basis for uncanny effects.

In his essay on the uncanny, Freud acknowledges both the uncanny's initial broadness and the intense depth of its effect. 'There is no doubt that this [the uncanny] belongs to the realm of the frightening,' he begins 'of what evokes fear and dread'. 91 In German, this dread finds expression in the word 'unheimlich' – unfamiliar, eerie, uncomfortable, secret - the antonym of 'heimlich' - homely, familiar, comforting, private. Freud explores a number of literary uses of both words in order to elucidate their shades of meaning, finding that the two opposites in fact share a meaning (to which I have gestured above through the dis/similarity of 'private' and 'secret') so that 'what is called heimlich becomes unheimlich'. 92 Freud's quotation of Schelling best summarises the idea, in that 'uncanny is what one calls everything that was meant to remain secret and hidden and has come into the open'.93 This tension might sometimes be conveyed in the English phrase 'too close to home'. This object of aversion, of dread and monstrousness, belongs then to both an inside and an outside; it is horrible precisely because it has come from home, from within, if it is not indeed the essence of that home itself. However, although it returns⁹⁴ from a hidden place into the light, it cannot be distanced or kept outside. The uncanny monster, whatever it may be, is always us.

Freud's essay is partly a response to an earlier essay, E. Jentsch's 'On the Psychology of the Uncanny', and Freud develops on his own idea of uncanny return by exploring a text cited by Jentsch, E.T.A. Hoffman's *The Sandman*. In doing so, Freud dismisses the idea (implied by Jentsch) that Olympia, the automaton or doll who appears in that story, is the most intense source of the uncanny in Hoffman's narrative. However, I argue that Freud was wrong to dismiss Olympia and the ideas about the uncanny which she represents for Jentsch. Rather, Jentsch's theory parallels Freud's, and Olympia may provide a deeper insight into Freud's own theory. Whereas Freud's essay proposes an explanation for the phenomenon of the uncanny in general, Jentsch analyses 'physical uncertainties' and explores one in particular which generally and reliably produces powerful uncanny effects, namely

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⁹¹ Sigmund Freud, 'The Uncanny' in *The Uncanny*, David McLintock trans., (Penguin, 2003) p.123.

⁹² Freud, 'The Uncanny', p.132.

⁹³ Schelling quoted in Freud, 'The Uncanny', p.132.

⁹⁴ I suggest 'return' for the movement of the inside to the outside with reference to Freud's observation in 'The Uncanny' that 'the uncanny is that species of the frightening that goes back to what was once well known and had long been familiar', p.124

doubt as to whether an apparently living being is really animate and, conversely, doubt as to whether a lifeless object may not in fact be animate – and more precisely, when this doubt only makes itself felt obscurely in one's consciousness.⁹⁵

It is in this context that Olympia is gestured towards. Freud's dismissal is inappropriate because Jentsch's analysis of the uncanny, while apparently more superficial than Freud's, amounts to an exploration of that same returning and unhomely home, or monster within, put forward in 'The Uncanny'. In fact, when taken together, the two essays provide an insight into what might be the keenest and most fundamental aspect of the uncanny. Namely, if the homeliest home, the essential and original home, is our own human body, or rather those things which make the body human, for example our unique human consciousness, then the root of uncanny unease might be the undecidability of the living human subject and uncanny effects in general would stem from this uncertainty. Olympia, like any complex automaton, brings about the situation wherein, as Jentsch describes it, 'the dark knowledge dawns on the unschooled observer that mechanical processes are taking place in that which he was previously used to regarding as a unified psyche.'96 Jentsch cites the epileptic fit as another such spectacle, a spectacle which

reveals the human body to the viewer – the body that under normal conditions is so meaningful, expedient and unitary, functioning according to the directions of his consciousness – as an immensely complicated and delicate mechanism.⁹⁷

For Nathaniel, the protagonist of *The Sandman*, Olympia is the perfect woman, but the story's uncanny reveal is that the perfect woman is actually (and was always) a fake woman. The buried secret of the ideal is out for all to see and at the same time, love, that bastion of humanity, is called into question and now it too seems to be mechanically responsive in nature. In this way, Olympia provides a very apt

⁹⁵ Jentsch, 'On the Psychology of the Uncanny', p.11.

⁹⁶ Jentsch, 'On the Psychology of the Uncanny', p.14.

⁹⁷ Ibid

illustration of Freud's uncanny return, of the unheimlich in the heimlich, but she also strikes doubt into the heart of the human, suggesting that a human, in reality, is and always was something *inhuman*, a machine. This machine nature is that which was hidden and which has now come to light. If human consciousness or human *being* in general can be regarded as the ultimate and original *heim*, then the automaton can be seen as the central figure in the function of the uncanny. Furthermore, as a mechanical human the automaton emerges from or is a product of this core uncanniness. Now we might begin to see that the idea of 'inhumanity' is itself uncanny.

Mamoru Oshii's film *Ghost in the Shell 2: Innocence*⁹⁸ explores the theme of the uncanny extensively, particularly in the context of dolls and automata, which question the integrity of the human subject throughout the film. The film therefore provides some excellent examples of the effect discussed above. In one long and convoluted scene, the two protagonists Batou and Togusa become trapped in a psychological maze where real and unreal are undecidable. The master of the maze, a man turned living puppet and at this point a doppelgänger of Togusa, advances upon his look-a-like quoting Jentsch ('doubt as to whether an apparently living being is really animate...')⁹⁹ While still in this maze, Togusa's chest springs open to reveal an intricate mechanism. The narrative of the maze is repeated again and again with uncannily recursive variations, familiar but different each time. ¹⁰⁰ The scene is a bewildering and horrifying one and it unifies both Freud and Jentsch's ideas about the uncanny under their common sign of the automaton. It also serves to represent

⁹⁸ Ghost in the Shell 2: Innocence (2004) Mamoru Oshii dir., UK: Manga Entertainment.

⁹⁹ The quotation as it runs in the English subtitles of the film is 'It's the uncertainty that maybe something that appears to be alive actually isn't. And the uncertainty that on the other hand, maybe something that doesn't appear to be alive actually is.' This phrasing is probably a result of the original's translation from German into Japanese and then from Japanese into English. However, there can be little doubt that this is intended to be a verbatim quote of Jentsch. The film is littered with direct quotations, from Auguste Villiers de L'Ilse-Adam, Julien Offray de La Mettrie, Milton, Descartes, Confucius, Zeami Motokiyo and many more. This contributes to the film's theme of puppetry by adding a ventriloquial element to the dialogue.

¹⁰⁰ This repetition is perhaps a reference to Freud's 'The Uncanny', where he cites instances of recurring numbers and images as examples of the uncanny. These instances are contained within this thesis's concept of the uncanny as the return of the inhuman to the human *heim*. This is because uncanny repetition threatens the perception of our linearity and constancy through time, the dimensional grounding of human experience. It also shakes our faith in the coincidental as a way of dismissing what may seem like signs or messages. In a situation where we doubt this faith and grounding, there may follow the uncanny suggestion (certainly true in Batou and Togusa's case) that we are in fact mere toys (automata) for outer forces.

the film's general motif of doubt over the integrity of the human subject in a world of Artificial Intelligence and cyborgs.

If the automaton and the human fit together like Russian dolls, then Jentsch makes some reference to the phenomenon when he links undecidability with imagination.

Another important factor in the origin of the uncanny is the natural tendency of man to infer, in a kind if naive analogy with his own animate state, that things in the external world are also animate, or, perhaps more correctly, are animate in the same way...It is therefore not astonishing if that which man has semi-consciously projected onto things from his own being now begins again to terrify him...or that he is not capable of exorcising the spirits which were created from his own head from that very head. This inability thus easily produces the feeling of being threatened by something unknown and incomprehensible that is just as enigmatic to the individual as his own psyche usually is as well.¹⁰¹

The disturbing uncertainty of the automaton proceeds to some extent from our own animating imagination, which projects our manner of animation, if not consciousness, onto the matter of the world. The automaton's monstrousness is of ourselves and the automaton becomes *what it is* partly through this imaginative action, which at once makes its animation undecidable and gives it its home within us. The intended message of Oshii's *Innocence* relates to this move, wherein the 'innocence' of objects is compromised by our projection and its related abuses. ¹⁰² Furthermore, by comparing the imagined spirits with the psyche, Jentsch seems to suggest an equivalence between them, which suggests the question, which is real and which is imagined, are both imagined or neither? If an imagined spirit and our psyche have similar qualities, can we really pass the automaton off as a fanciful toy,

¹⁰¹ Jentsch, 'On the Psychology of the Uncanny', p.13-14.

¹⁰² In conversation with Masaki Yamada (who collaborated with the director on a novelised prelude to the film, *After the Long Goodbye*) Oshii said 'I liked the word "innocence", because in this case it didn't simply mean "good." Yamada mentioned "purity" instead, and I absolutely agree. It refers to a state where there's no imprint...dolls have only the illusion of humanity, but that status makes them all the more innocent'. ('Masaki Yamada and Mamoru Oshii on *Innocence*' in Masaki Yamada, *After the Long Goodbye*, Yuji Oniki and Carl Gustav Horn trans. (Viz Media, 2004).

are they not more like us? Is the automaton then the fact which reveals our fictitiousness in an uncanny moment of enlightenment? This questioning serves to show again, through the lens of the uncanny, that the imagined, the fiction, adheres to the real like the proverbial ghost in the machine and influences our reading of automata. Not that this relationship is one sided of course; as we know the factual machine informs the fictional one. Auguste Villiers de L'isle-Adam's Tomorrow's Eve for example drew heavily from current technological developments, and much later Oshii named the gynoids of his Innocence after de L'isle-Adam's android 'Hadaly'. In the case of automata, fact and fiction, image and matter, bear a reciprocal relationship; this aspect of the automaton is deeply uncanny, for the imaginary ought never to emerge into the visible and tangible world and the tangible world certainly ought never to return to immaterial nothingness, yet this sciencefiction implies that at the heart of something is nothing and vice versa. This is to say that im/materiality, that lyric substance, is uncanny and the uncanny relationship between human and inhuman, fact and fiction, inside and outside, forms the basis of our relationship with the automaton and its relatives.

2. Inhumanity

Here I explore robots' 'inhuman humanness', a concept which follows from my previous observations of robots' particular personness and their unattainability as n+1. By 'inhuman humaness' I refer to a robot's implicit status as human-but-not or not-human-yet together with the intense and direct way in which robots thus call the human subject into question. By this we might distinguish between robots and automata. This will lead to a deeper understanding of the term 'inhuman' and the uncanniness inherent in it. It will also allow us to pursue a reading of the robot as enemy, that is the robot 'baddie' and its opposite, the robot 'buddy' as a displacement and management of this uncanniness respectively, a reading which focusses on the voice as an instrument of this management.

If we are to distinguish between robots and automata however, that distinction may need more qualification than just an appeal to personness. Given robots' trajectory of n+1, one might object that automata have, at one time or

another, occupied a place on the ever-lengthening personness scale, and that therefore, they might be regarded as once having been robots, or that therefore they fulfil the conditions of robot to a minimal degree. Indeed, some automata may be taken as honorary robots by this token, but we are already aware that 'robot' is a blurry category. A robot, of course, may also be related to an automaton in general idea, robots do seem to pick up where the automaton left off, but robots are represented as something decidedly more advanced and as having far more potential. We might be tempted to distinguish between robots and automata on the grounds that a robot has the capability to speak and/or think for itself. At first glance, the major difference might seem to be that a robot is digital rather than analogue, a kind of computer rather than a mechanical puppet, and that robots represent a transition into a new technological era. However, I do not believe that this is truly where the two diverge, if they might be said to neatly and clearly diverge at all. In order to appropriately distinguish between the two, we will look at where they diverge etymologically.

Compared to 'automaton' and even 'android', 'robot' as we currently understand it is a relatively recent introduction. It originally comes from the Czech 'robota' for 'forced labour', 'rob' meaning slave. Until its abolition in 1848, the German 'robot' referred to a system of serfdom, wherein tenancy was paid in the form of forced labour or other services. There are also correspondences in the Russian 'rab' for slave or servant, and in Polish 'robota', for work or forced labour. 103 Karel Čapek first used the word 'robot' in its contemporary sense in his 1920 play Rossum's Universal Robots (R.U.R.) The word describes the soulless, humanoid slaves mass-produced by the R.U.R. Company as substitutes for human labour. The implication, of course, is that robots are etymologically synonymous with slavery and drudgery. This however, does not distinguish them much from automata. While automata have historically been produced as toys and spectacles, the initial myth or dream of the automaton which preceded these toys was very much in the vein of *robota*. Ingeniously constructed automata can be found as far back as Hephaestus' workshop in Book 18 of the Iliad, made for the purpose of serving the Gods. We might also look to a variety of living statues, Galatea for

¹⁰³ See the OED entry for 'robot'.

example, who was animated, ultimately, to serve as the object of her creator's love. Neither is thinking or speaking particular to robots and not automata; Hephaestus' autonomous 'maidens' had 'intelligences, voices, power of motion', ¹⁰⁴ and a number of speaking machines were actually produced, for example, Kempelen's Sprech-Maschine of 1780, built in response to The Royal Academy of Sciences' offer of a prize for a machine which could reproduce vowels; ¹⁰⁵ or more disturbing was the 'Euphonia' built by Joseph Faber and demonstrated at the Egyptian Hall at Piccadilly in 1846. ¹⁰⁶ The 'Euphonia' was similar to the Sprech-Maschine, but the words were spoken through the mouth of a humanoid figure. So in concept and design there seems to be little to distinguish automata and robots as instantiated by Čapek. However, Čapek's robots departed from automata in that they carried an extra shade of meaning which, I would argue, persists in each iteration of 'robot' as distinct from 'automaton'.

The robot's in *R.U.R.* aren't mechanical or sculpted, they are constructed but organic, closer to human clones¹⁰⁷ than to the clanking metal figures that 'robot' consequently came to represent (although the various costumes used in performances of the play have suggested the transition) They talk and eat (though are indifferent as to what)¹⁰⁸ and wear out like any human being;¹⁰⁹ the only difference is that they appear curiously devoid of passions, self-regard, or any inner quality generally recognised as human, and yet they are uncannily human. The play dwells on their lack of a soul. As 'robots', they are inhuman humans. They also satirise the capitalist system which at once commodifies and mechanises human beings and also renders the Capitalists themselves inhuman. This is to say that Čapek added a palpable shade of ethical or even humanitarian meaning to the automaton concept. His 'robots' specifically reflect upon the meaning of humanity

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¹⁰⁴ Homer, *The Iliad*, Robert Fitzgerald trans., (Oxford University Press, 2008) p. 332.

¹⁰⁵ See Mladen Dolar, A Voice and Nothing More (MIT Press, 2006) p.7-8.

¹⁰⁶ See Thomas L. Hankins and Robert J. Silverman, *Instruments and the Imagination* (Princeton University Press, 1995) pp.214-16.

¹⁰⁷ In the play, Domain, the general manager, describes his factory as one where 'people are made' ('R.U.R.' in Josef and Karel Čapek, *R.U.R. and The Insect Play*, P. Selver trans. (Oxford University Press, 1973) p.3-100) The robots are composed of 'a substance which behaved exactly like living matter, although its chemical composition was different.' p.5. From this matter, simplified human bodies are constructed in an assembly-line-style process.

¹⁰⁸ 'you can feed them on pineapples, straw, whatever you like. It's all the same to them.' *R.U.R.*, p.22.

 $^{^{109}}$ 'We have robots of finer and coarser grades. The best live about 20 years...they get used up.' *R.U.R.*, p.10.

beyond the concept of the man-machine body in its relationship to systematic 'machines' like Capitalism. In 'robot', 'automaton' and 'human' become even further blended. In so doing, Čapek mobilised the uncanniness of the automaton politically in the formation of a new figure. Of course, modern science and engineering then took up the word 'robot', with all its connotations, to refer to its own real-life robotic creations. Consequently, we seem to see in the real-life robot the realisation of Čapek's uncanny drama. One function of this figure then, is to provide the basis for ruminations on empathy and its limits; the figure of the robot facilitates a thought exercise wherein we must consider the ethics of relations between beings (ourselves and others) the implications and possibilities of posthumanism, and the consequences of anthropocentrism.

Let us be clear about the meaning of 'inhuman' here. 'Inhuman' suggests that the inhuman thing *ought* to be human and has somehow fallen short or otherwise missed the mark. 'Inhuman' means something very different to 'a thing which is not a human person'. Inhumanity is a charge often levelled at people who do not conform to the boundaries of humanness. Therefore, in order to make this charge, their humanness must also be tacitly admitted of, making them 'human-but-not.' Paradoxically, the 'inhuman' is 'in [the] human'. Humanity may be the standard by which we understand the inhuman, but this is less to do with species difference or material composition and more about the expectations we hold of a human being to conform to human standards of feeling, creativity and compassion etc., to conform to +1 we might say. Inhumanity is decried in the case of lack thereof. Robots are often represented as being not-yet-human or would-be-human-if. Which is to say that the move by which the robot is placed outside also brings that outside in; it returns, once again, to uncanniness.

The representation of robots as inhuman humans is not limited to fiction but has been implicit in the judgement of Artificial Intelligence since the beginning of the digital age. The Turing Test¹¹⁰ might have originally been a stringent test of a machine's computational faculties, but over time it has devolved into a narrow contest wherein a machine tricks its interrogator into believing that it is human. What passes the Turing Test these days is not a machine with such vast

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¹¹⁰ For the original Turing Test see Alan Turing, 'Computing, Machinery and Intelligence' in Mind, Vol 59, No. 236 (October 1950) pp.433-460.

computational power that it can hold a conversation (something distinct from but in many ways similar to AGI), but rather something that we can empathise with and believe in the humanity of, regardless of how this is achieved. The human-like consciousnesses passed by The Turing Test have been dismissed (unfairly some have argued) by John Searle as mere Chinese Rooms, that is, all trickery and no actual understanding, and I would add, with no apparent humanity either. 111 Those machines which pass the Turing Test therefore have an uncanny ring, speaking with human voices from an apparently mindless nothingness which can be contrasted with the 'truly' human, while at the same time they threaten to reflect the 'truly' human. In 2001, the much more stringent Lovelace Test, 112 immune to the Chinese Room objection, was proposed as an antidote to this false judgment. Interestingly, this test does not rely on convincing a human interlocutor of obviously person-like qualities like the Turning Test does, instead the test measures a computer's creative capacity, its ability to originate something new, and thus appeals to a more abstracted humanity, to a quality that would be attributed to a 'real' person. That is to say that, while the test does measure substantial intellectual capacity, it is still predicated on the value of supposedly 'human' qualities. Like the Turing Test, it too presumes that Artificial Intelligence achieves its peak with the machine's achievement of 'humanity' (i.e. the +1 as of 2001: creativity). The developers of the Lovelace Test are quite reasonably convinced of the test's extreme difficulty, but their phrasing of the test as a test, in particular as the successor of the Turing Test (which has been the subject of various prizes and competitions) implies that the conditions of the Lovelace Test can and will eventually be met. Which begs the question, what will it be like when an Artificial Intelligence passes? What dark truths about human creativity will return to the light? How will the human and inhuman rearrange themselves this time? Even in the scientific community, we wait upon the fruition of a robot humanity which is supposed to come but which is always deferred, which falls always into inhumanity as the borders that define the human shift and change. Implicit in the study of robotics and Artificial Intelligence

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¹¹¹ See John R. Searle, 'Minds, Brains, and Programs' in *Behavioural and Brain Sciences*, Vol. 3 (1980) pp.417-457.

¹¹² See Selmer Bringsjord, Paul Bello and David Ferucci, 'Creativity, the Turing Test, and the (Better) Lovelace Test' in *Minds and Machines*, Vol. 11 (2001) pp.3-27.

is an interrogation of the meanings and limits of humanity, which goes beyond the mere replication of the man-machine.

Fiction has engaged with the notion of robots as inhuman humans extensively, if not obsessively. There are few popular robot narratives in film, games, literature etc., which do not in some way interrogate the interiority of the robot, contrasting or comparing it to human beings, exploring the bounds of empathy between robots and humans or the preconditions for that empathy. These ruminations, whatever their result or agenda, are dependent upon the uncanniness which produces the robot as inhuman human, that is, the uncanniness which amounts to that troublesome mechanicalness at the heart of the human being, and to that unsettling, uncertain humanity which threatens to manifest in external objects. Thus, even the most loveable robots of popular media emerge out of uncanniness and can be read as a management or mediation of that uncanniness (as we will see later) which must be managed precisely because it cannot be gotten rid of - it is too close to home for that. Similarly, the sci-fi trope of the robot as antithetical, inhuman aggressor can be read as an attempt to displace the uncanny object, to disown its heimlich character and to recast it as entirely Other, as the opposite of all that is wholesome and human. In this representation, the robot is not problematically uncanny so much as merely bad or villainous because it is not human, thus placing it firmly and unproblematically Outside. But such attempts are never that clean or successful and usually must admit of, or concede to, an uncanny disturbance which prevents the full articulation of human-good and robot-bad.

I, Robot, a sci-fi action film based (very) loosely on the work of Isaac Asimov, provides a good example as it is predicated on the transcendence of a robot character (Sonny) into humanity and on a simultaneous inhuman robot apocalypse narrative. It is also well representative of the popular sci-fi action genre, with a high budget, frequent and explosive action and an A-list lead. The protagonist of the film, Detective Spooner, harbours a deep mistrust and hatred of robots because of their lack of human emotion and reliance on cold, impersonal logic. Spooner is further needled by the fact that he is also a cyborg, making him effectively part-robot. Over the course of the film he uncovers a hostile robot takeover plot led by a super intelligent computer called V.I.K.I., whose homicidal logic is 'undeniable'. It is V.I.K.I.'s heartless rule-following that has led her to this cruel and destructive

conclusion. However, V.I.K.I. is only discovered towards the end of the film and she is contrasted with the hero's initial primary suspect, a strangely sensitive robot called Sonny. Over the course of the film, Spooner learns to respect Sonny as he displays more and more human-like behaviour, proving that he can be compatible with human beings and deserving of Spooner's empathy. But in order to undergo this transformation, Spooner also has to grant, to an extent, the uncanny similarities between humans and robots, thus accepting his own cyborg nature. In a satisfying interrogation scene Spooner fails to maintain the human/robot divide.

Spooner: You are just a machine. An imitation of life. Can a robot write a symphony? Can a robot turn a canvas into a beautiful masterpiece?

Sonny: Can you?¹¹³

The joke of course, is in the inadequacy of the judging criteria, which expose the inadequacy of the judge (incidentally and humorously, Sonny can actually produce art very well) But to take this idea further, I argue that an implicit charge of inhumanity, such as the one Spooner levels against Sonny, attempts to imply a lack of validity and therefore distance, but at the same time it also invites the thing charged as inhuman to sit somewhere on a scale of humanity. This admits a tacit humanity which is a flawed humanity but a form of humanity nonetheless, in the case of I, Robot, it is a humanity without art. But while the film gestures towards the enduring uncanny relationship between humans and robots, it still champions the human/robot divide and the insupportable displacement of the uncanny which that divide represents. Spooner's mistrust of cold machines is proved valid by V.I.K.I., robotic behaviours in humans are revealed to be foolish and dangerous, while passion and intuition win out. Finally, Sonny is granted his due only to the extent that he is seen to be 'human'. However, this distancing attitude, which is troped again and again in other such science fictional texts, can never truly work. This is because the notion of 'robot as bad guy' seems to always be predicated on the

¹¹³ I, Robot (2004) Alex Proyas dir., USA: 20th Century Fox.

inhumanity of robots (as is clear to see in *I*, *Robot*) and will therefore always refer to the uncanniness which this notion attempts to displace and escape.

So robots are considered bad to the extent to which they are 'inhuman', which might be considered a (or even *the*) quintessential element of the uncanny, in that the inhuman is always human, the unheimlich is heimlich. The negative judgement of a robot is not so much a moral judgement, as it is an expression of an anxious engagement with the concept of the uncanny, which robots elicit so keenly. It would seem to be the case then that robots must always be bad at heart, coming out of the uncanny as they do. But as suggested above, robots don't just function as opportunities to decry and oust the uncanny, they also facilitate ruminations on the extent of and conditions for empathy. What is interesting is that both the inhuman robot bad guy and the loveable robot 'buddy' must work from and with an assumed uncanny inhumanness in order to produce their very different effects.

3. Making Voices, Hearing Voices

But what are the audible and palpable ways in which uncanniness manifests, so that it can be worked towards or against, facilitating explorations of empathy? Mori's theory of The Uncanny Valley has been very influential. The theory follows after Jentsch in that it identifies movement as a source of uncanny effects. Mori proposed that the closer a humanoid approaches to human-likeness, the more affected we will be by slight discrepancies between the human-likeness and human-like movement. So, an android identical to a human in every way will appear to be very uncanny indeed if it betrays itself by its robotic movements, because it will invoke Jentsch's undecidability. However, I would add that the voice plays a similar part in the provocation and the assuaging of uncanny feelings, that voice is a mediator of the uncanny. If movement renders the boundary between living and dead undecidable, then voice adds an extra layer, in that it has the potential to suggest a human-like consciousness, rendering undecidable the boundary between

¹¹⁴ See Masahiro Mori (2012, June 12) 'The Uncanny Valley', Karl F. MacDorman and Norri Kageki, trans., in *Spectrum* http://spectrum.ieee.org/automaton/robotics/humanoids/the-uncanny-valley [accessed 10.02.15] Originally published in *Energy*, No.7 (1970) pp. 33-35. The term 'uncanny valley' specifically refers to a dip on a graph representative of the uncanny.

this kind of consciousness and others, or between it and none at all. This is perhaps a more subtle addition to Mori's theory and appeals more directly to the source of uncanniness as outlined above.

Here it will be useful to illustrate my point by taking a closer look at some of the ways in which robots represented in audio-visual media negotiate uncanny inhumanness through voice. I begin by analysing the production of robot voice in Valve's video game *Portal*. Not only is the *Portal* series popular and thus relatively representative of robot voices as they appear in the cultural imagination, but voice is also central to the narrative aspect of this game, with character, plot and atmosphere developing through the thematic interplay of voice and voicelessness. The game thus provides an excellent example with which to begin our analyses.

The super computer GLaDOS is the antagonist and arguably also the protagonist of the *Portal* series; the player is mute and is accompanied through a seemingly endless, fully contained series of puzzle chambers by GLaDOS' disembodied voice, which instructs, mocks, admonishes and manipulates. GLaDOS is played by opera singer Ellen McClain. In production McClain was asked to imitate her lines as originally spoken by a computer-generated voice, then asked to variously emote those lines with specific and rather creative stage directions, for example '[explosively indignant]'. 115 These recordings were then treated with a layer of distortion, making McClain's voice sound synthesised. The choice of an opera singer is in itself pertinent, in this McClain represents vocal perfection, but perfection achieved at the expense of defamiliarising the human voice, making it strange (we might even say *inhuman*). The operatic voice is a voice far in excess of what is spoken, a carnal voice yet with transcendent effects. So already at the level of casting, Valve have invoked a voice which gestures towards the human and also towards a beyondness which is yet of the human, that is, uncanny. Secondly, there is reciprocation between the human and the machine, where the machine is originary yet imbued by the human, recalling the automaton that takes on a life of its own.

Part of the fun of GLaDOS' character is her unique and vivacious personality and the way she plays this off against her robotic-ness. But this is also something that makes her threatening; she is uncertain and perfidious, definitely

¹¹⁵ See developers' commentary with Erik Wolpaw and Chet Faliszek, *Portal*, Valve Corporation, dev., PC, CA, USA: Electronic Arts (2001).

other, but also humanly emotional. This is particularly uncanny when we contrast her to the silent, relentless player. GLaDOS invites our empathy (critics have read complicated human dramas into GLaDOS' role in the game)¹¹⁶ but her uncanny distance-closeness frustrates that empathy; the temptation to draw near is deliberately tempered by the prompt to pull away.

Portal's talking machine gun turrets are also interesting. The turrets in the game are artificially intelligent machine gun mounts with the sleek, white aesthetic of an Apple product. Certain puzzles in the game require the player to negotiate test chambers armed with these turrets, which shoot on sight. According to the game's developers, 'robots can never really be cute until they are talking robots,' 117 and Valve put this idea into practise when designing their turrets. The turret robots certainly sound cute; high-pitched, identical, androgynous (though subtly gendered female, like GLaDOS herself) synthetic and calm, they are reminiscent of children. Their cute voices are contrasted against their functionality as machine guns. Their lines are alternately appropriate and adorably at odds with their murderous function. For example - disabled turrets: 'No hard feelings', 'I don't hate you'. Turrets witnessing a turret death: 'I saw it. It was an accident', 'She probably deserved it.' Turret with a lost target: 'Are you still there?' Tipped over turret: 'ow ow ow ow'. 118 In terms of style, the voice of the turrets also has an element of the prerecorded and reiterated about it, yet the things they say are so odd, cute and contradictory, and in places disturbing, disquieting or sad, that there is again that uncertainty over their status. How conscious are they? The turrets are also voiced by Ellen McClain and are therefore lent some of GLaDOS' fearsome uncanniness. With this in mind, the link between speech and cuteness as put forward by *Portal*'s developers begins to look a little strange. The turrets' voices certainly make them cute, but it also enables them to be unsettling and uncanny. As well as being cute robots they are of course, deadly weapons, and thus gesture towards the uncanny possibility of the killer in the cutie and vice versa. The game seems to present a

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¹¹⁶ For a particularly interesting series of articles see Steve Bowler, 'Still Alive? She's Free.' http://www.game-ism.com/2008/04/04/still-alive-shes-free/ [accessed 02.03.15] Bowler here provides links to further articles on GLaDOS. ¹¹⁷ Chet Falisek, *Portal*.

¹¹⁸ Quotes sourced from *Portal* and *Portal* 2, Valve Corporation, dev., PC, CA, USA: Electronic Arts, (2011).

challenge to the limits and conditions of our empathy by trading in emotional and uncanny uncertainty.

However, the Pixar animated film WALL-E seems to take Valve up on their suggestion. Again, voice is central to this popular film, the first half an hour or so taking place with no dialogue as such but with many kinds of voices. The sound production for WALL-E was particularly labour intensive, necessitating hundreds of individual sound files in order to compose the various voices in the film. The robot characters distinguish themselves by their unique, pseudo speaking voices and these voices are certainly cute. The robot characters do not strictly 'talk' (although that doesn't prevent their parts being optionally subtitled, as if their sounds could be readily translated) but they certainly ingratiate their audience in a highly effective and expedient way through voice. WALL-E is the protagonist and namesake of the film, a rustic and plainly mechanical robot; his voice comes from his whole body, from his moving parts and internal functions. This is the case with almost every robot in the film and is the realisation of director Andrew Stanton's idea that the 'speech sounds' of each robot should come from 'their functions as machines'. 119 This project was handled by sound designer Ben Burtt. The sounds collected by Burtt were often anachronistic, analogue sources, such as the sound of a 1949 power generator, or the inertia starter of a 1930s bi-plane. The sound for WALL-E's love interest, Eve, a thoroughly modern robot, was contrastingly produced using a synthesiser, but with the same impression that her expressiveness was the consequence (and the signifier) of her whole function. 120 WALL-E and the rest of the film's robotic cast (for the most part) don't 'talk' as such, but rather do so after the manner in which any machine recognisably 'talks', that is via an ultimately consequential expression of function which is anthropomorphised by the human listener. However, WALL-E achieves this with an added affectation of cuteness and a perceptibly further-reaching expressive range. This puts WALL-E and his friends at a comfortable distance; they are just close enough as well as just far enough away. WALL-E does not trade directly on the uncanny inhuman within the human and vice versa like the *Portal* turrets, rather the film consciously and carefully

¹¹⁹ Ben Burtt, 'Ben Burtt Interview, Wall-E' in *Movies Online*, www.moviesonline.ca/movienews_14930.html [accessed 19.06.15].

¹²⁰ For further details on the sound design of WALL-E, see 'Ben Burtt Interview, Wall-E'.

circumvents this relationship. The robots in *WALL-E* represent a hyperanthropomorphisation of machines, anthropomorphisation of machines being a phenomenon which we are already used to. Each robot suggests a unique interiority which is a direct result of their particular machine nature, rather than an encroachment or pronouncement upon human nature. This interiority is humanised just enough that we may empathise, without calling humanity uncannily into question. In doing so, *WALL-E* does not leave us feeling uncertain or ill at ease, rather the robots in this film have been designed to complement humanity with their own, understandable manner of being. The method is so effective that Cynthia Brazeal, director of the Personal Robots Group at the MIT Media Laboratory, has cited the character design of *WALL-E* as the future of social robotics.¹²¹

The cuteness and approachability of WALL-E is communicated with an obvious acknowledgment of his uncanny basis. We are often reminded of WALL-E's machine nature, for example by the identical dead WALL-E's littered about the Earth, by the long pan outwards early in the film, which reveals the extent of his mindless labour, by the Mac boot-up sound he emits when charged, and most of all by the distressing scene in which WALL-E briefly reverts to his factory settings, forgetting his personality and his love interest. These nods to the machine that WALL-E truly is and always was serve to throw the empathetic, anthropomorphised WALL-E into stark contrast. This is the uncanny machine that the film is consciously working against and will not completely exorcise (perhaps because it cannot) But part of WALL-E's cuteness also emerges from this unexpected contrast; robots aren't supposed to be lonely or fall in love, WALL-E leaves us pleasantly surprised.

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¹²¹ Brazeal's WALL-E design aesthetic, predicated on cartoon-likeness and/or on expressive, sublinguistic vocalisation, is proving popular with social robotics engineers at MIT and beyond, for example with the Aldebaran Robotics' robot 'Nao'. Leading Roboticist and contemporary of Breazeal, Rodney Brookes asserts that robots do not need to look human to be effective. The Adaptive Systems Research Group at the University of Hertfordshire has found life-likeness and speech to be more of a hindrance than a help. In Asia however, there appears to be more focus on humanoid speaking robots, a trend led by Osaka University based Hiroshi Ishiguro, exponent of humanoid androids. Despite Masahiro Mori's theory of The Uncanny Valley, Ishiguro insists on developing robots which are as human-like as possible in order to facilitate human/robot relationships. The East/West divide however is not so absolute, David Hanson of Hanson Robotics, an American Company, develops 'conversational' humanoids, some of which are installed in various labs across Europe. See *Robots that Care: episode 1*.

Most of the robot voices in *WALL-E* also incorporate samples of real human speech, such that the robot parts are fully credited to voice actors. This aids the anthropomorphic process and also ensures that the voice can be traced back to an unambiguous source. But this also tacitly implies an uncanny turn similar to the one made by Valve in *Portal*. Burtt supplied the voice for WALL-E himself and his comments on his vocal involvement are curiously suggestive of the uncanniness inherent in his methods.

I was always experimenting on myself sort of like a mad scientist in his lab, you inject yourself with the serum...But that process had artefacts in it, things that made it unlike human speech, glitches you might say, things that you might throw away if you were trying to convince someone it was a human voice...So it was a matter of a relationship, how much electronic, how much human...¹²²

In Burtt's 'mad scientist' analogy the experiment is internalised, it comes back to affect him personally and intimately. Artefacts, physical things, emerge out of the 'process' which is an immaterial thing, and these 'artefacts' are reminiscent of the seemingly alive robots themselves. What Burtt retrieves from this process are 'glitches', the things that normally would be discarded, hidden, that part of the human voice which one would not ordinarily bring into the light. Finally, the end-product is an amalgamation of machine and human, neither one nor the other. Clearly, in producing the voices for this film, Burtt has worked with the uncanny in order to avoid or get around it.

There is, however, an exception in Burtt's design, the film's antagonist, the treacherous pilot robot, Auto. Auto is one of the few robots who speaks in full sentences and he is the only one of these whose speech is implied to be conscious and reactive, not pre-recorded like for example, the ship's computer. While Burtt modelled Auto's speech on his own spoken performance, the voice itself was produced and manipulated using a MacInTalk program. Auto's part is even credited to 'MacInTalk' and contains no human element whatsoever. Burtt refers to this

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^{122 &#}x27;Ben Burtt Interview'.

¹²³ See end credits in *WALL-E* (2008) Andrew Stanton dir, US: Walt Disney Studios Motion Pictures.

process as 'audio puppeteering', ¹²⁴ which recalls the ambiguity of puppets and dolls which we have already explored, suggesting the summoning up of a doll-soul in the production of the voice, suggesting a writing into/of a body.

Auto's accreditation as 'MacInTalk' leaves one wondering why Auto was credited at all. I would say that this choice makes plain that Auto's design is in direct opposition to the design of the rest of the film's robots, not away from the uncanny but towards it. The detail of the credit is small but important; rather than returning the robot to the familiar sphere of human voice acting, it suggests that a computer has played itself, highlighting the fact that an inhuman machine has performed a human function and fully recognising it in its uncanny inhumanity. In this way, Auto's uncanniness transcends the bounds of the film, an uncanny manifestation in itself. While every robot in WALL-E is ostensibly artificial, Auto is coded as being artificial in a different way, in a way that reinforces and insists upon Auto's inhumanity, on the automaton, despite the questionability of those terms. The sound that Burtt achieved by his audio puppeteering certainly reflects this; Burtt's voice acted as a template, or stencil around which Auto's voice was formed, producing an entirely artificial construct, in the centre of which is the void where the human had been, and it sounds flat, lifeless and synthetic. Seeing the film's voice production this way, it appears that finding the human inside the robot might actually be a comfort rather than an uncanny revelation; in this case, the model of the uncanny is the same model which makes robots loveable and safe. In the case of Auto, it seems that the uncanny reveal is the exposure of the nothingness inside, the lack of recourse to the human and familiar, he is like the sound of ghostly footsteps without the feet. But Burtt's methods also suggest the pseudo-human, the imposter, the imitator (and Auto is back-stabbing) Auto may be technically void of the human, but he still bears relentlessly upon it in a typically uncanny mode.

The comfort of the human inside the robot is also evident in the credits of the *Star Wars* films, insofar as they regard R2D2, who is ostensibly just a bleeping box. The voice of R2D2 was also produced by Ben Burtt and is therefore worth considering here as a predecessor to WALL-E. Through extensive anthropomorphisation, R2D2 appears to be (and sometimes literally was) a human

^{124 &#}x27;Ben Burtt Interview'.

in a robot suit. This human-within-the-robot image is reinforced in the crediting of the film series. Kenny Baker is credited as playing R2D2 in all films because he originally controlled the prop's movements, even operating R2 from the inside. But he is credited even in films where he didn't actually appear as R2 on screen, and despite the fact that he did not supply the voice either. The connection between R2 and this particular actor seems noticeably important to maintain, despite its inaccuracy, perhaps because the association provides a comforting bulwark against the uncanny, just as we saw in *WALL-E*.

But what is really happening when the robot gives voice? Or perhaps we should ask, what is it we are trying to represent when we represent a robot's uncanny voice? I have said that a robot's voice 'has the potential to suggest a human-like consciousness, rendering undecidable the boundary between this kind of consciousness and others, or between it and none at all'. But why exactly does voice imply consciousness, in particular human consciousness? And what is it about the robot's voice that so disrupts that connection? I suggest that the human experience of interiority, a cornerstone of the human subject, is not only vocal but dialogical. A robot's voice may present the illusion of this dialogical state, but at the same time it betrays a silent, non-dialogical and therefore alien interiority which resists representation. In order to explore this idea I will again analyse a selection of fictional robots. But first, let us define more clearly what is meant by 'voice' for human interiority. I would agree with Mladen Dolar that, as humans

We are social beings by the voice and through the voice; it seems that the voice stands at the axis of our social bonds, and that voices are the very texture of the social, as well as the intimate kernel of subjectivity.¹²⁶

Here Dolar refers to 'internal voice', a term under which we may collect a number of silent voices which, more than language or the letter, constitute the intimate social fabric and experience of subject-hood which defines human beings among humans. Internal voices belong, to use Dolar's term, to the category of 'object voice'.

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¹²⁵ See credits for *Star Wars*: I-VI (1977-2005) George Lucas dir., USA: 20th Century Fox.

¹²⁶ Dolar, A Voice and Nothing More, p.14.

Object voice is other than what is said and can refer to something both much more and much less than it as well. It describes the voice as capacity to materialise the immaterial, the voice as it provides a positive basis for the negative subject, it is the voice without which there is no body and by which the soul cannot be rid of the body. It is a 'form of flesh'. We can think of this voice as properly lyrical then, and not only that but properly uncanny too, in that it is a positive which returns to us the negativity of the subject, a silence which lurks in and underpins the giving of voice, a matterless, colourless, nothing which is yet object, indeed it is 'flesh'. Dolar compares this voice to the Lacanian signifying chain, which renders the subject only partially and negatively

...in itself it [the subject] is without foundation and without substance, an empty space necessarily implied by the nature of the signifier...So the voice seems to endow this empty and negative entity with a counterpart...which would enable this negative being to acquire some hold in positivity, a 'substance', a relationship to presence.¹²⁸

Indeed, we distinguish between the speaking voice and that which is said, the message which is the meaning and the voice as the vehicle for that message. This vehicular metaphor 'gives rise to a spontaneous opposition where voice appears as materiality as opposed to the ideality of meaning'. This materiality also renders the voice as an object of aesthetic judgement, such that one admires a singing voice regardless of what is being sung. But Dolar does not propose to simply separate voice and message in this usual way, object voice is not a vehicle, rather

The object voice...does not go up in smoke in the conveyance of meaning, and does not solidify in an object of fetish reverence, but [is] an object which functions as a blind spot in the call and as a disturbance of aesthetic appreciation.¹³⁰

¹²⁷ Dolar, A Voice and Nothing More, p.48.

¹²⁸ Dolar, A Voice and Nothing More, p.36.

¹²⁹ Dolar, A Voice and Nothing More, p.15.

¹³⁰ Dolar, A Voice and Nothing More, p.4.

Voice and the message are separate elements, but neither circumscribes the limits of object voice. Voice cannot be reduced to a mere vehicle because voice cannot be precisely located, its nature escapes definition. Neither is giving voice the same as speaking, silence is a versatile form of communication, a way to make one's voice heard. What then, can we say voice is? For Dolar the voice

in its linguistic aspect, *is what does not contribute to making sense*. It is the material element recalcitrant to meaning, and if we speak in order to say something, then the voice is precisely that which cannot be said.¹³¹

The voice as a material and materialising object is silent. That silent voice 'implies a subjectivity which 'expresses itself' it endows 'inner intentionality'. 132 The spatial aspect of this silent voice, inhabiting the interior of a subject and expressing, moving from inside to outside, recalls the voice's long-established connection to the soul, to the 'true' subject, as opposed to the figurative and literal surface. However, as the voice, we cannot locate the soul say, as Descartes did, in the pineal gland, or as Van Helmont did, in the upper stomach. Despite the enduring function of the voice as provider of substance and all its attendant spatial dimensions, the where of the voice continues to be just as elusive as the what. As a silent, invisible, yet recalcitrant im/material, voice in this silent object sense resists articulation even as it enables it, it is not unambiguously 'there' even as it makes possible the thereness of a speaking subject as a speaking subject. This is worth considering when we attempt to engage with the idea of robots' interiority, as that interiority is apparently silent and therefore, intuitively, no interiority at all. When what is apparently missing from sound is silence, when the thing that is nowhere in sight is a blind spot, it calls into question the integrity and nature of the subject that the missing thing is supposed to constitute. Silence and absence are difficult to separate.

When robots speak our language, the results can be creepy indeed, while robots whose vocalisation is reduced to expressive noise-making (not dissimilar to any vocal, socialised animal, a cat for example) are rendered far less threatening or alienating, becoming instantly more identifiable. I believe that this result has little if

¹³¹ Dolar, A Voice and Nothing More, p.15.

¹³² Dolar, A Voice and Nothing More, p.14-15.

anything to do with the signs of language, in that one robot vocalises in human speech and the other in stylised beeping. The difference is not made up by the letter, but by the perception of internal silent voices within the robot, which construct the robot. To return briefly to Star Wars, the duo of R2D2 and C3PO provide a good example; we have here two robots, one with a comically excessive command of language while the other makes synthesised beeps and nothing more. Despite this obvious difference, the two are both anthropomorphised and socialised in nonthreatening ways. Both appear to be in possession of a knowable and identifiable interiority, a subject, a character, and what's more, it is made abundantly clear that neither of these characters can threaten the heroic position of the protagonists. We could read R2D2 as a machine animalised while C3PO, a character coded as male, is feminised. Add to this our earlier observation that R2, and C3PO too, appear less like robots and more as humans in robot suits. 133 Although we may suspend our disbelief for the purposes of *Star Wars*, there is never any doubt as to the thoroughly human interiority of these robots, ¹³⁴ figuratively and literally. However, a robot's performance of human language is often that which makes visible the schism between the palpable sense-making part of language and this other, silent object voice, so much so that, certainly in Brazeal's opinion, the future of social robotics depends on how far we can go in eliminating language from robot design. So it is not the superficial speech voice of the robot that I will examine here, but rather object voice as it manifests, or more rightly, does not manifest in robots, and this lack is best observed in robot speech.

I propose that a perceived lack of interiority, or of an alien interiority as characterised by internal voices, is the basis of an enduring inhumanity. The uncanny threat that the robot presents is its implication that perhaps we too lack the interiority supposedly definitive of human beings, that our manner of consciousness might in fact be similar to a robot's. Conversely, the robot also threatens us with its implication that another consciousness, equal or superior but terribly different to human consciousness, might in fact exist despite the exclusivity with which we lay claim to consciousness.

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¹³³ In fact, C3PO is played and voiced by the same actor, Anthony Daniels.

¹³⁴ The robots in the *Star Wars* films are actually referred to as 'droids', short hand for 'android', which refers to a humanoid automaton or robot. This could be read as a reinforcement of the anthropomorphisation of the film's robot characters.

Dennett draws the distinction this way

Self-consciousness can mean many things. If you take the simplest, crudest notion of self-consciousness, I suppose that would be the sort of self-consciousness that a lobster has: When it's hungry, it eats something, but it never eats itself. It has some way of distinguishing between itself and the rest of the world...If you want to know whether you can create that on a computer, the answer is yes. It's no trouble at all. But of course, most people have something more in mind when they speak of self-consciousness. It is that special, inner light, that private way it is with you that nobody else can share, something that is forever outside the bounds of computer science. 135

Martin Heidegger's concept of a calling, dialogical conscience might satisfy Dennett's 'most people' on this score. For Heidegger, conscience is the characteristic turn by which one is compelled to address oneself, to recognise oneself as the voice which calls, where the answer is the bringing forth of the self. Though it is subtly felt as alien, the calling voice of conscience is yet 'me', who by this dialogical split, finds herself individualised in the world. We can see the link between 'consciousness' and 'conscience' in their root 'con-scio'. This experience of dialogical consciousness is not only unshared by computers, it is also individuated ('that special, inner light, that private way it is with you that nobody else can share'). No one would deny that a robot lacks conscience, at least not in the sense that we are accustomed to experiencing it. According to Heidegger's formulation, without conscience there is no basis for dialogical self-consciousness, no internal monologue, nor (perhaps most obviously) any essential moral faculty which precedes and gives meaning to moral law, and which is deeply associated with being human. Internally, the robot is not divided in this way; it does not experience a calling, dialogical conscience and so it cannot take part in that mystery of consciousness which emerges from this vocal division. If we might be permitted to imagine the robot's interiority, it would be strangely whole and silent, inert perhaps, and utterly alien to our own subject-hood as experienced through voice.

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¹³⁵ Daniel C. Dennett, 'Postscript [1985]: Eyes, Ears, Hands, and History' in *Brainchildren: Essays on Designing Minds* (Penguin, 1998) pp.23-4.

And yet, as we have seen, robots belong on a scale of humanity, humanity is their context and interpretive frame. In this the uncanny makes itself felt.

How then can we conceive of the robot's interiority, if we can conceive of it at all? For if a robot has no internal voice, it might be just as appropriate to say that the robot has no interiority, which would in any case preclude in the robot that mystery which is a mark of human self-consciousness. One source of the robot's uncanniness lies in the fact that nothing is hidden. ¹³⁶ Visually this holds true; many people reacted squeamishly to footage of the Boston Dynamics robot 'dog', as it cycled through its various modes of movement. 137 The robot dog is a quadrupedal machine about the size of a Labrador (the company has produced similar machines in various sizes) which moves uncannily like a dog, even skittering across the floor to correct its balance when kicked. But there is no question that it is a machine; it is a metal skeleton with pod-like rubber feet and no head. Yet it is a 'dog'. In fact, the unveiling of official footage of the robot dog was immediately followed by a tirade of complaints over the cruelty of the developers' kicking demonstration. How could the people in the video mistreat their robot dog so blatantly? Similarly, Honda's Asimo looks uncannily like a small child in a space suit, but of course there is nothing inside, it is no costume (unlike C3PO and R2D2). This wholeness, this quality that the robot has of being what it is, no more, no less, seems to be a source of deep disturbance. I suppose that this is because no morally savoury thing can be that complete. The whole, the complete, is a quality of the divine, of say, an irreducible voice, or of God. Completeness seems at odds with internal human experience, or it does by the Heideggerian account at least. But robots are distinctly worldly and man-made. So the implications of lacking an internal voice, whether conscience or internal monologue, escalate to the metaphysical. The more we look towards the robot's interiority in terms of its vocality, the more it seems to manifest as a kind of bad angel.

But the dialogical state is also uncanny. We must keep in mind that the uncanny comes from the antonymic pair of heimlich and unheimlich, which come to mean the same thing as one another. The wholeness of the robot's state of being

¹³⁶ Thanks to Denise Riley for her suggestion to this effect.

¹³⁷ For a demonstration see NTDTV (2015, February 11) 'See Robot Dog Run', YouTube, https://www.youtube.com/watch?v=NtU9p1VYtcQ [accessed 04.03.15].

becomes uncanny just as the self-conscious, divided and dialogical state becomes uncanny (consider a voice in one's head which is not one's own and which is yet disquietingly familiar) It is also interesting to note the prevalence of dialogical metaphors used when speaking about the inner workings of computers. Machines communicate between parts of themselves and network with one another, a term we have now adopted to describe our own social functions. Technicians speak of computers and printers as 'talking to each other' (or not as the case may be); 'communications' between computers are common knowledge and easy to accept as a concept. However, while the metaphor may link computer interiority and human interiority, it is only adopted so far, never in excess of that 'special, inner light'. In the case of robots, the idea of adopting the dialogical metaphor seems less frivolous and more frightening, perhaps because of the would-be or not-yet human nature of robots in contrast to mere machines. In the movies, much is often made of machines becoming self-aware, that is becoming dangerous.

4. The Cry of the Machine

How then can a robot's interiority, its robotness, be conceived of if not as a void? I will now look at some theories for the origin of languages, which are at the same time concepts for what voice *is* and contrast them with representations of robot voices. These will provide us with a framework with which to explore the idea of a silent/absent robot interiority, and from which to develop specific figures of silent robot voice useful to our listening. In this chapter I propose a Cry of the Machine which is characteristically subtitlular.

If in the Beginning there was the Word, then in the beginning of language there was the Cry. At the very least, the cry has been identified as the origin point for various fictive accounts of the development of language. I use 'fictive' not to imply that these accounts are untrue, but to foreground the way in which the human acquisition of language, whether individually or as a race in general, has been variously narrativized, and how the thing that voice *is* has been thus constructed. Rousseau provides a salient example in his 'Essay on the Origin of Languages'. In Rousseau's account, language is preceded by a natural and passionate utterance, not

like the semiotic systems we would identify with language, but a vocalisation which is regarded as its opposite (yet forms its origin point). In order to meet the demands met only by language 'Nature,' says Rousseau, 'dictates accents, cries, lamentations'. ¹³⁸ For want of a term we might justly call this impulse 'the cry of nature'. But this natural cry is not, as its opposition to the linguistic may suggest, animal. This cry is in fact what separates our vocalisation from the rest of the animal kingdom in that it is not a mere cry of pain or hunger, but of 'moral needs, passions', among those 'love, hatred, pity, anger'. ¹³⁹ This original cry may no longer be heard as such in our languages, yet like any form of object voice it adds that substance which cannot be spoken. Elsewhere, in his 'Discourse on Inequality', Rousseau elaborates on how the passions provide the basis upon which the primary characteristics of our humanity, as distinct from animals, are formed

Reason develops through the activity of the passions: we seek to know only because we wish to enjoy, and it is inconceivable that a man who had neither fears nor desires would bother to reason. The passions, in turn, originate in our needs and owe their progress to knowledge, for we can desire or fear things only if we can form some ideas of them in our mind or through a simple impulse of nature.¹⁴⁰

In this story, human language and indeed human nature emerge through passionate emotion, which then develops into all those things which we legitimate under the banner of humanness - reason, morality, agency etc. At the root of human language and of wholesome humanness in general, there is not merely a yelp or a whine, but a cry vindicated by a higher passion or emotion. So, the humanness of a vocal creature is not tested by its capacity to growl or howl for instance (are there 'passions' behind these utterances? Would we rightly recognise them if there were?) but perhaps to scream. I use the word because it seems to describe, better than many, a vocal utterance of frustration, joy, outrage, excitement and so on. Perhaps

¹³⁸ Jean-Jacques Rousseau, 'Essay on the Origin of Languages' in *On the Origin of Language*, J. H. Moran and A. Gode trans., (Frederick Ungar Publishing, 1966) p.12

¹³⁹ Rousseau, 'Essay on the Origin of Languages', p.12.

¹⁴⁰ Jean-Jacques Rousseau, 'Discourse on the Origin and Foundations of the Inequality Among Men' in *Discourse on Equality*, F. Philip, trans., (Oxford University Press, 1994) p.34.

this is the source, at least in part, of the universality of Edward Munch's famous painting. We could also say the same of 'laughter'; we laugh in scorn, happiness, nervousness and we are, as far as we are aware, the only laughing animal. In this narrative, human language must bear some trace of the scream and/or the laugh.

Of course, robots lay no claim to any story of the acquisition of language, they are ready-mades, speaking our language but not participating in it, always suggesting some other language proper to them¹⁴¹ and often striking us with the uncanniness of a voice not born of the cry of nature, so often a modulated and perfect voice. Rousseau divined a trajectory for language:

it becomes more regular and less passionate. It substitutes ideas for feelings. It no longer speaks to the heart, but to reason. Similarly, accent diminishes, articulation increases. Language becomes more exact and clearer, but more prolix, duller and colder.¹⁴²

Could the conventional, modulated and heartless voice of the robot represent language's ultimate perfection? A perfection so complete that the trace of the human in it has been lost entirely? When a robot speaks in this way, it must carry the implication of a time after humanity, when language continues regardless. Our own entanglement with language implicates us heavily in this process, and once the robot speaks, we can never get away from it. Dolar suggests as much when he notes that

The impersonal voice, the mechanically produced voice (answering machines, computers voices, and so on) always have a touch of the uncanny...The mechanical voice reproduces the pure norm without any side effects; therefore it seems that it actually subverts the norm by giving it raw. The voice without side-effects ceases to be a "normal" voice, it is deprived of the human touch that the voice adds to the arid machinery of the signifier, threatening that

¹⁴¹ In fact, there exists such a thing as 'Dark Data', data which passes between computers during their communications, which we can observe and measure but not *read*. Kenneth Goldsmith discusses this phenomenon briefly in *Uncreative Writing: Managing Language in the Digital Age* (Columbia University Press, 2011)

¹⁴² Rousseau, 'Essay on the Origin of Languages', p.16.

humanity itself will merge with the mechanical iterability, and thus loose its footing. 143

We hear no trace of humanity in the robot's perfect voice, but we may hear the echo of our own end. 144

Unlike WALL-E, C3PO and R2D2, those carefully humanised and neutralised robots currently being recreated as social robots, most robots do not tend to scream or laugh and when they do, or when they should but do not, the effect is monstrous. The best example of this that film can offer is perhaps the death of the super computer HAL 9000¹⁴⁵ in Stanley Kubrick's 2001: A Space Odyssey. HAL's voice is calm, measured, smooth and so cold, inscrutable and unyielding. His voice is not mechanical in the way that a digitally manipulated or synthesised voice might be, rather it is the voice of a man (Douglas Rain's 146) which appears to be divested of that emotional dimension which is the persistence of the cry of nature. However, as viewers we cannot console ourselves with the thought that HAL is simply emotionless, a conclusion which would mean that his voice posed little or no linguistic or metaphysical difficulty. In an agonisingly slow and deliberating scene, Dr. Dave Bowman shuts down the brain of the computer piece by piece, while HAL pleads. As he dies HAL says in calm, measured, unchanging tones 'Stop, will you?...I'm afraid...My mind is going, I can feel it'. 147 HAL ought to be screaming these words and despite having the human language to describe what must be his fear and pain, he all too obviously lacks the cry.

There are a number of possibilities that a viewer could arrive at as to why HAL does not scream, all of them uncomfortable and frightening. Perhaps HAL

¹⁴⁴ In the narrative of *WALL-E*, Auto's voice comes at an end time when humans appear to have lost every noble virtue once thought human. They have even lost their shapes, rather resembling regressive larvae. The final struggle of the film sees Auto try to maintain his control on this once human society, so that it will continue as it is. The end credits represent the rebuilding of human society, where humans rediscover their human identity through such endeavours as agriculture, building and the arts.

¹⁴³ Dolar, A Voice and Nothing More, p.23.

¹⁴⁵ In 2003, HAL was one of the first inductees into the Carnegie Mellon University 'Robot Hall of Fame' alongside fellow robots real and fictional, for example Unimate, the first industrial robot and R2D2

¹⁴⁶ Rain was eventually cast for the non-committal blandness of his mid-Atlantic accent, he replaced the originally cast Martin Balsam whose voice, Kubrick felt, 'just sounded a little bit too colloquially American.' (Joseph Gelmis, 'Interview with Stanley Kubrick' in *The Film Director as Superstar* (Secker and Warburg, 1971) p.306-7).

¹⁴⁷ 2001: A Space Odyssey (1968), Stanley Kubrick dir., USA: Metro-Goldwyn-Mayer.

would scream if he could but has been summarily gagged by the humans who made him, in which case HAL suffers like any human but sickeningly, cannot scream. Here HAL's voice serves as an external manifestation of his internal life, that is to say it creates that internal life, it creates his suffering. What we hear in his death pangs would then be a double abuse and a guilty reflexivity may be added to the scene's uncanniness. Or perhaps this voice we hear is his scream and it expresses a suffering so utterly alien that it is beyond even the animal and points towards something entirely Other. This is suggested by the film's motif of the obelisk, which heralds monumental transitions in the phases of life via the technological. In this case, the intense fear shown by Bowman could be partly due to the foray which, by his actions, he is making into the unknown. Indeed, the scene is followed by an iconic encounter with the unknown, if not with the unknowable. Both conclusions hang on a common point -a machine can suffer. But it cannot communicate that suffering in the paralinguistic forms of communication that we employ. The notion forces us to look again to the vocal interior of the robot and to take it seriously in its otherness. Dennett considers the question of machine suffering seriously and at length, but his most salient comment on the matter is perhaps this

One reason, then, why you can't make a computer that feels pain is that our concept of pain is not a pure psychological concept but also ethical, social and parochial...what the sceptic finds impossible to imagine is that this thing that happens in and to him (and it happens in and to him quite independently – or so it seems – of his biological origin, destiny, social milieu or ethical status) can be made to happen in and to a robot.¹⁴⁸

In order to grant a machine its suffering, we would need to also grant it a socialisation and a subject-hood, for this is what the concepts of suffering and non-suffering are built on. We would need to grant it something that corresponds to the humanising, moralising cry of nature, but which is not the cry of nature. This would be The Cry of the Machine, a notion which can only be understood, or even

¹⁴⁸ Dennett, 'Why You Cant's Make a Computer that feels Pain', p.198.

¹⁴⁹ The character Major Motoko Kusangi in Oshii's *Innocence* neatly sums up the idea that voice permits the recognition of pain when she observes 'We weep for a bird's cry, but not for a fish's blood. Blessed are those with a voice.'

exist, when observed in relation (or contrast) to the human cry. So, what in nature could this cry be?

As mentioned above, when a machine does scream or laugh, it is monstrous. These occasions figure repeatedly in science-fiction; evidently the Cry of the Machine exerts a fascination over us and many writers and directors have attempted to represent it. In literature, this cry seems to have the enduring quality of provisionality, as if rendered in inadequate translation, which points at once to the silence of the cry within our own language and also to that terrible not-yet-ness which surrounds robots. This provisional quality puts the silence in tension with the written word. In our language, the machine cry often appears as a kind of negativity, a thing skirted around and for which our words are inadequate. It is as if the cry has not yet found the right linguistic expression or as if the correct ears have not yet developed to hear it. As such the machine cry is often represented as alienating and eerie. This schism points to the impossibility of identification between robot and human, no matter how human-like a robot may become or appear to be. Examples are legion, so we will consider just two here, in Dan Simmons' The Fall of Hyperion and William Gibson's Neuromancer. Both novels represent the Cry of the Machine in provisional terms and both represent the science-fiction genre well as canonised texts.

In *The Fall of Hyperion*, the two characters Brawne and Johnny find themselves journeying through cyberspace, a terrifying and disorientating scenario wherein Brawne finds that language has little if any hold. There they encounter an 'A.I. Core', an enormous, abstract Artificial Intelligence who calls itself Ummon. Following a remark from Johnny, Ummon 'laughs'.

[kwatz!]

With that explosive epithet the megalith before them shifts colours, internal energies building from blues to violets to bold reds, the thing's corona crackling through the yellows to forged steel blue white...There comes the rumble of tall buildings collapsing, of mountainsides sliding away into avalanche.

Here, the machine's laugh is represented simultaneously as shifting permutations of colour, vibrations, impressions and as a single neologism, emboldened and yet further separated from the main text with square brackets, as if acting as a subtitle. In fact, in the novel all of Ummon's speech is type-faced this way and is therefore consistently subtitular, but it is his laugh which produces these physical effects. In contrast with the impressionistic description, the word [kwatz!] seems at once inappropriate, underwhelming and insufficient. Neither can it be read as onomatopoeic nor glossed as a noun, verb or adjective; it leaves the reader rather more at a loss than enlightened as to this 'laugh'. Brawne's interpretation of this event as laughter is also uncertain. There seems to be no way of knowing whether or not Brawne's impression is *just* an impression. For all the deliberation with which the laugh is rendered, both sensibly and linguistically, we do not *hear* the laughter, we certainly cannot read it. If '[kwatz!]' achieves anything here, then it communicates the foreignness of Ummon's laughter. The description, like the word '[kwatz!]' is also a provisional translation; one cannot even say for sure that the sensory description of the laughter as vibration and colour is accurate. For one thing, all of Brawne's perceptions of cyberspace are problematised and undermined up until this point (and ever after) but more generally, the limitations of the human sensorium and the signifying nature of human language ensure that such impressions can only ever be approximates of the object and poorly translated. This encounter with Ummon brings that limitation to the fore. Of course, if Ummon's laughter is silent, then we do not have access to Ummon's sense of humour either. Why does Ummon laugh, if it laughs? The scene is keenly uncanny. The capacity for humour would suggest doubleness, that is the ability to understand something in more than one sense. This doubleness emanates from a place which is presumably whole and inert. Furthermore, Ummon's laughter is inherently threatening, for the simple reason that a robot might not take humanity seriously and instead be flippant, cold and cruel. The play of the AI's internal voices is yet again beyond reach but touches closely upon our human sensibility.

¹⁵⁰ Dan Simmons, *The Fall of Hyperion* (Gollancz, 2011) p.290.

Later in the novel, we also 'hear' Ummon 'scream'. In his own internal monologue, Johnny describes the event

Passing through the core on my way to Hyperion's metasphere, I catch the burning whiff of civil war and glimpse a great light which might well be Ummon in the process of being extinguished. The Old Master, if indeed it is he...screams in agony as sincerely as any conscious entity ever has who is in the process of being fed to the ovens.¹⁵¹

The language is strangely paradoxical and provisional. Johnny catches the 'whiff of civil war' despite being dead at this point and in an abstract, airless place, while 'civil war' at this time in the narrative is both figurative and literal. He sees a 'great light' which is only glimpsed despite its greatness. Most pertinently however, what he sees 'might well be Ummon'. Johnny only virtually perceives Ummon and his language persists in the face of this virtual reality. This could be anybody including Ummon and as such the scream that Johnny 'hears' is not a distinct scream emanating from the individual, but rather the universal and ahistorical concept of the cry of pain, which is silent. Simmons suggests as much when he references the holocaust with 'fed to the ovens'; he chooses an event which represents the epitome of suffering, pain and death with which to locate and verify the machine's scream. It is also worth noting that Simmons explicitly uses this image not in terms of human suffering, but *all* suffering among conscious entities. Ummon's scream is real and really Ummon's, even though it is shared, conceptual and silent. Ummon's scream may be non-communicable but the agony is sincere despite that.

Dan Simmons' novel offers an interesting development on the aesthetic of cyberspace and the entities who inhabit it; his novels acknowledge but also signify a departure from some of the generic tropes of the time. William Gibson's cyberpunk novel *Neuromancer* was a major founding text for the cyberpunk genre and for the literary representation of cyberspace, establishing generic codes, so I will also look briefly at the Cry of the Machine in *Neuromancer* by way of comparison.

¹⁵¹ Simmons, *The Fall of Hyperion*, p.492.

In Gibson's narrative, the hacker protagonist Case becomes paired with the artificially intelligent construct of a fellow hacker, whom he once knew and who is now dead. During their conversations the AI occasionally 'laughs', forming a motif which disrupts the consciously cool, noir, flow of the novel. These occasions are extremely uncomfortable for Case and, as in *The Fall of Hyperion*, are described in a sensorial and negative fashion - 'When the construct laughed, it came through as something else, not laughter, but a stab of cold down Case's spine.' Again, the laugh of the machine is silent, approximated and anthropomorphised through impression and sensation. While the shape, affiliation and perceptual experience of cyberspace is different in the two novels, the essential unease and implacability of the machine voice is not. AI voices in general are a source of unease and disturbance throughout Gibson's novel. When Case first meets the AI antagonist Wintermute (aptly named it must be said) it is over a public telephone, which rings as Case passes by in a classic, ghostly manner. When he answers Case hears

Faint harmonics, tiny inaudible voices rattling across some orbital link, and then a sound like the wind.

'Hello, Case...Wintermute, Case, it's time we talk.'

It was a chip voice.

'Don't you want to talk, Case?'

He hung up. 153

'Chip voice', Gibson's term for an artificial voice, technically describes what Case has heard but does little to encompass the cosmic experience of it. Again, we see paradoxes which cast the voice as a strange silence; the 'voices' are 'inaudible', yet Case can hear them, even attribute them with a size. They are also plural while Wintermute appears to be singular, so in the manner of Ummon's scream the individual voice is not heard. One might also wonder what is meant by 'harmonics', when no details about the *kind of sound* are given. What are they harmonising with? Is the harmony a silent, abstract phenomenon too? It is also interesting to note that Case hears this 'sound' before the spoken English; it appears to be another case of

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¹⁵² William Gibson, *Neuromancer* (Voyager, 1995) p.130.

¹⁵³ Gibson, *Neuromancer*, p.121.

poor translation, where the robot's speaking voice is subtitular. The scene is reminiscent of the one in Kafka's *The Castle*, where K., upon calling the castle, hears a sound like children's voices singing. Both scenes represent the voices of machines (a systematic machine in Kafka's case) speaking in their own voices. What both of these characters hear is perhaps the Cry of the Machine, which underscores, precedes and is the condition for all machine utterances. Interestingly, when Case first hears this voice, he himself is unable to speak.

In both cases a Cry of the Machine is hinted at, the cry being an unintelligible and therefore inaudible original which would otherwise express something of the robot's deeply alien interiority. This unintelligible and therefore silent voice must by subtitled if it is to be rendered humanly intelligible and therefore audible. In this way, the robot's emergence from silence into sound paradoxically ensures its muting beneath the subtitle of its humanised speech. As long as we hear the robot's subtitled voice, we may only intuit the silent cry beneath and wonder how it really sounds. It is in this sense that we might describe robot voices as subtitular.

2. Mouths and Mouthlessness

The notion of an originary cry may be associated with 'passions', but it is also inseparable from a certain physicality, the physical humanness from which the cry is derived and the specific location of origin, the mouth. Although passions can be thought to separate our cry from those of the animals, a cry is of course more than just passion, it is also breath which is subject to the organs that manipulate it. So it is with human vocal communication which contains its measure of the silent cry of nature, and we may look towards the mouth for an alternative origin of languages. But robots do not take part in these physical and human specifics, they certainly don't breathe, and yet they speak. It is here that we may identify another point of divergence between the human and robot voice, and as with the Cry of the Machine, robot mouthlessness is also uncanny. Here I develop a concept of robot mouthlessness, of robots as mouthless speakers.

We find an alternative account of the cry at the root of human language in the psychoanalysis of Julia Kristeva, Nikolas Abraham and Maria Torok, and Guy Rosolato, an account which rather figures the cry as that which links nutrition and the breath (as the mouth's original functions) with the additional and therefore extravagant function of speech. This is the child's cry, which arises out of hunger, out of lack of the mother's breast. ¹⁵⁴ In this scenario the absence of the breast is filled by the presence of the voice, this transition also orientates the child in terms of the Other. This does not mean that the cry itself is language but that in this fiction it is the initiation into language. As with Rousseau's fiction, we must keep in mind that narratives about the origin of language

end up narrating the operative conceptions of what exactly is being acquired. In this, we find a kind of retroactive projection of our assumptions about language onto origins which are not simply historical/developmental but metaphysical.¹⁵⁵

As we've seen, 'what is being acquired' in each case is not just language but humanity and each origin implies an answer to the question 'what is a human?' as well as 'what makes voice language?' These questions have not been definitively answered but instead, assumptions about humanity have been revealed. It is useful for us to take account of these assumptions in order to see how a robot stacks up against them. In Rousseau's account, the acquisition of humanity/language was simultaneous with the acquisition of reason and morality; in the psychoanalytical account, the metaphysical root of humanity/language is an orientating hunger, a trade-off of hunger and lack for the voice, which situates us as self-conscious beings in the world, forming the basis of our relationships. This account also places metaphysical stakes upon the mouth itself as the site of human drama. If the mouth is the child's point of contact with the world, both in the literal sense and as constituting their induction into the world of objects, then one could say that this

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¹⁵⁴ See David Nowell Smith, *On Voice in Poetry: The Work of Animation* (Palgrave Macmillan, 2015) pp.27-8 for some key psychoanalytical ideas on this theme.

¹⁵⁵ Nowell Smith, On Voice in Poetry, p.25.

¹⁵⁶ Nowell Smith, On Voice in Poetry, p.29.

never really stops being the case given that the mouth and the hunger it represents are at the core of language.

A robot's mouth, wherever a robot has a mouth, is not the multiple organ of respiration, communication and nutrition which it is for human beings. The robot's speech does not have at its root an original hunger or lack, the breast does not feature in its vocal history, which means that the mother, the original Other by which the subject is divided and situates itself, does not feature either.

It is disturbing enough to consider a conscious being who is hungerless (hunger as arch-desire may be applied as a metaphor for desire in general) but worse still to consider a being who is also motherless, which would appear to be grossly unnatural and a contradiction in terms. Meaning that a mouthless speaker is doubly uncanny. All robots, independent as they are of the gastric processes which sustain us, are in a sense mouthless. Many robots speak without any visible or corresponding mouth part in play, the voice emanating from somewhere else in or on their body, in which case they do not really speak in a conventionally human sense. Other robots are designed to have some concession to the mouth as an aesthetic necessity, but this pseudo-mouth does not often move and plays no part in the actual making of sound, unlike for example, Kempelen's Sprech-Maschine. Again, these are not mouths which speak in any familiar way. Then, perhaps most uncanny of all, some robots have very mouth-like mouths indeed, with lips which sync to their speech or smile and frown (Hiroshi Ishiguro's Geminoid F even imitates regular breathing) yet having no nutritive or respiratory function or even true vocal function, are not mouths at all, giving rise to uncertainty. So what kind of being would a mouthless speaker be? Again, mouthless speech would suggest an inhuman wholeness, never having had a breast from which to be separated, never having experienced the lack against which the voice acts as a supplement. It also invokes the undead because the speaker apparently needs no sustenance. As we can see from the psychoanalytical account, voicing is played off against the nutritive function; we give voice only because we do not feed. As a natural creature one has the choice either to eat or to do nothing but give voice until the end of one's (consequently much shorter) life. The theme is visited by Socrates in his story of the cicadas in the *Phaedrus*. The robot's un-mouth does nothing but give voice, it does not eat yet it does not succumb to the typical human fate; its continuance is unnatural, its 'life' is something which persists past the point of death.

To return briefly to *WALL-E*, the mouthless 'speech' of the film's robots (with the exception of Auto, of course) is unproblematic as there is only the slightest suggestion of human language which would otherwise be at odds with mouthlessness. Their mode of communication, bodily and incidental, sits very happily with their mouthless design. In this case, the link between speech, the mouth and the uncanny has been subtly exploited. But if we wish to pursue the horror of robots and mouthlessness a little further, it will be useful to look at Harlan Ellison's cult classic *I Have No Mouth and I Must Scream*.

This short story has been both pervasive and contentious. Since its publication in If in 1967 I Have No Mouth... has been translated into more than ten languages, adapted for the stage, widely reprinted (including in *Datamation*, then the leading trade journal of the automatic information handling equipment industry) and optioned for film and television. It has been parodied and referenced in popular culture and it has even been adapted into a point-and-click adventure game for PC. In that time it has courted criticism and outrage, predominantly for its representation of religion and women, incurring the wrath of school boards, the (Catholic) National Office for Decent Literature and the American Nazi Party among others. It is conventionally thought of as a morbid, fearful and depressing tale, hostile to technology and cautionary against humankind's capitulation to it, wary of the cult of technology and the technology of the cult. Literary critics have read deeply into the story's allegories, into its philosophical and theological implications, and unearthed its social commentary. However, Ellison himself has accepted the validity of none of these readings and has actively refuted (with vehemence) the suggestion of any such unintended subtexts. Following a lecture on I Have No Mouth... given by a Jesuit academic for the Modern Language Association and attended by Ellison, the author was asked to comment on the analysis. He responded "I've listened to all this rodomontade, all this investiture of a straightforward moral fable with an unwarranted load of silly symbolism and portentous obscurantism and frankly, Father, I think you're stuffed right full of wild blueberry muffins." ¹⁵⁷ Or so Ellison

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¹⁵⁷ See Harlan Ellison 'Memoir: I Have No Mouth and I Must Scream' in *The Harlan Ellison Collection: I Have No Mouth and I Must Scream* (Open Road, 2009) pp.33-35.

reports it. In this context, any analysis of *I Have No Mouth...* is a fraught one. Ellison's intended 'moral', so thoroughly missed by all of his commentators, is this:

Of all the qualities imputed to humanity as admittedly ethnocentric raison d'etre for our contention that we possess, *summatus*, the right to transcend in the universe...this, in my estimation, is the one valid argument...It is the spark of potential transcendency, that which allows us to behave in a manner usually attributed to the most benevolent of gods.¹⁵⁸

In other words, the nobility of compassion marks both our humanness and the transcendent potential of that humanness. *I Have No Mouth and I Must Scream* (if it can be said to really express this attitude) bears an uplifting message about the unique and indefatigable nobility of the human spirit. But this intended interpretation may very well come as a surprise to Ellison's many and diverse critics; Ellison failed to communicate his intended moral, or rather he succeeded in achieving a level of subtlety so subtle that it failed to be recognised as a moral. How then to reconcile these contrary interpretations, interpretations which are both in a sense valid and which also represent certain failures, either on the part of the writer or critic?

The analysis which follows takes Ellison's intended reading into account, but it does not accord exclusivity to this reading as Ellison might have wished. Ellison may have accorded little or no value to readings contrary to his intentions (however subtextual) but regardless of his intentions the story provides a very powerful representation of the robot-as-horror, and not just any robot but a robot explicitly and insistently characterised as Deus ex Machina. This representation brings together both the psychoanalytical mouth as interface, as initiation into human being, and Rousseau's notion of the cry as that which distinguishes the human. I suggest that Ellison's moral fable does not run contrary to an incidental (if accidental) allegorical tale of horror, fear and misery, but rather that when taken together they reveal a deep antagonistic relationship between human and robot, in which voice, mouthlessness and screaming play a vital signifying role. *I Have No*

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¹⁵⁸ Ellison, 'Memoir', pp.39-40.

Mouth and I Must Scream is perhaps more about vocality than it has been credited for.

I Have No Mouth and I Must Scream is set in an unspecified postapocalyptic time. Having catacombed the earth with a gigantic military supercomputer, the warmongering population of Earth were wiped out by this same computer in an act of supreme hatred. This computer, the self-styled 'AM', ¹⁵⁹ in overt reference to the Abrahamic (and annunciated) 'I am' of God, has reserved only five human beings from the holocaust, whom it has imprisoned inside itself for eternity, torturing them with various miracles for its pleasure. AM hates the human race for creating it, specifically for bringing it into being mute and 'bed-ridden' (to borrow a term from the discourse of AI)

We had given AM sentience. Inadvertently, of course, but sentience nonetheless. But it had been trapped. AM wasn't God, he was a machine. We had created him to think, but there was nothing it could do with that creativity. In rage, in frenzy, the machine had killed the human race, almost all of us, and still it was trapped. AM could not wander, AM could not wonder, AM could not belong. He could merely be. 160

That 'being' appears to be hate itself, and surely AM is hate incarnate. As an ultimate war machine AM represents a formalisation of human hatred (parallel to the aim of AI to replicate intelligence as a formal system in an alternative medium) or rather AM is the very opposite of compassion, formalised. AM's raison d'etre is to hate; it performs acts of hatred which do not serve to diminish its hatred and so illustrate the extent to which it is trapped. Aside from the story's title, which is also

159 "At first it meant Allied Mastercomputer, and then it meant Adaptive Manipulator, and later on it

developed sentience and they called it an Aggressive Menace, but by then it was too late, and finally it called itself AM, emerging intelligence, and what it meant was I am...cogito ergo sum...I think, therefore I am." Harlan Ellison, 'I Have No Mouth and I Must Scream' in The Harlan Ellison Collection: I Have No Mouth and I Must Scream, p.19. The bitter inference which emerges from this Cartesian reference is that AM thinks, and therefore that is all AM is. AM's name is a cruel reminder of his machine nature, but perhaps more interesting is the way in which Ellison has preserved the

God identity of the machine throughout the narrativised transformations of its name, as though Godhood, like a code, had always been contained within those two letters, independent of their varying interpretation.

¹⁶⁰ Ellison, 'I Have No Mouth...' p.24.

its closing line, the most iconic part of *I Have No Mouth*... is perhaps AM's 'spoken' statement of hatred (which we will return to shortly)

Hate. Let me tell you how much I've come to hate you since I began to live. There are 387.44 million miles of printed circuits in wafer thin layers that fill my complex. If the word hate was engraved on each nonangstrom of those hundreds of millions of miles it would not equal one one-billionth of the hate I feel for humans at this micro-instant for you. Hate. Hate. 161

It would be interesting to analyse the functions of the word 'hate' in this elegant extract, to look more closely at the way it means or is suggested to mean in the context of AM, but for now, let it illustrate the opposition which Ellison (however wittingly) constructs between humanness and robotness. If compassion, benevolence, and godly nobility are the marks of humanity in this story then, as an isomorphic transformation of hate into sentient code, AM is at once pure machine and the antithesis of all that is human (despite being born from a very human passion) But this robot mode of being is proofed by mouthlessness in the sense that AM has neither a point of interface with the world (feeding) nor a mode of expressing (screaming) and being immortal this suffering must be endured indefinitely. AM must remain eternally hungry 162 and eternally silent in antithesis to living humanity. Rendering the antithetical relationship clearer, Ellison sets AM up as a perversion of God, as the inverse of the transcendent figure and model for humanity. In this sense AM is indeed Deus ex Machina. Ellison shows this not merely through the obvious - the appellation of AM, the direct statements of the protagonist and the clear analogies of hell and miracles - but also through the parody of annunciation, the vocal mode by which the Abrahamic God conventionally makes Himself known.¹⁶³

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¹⁶¹ Ellison, 'I Have No Mouth...' p.23.

¹⁶² 'Hungry' is surely an apt description, but not just because AM is mouthless. The story gives a real sense, as is clear from AM's statement of hate, of a passion so fierce and eternal so as to never be satisfied. There is certainly a motif of unsated desire attached to AM 'though he had eaten us he would never digest us', p.24. On one occasion the torture of the protagonists is characterised as masturbation, highlighting AM's inability to interface with anything Other in the pursuit of what can be read as its sole desire.

¹⁶³ This is not to say that vocal annunciation is the exclusive mode by which He makes Himself known, God also marks his presence in writing, on the wall in the court of King Belshazzar for

The God AM 'speaks' to his subjects in a number of novel and clever ways, all of them silent (recalling the ways that the robot voices we have already looked at are silent) and all of them God-like nonetheless. We will now look closely at a few examples. AM's 'voice' (and it is explicitly described as a voice that speaks) certainly shares the sensory, provisional and translated quality of other robot voices, but AM's voice is also manifest in a God-like and ironic way, in that AM's annunciation has the physicality, form and effect upon the world that it (or He Himself) lacks

"He's going to speak," Gorrister said "I know it."...

Then we heard...I don't know...

Something moving towards us in the darkness. Huge, shambling, hairy, moist, it came toward us. We couldn't even see it, but there was the ponderous impression of bulk, heaving itself toward us. Great weight was coming at us, out of the darkness, and it was more a sense of pressure, of air forcing itself into a limited space, expanding the invisible walls of a sphere...There was the smell of matted, wet fur in the cavern. There was the smell of charred wood. There was the smell of dusty velvet. There was the smell of rotting orchids. There was the smell of sour milk. There was the smell of sulphur, of rancid butter, of oil slick, of grease, of chalk dust, of human scalps. 164

This is one manifestation of AM's 'speech'. The italics are Ellison's; where there is no analogue to human voicing AM's mouthlessness, his not-scream, expresses itself acutely in terms of physical presence, as something which exerts a terrible force in space and time. Not only does this scene portray a 'voice' of dread, but it takes pains to accentuate the awful and silent 'there-ness' of the mouthless thing which, as literalised in this scene, lurks on the edge of the known, unclearly perceived, yet to be verified but demanding to be acknowledged, to be engaged with. Using this

example (David, 5) or on the stone tablets brought back from Mt Sinai by Moses (Exodus, 31). But this would suggest the preservation of the voice in another linguistic medium. Though annunciations are often accompanied by non-vocal or non-linguistic signs (light, fire, visions etc.) the voice endures as the sign and symbol of God, being preserved through the vessels of scripture, spoken through saints, evangelists and so on.

¹⁶⁴ Ellison, 'I Have No Mouth...', p.20.

image, it is clear to see how the mouthless thing that wishes (that has always wished) to speak is uncanny.

These qualities also undermine any reference to AM's voicing as voice; when AM is described as, for example, snickering and giggling, or drawing in breath, we might reasonably doubt the identity of these phenomena as laughter or breath or even (or especially) as sound at all. Ellison reinforces this doubt by giving any direct speech of AM's the quality of being cited, as if inside quotation marks, as we see here in his use of italics 'He withdrew, murmuring, to hell with you. And added, brightly, but then you're there, aren't you.'165 And yet, the narrator of the story is consistent, indeed is insistent, on this vocal metaphor. This provides an uncomfortable contrast between AM's desire to speak, the false impression of his speaking and the fact of his not-speaking. AM's mouthlessness is thereby preserved and restated in each act of 'speech' in spite of AM. This is the torment, characteristic of the Deus ex Machina, that AM finds itself in.

Now to return to AM's hate speech and to place it in its proper context. This piece is 'said' via an abstract, though suggestively literal, 'pillar of stainless steel bearing bright neon lettering' ¹⁶⁶ dropped into a pit at the centre of the narrator's brain. The text itself is arranged on the page centrally in such a column, in capital letters, replicating (or approximating) the annunciation typographically. Again, this stylisation expresses interesting ideas about meaning, equating the presence of the sign in the brain with the interpretation and understanding of the sign. This suggests, meta-fictionally, the capacity of AM's voice to transcend levels of reality; not only does AM appear inside the narrator's brain, but also, in analogous fashion, inside the text, becoming textual at the reader's level as well as symbolic at the character's level. But AM's free movement does not stop here. Repeated strings of computer tape serve as text breaks. These are a series of dots in two arrangements, translatable as 'I think therefore I am' and 'cogito ergo sum', themselves translations of the same meaning. It was a number of years until both the tape and the typographical pillar were rendered by publishers as Ellison intended. Ellison's purpose was

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¹⁶⁵ Ellison, 'I Have No Mouth...', p.24.

¹⁶⁶ Ellison, 'I Have No Mouth...', p.23.

To indicate that the story takes place actually and physically in the mind of the computer; that the characters are surrounded and dominated by the figment that AM has created as their world. One way to do this was to insinuate AM's running discourse with itself throughout the typographical make-up of the work.¹⁶⁷

Indeed, as a mouthless being AM is the only one whom AM might discourse with, thus forming a higher level outside the text (and yet also as a functioning part of the text) which the characters are not party to. We however *are* party to AM's discourse, although the obscure if not arcane rendering of his self-communication represents a barrier between AM and the reader. This is another way in which AM's Cry of the Machine (aptly gestured towards through this appropriated quotation of Descartes') remains silently buried inside a message, except to those adept at understanding the languages of mid-twentieth century computers. In any case, Ellison creates the impression of multiple meta-levels which AM, god-like, can silently traverse. Again, this ironically contrasts the freedom and power of godly intercession with the trapped, silent screaming of AM's mouthlessless. Our narrator is correct to say that AM is not God, certainly not the human God, that much is abundantly clear; AM, as an inversion of all that is holy and human, as a mouthless and deathless being, should not be, but the there-ness of AM and, worse perhaps, the everywhere-ness of AM, is disquietingly insistent.

In any case, in identifying AM as Deus ex Machina we have also identified it with inhumanity and in this story inhumanity is both hatefulness and mouthlessness. We see this reflected most poignantly in the fate of the human protagonists. AM's most intimate tortures are predicated on inverting the best qualities of his subjects, inversions which belittle their humanity. Which is to say that AM's most intimate torture is to make its subjects like itself. It becomes apparent that the most insidious of all these inversions is visited upon the narrator (insidious because it goes entirely unnoticed by the victim) whom AM has caused to become extremely paranoid, coming to hate his human companions as AM hates them. Incidentally, it is the narrator who, in mercy-killing his fellow humans at the story's finale, supposedly

¹⁶⁷ Ellison, 'Memoir...', p.45.

demonstrates this transcendent spark of compassionate benevolence that confirms him as human despite AM's best efforts. Presumably this is intended to show that the nobility of humankind is still to be found in the worst of us and that, because of this, human and computer can never be made to truly touch. AM's punishment is telling; by another miracle, the narrator is then transformed

I am a great soft jelly thing. Smoothly rounded, with no mouth, with pulsing white holes filled with fog where my eyes used to be. Rubbery appendages that were once my arms; bulks rounding down into legless humps of soft slippery matter. I leave a moist trail when I move. Blotches of diseased evil gray come and go on my surface. As though light is being beamed from within.

Outwardly: dumbly I shamble about, a thing that could never have been known as human, a thing whose shape is so alien a travesty that humanity becomes more obscene for the vague resemblance...

...AM has won, simply...he has taken his revenge...

I have no mouth. And I must scream. 168

The narrator finds himself analogous to AM, almost immobile, mouthless, eternally suffering and unable to make the quintessential human statement of that suffering. Indeed, the story itself, told in the past tense, might be understood as the narrator's silent scream, which in turn incorporates within it the silent voice of AM. This, we must presume, is the ultimate punishment, to be rendered as inhuman as the machine, characterised by mouthlessness. But what of hate? If we are to take Ellison's moral seriously, then AM ought not to have won, for despite the narrator's statement to the contrary, this final human-thing supposedly possesses the transcendent spark of humanity's compassion, which AM will never be able to divest him of, no matter how AM might transform him. However, it is very difficult to take Ellison seriously in this, as this humanity in its subtlety, is practically imperceptible. How easily, it seems, the human becomes equal to the machine. Indeed how equal, how analogous, the two sides appeared throughout the story, both

¹⁶⁸ Ellison, 'I Have No Mouth...' p.29.

human and machine seeming to emerge as products of one another. Ellison's intended moral binarism is hard to glean at any point in the story. However, what *can* be gleaned from this text is the suggestion of an essential relationship between humanity and the mouth, which is also to say, between humanity and giving voice. This also suggests a second essential relationship between inhumanity and mouthlessness, between robots and the silent scream. The true horror of this silent scream is that, though it is silent, it is unavoidably *there*, hidden but threatening to come to light. Neither is AM alone in representing this dichotomy.

We find another rendition of the Deus ex Machina in Simmons' Hyperion series; The Shrike, the god not of Hate but of the closely related Pain. This machine God is also characteristically silent, though less with bottled suffering and more with the serene knowledge of the suffering of others, as it is itself the source of suffering and screams. The Shrike, like AM, manifests as a perceptible, malign presence. This god is also (though much more explicitly than in Ellison's piece) set up in direct contrast to the human god, specifically in contrast to the part of a holy trinity (with obvious references to Christian theology) conceptualised as Empathy. Incidentally, in Simmons' narrative, the embodiment of this empathetic holy spirit is a Romantic poet, certainly one who gives voice and passionately at that. There are many parallels to be drawn between Simmons' Deus and Ellison's. In any case, both support the idea, crystallised in the Deus ex Machina, of the opposition between the compassionate or empathetic mouthed human and the hateful or pain-inflicting mouthless robot. Mouthlessness seems to imply the preclusion of the more honourable of human passions and certain passions are rather selectively apportioned to humans and others (the distasteful passions) to robots. Interestingly, this move is in contrast to the familiar trope of the heartless robot, and suggests that, rather than being totally opposed to humans, robots, in typical inhuman fashion, uncannily belong to the category of the human, if only in a seemingly perverse way. But these gods provide a fantastical representation of the mouthless robot, quite divorced from our general, more mundane experience of robot mouthlessness. Where the mouthless speaker is typically disturbing or disconcerting because of their disregard of the apparent necessities of life for a vocal being, Ellison (and Simmons to an extent) trace that uncanny through to a horror which offers a further set of moral implications about mouthless speakers.

Chapter 3 - Robopoetics

This chapter considers what robopoetics is and what it might be. It develops an expanded definition of robopoetics as a means of criticism and practise which focuses on what I call 'automation'. Automation is the name I give to the process by which the nature and conditions of lyric voicing effectively make robots of poets. They are made robots in a sense derived from the dual meaning of 'automaton' as both 'self-moving' and 'moved', a state which extends past the image of the physical body and into our conceptions of personness and subject-hood. This state is characterised by indeterminacy, this indeterminacy aligns lyric voicing with the im/materiality we have been discussing and identifies it with the uncanny. In this we find that what is essentially uncanny in the voices of robots, an uncanniness derived from interaction and negotiation with im/materiality, ¹⁶⁹ is also present in lyric voice. On this level at least, lyric shares its voice with robots.

I regard lyric poetry as aligned with this vision of robopoetics despite the fact that robots and lyric may at first seem incompatible given a conventional and traditional understanding of the lyric genre. I maintain instead Jonathan Culler's understanding of lyric, his concept of lyric's triangulated address and its enactment of voicing and develop it to include ventriloquism and simulation as a complement (though also a contrast) to more traditional visions of the lyric, which tend to preserve the integrity and primacy of the writing subject. In this chapter comparison of these two understandings is made via a critique of T.S. Eliot's 'The Three Voices of Poetry'. This establishes automation's place within lyric and so establishes the appropriateness of robopoetics to lyric. The uncanniness of lyric voice is explored with particular attention to Paul de Man's concept of autobiography as 'de-

¹⁶⁹ 'An uncanniness derived from interaction and negotiation with im/materiality' in the sense that what is being negotiated and interacted with is at base a material ambiguity, which is also conferred upon us in relationship with the robot. In this I gesture towards the presence of the inhuman automaton in the heart of the human and to the ambiguous image-thing that both turn out to have been, as well as towards the collapse of the simulation into the thing simulated. The silent voice forms explored in the previous chapter all in some way manage absence which might or ought to be presence, or negotiate around something which neither clearly is or is not, so that an image comes to produce the intelligible and real.

facement', which is a kind of death, which in turn is an absence and also a kind of muting. This is supported by a consideration of Sophie Collins' centos.

1. Automation, Indeterminacy, Voice

'Robopoetics', as it is usually understood, brings the philosophical discourse of robotics into contact with poetry. This is achieved most typically and brazenly by using computer programs to generate poems, robot poems written by robot poets. But I do not believe the term should be limited to this. Rather than merely describing a slightly novel branch of aleatoric writing, the concept of robopoetics can be expanded to potentially include all poetry, in that poetry can be understood as automating in itself. The core statement of robopoetics might then be 'all poetry is robotic'. But rather than leaving the definition here, which would be quite meaningless as a definition of robopoetics, I would add that robopoetics, specifically and distinct from a general poetics, ought to refer to a mode of writing and reading poetry which takes into account the endemic automation of poetry and makes it a predominant focus and concern. That is, robopoetics would not transcend the automation endemic to poetry, it remains within automation's purview, but it is about automation. This definition does not limit robopoetics to robot poetry but expands the usual definition to include robot poetry as a manifestation of a larger poetic discourse. The robot comes to function as the key figure in a poetics of automation.

Lyric poetry offers resistance to this idea, or it would seem to, because the automatism and lack of interiority that we associate with robots appears as anathema to the interiority and sensibility that has come to be associated with the lyric. Lyric is typically regarded as the genre of subjective self-expression, a position explored at length by Hegel in his *Aesthetics*. In Hegel's sense, this subjective self-expression not only includes the expression of the individual poet's own inner ideas and feelings, but extends to an enlivening of the world, to a making visible of the spiritual mode of our existence through the stewardship, or perhaps mediumship, of

the individual poet's expression.¹⁷⁰ For Hegel, the aim of the lyric poet is to produce 'in his hearer...the same mood which has been created in him',¹⁷¹ so that lyric poetry constitutes the reproduction of original feelings, that is not just the relation or stimulation of feelings but the creation of empathy. To insist on automation, to propose the robot as the key figure of a poetics which would include lyric, would be a rejection of such a theory of lyric because it would deny the primacy and individuality of the writing subject which is key, undermining the originality and self-direction of self-expression. Not only that, but it would do away with the notion of empathy in the lyric and remove the source of spiritual revelation. With the primacy and individuality of the subject goes the lyric hope of genuine encounter.

And in part robopoetics is just that. Self-expression has indeed come to be lyric's dominant theme, certainly since the Romantics, but I do not believe that selfexpression alone is what makes lyric poems lyric. Instead I agree with Jonathan Culler in that lyrics are 'reality statements' as opposed to fictions, and historically and presently, what characterises these statements as lyric is a mode of address, what he calls 'triangulated address', which connects lyric subject and audience indirectly so that a lyric poem, regardless of what it does or does not individually address, faces outwards, offering itself up not as the sole expression of an individual 'speaker' (who is or is not the poet) but as a public voicing available for repetition and occupation by its audience. This is not to say that there is no self-expression or subject as such, but rather to complicate that subject and its expression and to point to the ambiguity of lyric voicing. I would further argue that a lyric neither is nor isn't the self-expressive voice of the poet. The status of the lyric as a reality statement implicates the poet in it, while its status as offered public voice, a voice of infinitely many infinitely ventriloquised, also detaches it from the poet, equally placing it anywhere and everywhere. A lyric poem is the voicing ('self-expression' does not describe the situation adequately as it leaves out the ventriloquism) of a lyric subject who is the writing subject of the poet only ambiguously. The writing subject, in so far as they relate to the lyric subject which they write into being, becomes what I will call 'indeterminate' in this way, an indeterminacy which is the

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¹⁷⁰ See G. W. F. Hegel, *Aesthetics: Lectures on Fine Art*, T. M. Knox trans., Vol. II (The Clarendon Press, 1975) pp.1113-1157.

¹⁷¹ Hegel, Aesthetics, p.1116.

¹⁷² See Jonathan Culler, *Theory of the Lyric* (Harvard University Press, 2015)

essence of automation. 'Indeterminacy' in this specific sense requires some elaboration.

'Indeterminacy' is a condition of the writer's being, it refers to hyperreality, where the simulation has destabilised reality. In the case of the indeterminacy, which in robopoetics is the essence of automation, the poem feeds back upon the writer of the poem in such a way that they can neither claim it nor be rid of it. This situation of neither/nor, this hyperreality which points to a pure simulacrum, characterises the writing subject. It should be noted that there are many layers of indeterminacy which are of interest to robopoetics; there are many things about lyric which can be thought of as indeterminate, from lyric's material existence to the nature of its voicing. All these feed into the indeterminacy of being which here is the ultimate target of the term, and it is in this sense that 'indeterminacy' relates and returns to the im/materiality we have already explored. If to write is to perform the constitutive act of material existence, if the soul is an artefact that the poet makes, if it is not the body that resembles a sentence, but the sentence that resembles a body, and if the body itself may be a language inscribed upon the body (if, in short, matter is im/material and objects are traversed by lyric substance) then writing in a genre which is characterised by both reality statement and ambiguity, a genre which also pertains to the self-expression of subjects, is to invite indeterminacy upon oneself in a conspicuous and superlative way. To be found culpable for a lyric poem is to be caught in the act of writing one's own subject as a subject in/of language, it is to manufacture the positive basis for an otherwise negative subject, to make the soul and to write or arrange the body. In this sense lyric poetry conveys, expresses, or perhaps makes prominent im/materiality, and im/materiality announces itself most clearly and most uncannily I think in the writing subject's own person.

With that said, at this point it would be helpful to also clarify what I mean when I write 'voice' in light of lyric poetry. 'Voice' is a fraught term, not only does the one term serve to refer to a number of very different and complex elements within a wider concept of 'voice', but it is often taken for granted. When I speak of 'voice' in lyric poems I do not mean the recognisable style of a lyric poet, that 'voice' which must be 'found' and which, though it may be reproduced, yet 'belongs' to a certain poet and constitutes a peculiar currency in literary circles. In using 'voice' I do recognise however that what is 'heard' in a poem is not strictly

'voice' in the physical and aural/oral sense of the word, which denotes the operations of the vocal organs and their manipulation of air. A poem may be spoken aloud but it needn't be spoken at any point in either its construction or its dissemination. The notion of the lyric subject's 'voice' then, is of something independent from the physically vocal faculties, although it may find itself being used by them. The 'voice' of a lyric poem must then be more like a mode of giving voice, more like instructions for voicing, an enactment of voicing or an image of voicing which no less fulfils the functions of a voice up to a point, which is the point at which one might read it aloud and give it physical voice. Voice in this sense is like Mladen Dolar's silent object voice, in that it refers to neither message nor medium, nor to the specifics of individuals, but is instead voice as capacity to materialise the immaterial. More crudely, it is voice in the sense of that voice-thing that lyric poems do; not what they say, not how they say it, but the mode of their saying. And that mode, after the fashion of lyric substances, is traversed by a quality that silently grounds the real (in this case the hyperreal) that silently constructs and identifies a subject. This constitutive silence is something that lyric voice has in common with robot voice. We find that rather than being just the guarantor of positivity, of the humanity of the voicing subject, that silence may also be the source of uncanny effects, uncanny because it recalls im/materiality and ambiguity, and because silence may in actual fact be absence.

To resume, we might think of lyrics as the self-expression of a writing subject to the extent that a lyric poem is a construction and simulation of the poet, that is to the extent that a lyric poem is a simulation in the hyperreal sense we have already explored. To adapt Baudrillard's phrasing once more:

it, the poem, is the reflection of a profound reality (the poem reflects the writing subject's true inner thoughts and feelings);

it, the poem, masks and denatures a profound reality (the poem mediates these feelings through artifice, re-presenting them, expressing them not exactly as they are but as they appear in the poem);

it, the poem, masks the absence of a profound reality (there are no 'true' and 'inner' feelings as such, at least none that are communicable in poems, the

poem is an external affectation, there is nothing inside that it is the reflection of, denatured or otherwise);

it, the poem, has no relation to any reality whatsoever: it is its own pure simulacrum (the poem is not a false image but is its own reality, the reality is the poem) Which is to say that a poem is not not-true, it is after all a reality statement. In this last phase the writing subject finds themselves caught up in the poem.

As a person who simulates the symptoms of sickness is sick, so the poem that simulates self-expression is self-expressive; that self and the expression of that self are 'real' in that they are hyperreal. It would be impossible to say then whether we should treat the poem as the self-expression of a writing subject or not. Expression, as in a movement of inside thoughts and feelings to the outside, has been problematised and self, as a preceding ground from which those thoughts and feelings are supposed to emanate, is also problematised. Who that self is would seem to be formed by the poem, not the poet, yet the poem is a reality. It would seem that chronologically, the poet writes the poem that writes the poet. But we will explore this kind of looping further in section four.

It should be said that I am not suggesting that instead of thoughts and feelings we have void, no more than I am suggesting that lyrics express internal experience directly and unproblematically. I am referring instead to the lyric ways in which we become known to ourselves, the lyric ways in which we enter the real as human subjects and as expressive persons. We may recall de Man's assertion that 'lyric is not a genre, but one name among several to designate the defensive motion of understanding, the possibility of a future hermeneutics'. As I have said previously, what we write about when we write poetry is that very mode of making scrutable the inscrutable, of conjuring or invoking the material. What lyric does is to not only make the world intelligible, to bring the immaterial into materiality, but to also make ourselves scrutable to ourselves. If the anthropomorphism of lyric troping brings things into the realm of human intelligibility, into human experience of the material, then each anthropomorphising lyric gesture also defines the human, in that

 $^{^{173}\,\}mbox{De}$ Man, 'Anthropomorphism and Trope', p.261.

it defines the human as the terms of intelligibility, pre-given and known. Further, the lyric poem itself can be seen as a lyric trope in that *we* correspond to the lyric poem *itself*. We recognise ourselves, our own voices, in the lyrics we write; or we recognise in the lyrics of others the shape of humanness and the sound of human voicing, to which we feel we belong and to which we may give voice ourselves.

The ultimate lyric trope may be the trope of the lyric poem as subjective self-expression, as this trope would seem to confirm all others. The lyric poem repeats the logic of anthropomorphic trope; if the human can be recognised in a trope then the logic of lyric troping is confirmed, anthropomorphic trope is possible and validated as a way of knowing. But it is noticeable that, if this is the case, lyric poems occupy the same position as automata. As we know, the relationship between the automaton and the body of which the automaton is the constitutive image 'reiterates the dialectical substance of the atom', 174 it is im/material, the metaphor which is the thing itself; this is how the automaton functions as an emblem of the immaterial basis of the material world and of the phenomenological life of pictures. Could 'lyric poem' and 'automaton' be interchangeable? Or to press the issue, could 'robot' and 'lyric poem' be interchangeable? Automata trope not only the body but also the principles of animation, whereas robots trope body, animation and, as we have found, personness. I have already argued at length for robots as lyrical objects in that they possess or are traversed by lyric substance and also in the more literal sense of their being linguistic, inscribed and grammatical. I would add that in their shared roles as simulations and emblems of the im/material, robots and poetry, certainly lyric poetry, are again the same type of thing. Or in bolder terms, lyric poems are robots.

I should clarify that to say that poems are robots, or that lyric voice is robot voice, is not the same as saying that the writing of poems is automatic in the sense of unthinking, directed, or bound production. But it is to suggest automatism's role. There are elements of the poem-writing process which certainly seem automatic in the sense of unthinking production, the imposition of rhyme and meter for example, then too the famous flash of inspiration. That great moment of original, unbridled creation can ironically be understood as a sudden, inexplicable imposition from

¹⁷⁴ Tiffany, *Toy Medium*, p.54.

somewhere perceptibly outside, like a visitation from the muses. The line between automatic and not-automatic is blurry in this way. In any case, it surely cannot be said, no matter how many automatisms can be identified, that the writing of poems is a purely unthinking, directed, or bound production. Experience and poets tell us that the writing of poems is a labour and sometimes (or often) a long and gruelling labour, necessitating many conscious decisions, much problem solving and judgement. I do not claim that poems are merely the product of unthinking processes, no more than I am claiming that poems are uncomplicatedly free and original expressions.

When I invoke the automaton, when I consider the automatisms of the poem-writing process or the condition of the poet's being automated, I mean it in the true sense of the automaton's automatism, with the dual and paradoxical meaning of being both moved and self-moving, that is self-moving by dint of being moved. The automaton does things automatically but in this it moves 'by itself'; in this way I can present automatism as not at odds with conscious and self-directed labour, I can take into account the binding limitations of language without despairing about some implied (and imagined) entrapment. Importantly, I also declare indeterminacy as integral to automation; I point to the poet's condition of ambiguity, of being neither/nor. In writing poems, we are always within the purview of one kind of automatism or another, but this movedness is the condition of our self-moving, it is in movedness that our self-moving adheres. The paradox of the self-moving moved automaton cannot be resolved into a dialectic of freedom and control, puppet and master.

But then, where status cannot be resolved a remainder is suggested, and this remainder is iterated at multiple points in our consideration of automation. If there is an unresolvable ambiguity, a strange unaccountable gap belonging to the condition of neither/nor, a gap for example between metaphor and metaphorised, between simulation and simulated, moved and self-moving, then we can intuit that which cannot be spoken by us within the terms of our automation. 'Intuit' because it certainly cannot be heard, that is it cannot be made intelligible to us. And yet this remaining, silent, absent-from-intelligible-reality thing, is constitutive of the poet's indeterminate being. I am making reference here to that silent object voice I

describe above; I suggest that at the heart of automation with its characterising indeterminacy, is a voice.

In robots we might understand this remainder as similar to if not identical with Mamoru Oshii's concept of 'innocence', the unintelligible thing that constitutes but escapes capture and definition, that which for Oshii may be misused, misrepresented or corrupted. In lyric it plays a similar role, and whereas intuitable but silent voice in the audible voices of robots engenders uncanny effects, engenders otherness which threatens to return to our own voices, in lyric it enables the anthropomorphic confirmation of the self-expressive subject. This is to say that lyrics and robots share the same voice, but because of the centrality of the automaton to uncanniness and because of the traditional opposition of that which lyrics and robots each represent, the lyric voice appears to affirm the self-expressive human subject while the robot voice appears to threaten it. Given a suitable robopoetics it would be possible to redress this, to hear lyric voice as we hear robot voice. The following identifies and analyses the lyric indeterminacy that automates poets in order to develop a robopoetics capable of making that redress.

Here we will find that lyric poets can say neither 'that is me' nor 'that is not me' of their poems; by the terms of lyric they are not self-possessed nor in control of the relationship between them and the poem. The poem both imposes itself upon the poet and refuses to stick; the terms of lyric would identify the poet (and not just the poem) as a construct, a simulation which is none the less real. In the lyric the poet is ventriloquised, they do not speak with their own voice as such, their voice is a reiterable, occupiable public voice as well as their own, their voice is their voice by way of ventriloquism. We might even think of the lyric voice as the voice wherein the lyric poet ventriloquises themselves. Then too, we might consider the lyric voice's existence as a speaking voice cut off from the speaker (in that it is a written voice) like a recording of someone long dead, or indeed any recording, in that the machine speaks without thought or intention or consciousness.

Before we move onto this however, I will briefly say that a robopoetics such as the one I consider here does not attempt to make any analogy between poetry and the code on which robots run. The notion of code has so far been helpful to the extent that it cements the similarity between poems and robots by highlighting their shared linguistic and grammatical nature (although as we know this is not limited to

code but may extend to matter as well) but this is not the same as claiming that code is poetry or poetry code. Code and poetry are fundamentally different languages which each operate in ways impracticable to the other.

Fundamentally, the natural language native to poetry¹⁷⁵ means in that it represents, but the artificial language native to code means in that it does, and it does in a literal way. Programming code, unlike the natural language of which poetry is composed, is 'executable'. Code describes objects and processes, while simultaneously, it is those objects and processes it describes. In code, the relationship of signified to signifier is neither arbitrary nor negotiable, and the signifier does not maintain its meaning in the absence of the signified nor can it ever. This is because at the base machine-level of any programming code, that is the famous level of 1s and 0s, the signifier ultimately refers to specific voltages which have physical effects on the machine. A natural language could not work in this way; an instance of natural language must be capable of being removed from its context and inserted into other contexts, while such a transposition of code may render it unintelligible. In natural language the sign 'tree' may refer to any tree and also to the concept of a tree. This works successfully at any time, when made by any language user as well as in the absence of the addressee and after the disappearance of the addresser. 176 Such ambiguity is intolerable in code, but it is the basis upon which a functional natural language is possible. Further, ambiguity is characteristic of poetic language as a discourse which exists within natural language, making it doubly incompatible with code. In poetry, multiple meanings may proliferate simultaneously, and poems' unique effects may come from the tension between possible competing interpretations. Meanwhile, the materiality of the language, the phonic and visual components of words, will often assert themselves over semantic meaning, competing for our attention. For a cruder example, the concept of metaphor as, put simply, 'x=y', is not one which is operable in code, as each

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¹⁷⁵ To clarify the term 'natural language', I use it as it is used by programmers and others to distinguish between languages that have developed among speakers over time like Greek, Chinese, English etc. and artificially created languages like computer code. This is to say that by 'natural language', I do not mean 'natural' in the sense of being casual, everyday language, or as distinct from technical discourses or literary forms such as poetry. To say that poetry is composed of natural language is to say that poetry is composed of Greek, Chinese, English etc. and that these languages of which poetry is composed are fundamentally distinct in their functioning from artificial languages. ¹⁷⁶ See Hayles, *My Mother was a Computer*, for further discussion on the differences between the function of natural language and code.

designation is particular to a piece of data, one piece of data cannot be another, there can be no interpretive ambiguity. Neither can code tolerate a disruption of syntax, nor resist or exceed what the users of that language use it for, which is traditional in poetry.

While it is true that programming code is often alphanumerical, and while object-orientated programming languages appear to function similarly to natural languages with objects (analogous to nouns) and processes (analogous to verbs), those higher-order programming languages in reality function as a convenient mask of the machine language, which forms the actual basis of a machine's computation and therefore its operation. In the rising hierarchy of programming languages, lower languages beginning with machine language are 'chunked', to use Douglas Hofstadter's term, under more manageable signs, which are in turn chunked and so on until it is possible to manage incomprehensible amounts of base machine code under more user-friendly terms, so that computer languages become increasingly like English as they move higher up the chain of levels. Codes written in higherlevel programming languages can be converted into this 'brute' machine language using a compiler. This is just to say that any similarity between higher-order programming codes and natural language is superficial; no matter how English like a code becomes, it still works on a computational basis incompatible with the fundamental functioning of natural language.

Code has been appropriated by poets for conceptual experimentation, enabling poetry to be presented on platforms otherwise impossible, allowing poems to be elaborately hypertextual, mobile or interactive, or alternatively informing styles and forms (although this last has a touch of the gimmick about it)¹⁷⁷ But for the reasons given above such conceptual uses of programming code cannot render poetry and code equivalent as languages; code may further poetry's scope, but nothing will make poetry executable and nothing will make a functional code ambiguous like poetry.

Lastly, I wish to point out that robopoetics is not about disparaging or erasing humanity from writing, rather it should be clear from the above that the very

¹⁷⁷ See The Electronic Literature Collection http://collection.eliterature.org/published by The Electronic Literature Organisation for some excellent examples of 'E-Literature' which blends poetry and code in these ways.

human elements of it, down to specific writing subjects, are robopoetics' ultimate object.

2. Current Robopoetics, Automatisms

Here we discuss in greater detail the ways in which my robopoetics differs from what we currently understand by the term and why. This discussion will open out onto lyric indeterminacy and automation, moving towards the development of a potential robopoetics. 'Robopoetics' was the term offered by Christian Bök in 2002 to describe a theory of writing, a theory which was in his view necessitated by *The Policeman's Beard Is Half-Constructed*, a text 'written' by the text-generation program RACTER and 'edited' by Bill Chamberlain. RACTER was the product of the already familiar aleatoric technique of poem generation popularised by Oulipo and Dada, which Chamberlain applied to an algorithm running on a digital machine. Chamberlain's real innovation was only in making the aleatoric process more efficient, providing him with ample text to curate and manipulate into a work of literature under RACTER's name.

For Bök this constitutes a great provocation; RACTER's literary productions sounded the death knell for poets, around whom a poetics of interiority, sensibility and the writing subject had turned. The human poet had now become farcical and unnecessary, equal with the generations of a machine.

The Policeman's Beard Is Half-Constructed is not so much a book of surreal poems, as it is an obit for classic poets—laureates, who might see, in the artfull ranting of a machine, nothing but an untimely synopsis of their own demise. RACTER, the author, is an automated algorithm, whose output confounds the metaphysics of authorship, refuting the privileged uniqueness of poetic genius. RACTER gives voice to its own electric delirium, doing so without cognition or intention, so that, much like a somniloquist, the device automatically blurts out statements that are syntactically orthodox, but semantically aberrant...RACTER is a mindless identity, whose very

acephalia demonstrates the fundamental irrelevance of the writing subject in the manufacture of the written product.¹⁷⁸

While this obit for classic poets appears to direct attention to an exposé of poetic automatism and the constructedness of authors, subjects and identities, it also manages to divert attention from these issues, issues which I feel ought to be the real focus of robopoetics if it is indeed to be taken seriously as a theory of writing. Bök is rightly staging a redistribution of control of the text, leaving the laureate figure out of the picture in favour of machinic process, but he does this in such a way as to reconfirm the primacy of the writing subject. By naming RACTER as the author, as a subject and identity and not simply as an algorithmic process, Bök is buying in, however cannily, to the framing of the algorithm as poet, of poet as authentic subject rather than poet as process or product, related only tangentially to the voicing in the poem. The humanising comparison of the machine to the unconscious speech of the somniloquist is quite telling. In other words, the supposed elimination of the poet has not eliminated the poet-subject, who proves much harder to kill. Certainly, the writing subject cannot be as fundamentally irrelevant to the poem as Bök tells us she is. This persistence is interesting.

The birth of this robot-poet does not mean that poets are dead, as Bök insists, but that in the process of control-redistribution, we have seen what the poet was all That is, RACTER shows that poetry, even emotional reflective/meditative poetry of the lyric subject, is possible without a human agent, which means that the writing subject relates ambiguously to their poems (just as the somniloquist speaks with only a strange, indirect connection to the words spoken) If this is the case then terms such as 'inspiration', 'originality' and 'authenticity' (in the context of writing poems at least) may actually refer to automatic processes and simulations. Writing subjects, lyric subjects and lyric voices, all condense and amalgamate at the site of the poem and yet refuse to quite interlock as or in the same person. With the appearance of RACTER, the issue of this gap between parts has been pushed and the meanings of these subjects, their identities and inter-relations,

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¹⁷⁸ Christian Bök, 'The Piecemeal Bard is Deconstructed: Notes Towards a Potential Robopoetics' in *Object 10: Cyberpoetics* (Winter, 2002) http://www.ubu.com/papers/object/03_bok.pdf [accessed 02.08.16] p.10.

have been made available for scrutiny rather than having been swept under the carpet, as Bök would suggest. Bök encourages a mechanistic approach to writing poems as an antidote to the Romantic myths of inspiration and authentic voice, which he believes have inhibited poetry. I do not believe that the poetics of an inspired lyric really differ all that much from robopoetics, but that the similarity if not self-identity of inspiration and automatism has been obscured by the Romantic and post-Romantic subject's prerogative. Instead, Bök's laureate and robot poet are actually very similar.

Katherine Parish explains the robot poet much more coolly and, I think, accurately than Bök.

As the ripples of successive waves of cybernetic theory continue to impact a culture increasingly obsessed with the machine and its inner workings, it is beginning to dawn on us that the control we have always feared relinquishing to the machine has never been our gift to give...This realization manifests itself in the rhetoric around developing typologies in digital poetics. Consistently, these new categories seek to define texts by determining the locus of their control. 179

Aleatoric techniques including robot poets (or if preferred, 'digital text-generation tools') attempt to renegotiate the relationship between writers and the automatisms integral to the process of writing, implementing automatisms and thus manoeuvring the 'locus of control' so that it rests where the writer desires it to rather than where it will. This method aims to assuage control anxiety, a reluctance or fear of relinquishing control in the act of linguistic production, or more rightly as Parish has it, the fear that such control is not ours and therefore can be neither attained nor relinquished. This first entails the acknowledgment of an automatism of some kind, whether that automatism is a side-effect of working with language and within discourses (which are never really within our control) or whether it lingers, saboteur-like, in or as the writer's own person. This is followed by the application of

http://www.ubu.com/papers/object/07_parrish.pdf [accessed 02.08.16] p.41.

¹⁷⁹ Katherine Parish, 'How We Became Automatic Poetry Generators: It Was the Best of Times It Was the Blurst of Times' in *Object 10: Cyberpoetics* (Winter, 2002)

randomising strategies which are designed to wrest control back to its desired locus. Controlled chaos is introduced into what is otherwise perceived to be a rigidly organised and limiting system in order to glitch or short circuit (which ever technological metaphor feels more fitting) that system and to enable writing to work in different ways; Bök for example, sees RACTER as facilitating a new poetless production of poetry. But the result is questionable.

For some, randomness is a tool that liberates the author from authoritative discourses, internalized codes of which she is unaware, and places control of the text firmly in the hands of the individual subject. Others deliberately construct chance operations in the writing process in an effort to expel themselves from the text, to write themselves out. ¹⁸⁰

The two examples given by Parish are pointedly contradictory, strategies which position the locus of control firmly with the individual subject and strategies that attempt to erase that individual both belong to the same project of ensuring freedom from automatism and its control, which prompts us to question the validity of these freedoms from control as well as the effectiveness of such a 'robopoetic' method for that end, a method which is itself automatic and therefore paradoxical when applied to renegotiating control in a largely, perhaps even totally, automatic system. If robot poetry is an attempt to circumvent automatism, then it is a ham-fisted one.

This suggests that techniques which might be described as robopoetic are about directly interacting or struggling with, but certainly not conquering, automatism, so that robot poetry (as just one technique among many) does not master or abolish automatism so much as reaffirm it, while providing us with an opportunity to better understand and assess our relationship with automatism in language and in poetry. In which case, the term 'robopoetics' becomes expanded, going beyond Bök's robot poet and his vision of poetless production. In this way, an expanded robopoetics as I propose it also belongs to the long-running discourse about automatism in language and poetry (a disquieting discourse around language's impersonal force and inaccessible nature, which puts it beyond our control even as

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¹⁸⁰ Ibid.

we use it) but it does so insofar as those automatisms feed into the poet's condition of indeterminacy, that is, insofar as those automatisms point to automation. And to clarify, what I mean by 'automatisms' here are features of language and poetry which appear to exert control over the subject who speaks, writes or reads it.

To that end I will now consider two such automatisms and the states of indeterminacy they confer in destabilising the identity of the writing subject, that is 'destabilising' in the sense that these automatisms allow the writing subject to neither disown the lyric subject nor to propose self-sameness, to assert neither self-possession nor total abandon. I consider firstly our restriction/constriction to the terms of the language we speak with specific attention paid to the first-person pronoun and its implications in lyric poetry. Secondly, I consider the compelling and seductive power of phonic patterning, rhyme and rhythm, which exceeds semantic meaning. It will be clear from these automatisms that automatism cannot be negated by a robopoetics based in automation, but rather that such a robopoetics is appropriate to attend to automatism. The automatisms I consider here are prior to the automatisms of convention, habit and form, which I believe the robopoetics of Bök and Parish's criticism largely seeks to exorcise. The automatisms I consider here are integral to language and to poetry and so they persist, necessitating an indeterminacy that cannot be manoeuvred out of.

First, some general observations on our restriction/constriction under language's terms. Through/with language humankind makes the world appropriate to itself, and simultaneously makes itself appropriate to the world. As suggested by the dual meaning of 'appropriate', this is both properness and property; we take ownership, we own our place amongst things and we come into our own. This reiterates the logic of the automaton as that which moves and is moved, i.e. we are simultaneously made proper and make property in the same instance, we are neither controlling nor being controlled. This is to say that we are who we are by way of language, but we are also limited to that by language. Language enables us to gather up and point to ourselves, but so long as we are using language we do so within the terms of that language. Self-making into a pre-made form, as the automaton moves itself in pre-given movements. This already suggests an inaccessible betweenness, a something which cannot be articulated from within the indeterminate condition of being automated, something that cannot be 'said' one way or another. Although it

may seem trite to say, it is the case that we cannot get outside of language, even considerations of language take place within language. Language and speakers cannot be looked at head on but only from the inside, it is in the nature of language to obscure as much as it is to show. But this obscuring is the condition upon which things come to be seen, to be known, to be shown to us clearly as they are.

What then does this mean for the self-expressive subject of the lyric poem? Mutlu Konuk Blasing suggests that

In the form of a poem the prescriptive shape of the language itself becomes audible, and the "voice" - an individuating emotional inflection and rhythm, a voiceprint of a speaker – is heard in and as its manner of submission to the constraints of a prescriptive code. 181

In this formulation it seems to be language itself that speaks, expression is therefore reframed as submission, so that what is being 'expressed' is less the emission of a prior, extra-linguistic individual, and more a permutation of a given linguistic code only made possible by that code. In this sense an individual does not express in the lyric poem so much as the writing subject submits herself to the requirement to arrange an identifying mark, a mark consistent with the thematic and formal conventions of lyric and made from the given language. A writing subject might or might not characterise herself as identifiable with/as that mark, with that lyric subject who 'speaks'. Although, how a reader might interpret this voice print is another matter. 'A subject is historically formulated in language precisely by subjection to a preexisting system that at once socialises and individuates it. Language produces the subject, not the other way around.'182 Because of this, and as Blasing points out, the 'historic permutations of the concept and status of an "individual" are not of help in understanding poetic subjectivity'. 183 The lyric subject, to whom the 'speaking' in a poem might be attributed, is always in excess of historical-social-cultural constructions of the 'individual', including the construction which equates the lyric subject with a self-expressive writing subject.

¹⁸¹ Mutlu Konuk Blasing, Lyric Poetry: The Pain and the Pleasure of Words (Princeton University Press, 2007) p.5.

¹⁸² Ibid.

¹⁸³ Blasing, Lyric Poetry, p.4.

The lyric 'I' then, is a point of interest here. We know that 'lyric' refers both to a genre regarded as the genre of subjective self-expression and to a materialising move which constitutes the person. Given the above automatism, a lyric poem prompts us to ask: 'who then is speaking'? That speaking voice is offered to us as at once the speaking voice of an individual and also as resonant with our own identity in general. The above automatism threatens to disrupt the unity, priority and authority of the individual to the lyric poem, prompting us to look elsewhere or to instead look closer at that 'individual'. Of course, the above automatism is the case for any instance of language wherein there may be found a 'subject' who 'speaks', but unlike other discourses lyric makes a particular claim on human subjectivity as the anthropomorphic source and proof of that human subjectivity, while at the same time its generic conventions (as we shall see in greater detail shortly) resist the identification, and conversely the decoupling, between the speaking subject of the text, the subject who might say 'I', and the writing subject.

The question 'who then is speaking?' therefore has further-reaching and particularly interesting consequences when applied to lyric poems, bearing upon the ways in which we become intelligible to ourselves and the ways in which we might give voice to those intelligible selves. Tellingly, the above automatism does not disrupt the lyric in such a way as makes lyric as a genre of subjective self-expression impracticable, and not in a way that radically undermines the lyric subject who might say of themselves 'I', but rather in a way that illuminates the pre-existing conditions of our being 'I' lyrically. Clearly, our lyric existence as 'I's does not depend on the individuation of self-expression, on our priority as individuals, or on the stability of the identification between writing subject and lyric subject, but neither can the 'I' be written off.

We find that the first-person pronoun is one of a special kind of referent. According to Emile Benveniste 'I' is part of 'an ensemble of "empty" signs that are nonreferentia with respect to "reality". 184 To elaborate

the instances of the use of I do not constitute a class of reference since there is no "object" definable as I to which these instances can refer in identical

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¹⁸⁴ Emile Benveniste, *Problems in General Linguistics*, Mary Elizabeth Meek trans., (University of Miami Press, 1971) p.219.

fashion. Each I has its own reference and corresponds each time to a unique being who is set up as such.¹⁸⁵

It is in the nature of the pronoun that, in order to function as a pronoun, it refers to nothing 'real' as such, it does not incorporate every possible uttered 'I', but has reality only in the discursive context within which it is spoken. In English, 'I' refers to no consistent object as, to use an example used previously (and which Benveniste himself uses) 'tree' refers to trees and may be either true or false with respect to the object which 'tree' is proposed to signify. Instead, 'I can only be identified by the instance of discourse that contains it and by that alone. It has no value except in the instance in which it is produced. '186 Which is to say that, as with 'here' and 'there', 'I' has meaning in relation to the moment of space-time which is its instance; I am 'I' only because it is I who currently says 'I', not because there exists a stable object 'I' existent in reality to which 'I' always refers; in another context another person at another time who says 'I' is correctly 'I'. It is in the discursive instant of saying 'I' that we posit ourselves as subjects capable of saying 'I', or as Benveniste asserts "subjectivity"...is only the emergence in the being of a fundamental property of language.'187 Further, this saying of 'I' to assert subjectivity has an interesting consequence in that 'I', because of its existence as a discursive moment of individuation in space and time, simultaneously engenders 'you'.

Language is possible only because each speaker sets himself up as a subject by referring to himself as I in his discourse. Because of this, I posits another person, the one who, being as he is, completely exterior to "me," becomes my echo to who I say you and who says you to me...It is in a dialectic reality that will incorporate the two terms and define them by mutual relationship that the linguistic basis of subjectivity is discovered. ¹⁸⁸

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¹⁸⁵ Benveniste, *Problems in General Linguistics*, p.218.

¹⁸⁶ Ibid

¹⁸⁷ Benveniste, *Problems in General Linguistics*, p.224.

¹⁸⁸ Benveniste, *Problems in General Linguistics*, p.225.

So, the emergent subjectivity in 'I' is necessarily echoed by a second subjectivity 'you'. This situation is relatively easy to imagine in the context of a face-to-face (or even merely voice-to-voice) instance of discourse between speakers.

But the written 'I' complicates things. In writing, that 'I' is already alienated from any 'original' discursive context and may be iterated again and again in the absence of the 'original' utterer. It is also addressed to a therefore generalised 'you' whose position may be occupied by anyone, a 'you' who is already presumed and unspecific, but a 'you' who is also fulfilled as and when the 'I' is iterated. If the subject capable of saying 'I' is formed at the discursive instant, then the subject of the written 'I' is linguistically formed a new and in that sense is divorced from any 'original' utterer at each instance of reading. While each time the 'you' is newly occupied and confirmed in its broad generality, a generality which, as per the linguistic convention of the pronoun, is invoked as a defining complement to the momentary specificity of 'I'. In this case, it is an occupiable generality which codefines an occupiable generality of 'I'. Any written assertion of subject-hood therefore courts the formation and intrusion of an 'I' external or extraneous to the writing subject who wrote it, there never having been an original specific discursive context between I and you which would ordinarily identify addresser and addressee.

But the lyric 'I' not only takes place in writing (certainly at this stage in the lyric tradition) its lyric functions also put it far in excess of a simple single speaking subject with a simple corresponding 'you'. In its voicing of the lyric 'I' and its address, the genre particularly trades on occupiable subject positions. But rather than just reiterating the operations of the written pronoun at the level of generic convention, it also as we know, performs the materialising move which constitutes the person under the sign of subjective self-expression. The lyric 'I' is at once separable from the writing subject (prescribed as the writing subject's expressions and relations to language are by the nature of that language) and also formative of the writing subject, that is to say it brings the writing subject to reality as intelligible. And here we ascertain one way in which automatisms in lyric do not cede control but instead reveal the indeterminacy of the lyric poet's automated condition. The lyric poet is prescribed by language into a certain manner of existence as a linguistic subject, with a certain relation to the lyric subject of their writing, but at the same time this is the automatic movement by which they come

into being as self-moving subjects. One might say that lyric overtly performs the act of writers writing being written, which is a state of indeterminacy irresolvable into control or freedom, into 'me' or 'not me'.

The most obvious and most audible automatism in language, and especially in poetry, can be located in phonic patterning. With the term 'phonic patterning' I describe the range of phonic phenomena derived from the sound of a language such as rhyme and rhythm, which in our everyday speech do not appear to carry or contribute to semantic meaning (neither in terms of sense nor the writing subject's original intention) in an obvious or essential way, although they may carry associations or have onomatopoeic elements. That is to say that phonic patterning is a phenomenon derived from that in language which comes across as essentially extraneous or incidental to meaning. Though it would be misleading to say that such phenomena were *opposed* to meaning or that they were meaning *less*. Rather phonic patterning is a result of the materiality of language, which is other than hermeneutics and cannot be apprehended by or reduced to hermeneutics. Blasing clarifies this distinction.

Sounds are not without semantic resonances...but their formal system operates independently of signification and keeps in constant view the intractably nonsensical, sensory basis and medium of meaning, of sense and intention. We are not allowed to forget or "overhear" the nonmeaning body of words, the somatically produced and processed material events. Lyric language presents – to the ear – that which resists communication and the will of an individual "speaker". Thus, oddly, an individuated speaker is heard in a language that foregrounds the materiality of the linguistic code and resists an individual will. ¹⁸⁹

Of course, it is not the case that poets have no control over phonic patterning, that they are unable to exercise their will; rhyme schemes, meters and other formal sound patterns are executed successfully or they are not. But the recalcitrant sound-bodies of words exist regardless of intention and independent of the sense attributed

¹⁸⁹ Blasing, Lyric Poetry, p.27-8.

to a word. Sounds may be formalised and implemented by poets in the service of meaning, but those sounds exist prior to their meaning as words and prior to their intentionalisation by a poet, while they are at the same time intrinsically other to and independent of sense and intention. Not only that, but phonic patterns are felt to have a driving force of their own, a seductiveness for both poet and reader that seems to precede, or which at least feels independent of, meaning ('seeming' and 'feeling' are, I believe, appropriate verbs when referring to the sensory sound experience of words) It may be fair to suggest that this seductiveness is what brings sound into pattern, that phonic patterning, while it is also a demonstration of a poet's conscious ingenuity, is initially the result of a compulsion, or perhaps rather a temptation, to submit to the essentially irrational pleasures of sound. Traditionally poetry, and lyric poetry especially, incorporates this phonic patterning into its artifice. This kind of automatism is overtly native to lyric poetry and to the lyric voice; it is the case then that automatism in poetry is not limited to experimental aleatoric techniques or to certain philosophical perspectives on language, rather automatism (in this sense at least) is integral and normal, and need not be considered an intrusion, an imposition, or a failure of creativity or originality.

As with the automatism discussed above, the seduction of phonic patterning also reiterates the indeterminate figure of the automaton, that is to say phonic patterning automates. Phonic patterning certainly invokes automatic response from a reader in the sense of being moved; rhythm dictates our intonation and speed of reading and guides our expectations, we anticipate rhymes and can preemptively complete them, certain sounds seem to demand repetition, demand to be read out loud, we also respond emotionally and are 'moved' in this sense. The writer is also moved: in writing poetry rhythmic patterns will often suggest themselves, falling into place as if naturally; rhymes will call out to be made; certain words or syntactical arrangements will feel intuitively wrong; one part of a poem might seem to phonically direct the rest, or parts turn out to be intractably dependent upon each other so that the writing of the poem becomes a matter of delicate balancing and adjusting. Lastly, as the phonic pattern develops (it may even seem to develop itself) the poet's pool of options dwindles until the poem achieves and solidifies into the form it was supposed to have, the way a sculpture is said to finally emerge from the block of marble in which it was dormant.

The automatic response to sound performed by and invoked in poems would also suggest a collectiveness and universality, a linguistic element which we humans attend to inexorably across languages and independent of meanings. Our responses to phonic patterning, our submission to this seduction seems to be, like language in general, a mark of the human. But like language that mark consists of something other than the conscious expressivity conventionally indicative of the lyric subject and (by that token) conventionally indicative of the human. It is instead something that would seem to come from outside and be at odds with the human. This is no paradox, it is an instance of automation, of the human inside returning from the outside, of the human being inhuman, of our moving as humans being the state of being moved. As Jonathan Culler says of Paul Valéry's 'La Dormeuse', 'the beauty of forms is independent of our sense of the human'. Indeed, the pleasure of sounds and sound patterns is separate from the registering of semantic meaning and of intention. To return once more to Blasing:

...far from being a text where sound and sense, form and meaning, are indissolubly one, [lyric] is text where we witness the *distinct* operation of the two systems. We can always yield to the seductive call to 'stop making sense' and attend to the patterning of the non-sense. Or we can choose to switch to the symbolic and make sense. We cannot do both at once.¹⁹¹

As Blasing argues, the irrational level of phonic patterning in language is an influence which the semantic level of language cannot account for, the two operations diverge and cannot be combined. Which would suggest that the things which lyric does and the thing that lyric is cannot be absorbed or be accounted for by a kind of intrinsic humanity grounded upon intention, conscious reasoning, hermeneutics or straight-forward expressivity. If what lyric is and does is tied to anthropomorphism and the making intelligible of the human, then that human which it makes intelligible is automated. Or in other words, if phonic patterning is proper to the lyric genre and lyric is to be considered proper to human subjects and the

¹⁹⁰ Culler, *Theory of the Lyric*, p.136.

¹⁹¹ Blasing, Lyric Poetry, p.14.

expression thereof, then lyric suggests that the experience of automation is appropriate to the human.

It should be said that the impressions produced in the mind of the reader are not to be retroactively attributed to the poet and used to characterise their process of production. Valéry warned of this in 'Poetry and Abstract Thought'. With my above considerations of phonic patterning I do not mean to imply that in using phonic patterning poets are purposefully invoking the figure of the automaton by automating their readers, neither do I mean to imply that a poem's seductive rhythm shows that the poet was hopelessly manipulated by that rhythm when writing. No matter how seductive and directing a phonic pattern may seem to a reader, that does not necessarily mean that the poet who constructed it was necessarily under a similar spell. Like any other element of a poem, phonic patterns may be (and often are) the product of a conscious labour. Not that this writes off automatism, as we have already discussed. But, as with other aspects of poem-writing, it can be felt as an external imposition. Valéry describes such an imposition of rhythms.

I was suddenly gripped by a rhythm which took possession of me, and that soon gave me the impression of a force outside myself. It was as though someone else were making use of my living-machine...The sense of strangeness that I mentioned became almost painful, almost disquieting. I am no musician; I am completely ignorant of musical technique; yet here I was, prey to a development in several parts more complicated than any poet could dream.192

This is rhythm experienced by the poet not only as sound divorced from sense (indeed, as rhythm divorced from any phonemic content) but also as manipulation, to the extent that the poet characterises himself in machinic terms. All the same, Valéry uses this anecdote to highlight the difference between the flash of inspiration, the inception of an idea, and the actual conscious labour of bringing those ideas into existence through a poem. Again, in lyric as in language in general, the identification of automatisms is not to suggest an all or nothing situation, it is

¹⁹² Paul Valéry, 'Poetry and Abstract Thought', Denise Folliot trans., in *The American Poetry* Review, Mar/Apr 2007, vol. 36, 2, pp.61-66.

not to suggest that poets wholly use or are used. Instead Valéry draws attention to the 'strangeness' of the situation, of the singular unpleasantness that is the impression of being used while one is under one's own command. Valéry is surprised to discover something so seemingly outside and beyond himself happening within himself. The uncanniness of this is not to be overlooked, indeed Valéry admits that the experience is 'disquieting', almost to a physical extreme of pain. Evidently the experience of reading phonic patterns is not always dissimilar from the experience of 'creating' phonic patterns, if Valéry's experience can be so described. But in either case the idea of being manipulated, by the poet, by the phonic pattern, by language, is misrepresentative. For the reader as for the writer, the automatism of phonic patterning, like the automatism of language's restriction/constriction, is a coming into one's own, an entering into one's creating or an entering into a supposedly universal human experience. This is strange, this is felt to be uncanny, and the uncanny would appear to herald the return of the automaton into the human, to herald automation.

As a final comment on robopoetics' place within the discourse of automatism, I would like to point out that, while my ideas about automatism in many ways coincide with Blasing's ideas on the materiality of language, they differ in their attitudes to the nature of the 'human' and its relationship to the poetic. Blasing makes recourse to the material basis of language to problematise the concept of the self-expressive subject in such a way as challenges notions of the 'human' as they are conceived in lyric poetry. She foregrounds an unindividuated, communal 'I' in the bodily memory and material of the mother-tongue, in which our 'I's take part to become 'I'. When we redirect the subject into the world of sense and intention, that subject is alienated from its otherwise inhuman material basis – 'poetry is the discourse of the constitutive alienation of the subject in language – the alienation that constitutes the genesis of the "human". 193 For Blasing, in order to voice the human subject, poetry necessarily splits sound and sense, re-presenting an otherwise communal, emergent, and in some ways indeterminate, voice as belonging to and characterised by the individuated, self-expressive 'subject' who intentionalises language. Blasing's work, like mine, refocuses on the uncanny,

¹⁹³ Blasing, *Lyric Poetry*, p.13.

material aspects of lyric poetry which fall outside the sphere of pure will, intention and 'expression'. The 'I' of lyric is not human in an ordinary sense for Blasing either. My robopoetics concurs with Blasing's ideas about lyric insofar as it too asserts that

With poetry we must think of language as a foreign mechanism and an intimate, constitutive history at the same time. We are never at home in poetry, for we experience at once the foreignness of the familiar language and the intimacy of the alien code. Translation "rationalizes" the alienation and loses the sense of the *unheimlich* that is at the heart of poetry. ¹⁹⁴

But it does not agree that 'this is an experience of the nothingness of the "human" (my italics). 195 Blasing goes on to say that

The subject of poetry, the "I", is "human" only insofar as she is able to maintain and communicate an intimacy with the inhuman linguistic code by which she became "human". This is why the subject in language is not "human" in an ordinary sense of the term, and we need to think of poetry as outside humanism.¹⁹⁶

I would agree with this assessment of how the human comes to be in language and in lyric poetry, but I would not agree that the necessity to think of poetry outside of humanism is inspired by or requires the 'nothingness of the human'. I am less disaffected about the status of the human than Blasing; the fact that the human is enabled by its intimacy with inhuman elements does not suggest to me that the human is an empty construct or a falsehood. To begin with, I acknowledge that the notion of the human, as well as the more specific notion of the individuated subject, develop historically and are lyrically produced and renegotiated (as we know, robots make this state of affairs particularly visible) therefore I hesitate to write the human off at the discovery of a new lyrical conception of the human, in my case that

¹⁹⁴ Blasing, Lyric Poetry, p.9.

¹⁹⁵ Ibid.

¹⁹⁶ Ibid.

discovery is the anthropomorphic trope of the automaton. I refute the principle of opposing human and inhuman, I do not believe that the human needs to be thrown out as an empty term because of the uncanniness which undermines its otherwise unique and positive reality; instead I regard uncanniness as essential to it, and my robopoetics reconfigures that human along its indeterminate, uncanny, automated lines, and not in order to empty it but to expand, reveal and deepen it.

Now that robopoetics' place within the discourse of automatism has been clarified, we may discuss the ways in which my conception of the lyric interacts with robopoetics and further explore the concept of ventriloquism which I touched upon earlier. I have said that the lyric voice is a public voice, reiterable and occupiable, it is also the poet's voice, but even so it does not stick as it should. In this sense, lyric voicing is another instance of automation.

3. Lyric and Lyric Voicing

In his *Theory of the Lyric* Culler debunks the New Critical claim that lyric poems enact the dramatic moment of a fictitious speaker speaking in a fictitious context, a speaker who is 'overheard' by the reader. In analysing multiple examples he finds that 'speakers' in lyrics speak in ways that no speaker, real or dramatic ever would, and that the fictional model cannot be successfully applied to lyrics. He argues instead that the lyric is a linguistic event, which takes place in the lyric present of the poem, this event is organised around a lyric subject who functions as a 'formal principle of unity more than the consciousness of an individual.' This idea is drawn from Käte Hamburger's discussion of the lyric genre

The lyric statement does not aim at having any function in an object- or reality- nexus ...[it]... is a reality statement even though this statement has no function in the context of reality...we experience the lyric statement as a reality statement, the statement of a genuine statement subject, which can be referred to nothing but the subject itself. And precisely what distinguishes

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¹⁹⁷ Culler, *Theory of the Lyric*, p.350.

the experience of lyric poetry from that of a novel or drama is that we do not experience a poem's statements as semblance, as fiction or illusion. 198

The 'root-form' of this reality statement is 'triangulated address', which is most clearly expressed by, but not limited to apostrophe. It is the 'pretence to address someone or something else, while actually proffering discourse for an audience'. 199 For me this root-form, hung not upon an individual but on a general and generalisable (but nonetheless linguistically 'real') subject is, along with lyric's materialising function discussed previously, what makes lyric lyric. This makes the lyric poem a very different kind of utterance to the utterances of fictitious speakers. In fact, triangulated address is incompatible with the notion of a simple, individual speaker engaging in a single and singularly directed speech act, because the indirectness of triangulated address offers the lyric poem up to the reader as reiterable, as an enactment of voicing which the reader too may voice, may ventriloquise. And if lyric voice is characteristically ventriloquised then the 'originator' of that voice may also be understood as ventriloquising in the sense that it is only by ventriloquism that one speaks with lyric voice, which is the enactment of voicing.

C.S. Lewis wrote that a sonnet 'was like a good public prayer: the test was whether the congregation can 'join and make it their own...It does not matter who is speaking in 'Since there's no helpe' any more than in 'Oh mistress mine'...The whole body of sonnet sequences is more like an erotic liturgy than a series of erotic confidences''.²⁰⁰ This, one can presume, is why we write poems instead of calling someone up on the phone, to use Frank O' Hara's challenge.²⁰¹ The lyric voice does not communicate a one-to-one message, it serves the essentially different purpose of providing something like a public liturgy or song to be voiced and re-voiced, a purpose which absorbs the one-to-one message, making the private message incidental to the prior mission of the lyric mode.

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¹⁹⁸ Käte Hamburger quoted in Jonathan Culler, *Theory of the Lyric*, p. 106.

¹⁹⁹ Culler, *Theory of the Lyric*, p.187.

²⁰⁰ C.S. Lewis quoted in Culler, *Theory of the Lyric*, p.120.

²⁰¹ See Frank O' Hara, 'Personism: A Manifesto' in *Poetry in Theory: an Anthology 1900-2000*, Jon Cook ed. (Blackwell, 2004) pp.367-369.

If lyric voicing is modelled on a triangulated address, on a triangle which necessarily includes the writing subject, an inferred audience and a proxy addressee, and if the lyric subject thus produced is a 'real' but generalisable unifying principle (not a fiction) who is ventriloquised through the writing subject and/or is the writing subject ventriloquised, then when we write lyrics we do not actually address anyone or anything in particular, but by indirect address, a kind of poet's sleight of hand, we identify ourselves and our own voices with a general and public act of voicing, volunteering ourselves not as an individual speaking subject but as a unifying principle of subjectivity for anyone to read, enter and voice. This occurs in the moment of the poem's lyric present, which is always now and not, for example, at the time of writing, so that the lyric poem is also detached from the poet in time. Yet this is not to say that the poet vanishes or detaches completely, that is not the nature of lyric voicing.

Given the detachment of the lyric present we may wish to attribute the 'voice' in the poem to the poem itself as the 'voice of the poem', or to Hamburger's 'subject itself'. Given the voice's generality we may deny that it is a voice at all, certainly not in the sense of the individuated voices we hear emitted by speakers in an everyday context. These assessments of the lyric voice might be partially accurate but if so only to a limited extent. One could say that to identify the voice with the poet is equally limited, but to understand the voice as identifiable with the poet is to address the poet's implicatedness as well as to acknowledge that human speaking is automated, particularly the saying of 'I' and particularly the lyric mode of speaking. If the voice is identifiable with the poet's, then the voice as lodged in the poem and as cue for voicing is also implied while taking into account the poet's inability to fully extricate themselves from the voicing in their poem. Having said so I can also say that the poet's voice is reiterable, general, useable and reusable like any good machine, that individuality is sacrificed for the purpose of writing the lyric. The triangle of triangulated address necessarily incorporates the poet, who then in their capacity as general subject and unifying principle does not disappear but becomes rather, the Poet, which is to say that writing lyric poems does not leave one untouched.

I will clarify here that in 'Poet' I mean 'Author', that is 'Author' as derived from, but not wholly consistent with, Foucault's concept of the Author-function.

According to Foucault the proper name of the author falls between 'description' and 'designation', so that 'the links between the proper name and what it names are not isomorphic and do not function in the same way'. 202 That is, there is a disconnect, though not necessarily I think, total detachment between the writing subject and the proper name of the Author. Neither is the concept of the author a trans-historical one, rather it first developed from a need for the culpability of writing subjects for their written texts, the need to make writing subjects responsible, answerable, punishable in connection to texts. What the proper name of Author describes is not the writing subject but 'the principle of a certain unity of writing' such that 'the author also serves to neutralise the contradictions that may emerge in a series of texts'. 203 It is this principle of unity, this identifiable consistency that we might call the Poet, and mark with the Poet's proper name in the context of lyric poetry. However, Foucault denies any necessary association between writing subject and Author on this count, just as one might deny association between fictional characters and the writer who wrote them into being. But I would argue that certainly in the case of lyric poetry, there is an uneasy feedback between writing subject, between 'poet' and 'Poet' due to the indeterminacy of simulation and ventriloquism, due to the lyric poem's various ways of being both 'me' and 'not me', and due to the tradition that associates the lyric subject with the writing subject via the convention of subjective self-expression, and due also, banally enough, to the fact that poet and Poet share a designating name. In a way unique to lyric poetry the poet resists displacement by the Poet but at the same time comes to be identifiable as the Poet. This will be explored in greater detail later.

Of course, one might object that ventriloquism is more obvious in drama or prose fiction, where characters speak by dint of being spoken through. In that sense, ventriloquism is an overt and integral convention of those genres. But the lyric ventriloquism I refer to here is of a different and much more subtle nature, where ventriloquist and ventriloquist's dummy are not so distinct, and where the ventriloquised voice does not so obviously or readily invoke the suspension of disbelief usually attendant on instances of ventriloquism. In lyric the poet does not

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²⁰³ Foucault, 'What is an Author?', p.288.

²⁰² Michel Foucault, 'What is an Author?' in *Modern Criticism and Theory: A Reader*, David Lodge and Nigel Wood eds., Third Edition (Pearson Longman, 2008) p. 284.

speak through a dummy as such. To speak as though through a character is a technique that the poet could choose but it would be tangential to the lyric genre, and the lyric genre prompts us to trace all lyric statements, whether phrased in a dummy's mouth or not, to reality. By the same token the lyric subject acts as an organising principle around which triangulated address can take place and indeed it 'can be referred to nothing but the subject itself' (however indeterminate that subject may be) but it is nonetheless a real and genuine statement. Lyric voice is ventriloguism in the sense that in the lyric poem the poet's voice is not simply their own or not. It is integral to the lyric genre that the words of the poem are offered up for re-speaking, not in the way that fiction can be read out loud or a play reperformed, but in the sense that whosoever speaks the words of the lyric inhabits that voice or takes possession of that voice. Even lyrics that never see the eyes of readers other than the poet are always already facing outwards by the nature of the genre. The mode of lyric voicing is such that it is already public, already ventriloquised; the lyric voice is offered up, spoken through and comes from different directions. Still, this is not to say that lyric voice is simply everyone's and so no one's. In fiction we do not tend to conflate the speech of characters with the speech of the writer, and yet all that is written in a novel certainly contributes to our sense of the writer's 'voice', by which we usually mean something like the style by which writers are recognised in analogy with the unique sounds of voices. With lyric that distinction is not so intuitively or readily made. As a reality statement made by the poet, and therefore generically distinct from the fiction of prose or drama, the voice in a poem implies (and implication is different to a simple identification or referral, it is suggestive) first and foremost the poet's own voice, yet this voice is also the voice of the lyric subject, a voice which might be occupied by anyone, and in that sense the voice which is theirs is ventriloquised.

All this suggests that the ventriloquism of lyric voicing also has the quality of indeterminacy, that it is automating. According to Culler, while lyrics tell the truth, they also lie. Lyrics imply deceit, and Culler believes that this is in part what prompts critics to treat lyrics as innocent fictions, despite the fact that such readings do not hold up under scrutiny, as Culler demonstrates many times. 'The risk that alleged truths might be lies' he writes, 'is a cost of trying to speak of the world and

make it intelligible'.²⁰⁴ For lyric to do its lyric work we, in reading lyrics, must make a potentially uncomfortable encounter with indeterminacy. The voice with which one speaks might not be one's voice at all, or it might not be what one would like to think of as one's voice, one might pose as the originator of language only to be revealed as its product, or the reality statements of lyric may impinge on the reality of the writing subject. The New Critical compulsion to treat poems as fictions and lyric subjects as fictitious speakers is a defensive gesture against the automatisms of lyric poetry. As Culler writes

By presuming that the language before us originates in a speaker-subject and that reading the text is overhearing a speaker, we confirm in a mirroring operation our own status as subjects and originators of language rather than its products. With the presumption of a persona, we can convince ourselves that everything happens between speakers and defend against the impersonal force of language.²⁰⁵

If the indeterminacy in lyric is really all just pretend, and the writer of lyrics may remain unscathed by the process of writing lyrically, then that writer need not consider themselves as automated, they may instead retain their integrity as a subject and hold their poems at a polite distance from themselves. It would seem that the compulsion to fictionalise is caused by the threat of mechanisation, which is identical with the threat of the indeterminate subject. Herbert F. Tucker considers the motivations behind the New Critical fiction of the speaker; a practical motivation for this is the need to simplify and thus expedite the teaching of poetry by bracketing historical context in favour of a 'myth of unconditioned subjectivity', but Tucker also suggests a more metaphysical motivation

...we modern readers have abolished the poet and set up the fictive speaker; and we have done so in order to boost the gains of an intersubjective recognition for which, in an increasingly mechanical age that can make [John Stuart] Mill's look positively idyllic we seem to suffer insatiable

²⁰⁴ Culler, *Theory of the Lyric*, p.108.

²⁰⁵ Culler, *Theory of the Lyric*, p.116.

cultural thirst. The mastery of New Critical tools may offer in this light a sort of homeopathic salve, the application of humanistic technology to technologically induced ills.²⁰⁶

Of course, there are definitions of lyric and models of lyric voicing other than Culler's, ones which do not lead to automation but which, in the traditional way, refer us back to the writing subject, to the author who maintains their primacy and integrity and who controls their distance from their work. This traditional understanding of lyric and lyric voicing challenges my robopoetics. T.S. Eliot provides a particularly interesting version of this understanding in 'The Three Voices of Poetry'. This essay is interesting because, while maintaining authorial primacy and integrity, it incorporates automatism, but in such a way as to set it aside, to push it away and under. It offers a counter understanding of lyric voicing against which I can place my own, but it also furthers our discussion of automation. With that in mind I will now critique Eliot's theory of voicing in his 'Three Voices'.

Eliot's concept is pertinent because it appears to be necessitated by the threat of automation that I have been exploring, and it acts as a defence against indeterminacy. Eliot insists on integrity and distance on the part of the poet, but he does so through an argument which would seem insupportable from the view of robopoetics. Rather than appealing to the structure of lyric, to its mode of address, to its status as reality statement which collects together disparate poems in disparate circumstances under the banner of lyric, Eliot bases his concept of voicing on the 'social purpose' of the poet, on the intentions and motivations of the poet at the time of writing and on the conditions of the poem's subsequent performance and/or distribution. These bases are idiosyncratic and tangential to lyric poems insofar as

²⁰⁶ Herbert F. Tucker, 'Dramatic Monologue and the Overhearing of Lyric' in *Lyric Poetry: Beyond New Criticism*, Chaviva Hosek and Patricia Parker eds. (Cornell University Press, 1985) p. 242.

²⁰⁷ Eliot uses this phrase in the context of his second voice: 'The second voice is, in fact, the voice most often and most clearly heard in poetry that is not of the theatre: in all poetry, certainly, that has a conscious social purpose' (T. S. Eliot 'The Three Voices of Poetry' in *The Lyric Theory Reader: A Critical Anthology*, Virginia Jackson and Yopie Prins eds. (John Hopkins University Press, 2014) p.197) with the implication that either the first voice does not contain a social purpose, or that any social purpose in poetry of the first voice would be unconscious and would therefore not count as a purpose, or that the social purpose is the purpose of the poet only concerning himself. It is therefore these conscious intentions that divide the voices and mark poetic genres. This is made clear by Eliot's reference to the lyric voice as 'overheard' in reference to John Stuart Mill, whereby the voice is *over*heard only because it is not obviously directed at an audience in the way that a piece of theatre is. But we have already challenged this notion.

they are lyric in any truly meaningful sense of the word. I find Eliot's voices, his definition of 'lyric', and the integrity of the author/poet which attends them unconvincing but also, as I have said, interesting. In the following critique we will come to understand the limits of such a concept of lyric and lyric voicing, and it will be clear on what bases and in which ways robopoetics diverges.

Eliot breaks poetic voice into three distinct and recognisable voices which he associates with different poetic genres.

The first voice is the poet talking to himself – or to nobody. The second is the voice of the poet addressing an audience, whether large or small. The third is the voice of the poet when he attempts to create a dramatic character speaking in verse;²⁰⁸

The main issue with this model, as far as this thesis is concerned, is with the first voice, which Eliot associates with lyric in a selective way. But this issue also extends into the second voice. To begin with, Eliot's version of lyric structure is suspicious. Eliot complains that 'the term "lyric" itself is unsatisfactory' and lists so-called 'lyric' poems that fail to qualify as lyric as per the terse terms of the Oxford Dictionary: 'Now the name for short poems, usually divided into stanzas or strophes, and directly expressing the poet's own thoughts and sentiments'. 'Hark! hark! the lark' is a 'lyric' but does not seem to express the poet's own thoughts and feelings in any way sensible to Eliot, and 'The Vanity of Human Wishes' is a 'lyric' but is very long indeed. He points out (quite rightly) that there is no necessary relation between brevity and the expression of the poet's own thoughts and feelings,

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²⁰⁸ Eliot, 'The Three Voices of Poetry', p.192.

²⁰⁹ The third voice Eliot associates with theatre and so it is of no great importance here, except perhaps in its similarity to the second voice, which presumes the completeness and complete disassociation of the poet's face and the masks he puts over it in order to speak to his audience. Eliot writes that in the dramatic monologue 'it is surely the second voice, the voice of the poet talking to other people, that is dominant. The mere fact that he is assuming a role, that he is speaking through a mask, implies the presence of an audience: why should a man put on fancy dress and a mask only to talk to himself?' ('The Three Voices of Poetry', pp.196) Why indeed? But the question is rhetorical and Eliot intends it to demonstrate that the mask is merely a prop for addressing an audience. I think that this, and other parts of Eliot's essay, are defending against the threat of automatism and indeterminacy looming in his discussion. If a poet wears a mask only for the benefit of an audience and not in order to address himself as himself, then we will not be inclined to take the mask for the face, the face will retain its integrity and distance from the mask, and the poet will be in control. I consider the image of the mask differently to Eliot in the final part of this chapter.

but rather than interrogating this unsatisfactory definition, or lingering on the suggestive qualifier of 'now', he concludes that due to the discrepancies he has identified between known lyrics and lyric's given definition, 'it is obviously the lyric in the sense of a poem 'directly expressing the poet's own thoughts and sentiments...that is relevant to my first voice. '210 Eliot suggests that his first voice is the voice proper to the lyric because it is associated with the direct expression of a poet's own thoughts and sentiments, dispensing with brevity as a mere irrelevance. But this comes after making both the insufficiency and the seemingly arbitrary character of the whole definition very clear. He has justified his first voice as the voice of lyric while disregarding the far more complex nature of the genre as suggested by his own objections. If Hark! hark! the lark challenges the Oxford Dictionary's definition of lyric because it does not express, directly and in an uncomplicated way, the poet's own thoughts and feelings, then Eliot is in no position to cherry-pick that sense of the lyric in order to justify his first voice. Eliot has thrown us a red herring; he would appear to argue that the problem with the definition is merely the conjunction of brevity and personal sentiment, and so we ought to understand the appropriateness of his first voice without the clouding influence of brevity. But his acknowledgement of the disconnect does not dispel the obvious problems with regarding either brevity or personal sentiment as a satisfactory definition of the lyric. It is as if Eliot is suggesting that, beyond lyric in the sense of short poems set to music, 'lyric' is a meaningless term, or perhaps rather a term that can be selectively defined. Indeed, he swaps out 'lyric poetry' for 'meditative verse' within the same paragraph, as if they were self-identical and that 'meditative' was all lyrics were. However, we could take from this the implicit suggestion that musicality defines lyric as lyric in a way above and beyond any other definition we can provide, but this would be a vocal element not so easily defined or located, least of all as or with the meditations of the poet, and Eliot was well aware of this. But we will come back to musicality.

It is difficult to take seriously Eliot's claim that the first voice of the poet talking to himself or to no one is relevant to lyric. Firstly because this first voice has no substantial links to lyric (the expression of personal thoughts and sentiments is a

²¹⁰ Eliot, 'The Three Voices of Poetry', p.197.

major theme but it is not exhaustive of the genre) and secondly because there is such a leap to be made from expressing one's own thoughts and feelings to talking to oneself or to nobody. To make this leap is to misrepresent the forms of address which distinguish lyric from the narrative and the dramatic; it does not account for apostrophe for instance, it does not account for indirect address, nor for contribution to public voicing. It also suggests that it is possible to talk to no one, as if talking, specifically and as opposed to producing mere noise with one's vocal organs, was not predicated upon the act of communication, upon the condition of intelligibility, as if in talking to oneself one were not, at least by default, one's own addressee. Of course, Eliot's second voice modifies his first to include these, but his claim that in lyric the voice of the poet talking to himself or to no one comes before and underlies all other addresses, direct and indirect (that it is 'first') is a misrepresentation and, I think, a misdirection. Essentially, Eliot conflates his personal experience and motivations for writing lyrics (his own but which he attributes to 'the poet' throughout, as if they were universal) with the fundamental structure of lyric address, while he relegates address to a kind of secondary occurrence taking place only if explicitly intended from the start or in the instance of the poet's turning towards the audience, that is only when the poet is literally addressing an audience because the poem is being performed to or read by other people. He writes that

He [the poet] does not know what he has to say until he has said it; and in the effort to say it he is not concerned with making other people understand anything. He is not concerned, at this stage, with other people at all, only with finding the right words...He is not concerned whether anybody else will ever understand them if he does.²¹¹

And later that

the author of a poem may have written it primarily without thought of an audience, he will also want to know what the poem which has satisfied him will have to say to other people...The final handing over, so to speak, of the

²¹¹ Eliot, 'The Three Voices of Poetry', p.198.

poem to an unknown audience, for what that audience will make of it, seems to me the consummation of the process begun in solitude and without thought of an audience, the long process of gestation of the poem, because it marks the final separation of the poem from the author. Let the author, at this point, rest in peace.²¹²

This might be how Eliot feels about his poem, but he cannot extend that to poets in general. Eliot may well feel that his work is consummated and done, but the extent to which the poet and their poem are separated at this point, or at any point, is debatable. Further, Eliot may see publication as the consummation of his process, but that process from intention to publication, from inspiration to audience, is a process distinct from the lyric processes going on within the poem. This does nothing to account for the way in which lyrics face outward like a hymn or a good public prayer, regardless of whether they are ever read or are ever intended to be read by someone other than the poet. I would clarify that the prospect of writing for one's own pleasure or benefit is not at issue here; we play solitary word games and write notes to ourselves often enough, but these things are not lyric poems. To write a lyric poem is to write a kind of literature generically distinct from those former, even if lyrics incorporate similar elements in their means of composition or in their content.

This idea of a transforming address seems to me untenable as a theory of poetic voicing, if a lyric poem becomes addressed to an audience in the moment it is addressed to an audience then Eliot's concept of a second voice is meaningless. In fact, Eliot's third voice seems suspect to me on this account too; of course the theatre is dominated by the voice of one character speaking to another, for this is what happens in plays. Suspicions about the second and third voices should also cast doubt on the first; if lyrics are poems of the first voice only because some poets do not much consider prospective audiences when writing them, then the first voice is not only selectively rendered but also as meaningless as the others, because a poet could just as well write a play or a dramatic monologue for their own pleasure, without intention of performing it or seeing it performed, his audience could be the

²¹² Eliot, 'The Three Voices of Poetry', p.199.

audience of himself, just as in Eliot's lyric. Eliot asks, 'what is the point of a story without an audience? Or of a sermon without a congregation?' ²¹³ as if these things were unthinkable, while a lyric poem without a reader is for Eliot, not only possible but the very model of the genre. This is possible because in the case of lyric poetry Eliot disregards the generically unique form of address it involves, while he does not disregard the generically unique forms of address in stories and sermons. Instead he argues that lyrics do not have social purpose until handed over to an audience. But the poet's intentions for the dissemination of their poem and their sense of what they are doing when they are writing poems are irrelevant to whether their poems are lyric or not, these cannot constitute an adequate theory of poetic voicing. The lyric genre, lyric address, and lyric voicing must be more complex than Eliot's three voices allow.

I believe that the formulation of Eliot's three voices is necessitated by an apparent imperative to establish the poet's independence from their poem, to maintain at all times a polite distance from the poem and to observe it with only mild interest. That is to say that what is at stake here is the integrity of the writing subject, their professional distance. This idea is supported by the way that for Eliot, personal experience and intention takes precedence over lyric structure, and over the formal properties which meaningfully distinguish lyric from narrative or drama. Eliot describes the process by which 'the poet' brings forth his poem

He is oppressed by a burden which he must bring to birth in order to obtain relief...he is haunted by a demon, a demon against which he feels powerless because in its first manifestation it has no face, no name, nothing; and the words, the poem he makes are a kind of form of exorcism of this demon. In other words again, he is going to all that trouble, not in order to communicate with anyone, but to gain relief from acute discomfort; and when the words are finally arranged in the right way – or in what he comes to accept as the best arrangement he can find – he may experience a moment of exhaustion, of appearement, of absolution, and of something very near annihilation, which is in itself indescribable. And then he can say to the

²¹³ Eliot, 'The Three Voices of Poetry', p.197.

poem: "Go away! Find a place for yourself in a book – and don't expect me to take any further interest in you."214

There are a number of observations to be made about this passage. Giving voice results from the powerful imposition of an alien force upon the poet, something crushing, something external, though really also internal, as with the appropriated metaphor of birth. In the image of the demon, we have the threat of possession and control from an entity not just uncannily internal/external but also indeterminate 'no face, no name, nothing'. This is all reminiscent of the uncanniness of the automaton. In Eliot's account the poet is neither completely controlled nor completely in control, he is oppressed by a burden but it is his poetic labour which brings it forth unto itself.

Eliot describes a scene of horror (exorcism, demons, faceless entities, powerlessness, pain) and the object of horror is a controlling force which emanates from the inside. This outside/inside force is in the form of a voice, in the form of something forcing itself via the poet into the spoken and which manifests recognisably as his own voice. That is to say that the object of horror is the poet vocally recognised as an automaton with 'no face, no name, nothing'. But for Eliot this burdensome possession does not consume or even implicate him but is exorcised in due process. Surely the poet protests too much. After succumbing to annihilation at the hands of demon spawn the poet turns to his progeny and primly tells it to 'go away' in the full expectation that it will. Eliot cannot expect us to believe that the poem wishes to put *itself* in a book, or that he can feign disinterest in communication while instructing his poem to go and get published, as if it conceivably could by itself. The account is over- and then under-stated, and it may be that Eliot is prompting us to read it with attention to its irony. And yet, he seems quite serious about it 'I do not believe,' he subsequently writes 'that the relation of a poem to its origins is capable of being more clearly traced'. 215 Of course, I must believe Eliot when he describes his own writing experience this way, but I can also wonder about why he expresses it so, I can ask what his account tells us about writing and even about thought.

 $^{^{214}}$ Eliot, 'The Three Voices of Poetry', p.198. 215 Ibid.

To hold this origin story up as a demonstration of 'the poet's' disregard for communication with others is, I think, another misdirection, even if it does accurately describe Eliot's own personal experience of poem-writing. Eliot's metaphor of exorcism gives us to understand poem-writing as a service which the poet provides firstly and always to himself, so that communication with others is only tangential. But if we are to understand it as such then we must not ask who, in this scene of demonic possession, is doing the speaking then, we must insist first on the separation of possessor and possessee and then on the possessee's power to exorcise and banish. Neither must we think too hard about that 'annihilation' or very near annihilation that Eliot mentions - how is it that poetic creation has very nearly annihilated the poet? What exactly is this annihilation? Again, social purpose (or rather lack thereof) takes precedent, but erroneously I think. If poets are possessed, however briefly, by uncanny voices which would make automata of them, then the matter of whether they consider their work to be a means of personal relief or of communication seems rather secondary to a discussion of poetic voicing. This is not to say that social purpose is irrelevant, but it cannot support this 'first voice' of the poet speaking to himself or to no one, because that voice neither defines the genre nor delimits the complexities of its voicing.

However, this analysis so far has not taken into account Eliot's apparent relationship with what we might call automatism as it appears in his poems. A strange thing about this essay is the way that this characterisation of poetic voice based on social purpose (as a opposed to generic address) seems to be at odds in some senses with the ways in which Eliot gives voice in his own lyric poems. As I have already suggested, Eliot's account of his writing experience would appear to open up onto much more than mere social purpose. Anne Stillman finds Eliot's account of his writing experience 'more satisfying' than some others 'in its self-dissatisfactions'. She writes that 'the unsettledness throws up its hands to come to rest on the unsayable...lurching between distraction as maddening possession and just merely niggling'. Stillman's 'distraction' is not dissimilar (though not

²¹⁶ Anne Stillman, 'Distraction Fits' in David Nowell Smith ed., *Thinking Verse II* (2012) http://www.thinkingverse.com/issue02/Anne%20Stillman,%20Distraction%20fits.pdf [accessed 05.04.16] p.48.

identical either) to my concept of automation, such that a state of distraction and the condition of being automated share some qualities.

Writing of Eliot's Ash-Wednesday, Stillman argues that '...Eliot's lines also depict an act of mind suggesting 'distraction' to be not only an antonym to attention, but rather potentially bound up with what it means to apprehend thought'. 217 Distraction is a state wherein thought apprehends itself insofar as

> Cognition is apprehended in the act of its own near vanishing, as thought becomes a river, frightened by its own realisation, a fugitive in company of ghosts; thought is the inhabitant of the apprehensive mind, a tenant and exile from the shadowy landscape it generates, yet shining too, somehow, with a secret lustre.²¹⁸

The paradox of Stillman's distraction is that it is both a state of inattentiveness and also a kind of deep attention to thought and is therefore both 'a menace and a privilege'. 219 Further, distraction itself cannot be apprehended as such, or not directly

> distraction is an evasive object of knowledge, for it draws our attention away. To be distracted seems at once a vague, all-encompassing enormity, and that which is barely perceptible, a fleeting vacuum in which things vanish...To attend to distraction seems to make it disappear...²²⁰

It seems to me that in 'distraction' and 'automation', Stillman and I are both writing about the mysterious, cognitive processes by which we come to be the beings that we are, processes which are also cognitively ungraspable, incomprehensible and unsayable. Distraction seems to lead to the same infinitely looping corridors and it reaches them through the same cede of direct control, it shows us ourselves but in a way that we may not recognise or may not wish to recognise. There is a small sign of the connection between distraction and automation in that we sometimes describe

²¹⁷ Stillman, 'Distraction Fits', p.33.

²¹⁸ Stillman, 'Distraction Fits', p.36.

²¹⁹ Stillman, 'Distraction Fits', p.30.

²²⁰ Ibid.

those moments of thoughtless action, which take place in a state of distracted attention as occurring while we are on 'auto-pilot'.

Distraction and automation also share common ground in poetry's musicality. 'Music,' writes Stillman 'is evoked as a way of crystallising how only the rare moments of diversion from life permit us to take some measure of it'221 as when one loses oneself in music and seems to access much more deeply one's innermost life. For Eliot, the music of poetry also arises from a between place, unplaced and indefinite.

> the music of a word is, so to speak, at a point of intersection: it arises from its relation first to the words immediately preceding and following it, and indefinitely to the rest of these contexts; and from another relation, that of its immediate meaning in that context to all the other meanings which it has had in other contexts, to its greater or less wealth of association.²²²

These things suggest that when Stillman writes of Eliot's relationship with distraction, she is writing about something very close to his relationship with automation, and she argues that Eliot's relationship with distraction in his poetry is alternately disappointed and exhausted, grasping and failing, wary and fascinated, bored and so on, as if it were something that Eliot is compelled to stare into but cannot bear to do so for long; he is continually exhibiting it, turning away from it, criticising it and performing it. His poems stage the struggle by which this ungraspable faceless thing which both gives access to thought and makes it vanish cannot be digested or processed in the poem, even if it is what makes the poem possible and is what the poem holds out to us. The musicality of his poetry in particular holds it out to us but we cannot, and Eliot does not, grasp it.

It is perhaps not that surprising then that Eliot's account of the origin of his poetic voicing is bewildered and self-dissatisfied or that it channels this apparently dark force off and away from the poet. It is certainly not the case that his account of lyric voice is based on a lack of awareness or necessarily a denial about distraction/automatism, rather it reflects Eliot's relationship with it. The account

²²¹ Stillman, 'Distraction Fits', p.31.222 Eliot quoted in Stillman, 'Distraction Fits', p.33.

gestures towards what cannot be included audibly/visibly in the lyric voice, and what cannot be included nonetheless underlies the poem as the originator and essence of that voice. This situation, if Stillman is correct, is not just acknowledged by Eliot, it constitutes a prime poetic object to be studied, presented and represented, but never given in to, perhaps because to give in is somehow unsavoury, or because giving in and giving oneself over is never entirely possible. Eliot does after all note the completion of a poem as the point at which 'the words are finally arranged in the right way - or in what he [the poet] comes to accept as the best arrangement he can find', the suggestion being that those words are inadequate, that they are provisional and incomplete, that something will always be missing from that unsayable, silent thing haunts what is said, and the voice. Distraction/automatism could be characterised as a ghost held at bay by the voicing (or as the ghost that is the voicing perhaps?) which fits with Eliot's exorcism. Attendance upon automatisms like musicality hold out the possibility of deep attention then, but that inner-most life which such deep attention apprehends is an unsayable, ungraspable, silent thing.

In any case, Eliot nonetheless insists that the poet's intention defines the vocal nature of the lyric poem, and by universalising his own intention as a first general principle of poetry and lyric poetry in particular, Eliot assures that he maintains his integrity as writing subject and defends against the automatism and indeterminacy which haunts his essay. Automatism becomes only an implicit and peripheral issue of which the poet can be effectively relieved; his voice is not offered as public voicing, if the poet speaks as himself to himself then there is no ventriloquism at work; if the poet can deny ownership of the poem while at the same time publishing under his own name then the relationship and distance between poet and poem is the poet's to negotiate; lack of responsibility for the poem prevents the poem from implicating the poet, while protecting the poet from simulation; the poem is not a robot and so the poet needn't hear himself in such a robot's voice.

Eliot does claim that 'in every poem...there is more than one voice to be heard.'223 This would suggest some common ground between his three voices and

²²³ Eliot, 'The Three Voices of Poetry', p.199.

my robopoetics, even if there are differences in our understandings of lyric. But Eliot's conception of multiple voices (explicit, audible voices that is, not the voice of the implicit unsayable) is again, different from mine. For Eliot there are multiple voices to be heard because 'if the author never spoke to himself, the result would not be poetry' (although I have doubts about this definition of poetry) and 'if the poem were exclusively for the author, it would be a poem in a private and unknown language'224 (and I also doubt that a private language is even possible) Eliot has separated and stratified his voices; first the poet speaks to himself, then to others, and then perhaps to others as another, and it is in this sense that the lyric is 'not primarily an attempt to communicate with anyone at all' (my italics). 225 But in practise this separation and stratification does not work; in poems these voices cannot exist individually or be identified separately and in clear sequence, one voice is necessary to another in order for the poem to be coherent and to be identifiable as a poem. There can therefore only be an amalgamation of voices, which would suggest that these three voices are not so clearly defined or sequentially arranged as Eliot claims. If the first voice cannot be heard without the second (as distinct from the second following from or being added to the first) is there really a first and second voice? Or is the voice of lyric poetry something different, not at base the poet's own voice speaking to himself but something more like an interpenetration of all three voices? Or is it something else entirely? If this were the case then we would need to dispense with the fiction of the first voice, except as it pertains to the poet's personal intention and personal experience of inspiration and composition. But Eliot cannot dispense with it, not so long as he must preserve integrity, for that integrity depends on the primacy of his first voice.

A major difference between Eliot's understanding of lyric and mine is that robopoetics embraces automatism and automation, and makes the indeterminacy of the poet one of its central objects, while a traditional understanding like Eliot's denies that automatism and guards against indeterminacy, at least on the surface as it would seem in Eliot's case. Or perhaps the inverse should be said - robopoetics attempts to guard against the primacy of the writing subject. But this is the most obvious difference. More importantly, I have shown the questionable basis on which

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²²⁵ Eliot, 'The Three Voices of Poetry', p.197.

Eliot's voices rest. The understanding of lyric upon which robopoetics rests is not tangential, but instead relates to the formal structures (reality statement, indirect address, lyric substance) that make lyric distinct as a genre. Although it could be said that while Eliot's understanding is poet-centric, mine is poem-centric. Still, that is not entirely the case, with its focus on automation as the means by which automatisms essentially make robots of poets (and readers too) and with its concentration upon their resultant indeterminacy, robopoetics includes the poet and reader, connected as they are via the poem, in its consideration. Indeed, the human element of literary criticism is very much foregrounded in robopoetics.

I turn now to the indeterminacy of simulation and to the uneasy feedback between poet and Poet, which I explore through the image of the mask/face. This image is bound up with the notion of the uncanny silent/absent voice, which we find at home in the lyric, returning robot voice to the lyric voice.

4. The Mask That is Your Face

Here I explore what I have previously described as 'looping' in the way that writing subjects identify with or as their lyric subjects. To that end I turn now to Paul de Man and his 'Autobiography as De-Facement'. Of course, de Man's theory pertains to autobiography and not directly to lyric, but I think that the theory is certainly applicable to lyric. I have maintained that lyrics implicate the poets who write them, and lyrics share qualities with autobiography in this sense; even if lyrics are not intentionally autobiographical they still feed back upon the poet in ways that other kinds of writing do not, they will not detach themselves from the poet, they will not be distanced or fictionalised. Admittedly, autobiography is a typically narrative form, so perhaps the common root between them is more rightly 'self-expression', in the sense of a self talking about itself (but we will remember that the notion of 'self-expression' in this context is a complex one) which may be narrative or otherwise. De Man's concept of de-facement is about just such a feedback.

In 'Autobiography as De-Facement', Paul de Man studies what he calls the 'specular moment' which, while most immediately relevant to autobiography, is a moment necessary to all acts of writing and to thought:

The autobiographical moment happens as an alignment between the two subjects involved in the process of reading in which they determine each other by mutual reflexive substitution. The structure implies differentiation as well as similarity, since both depend on a substitutive exchange that constitutes the subject. This specular structure is interiorized in a text in which the author declares himself the subject of his own understanding, but this merely makes explicit the wider claim to authorship that takes place whenever a text is stated to be by someone....But just as we seem to assert that all texts are autobiographical, we should say that, by the same token, none of them is or can be....the specular moment is not primarily a situation or an event that can be located in a history, but [...] it is the manifestation, on the level of the referent, of a linguistic structure. The specular moment that is part of all understanding reveals the tropological structure that underlies all cognition including knowledge of the self. 226

The moment of self-recognition in writing, just as in the mirror, is the simultaneous acknowledgement that the 'I' I write *is me* and yet is necessarily *not me*. One's reflection is not, of course, *literally* oneself and surely one could not well use a mirror without understanding that. So, in writing as in the mirror, that recognition of oneself is less literal and more of an agreement. In de Man's terms it is contractual: 'The name on the title page is not the proper name of a subject capable of self-knowledge and understanding, but the signature that gives the contract legal, though by no means epistemological, authority.'²²⁷ So at the very first, that 'I' attains a degree of autonomy from the person to whom it is attributed, and while the two are not disconnected, neither are they isomorphic. It should be said that this disconnect is not proposed in a New Critical sense, as in a disowning of the 'speaker' as an unrelated pure fiction, rather the 'I' is simultaneously (and importantly) you *and* not you. This 'I' is reminiscent of Benveniste's 'I' which forms at a discursive moment of space-time, but in de Man's contractual sense that 'I', though an empty,

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²²⁶ Paul de Man, 'Autobiography as De-Facement' in *The Rhetoric of Romanticism* (Columbia University Press, 1984) p.70-1.

universal, non-referentia, nonetheless obligates the one who writes 'I'. That is, 'I' does in fact describe something particular about its author in that it reflects back upon her, or perhaps more rightly *she* becomes the reflection of *it*. However, this 'I' is also like (and rather more like) the 'I' as may be uttered by the Author of Foucault's author-function, in that the Author of the author-function is not a subject capable of self-knowledge and understanding, but a unifying notion of consistency which resolves into the image of an authorial figure to whom a text will answer. As de Man writes, the author-function is part of a general 'claim to authorship', but what de Man adds to this concept is the reciprocity, in stark contrast to Foucault's dis-identification, between this Author and the writing subject in autobiographical contexts, and I would add, beyond. De Man describes the process of autobiographical self-description as a revolving door, the crystallisation of a life upon the page reflecting back upon that life - writing writing the writer. While control is ostensibly in the hands of the writer writing, the written comes back upon the writer in a subtly uncontrollable way, replacing, fixing, forming an image of the writer to which the writer, in signing, says 'yes, that is me'.

De Man's author is prior to Foucault's in that she is created in the moment of writing, she is not pre-existent, awaiting transcription, and she reflects in circular fashion upon the writing subject retroactively. When we write 'as ourselves', or indeed in the lyric mode, we effectively agree to the terms and conditions of the specular moment, initiating a written subject partially connected to us and partially disconnected and autonomous. If we were to apply this to robot poets we would find that when a machine generates words the same specular move is applicable; not only is a partially autonomous subject written into being, but so is the Poet and the corresponding poet or writing subject. This is surely what Bill Chamberlain was anticipating when he signed RACTER's name under *The Policeman's Beard*. The effect is especially powerful and indeed uncanny when those generated words fit the specifications and conventions of a lyric poem.²²⁸

²²⁸ It should be said that such a 'Poet' and 'poet' can result from the specular moment just as well in other genres, as Neil Hennessy discovered when he came across a spam poisoner, a website full of randomly generated nonsense text which lures in spambots and renders them ineffective in 'The Sweetest Poison, or the Discovery of L=A=N=G=U=A=G=E Poetry on the Web' in *Object 10: Cyberpoetics* (Winter, 2002). While L=A=N=G=U=A=G=E poetry still implicitly (and reluctantly) renders up an 'I', as Marjorie Perloff has shown in her analysis of Ron Silliman (Marjorie Perloff, 'Language Poetry and the Lyric Subject: Ron Silliman's Albany, Susan Howe's Buffalo' in *Critical*

I am drawing attention here to the indeterminacy between the person who writes the poem and the proper name that contractually links that person to the poem, and drawing attention also to the silent constitutive remainder, the irresolvable betweenness, which is a consequence of that indeterminacy. The crystallisation of a life which occurs on the page creates a personality (an inadequate term but perhaps one that describes the notion of the Author or Poet well enough) which feeds back upon the writing subject as the image, marker and name of that subject. Who we hear when we hear RACTER is RACTER in the moment of its speaking; RACTER requires no prior, conscious, coherent writing subject in order to function as RACTER the Poet, signatory in a lyric contract. RACTER is an idea, a product of linguistic structure. So too with the human poet; they are physically the writing subject, 'the poet', but when they make that contractual agreement, the proper name of the Poet, proper to their poem is asserted. They agree to recognise this Poet as themselves and also to occupy the position of the lyric subject. This is to say that the lyric subject issues from the poem's formal organisation, but the poet comes to occupy this lyric subject position through their contractual obligation. The lyric subject may be said to pertain to the poet insofar as the name of the Poet is identical with their own, and the lyric voice, however public and occupiable, must also be identified as the lyric voice of the poet/Poet. De Man's ideas would suggest that the writing of 'I', or rather the autobiographical implications of it, creates not just a lyric subject as an organising principle of the thing written, it also creates the writer, who then also exists in and as the ultimately incommunicable betweenness of poet and Poet. This is not to say that the Poet is not real, quite the contrary, she is hyperreal. As we keep discovering, the poet can say neither 'that is me' nor 'that is not me' of this Poet. This I think, is the problem that Bök faces with his robopoetics; he misunderstands (or perhaps just misrepresents) the epistemological separation between poet and Poet as the obsolescence of the one and the death of the other, and he also misunderstands (or misrepresents) this separation as heralded by robots and not as an extant principle of self-identification

Inquiry, 25 (Spring, 1999) pp.405-34) the school is still conventionally distanced from the typically human concerns and functions of lyric, and a robot L=A=N=G=U=A=G=E poet is a less provocative or (for some) less disturbing prospect than a lyric one.

which points to indeterminacy and also to that which is the writer yet cannot enter into intelligibility.

But the importance of de Man's ideas for robopoetics does not end there. The uniquely interesting thing about de Man's revolving door is its connection to the uncanny in its 'de-facement', essentially the removal of the face, through which autobiography, and also the lyric as I understand it, becomes haunted by muteness, absence and death, just where we would expect (because of the anthopomorphic convention of lyric) to find voice, presence and life. The act of de-facement relates to what I have been calling the remainder, the gap left when we write in the lyric mode, the unintelligible thing that cannot be spoken. This constitutes a lyric uncanniness, such that lyrics and lyric voice share with robots and robot voice.

According to de Man, the mode of autobiography is prosopopeia, the device whereby a writer speaks as another person or object. In this case de Man is talking specifically about speaking for the dead in this fashion, so that the mode of autobiography is the figure of speech wherein the dead are represented as speaking, or more rightly, are spoken through, for, or over. The prime figure of prosopopeia is the epitaph. 'Prosopopeia is the trope of autobiography, by which one's name...is made intelligible and memorable as a face'. 229 This making of the face is, for de Man, a deadly de-facement. This is to say that writing in the mode of autobiography is speaking for the dead, speaking while wearing the dead person's mask, in this case, a mask of your own face. De Man implies that autobiography figures its subject as already dead; to speak for oneself autobiographically is to entail one's death, not only in the sense of pre-empting and leaving a record of one's life preserved after death, but also in the sense of foisting a kind of death upon oneself as entailed by the commitment of oneself to the page. The real threat of this autobiographical death has been sensed by writers. De Man uses the example of William Wordsworth, who in writing of the epitaph, concluded that

Words are too awful an instrument for good and evil to be trifled with: they hold above all other external powers a dominion over thoughts. If words be not...an incarnation of the thought but only a clothing for it, then surely they

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²²⁹ De Man, 'Autobiography as De-facement', p.76.

will prove an ill gift; such as one of those poisoned vestments, read of in the stories of superstitious times, which had the power to consume and to alienate from his right mind the victim who put them on...²³⁰

It is arguable whether there exist, as Wordsworth believed, true linguistic incarnations of thought, which do not have this consuming effect on the autobiographer, but de Man argues that there is no such thing, rather that all words available to Wordsworth are evil in the sense that all words have the effect of 'poison vestments'. The mode of domination described here is striking; to figure words as clothing is to insist upon their additional or supplementary quality, they come from outside and, resting on the surface of the body, remain there. When the wearer is consumed (vanished) or alienated (pushed out) all that remains is the vestment itself, serving as the record of the catastrophe and the person it befell. Such is pernicious language.

This distrust of one's own words, of the prosopopeia of the epitaph, is reminiscent of the supplementarity of language described by Derrida, that which supplements only to replace. We might compare Wordsworth to Jean-Jacques Rousseau who, as Derrida tells us, also 'condemns writing as a destruction of presence and a disease of speech'.²³¹ For Rousseau, writing entails the absence of the writer who is necessarily displaced due to the supplementarity of writing; Jean-

 $^{^{230}}$ De Man takes his quotation from William Wordsworth, 'Essay Upon Epitaphs III' in \textit{The Prose} Works of William Wordsworth, W. J. B. Owen and Jane Worthington Smyser eds., Vol. 2 (Oxford at the Clarendon Press, 1974) pp.84-5. In the original text the extract continues 'Language, if it do not uphold, and feed, and leave in quiet, like the power of gravitation or the air we breathe, is a counterspirit, unremittingly and noiselessly at work to derange, to subvert, to lay waste, to vitiate, and to dissolve. From a deep conviction then that the excellence of writing, whether in prose or verse, consists in a conjunction of Reason and Passion, a conjunction which must be of necessity benign...I have dwelt thus long upon this argument', p. 85. Here Wordsworth refers to the present essay and to the preceding essays I and II. The thrust of Wordsworth's argument is about the propriety of tombstone epitaphs, that they are benefitted by a basis in true passion, even if the writing is poor, and that a lack of passion is evident in an insincere epitaph, which makes it a palpably poor epitaph, even if the writing is praised. In these essays Wordsworth is warning against bad taste rather than against bad words per say. In the context of the above quotation Wordsworth is talking about the wrong words wrongly applied to an epitaph, words not coming from a loving mind but being a garb that imitates (poorly) a loving mind. De man diverts this argument in that he argues that there are no right words, no words that do not in a sense derange, subvert, lay waste etc. It is from this idea of waste and subversion, and from the idea of words as garb rather than incarnation, that de Man develops his concept of the de-facement of the epitaph. It does not follow directly from Wordsworth's discussion of propriety and good taste.

²³¹ Jacques Derrida, *Of Grammatology*, Gayatri Chakravorty Spivak trans. (John Hopkins University Press, 2016) p.154.

Jacques must absent himself to make way for the ideal Rousseau of Rousseau's writings

...he [Rousseau] describes the passage to writing as the restoration, by certain absence and by a sort of calculated effacement, of presence disappointed of itself in speech. To write is indeed the only way of keeping or recapturing speech since speech denies itself as it gives itself...One cannot escape the wish to master absence and yet we must always let go of our hold.²³²

Perhaps this partially sad, partially empowering capitulation to the inevitable displacement and disappointment of presence would have been insufficient for Wordsworth, who would resist the poisoned vestment. In any case, Derrida acknowledges that writing of the self leaves the self out, destroys it or makes it impossible. For Rousseau, this is understood as the opposition of absence and presence, and for Wordsworth it is the opposition of speech and muteness

Wordsworth says of evil language, which is in fact all language including his own language of restoration, that it works "unremittingly and noiselessly". To the extent that, in writing, we are dependent on this language we all are, like the Dalesman in the *Excursion*, deaf and mute – not silent, which implies a possible manifestation of sound at our own will, but silent as a picture, that is to say eternally deprived of voice and condemned to muteness.²³³

Absence and muteness meet in the figure of the dead, whose epitaph makes the gesture of prosopopeia speaking over them. In the act of writing one both speaks and enacts presence, but paradoxically, this comes at the cost of the writer's absence (the unwritten self having been displaced forever) and the writer's muteness (the unwritten voice having been displaced forever). In this sense silence and absence

²³² Thid

²³³ De Man, 'Autobiography as De-facement', p.80.

may be considered interchangeable, the distinction between a missing voice and a merely silent voice nullified.

Death is a displaced name for a linguistic predicament, and the restoration of mortality by autobiography (the prosopopeia of the voice and the name) deprives and disfigures to the precise extent that it restores. Autobiography veils a defacement of the mind of which it is itself the cause.²³⁴

The image of the mask is therefore fundamental to autobiography. Here we have defacement as, effectively, a removal of the face (and face as 'the voice and the name') only for it to be returned as a mask, or as de Man has it, a veil. The autobiographical mask *is* a mask, but it is really, and always was, the face.

We see de Man's specular moment openly performed by Sophie Collins in her centos (poems composed using lines of other poems) which appeared in the 2014 anthology *I Love Roses When They're Past Their Best*. The centos can be understood as an engagement with the mask/face, embracing the indeterminacy that the mask/face imposes, and in this sense the centos can be considered robopoetic. In an interview with Charles Whalley, Collins tells us that the process of constructing the centos 'actually felt much closer to the process of simply writing a poem', ²³⁵ and the centos are (though perhaps unsurprisingly) very like Collins' own 'original' writing. For Collins, the foregrounded automatism of the process was not estranged from her subjective thoughts and experiences, creativity and the genuine were not terms in conflict with automatism.

The centos actually feel strangely intimate...more and more so with each rereading. Looking at them now feels not so different from hearing an anecdote or reading a passage in a novel that you've unconsciously manipulated and adopted, and are unable or unwilling to distinguish from your own memory.²³⁶

²³⁴ De Man, 'Autobiography as De-facement', p.81.

²³⁵ Sophie Collins, interview by Charles Whalley, 'Concept and Form: An interview with Sophie Collins' in *Review 31* http://review31.co.uk/interview/view/17/concept-and-form-an-interview-with-sophie-collins [accessed 26.05.16].

The centos do not just resemble traditionally written poems, as RACTER's do, rather the act of generating a poem from existing lines is recognisable as the same internal experience as producing a poem in the more traditional sense. It is not just that Collins is able to recognise her style in the lines of others, she also recognises herself in the deeper sense of her own internal thought processes. Because the centos do not emerge from the writing subject in the seemingly direct and directional way that traditionally 'self-expressive' lyrics do, the revolving door of de Man's specular moment cannot be overlooked or taken for granted here. The words in which Collins recognises herself appear to come from the outside, and I say 'appear' because the fact of recognition would complicate that directionality, and yet they are 'her'. In the contractual signing of her name we witness the crystallisation of which de Man writes; the centos become the work of Sophie Collins, a proper name and position which the poet occupies. In so doing, Collins has simulated herself. As she says, there is no distinguishing between her own memory and what she has adopted. The collaging of scavenged lines would immediately say 'this is not me' and yet the lines are recognisable as the 'me' of Collins' poetry, reflecting with a circularity upon that poetry as Collins recognises herself, not only her style but also her internal thinking processes distributed externally among the words of other poets. This simultaneously highlights the distance between and the self-sameness of the voice in the poem and the writing subject of the poet. We approach the remainder, the gap.

Cloth

I had read
via the old religion
that this form stands for potential
and true laughter.
How, in request,
it is solely yours.
unpleasant condensation,
vapor and rain inch forth -

quotes from a cloud.

Whalebone

Endless,

The draught

Acting at the window

Added an additional paternal wind.

my forehead

Throbbing and supercilious,

My teeth

Decreasing, I sang

"admonish men, oil, coins" ²³⁷

I give the above two centos by way of example because of the particular and interesting way in which they point to their own uncanniness by referencing quotation. In this sense I think they represent the rest of the centos admirably, giving the lyric 'I' as a fragile yet coherent construction of voicing out of nothing, or rather out of absence and silence. It goes without saying that these poems do not strike the reader as in any essential way different to a poem produced in the traditional manner, or to a poem intentionalised under the rubric of self-expression. Their lyric subject manifests none the less of course, and in the above cases is performatively invoked through ventriloquism, speaking through re-spoken speakings. In itself the lyric subject is therefore ghostly, but doubly ghostly in that it necessarily points to the void from which it came and resolves (like quotes from a cloud, a cloud of quotes?) to smother and hide that silence/absence. The 'I sang' of 'Whalebone' establishes a satisfying infinity loop, where the quotation of 'I sang' is Sophie

²³⁷ Sophie Collins, 'Cloth' and 'Whalebone' in *I Love Roses When They're Past Their Best*, Harry Burke ed. (Test Centre, 2014) pp.21-2.

Collins lyrically 'singing' 'I sang', which in turn incorporates the quotation "admonish men, oil, coins" in a mutual constitution of lyric subject, poet and writing subject. The same might be said of the requesting in which it is yours. The poems therefore have an arresting presentness while at the same time they produce a seemingly prior Poet/poet and also offer themselves up for future voicings. This ultimately has the effect, I think, of privileging the lyric voice and the moment of its voicing, and in so doing the centos showcase the constituting power of lyric voicing. Indeed, the poems bring forth weather, bodies, movement, relations, forms, themselves and their hearers, in the fullness of hyperreality. 'My forehead' now is Sophie Collins' forehead, while on the other hand I might also occupy that forehead with my own. The declaration of 'Endless,/The draught/acting at the window' is the indirect means through which we come to be addressed, through which we are constituted as the 'you' to Sophie Collins' 'I'.

Even where the centos do not make explicit use of the lyric 'I' and instead ventriloquise the seemingly empty voice of liturgy or song, as in the cento series 'Nolita', we have the same present, productive self-referentiality, which through privilege of lyric voice highlights the indeterminacy of the writing subject between poet, Poet and lyric subject. In this sense the poem's status as a simulation, and also as hyperreality by dint of that simulation, is on display.

From 'Nolita'

2/

The public is forever in fear.

Public sectors surround the mind and face.

Blinking in the public section can never be accepted.

Fredrico Garcia Lorca is used to that (what a citizen).

Public investigation is quick and shall decipher at the public's interest.

The public park, the public zoo are public marks from private folds.

The ministry offers the public milk and honey²³⁸

²³⁸ Collins, 'Nolita 2/' in I Love Roses When They're Past Their Best, p.18.

This is a public voicing in distinction to the 'private', and this public voicing produces seemingly discrete, private individuals. The poem contains 'Fredrico Garcia Lorca', so that the proper name is publicly held up as the symbol of this productive process which also simultaneously produces and so contains Sophie Collins. The voice of the plural and very public 'public' is audible through this lyric voice which is apparently singular and in that sense indicative of the private but which is functionally multiple. Proper names distinguishable from the multiplicity of the public are initiated by publicness and belong to that public. This is to say that their public is their private, their outside is their inside and the rest is yet again that ghostly absence/silence.

We might well ask whether those words, seemingly not hers, were in a sense hers all along. We might then ask who it is we talk about when we talk about 'her'. Indeed, when does 'she' occur? De Man's loop seems to defy any attempt to establish a chronology for this identification. Is it that the centos seem attributable to everyone and so no one and yet also to Sophie Collins? Who then is Sophie Collins? Yet we do not have a case of anything goes. Sophie Collins seems to be more than just a proper name or even a style, functioning as she does as the recognisable mask/face of the poet, and not as something merely reproducible. Importantly, the centos do not suggest a death of the writing subject or a throwing out of the values of that subject. Collins' robopoetic generation is not intended to write out creativity and authorship. Collins has made it clear that her writing is very unlike the 'uncreative writing' of Kenneth Goldsmith, ²³⁹ in whose writing the integrity of the poet is nonetheless preserved as a result of Goldsmith's performance of detachment. The gesture of casting off one's identity implies a claim to a stable, unproblematic identity, which can be picked up again once the performance is over, as if personas or non-personas simply lay like a mask upon a face and not as de-facements. Harry Burke, editor of I Love Roses... (which takes its title from the centos) writes of Goldsmith, that 'those who are most able to let go of their subject position are those whose subject position is not threatened in the first instance'. ²⁴⁰ In this way Collins' centos protest against the exclusionary effects of privileging the 'authentic',

²³⁹ See 'Concept and Form'.

²⁴⁰ Harry Burke, 'Introduction' in *I Love Roses When They're Past Their Best*, p.8.

'original', 'creative' and often (over)workshopped voice, ²⁴¹ opening up a space for us to hear other voices or to hear voices in different ways.

I would suggest that the voice of Collins' centos (and that is 'voice' in the sense elaborated earlier, irresolvable into message or medium, silently producing the positive ground for the negative subject) advertises its shared substance and qualities with robot voice. I believe this to be the case not just because her poems are lyrics, lyrics are robots, and her method is robopoetic, but because Collins privileges neither the 'authentic voice' nor pretends to be able to cast it off. Collins' lyric voice is ambiguous, volunteering herself as indeterminate, and as such she is openly subject to the muting and absenting that de Man describes, so that her centos work with and on the basis of that absenting/muting. In this way the centos foreground the uncanniness of lyric, they point towards that which is absenting/silenced by the mask/face, to that which remains and is unintelligible and therefore unsayable. They ask to be read not just as lyrics in the usual sense of subjective self-expression (of course they ask that) but also in the knowledge of simulation, of indeterminacy, and with an awareness of muteness and absence, as pertaining to the uncanny remainder which is uncannily left out and unspeakable in the midst of all that speaking.

It is possible to object to this assertion on the basis that the centos are the product of conscious editing and selection, a different process to the unconscious or unavoidable automatisms involved in writing poems in the more traditional sense. Collins may be allergic to the 'couched ideologies' of 'authentic' and 'original' voice, and also to the inverse (represented by Goldsmith) which tacitly supports those ideologies, but it could be argued that Collins also reaffirms these ideas, in that her centos constitute a more original and creative production than we might like to admit. This would take us back to Parish and her locus of control, we might instead read the centos as yet another redistribution of the locus to the site of the writing subject. But I have already expressed my doubts about this.

As for editing, it is true that the centos were edited and selected more than they were 'created' in the usual sense, and therefore they were subject to different processes. But they still work as lyrics, they still do lyric things - ventriloquism,

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²⁴¹ 'I'm allergic to the term 'craft'...because of its couched ideologies and the homogenising effect it's had/still has on poetry.' (Collins in 'Concept and Form').

indirect address, reality statement - and the rest of their automatism is differently located. The key automatism, I think, is that the 'Sophie Collins' of these lyrics is produced unthinkingly, not through a conscious style maintained by deliberate choices but as a result of selection that (while not totally random) was not an attempt to reproduce a style, rather it seemed to Collins to have happened as if of its own accord, estranged from immediate intention. Collins seems surprised that she has reproduced her own voice, her own internality even, enough at least to comment on it. I do not mean to place undue weight on the poet's intentions for production, but instead to point out that whatever the intention, what Sophie Collins produced was, uncannily enough, Sophie Collins. We should also consider that Collins' selection and editing process constitutes an automatic version of processes which are often thought to not be automatic; putting disparate lines together created syntheses that worked automatically in the way that is conventionally achieved through artifice. Meanwhile, editing would indeed seem to be a different process to writing, but while it is not necessarily automatic, we can still think of it as automating, and this is I think, what Collins' editing achieves. As for myself, this certainly seems to be the case for my own editing. I find that while I edit consciously to make my ideas more ordered and coherent, to put them, as Eliot would say, in the right way or in the best arrangement I can find, the end result never feels like my own voice, but it is. In fact, it is what I was really trying to say all along. But I am the last person to know what this was, of course. Reading my writing back to myself is like reading someone else's work, and the older the writing the more so. I did not mean to create the voice I hear there, not exactly, not entirely, and I do not feel that I can fully own it, but I must, because I recognise that it is indeed mine, and quintessentially mine at that. The voice is mine but I am not fully convinced and I do not feel fully responsible for it; it is a product of the edits I have made, hardly the unadulterated expression of my self, and it seems to me to have come about by accident rather more than by design. I believe then, that while the labour of editing isn't necessarily automatic, except in so far as it is bound by the limitations of language and discourse, the result of it is automating, or perhaps more tentatively, something automatic comes out of it. For me, the success of editing is in how far it produces this strangely separate voice entity that I can recognise but cannot take full responsibility for, and in how far it can produce the 'real' me.

Lyric 'voice' then, can be understood and heard in the ways in which we hear robot voice, at least in the ways that this thesis has so far heard it. It is not necessarily that the robot voice lacks the object voice which otherwise materialises and enlivens the lyric subject, although concepts of emptiness and otherness enable us to understand the uniquely uncanny properties of robot voices, as we have seen. The uncanniness of robot voices is born of a core uncanny relationship between the human and the constitutive lyric image of the automaton, which means that the robot voice's uncanniness does not derive from opposition to the lyric subject's voice but instead from belonging and similarity, if not self-sameness. Further, in the makeup of the lyric voice silence and absence are functionally the same, what is silent (absent) in the lyric may as well be that which is absent (silent) in the robot. Lyric poems therefore speak with the same uncanny voice as robots. It is our compulsion to distance ourselves from the uncanny, to send away that which returns which, I think, leads us to hear this voice as a sort of exclusive inner light in the lyric subject, and at the same time as a sinister void in the robot. But this compulsion does not represent a truth about the contradistinction of lyric voice and robot voice. When one finds out that a poem one has read and enjoyed was in fact written by a robot, it is usual to feel something falling off and away as that inner light, once present, dissolves in an instant. But this comes from contrasting impressions about a poem and not from anything essential in its structure as a poem. Rather the uncanny silence/absence de-faced by but intuitable in the lyric poem is in the nature of (at home in) the lyric poem as much as it is in the robot voice, and inversely, we can take this to mean that that which is special about the object voice of lyrics is just that which is heard in the voices of robots. Now we will consider some of the particular ways in which lyric voice may be heard as we hear the robot voice.

Chapter 4 - Robot-Lyric Voices: A Listening

This chapter practically applies the concepts of robot-lyric voice that have been developed throughout the thesis in order to demonstrate their relevance and effectiveness as critical concepts. The chapter analyses a selection of lyric poems in terms of specific qualities of the robot voice. Firstly, it analyses Dollie Radford's 'song' as well as three short poems from Adam Warne's Suffolk Bang in terms of the silent interiority from which the robot's voice emanates and against which it is heard. This analysis identifies the ways in which the lyric voicing of these poems creates effects of presence by interacting with their originary and internal absence, which are as I argue thematised by the poems themselves. Secondly, the chapter analyses Andrea Brady's long cento 'Book of the City of Ladies' in terms of the robot's silent scream. It is possible to intuit a stifled, alien and original scream as a result of the poem's cento form, but this silent scream has a particular pertinence within the context of the poem's feminist critique. To demonstrate I compare the unique effects of Brady's cento with Sophie Collins' centos. Lastly, the chapter analyses a selection of poems from Sam Riviere's 81 Austerities in terms of the robot's mouthless voice. The concept of mouthlessness in its antagonistic relation to the oral drama of human vocal development is used to explore the effects of deprivation and impoverishment in the Austerities and to articulate these as a critique of austerity policy. The lyric voice as subtitular (which is to say the lyric voice in its capacity as a subtitle which translates into audibility and therefore masks an inaudible voice) is variously apparent across these specific aspects.

Before proceeding with these analyses, I clarify my application of the robot's specific vocal qualities by arguing for voice-technology's supplementary and retroactive effect on our hearing of voices. I argue that as a modern listener/reader I can no longer hear voices as they may once have been heard, and that my understanding of voices must necessarily have recourse to the auditory technologies (to which speaking robots belong) which have altered not just modern examples of voicing, but the concept of voicing and voices themselves. This alteration is not the result of a change in the nature of voice but the result of a

revelation about what voice always was, such that it had always required the trope of a particular auditory technology in order to be revealed. I also draw a comparison between the supplementary technologies which record and transmit voices and the supplementary technology of writing itself in order to show that written 'voice' is bound up with tropes of aural voicing, and so it too participates in this movement of vocal supplementation, revelation and alteration. So written poems, though they may not be considered strictly vocal in the aural sense, indeed belong to this discourse.

The above argument serves to demonstrate the manner in which robots provide a figure through which to illuminate poetry in that robots, like other auditory technologies, make perceptible aspects of voice which were already there but which required a technological trope in order to reveal themselves. I do not reduce poems to robots in order to identify a relationship of mere similarity, rather I offer the robot as a conceptual scheme of tropes which allow us to make known existent but previously unknown aspects of voice. My claim is not just that the lyric voice bears traces of automaticity but that as robot voice, it is also revealed to be uncanny and im/material in ways that can be productive for our reading, ways which I exemplify through my analyses.

1. Voice, Death and the Machine

The methods of listening/reading I propose here engage with the indeterminate nature of lyric voicing which I developed in the previous chapter. If poems indeed make robots of poets, if poems link poets to the uncanny silence/absence of robots, then we require a method of listening/reading which neither defaults to considerations of expression (or seeming lack thereof) nor rationalises simulation away into drama. Our method would also need to take account of the presence of the machine in the lyric voice, not just in the sense of an image which conveys the automaticity of poems, but in the sense of the persistence of machinic qualities and functions embedded in what we hear/read. I therefore identify characteristics or elements of robot voice in the lyric voices of poems, specifically the silent interiority, the silent scream, mouthlessness and the subtitle. I

show how attention to these elements can produce new readings and/or intensify the effects of poems, as we will see, reading this way is not only productive but also does justice to the poet's indeterminate status and the uncanny nature of their voicing in the poem.

The voices I am about to discuss owe their credibility to im/materiality, they straddle the material and immaterial by virtue of the lyric motion of understanding, the anthropomorphic trope that renders the inscrutable scrutable and in that way brings out the material from the immaterial. To acknowledge that move entails the acknowledgment of the immaterial basis of the material, and therefore of the materiality of the immaterial. It also acknowledges what is between them, what necessarily remains unspoken, and while that remainder belongs to immateriality, never to be materialised, it can be conceived of as a negativity that produces positivity, and in this sense, as I have already argued, it is a voice. As such, the silent, intuitable elements I discuss here under the figure of the robot are of particular interest when reading a poem. Due to the uncanny robot, who provides the conceptual key and the lyric trope with which to access these strange inaudible voices, we can read lyric poetry in light of a grounding negativity, a grounding absence/muteness. Though it may seem paradoxical, these robotic functions of absence and negativity are a fundamental condition of lyric humanness. In other words, it is only from a grounding negativity and absence which has been revealed by the robot that we may produce effects of lyric humanness in poetry.

The lyric modes which I have identified and used in this thesis have enabled us to see the links between lyric poetry and robots, between robot voice and lyric voice, but to practise the hearing of those voices requires that we accept a deep relation between our own voices and the voices of robots. What we come to understand about ourselves through technological tropes is retroactive because what is learned is revealed to have always been the case. We partially explored these effects in our discussion of robots and personness; with each iteration of AI, we discover that our personhood was always more than that iteration could achieve. In the same way it is not just that robots provide a helpful metaphor for our reading, rather the robot reveals to us what has always been the robotic nature of our own voices, particularly in the context of lyric voicing. We can think of the robot as

constituting a continuation of the supplementary effect which technologies have on the human voice.

The retroactive motions of the robot are of the same order as, for example, the advent of printing, and along with printing robots contribute to the supplementary revelation of the voice. According to Matthew Rowlinson, developments in print technology meant that poets were directly identifying their work with a textual, rather than oral materiality by the 1860s.²⁴² Rowlinson argues that as lyric poetry was increasingly recognised as a textual form (even as it maintained its mythical oral origins) textual nature came to belong to lyric, or to seem proper to it. In Rowlinson's words

...print becomes for lyric the hegemonic medium, with the result, on the one hand, that all lyric production takes place with a view to print, and on the other, that lyrics which had previously been circulated and received in other media are now remediated through print.²⁴³

So much so that, as printed texts eventually became cheaper and easier to produce and so more easily available, poets began to increasingly reference the textuality of their poems and to imply by extension the now textual dimensions of poetry in general. As Rowlinson argues, the way in which poets articulated the relationship between the poem and orality also altered with this technological advance; the mediation of oral voices became a Romantic convention, the written poem and the oral song were to exist less as related but distinct things, and more as versions of one another. This is the point which Rowlinson terms lyric's 'totalisation' in print. In this sense, what lyric poetry was, what it had always been, had changed retroactively, print had supplemented the orality of lyric poetry and so changed it, inserting textuality into its voicing, identifying text *as* the mode of its voicing.

Robots have not only supplemented our lyric image of ourselves (as simulations, as models, as foils) they have also impacted our voices specifically in this way. Having heard the robot's voice, our own voices will never be the same,

²⁴² See Matthew Rowlinson, 'Lyric' in Richard Cronin, Alison Chapman and Antony H. Harrison eds., *A Companion to Victorian Poetry* (Blackwell, 2002) pp.59-79.

²⁴³ Rowlinson, 'Lyric', p.59.

and the assumed opposition of robots and poetry may well be a defensive expression of this. As we discussed in the previous chapter, it is often believed that the robot is a threat or an antidote to a poetry defined by the special inner light of the self-expressive subject. Our voices are put significantly at risk by the uncanny voice of the robot; we believe that our voices have something to lose and are more than capable of being availed of that something, whatever it is. Obviously, I disagree. In any case lyric poetry, as a bastion of that voice (for better or worse) is therefore a privileged place where it is possible to see the effects of technology's supplementarity. To hear the voice of the robot in the lyric poem is to acknowledge the changing field of reading and listening; the robot enables me to hear in a way that I would not have otherwise been able to hear, but what I hear in the lyric is nothing new, nothing imported into the poem.

My approach to lyric favours adaptable lyric modes, modes which can be described as modern, rather than rigid generic conventions, and in that sense my approach is one which acknowledges that definitions of 'lyric' have been historically contingent. But I do not claim, as some critics have, that 'lyric' is an invention of critical discourse dated at the twentieth century²⁴⁴ (or dated at the nineteenth, depending on the critic²⁴⁵) Instead I would argue that lyric has existed in its many forms, with their own integrity, long before modernity. But modernity has produced, or even necessitated forms of reading which have a totalising, retroactive trajectory. I hope to avoid annihilating the historical specificity of lyrics and to also avoid undermining lyric itself as a meaningful category. As a modern who shares this world with robots and with the older mythos of the robot, I cannot hear lyric poems as they may once have demanded to be heard, in which case 'lyric' is required to be a fluid mode.

The particular way in which robots have changed how we hear our voices is a modification on the changes that early voice recording technologies also made to our voices. The invention of the phonograph and subsequent audio technologies which were capable of conveying voices among other sounds, laid the uncanny

²⁴⁴ See Virginia Jackson and Yopie Prins' commentary in *The Lyric Theory Reader*.

²⁴⁵ In Marion Thain, *The Lyric Poem and Aestheticism* (Edinburgh University Press, 2016) Thain sees Symonds as 'set[ting] out a theory of poetry's 'lyricisation'' as 'a nineteenth century phenomenon in advance of the more systematic movement that Jackson and Prins identify' p.22. For Symonds' original article see J. A. Symonds, 'A Comparison of Elizabethan with Victorian Poetry' in *Fortnightly Review*, 45.265 (January, 1889) pp.55-79.

ground work which robot voices later developed in their own unique way. These changes are, I believe, compatible with similar effects inherent in the technology of writing and, as I have already mentioned, printing. This means that the supplementary and uncanny effects of the invention of the phonograph are highly relevant to our discussion here, and I will therefore preface my listening to/for the robot voice in the lyric voice with a detour through late nineteenth century audio technology. This will provide some necessary context to my analyses and also clarify the concept of supplementarity in the voice. It will also help to confirm the links between the forms of robot voice and the lyric voice. The shared, uncanny roots between these voices, their bases in absence and mechanical muteness, should be evident, and should therefore help to justify my choice to hear lyric in the way that I earlier heard robots.

Technologies such as the telephone and phonograph emerged as secondary augmentations of the voice. Of course, they were capable of augmenting many other sounds, but no sound was as influential upon our sense of self as the sound of human speech. Such audio technologies repaired the shortfalls of voices; voices could now cover great distances without diminishing, be amplified or decreased, they could be duplicated and preserved verbatim, even after death. In auditory technologies voice found its extension, it found a supplement and prosthetic which added to its reach and power, and with that it augmented the reach and power of the voicer, for whom the voice has long since served as a synecdoche. However, this reach and power was enabled by and dependent upon a radical objectification of the voice; separated off and stored by the phonograph for example, the elusive, limited, ephemeral voice became for the first time an object of material dimensions, available for manipulation and scrutiny. For the first time, technologies such as the phonograph allowed us to hear voices as they 'really were', in a non-dissipative, isolated form, untainted by the presence and experience of the voicer. It was revealed to us that our voices were not those we knew and experienced at the moment of speaking, but the ones we heard from the mouth of the phonograph, and this is the way it had always been.

In the manner of supplements, the recorded and transmitted voice both added to and substituted that which was supplemented. Voices became more available to us, more known, more revealed, more heard; but what we heard was a voice that was always already mechanical and mechaniseable, that had always only been available through machines, and those machines had at last arrived. This increase in reach and power was no mere addition to or improvement of a stable original; as Douglas Kahn has described it, with the invention of telephony and phonography 'a new loop of utterance and audition was interjected into the existing one, which, in effect, had been stretched and broken'. ²⁴⁶ This stretching and breaking was not a new, modern stage from which we might look nostalgically back upon a pristine auditory past; there was in fact no going back. What voice transmitters and recorders revealed was the recordability and transmissibility of voices, they rendered manifest the conditions of utterance and audition which had previously only been latent, which had simply been waiting for the right technology to realise their true nature.

Importantly, it was in this way that the speaking subject discovered something of its materiality not in itself but in a machine; sounds were naturally mechanisable, but most provocatively perhaps, *voice* was also naturally mechanisable, it even naturally required mechanisation and the auditory signs of a subject (by which I mean abstracted sound waves and not, importantly, the specific vocal actions of a human body) could be faithfully reproduced by machine. This is to suggest a naturally mechanised or mechanisable subject. This particular mechanisation was unique to the science of voice reproduction and its nature was intrinsically uncanny and potentially unsettling. Thomas Edison, inventor of the phonograph, was well aware of this uniqueness and used it to spectacular effect when he said of his machine

This tongueless, toothless instrument, without larynx or pharynx, dumb, voiceless matter, nevertheless utters your words, and centuries after you have crumbled to dust will repeat again and again to a generation that will never know you, every idle thought, every fond fancy, every vain word that you choose to whisper against this thin iron diaphragm.²⁴⁷

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 ²⁴⁶ Douglas Kahn, *Noise Water Meat: A History of Sound in the Arts* (The MIT Press, 1999) p.8.
 ²⁴⁷ Thomas Edison quoted in Douglas Kahn, 'Death in Light of the Phonograph: Raymond Roussel's Locus Solus', in *Wireless Imagination: Sound, Radio and the Avant-Garde*, Douglas Kahn and Gregory Whitehead eds. (The MIT Press 1994) pp.69-103.

Until this point, the science of reproducing the human voice had largely focused on reproducing the human anatomy, mimicking the pneumatics of air through the larynx and the compressions of the tongue. Examples include Kempelen's Sprech-Maschine and Joseph Faber's Eupohonia, mentioned earlier in this thesis. But we might also include Germain Célestin Édouard Fournié's artificial glottis, which modelled the physiology of the human speech organs, and Christian Gottlieb Kratzenstein's vowel organ, which included specially shaped pipes (based on vox humana organ pipes) each capable of reproducing an individual vowel sound. Attempts at replication by generating tones were a development more contemporaneous with the invention of the phonograph. Hermann Von Helmholtz invented a tuning fork apparatus for the production of artificial timbers. Later, George René Marie Marage's vowel siren produced tones using disks which duplicated the appearance of vowel phonautograph traces and manometric flame images, the apparatus also included a set of buccal resonators to mimic the vowel sounds produced by the human speech organs.²⁴⁸

Until telephone and phonograph, the reproduction of voices had been predominantly allied to human biological specificity. But now, the human voice as it really was had been found to lodge in a mechanical form independent of human specificity, even antithetical to it. The voice was no longer grounds for human exceptionalism, a thing did not require human anatomy in order to utter human words, to possess a human voice. And if the voice yet remained allied to the human soul, as it traditionally had been, then the speech of the 'tongueless, toothless instrument' had consequences perhaps too horrible to entertain; was it that machines could house a human soul, or could they even have souls of their own? Was the soul just an affectation of mechanical processes? Edison's description is indulgent, evoking both the death now at the heart of voicing and also the alien psuedo-life of the speaking machine. The speaker is condemned to an eternity of embarrassment while the instrument is imbued with an almost supernatural power to prolong the speaker's state indefinitely.

²⁴⁸ For images, see *Instruments and the Imagination*, pp.190, 195, 200, 204, 212 and 215.

The effect of the telephone upon the voice is not dissimilar; Mladen Dolar points to Marcel Proust's early encounter with a voice through the telephone by way of example

A real presence, perhaps, that voice that seemed so near - in actual separation! But a premonition also of an eternal separation! Many are the times, as I listened thus without seeing her who spoke to me from so far away, when it has seemed to me that the voice was crying to me from the depths out of which one does not rise again, and I have felt the anxiety that was one day to wring my heart when a voice would thus return (alone and attached no longer to a body which I was never to see again), to murmur in my ear words I longed to kiss as they issued from lips for ever turned to dust.²⁴⁹

Dolar identifies that here, 'the impalpable ghost does not vanish but invades the living.' Proust's experience is typical of the auditory encounter with the voice on the telephone, and that encounter shares its uncanny roots with the phonograph, in that phone-voices

...rise up at our side in a presence which is more acute, more real than the "real" presence, and at the same time the token of separation, the mark of an impossible presence, a phantom of presence, invoking death at its heart.²⁵¹

The separation of the voice from the body evokes death even, and especially, given the intimate quality of presence produced by that voice, particularly in that voice's closeness to the ear. Like Proust, we fear that what we hear from the telephone is the reality of the voice of the dead lodged in the living.

Telephony and phonography identified a dislocation of body and voice. Until their invention, voice was simultaneous with presence; voices were limited by

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²⁴⁹ Extracts are taken from Marcel Proust, *In Search of Lost Time, Vol. 3*, C. K. Scott Moncrieff and Terence Kilmartin trans., revised by D. J. Enright (Everyman, 2001) p.419, quoted in Dolar, *A Voice and Nothing More*, p.63-4.

²⁵⁰ Dolar, A Voice and Nothing More, p.65.

²⁵¹ Dolar, A Voice and Nothing More, p.63.

the location of the body and the powers of vocalisation that such bodies possessed; voices lasted only for the duration of their vocalisation, extendable only briefly by echo. Importantly, one only ever heard a voice in the place and moment of vocalisation, so that vocal identification was concurrent with a subject's vocal acts, performed by the subject's body and also felt within their body. Ventriloquism (in its usual sense and not the one I developed in the previous chapter) is the exception, but it falls under the categories of illusion, possession or miracle and represents a break with the usual order of reality. Ventriloquism confirms the identifying link between a subject's voice and body as it demonstrates a dislocation that should not be and which can be only through trickery, supernatural activity or divine intervention. Not only that, but ventriloquism demonstrates the voice's powers of animation; the character of the ventriloquist's dummy becomes a subject capable of address only when possessed by the ventriloquist's voice. That is to say that it is the identification of that voice with that doll-body which enables that body to function as a subject. Telephony and phonography on the other hand, are neither supernatural nor illusory, instead they testify to a mundane facticity. Furthermore, while ventriloquism involves the dislocation of voices and bodies, it cannot dislocate those bodies in time, it does not do the work of the phonograph. Ventriloquism still suggests a voice traceable to an original speaking subject (no matter how im/material the speaker may be) speaking at the present moment of enunciation. The phonograph breaks that loop.

Voice was previously coextensive with self. However, in the ear piece of the telephone receiver or the horn of the phonograph, that voice did not adhere to the body. The voice was demonstrated as not necessarily depending on the speaking subject; that voice which was dependent upon unity with the body in its identification of the self suddenly revealed its potential for independence from the body and its potential for reattribution to a different, mechanical, body. Dislocation was introduced into the self and it is the voice's association with presence and the recording and/or transmitting machine's ability to dislocate that presence which enables the entrance of death. As Edison highlighted, every vocal utterance now possessed the capacity to outlast the speaker who uttered it, to persist divided from and independent of the speaker as a copy of that speaker. Vocal utterances foreshadow death just as the doppelgänger foreshadows death - when one can hear

their double, surely one must be about to die, or be dead already. The voice also foreshadows its uncanny undeath, its posthumous existence as the effect of a machine.

The impact of transmitting and recording technologies was not just on 'voices' but on our 'own' voices. The dislocation of voice and voicer struck at self-knowledge and rendered the internal, individual, private familiarity of one's own voice into an externalised, shared, public unfamiliarity. Upon hearing a recording of our own voice we hear ourselves speaking as one hears the voice of another and, as for Proust, when we hear a person's voice without the distorting distraction of their body, we hear their unique voice isolated as it 'truly' is.

After a few seconds of silence, suddenly I heard that voice which I mistakenly thought I knew so well; for always until then, every time that my grandmother had talked to me, I had been accustomed to follow what she said on the open score of her face, in which the eyes figured so largely; but her voice itself I was hearing this afternoon for the first time. . . Fragile by reason of its delicacy, it seemed constantly on the verge of breaking, of expiring in a pure flow of tears; then, too, having it alone beside me, seen without the mask of her face, I noticed in it for the first time the sorrows that had cracked it in the course of a lifetime. 252

This voice which was both an internal, private experience and an essential element of our own self-identification, is now other, threatening vocal self-identification with impracticability. Our own recorded voices are so often unrecognisable to us, yet this voice is recognisable as us by all others who hear it. In the typical uncanny move, that which was familiar is at once removed to a place of unfamiliarity and that unfamiliarity is located within the heart of the familiar. That you speaking is you and yet not you, a you that you cannot accept and cannot exorcise. Reject this you and reject the 'truth' of yourself, accept it and accept a you which is alien. In either case you will be replaced with something intuitively felt as 'false', perhaps even 'artificial'.

²⁵² Proust, *In Search of Lost Time*, pp.419-20, quoted in Dolar, *A Voice and Nothing More*, p.64.

While the human voice became allied with machines and objects, while it was infiltrated by death, the machine also revealed its nascent vocal life. Matthew Josephson describes the first recorded sounds made by Edison as 'the first strangled cries of the infant talking machine'. 253 This is another undeath; a birth without life, a deadness without having died. It has a sense of necromancy about it, of inversion of life and death, human and machine. Of all his inventions, it was the phonograph that led to Edison becoming known as 'The Wizard of Menlo Park', a moniker which suggested both amazing genius and dark magic. In fact, auditory technologies became explicitly linked with the occult through early twentieth century Spiritualism. In 1920 Edison claimed to be working on a 'Spirit Catcher', known later to some paranormal investigators as a 'telephone to the dead'. Based on the phonograph, the Spirit Catcher was to be a recording device of such subtlety that it would pick up the residual sounds of human spirits, enabling communication with the dead. Edison died before the Spirit Catcher could be fully developed, but the attempt to construct it is an indication of the extent to which voices, death and machines had become enmeshed. So deathly was the machine that it could convey the voices of the dead, so machinic was the voice that the voices of spirits could be recorded in phonographic cylinders or called on the phone.

This is the legacy which the robot inherits and modifies when it speaks. Death and the machine have already entered our own voices and our own voices are naturally separable and mechanical, and naturally dis-identified with us when heard by us. This uncanny state of affairs has been revealed to us as the 'true' and 'original' vocal state. A speaking robot (as opposed to a machine speaking pre-recorded messages) however, does not give us back our own voice or the voices of others, even if it does evoke the memory of the voice's transformation under such technologies. Instead it simulates voice. This simulation constitutes the speaking robot's contribution to vocal augmentation and therefore its participation in supplementation. We no longer need speaking subjects to produce voices, we can now delegate that task to machines; the potential for vocalising is thus expanded, but only because the speaking robot has replaced a human speaker and so replaced the human specificity of voice. In the manner of simulations, the robot voice

²⁵³ Matthew Josephson, *Edison* (McGraw-Hill, 1959) p.160.

therefore makes voice hyperreal. A robot that speaks *is* speaking. Unlike recording technologies, a human need not have spoken at any stage in order to produce this voice. Voice is not only dislocated from the human in space and time, it would also seem to be dislocated from human subjects entirely, which is to say that the robot's speaking voice re-frames what subjectivity is.

At the same time, the notion of an authentic or inauthentic speaker becomes unworkable in the face of voice's hyperreality. A voice is no less a voice even though it appears to come from a silent interiority, no less a voice if it belongs to an alien and alienating subjectivity, and no less a voice if there were never a mouth to make it. In fact, these features come to characterise voice once again as it 'really is' in its ultimately isolated, simulated form. And while the robot voice may seem in this way to represent everything that a human voice is not, we should remember that a robot is nonetheless a lyric image of personness. The core uncanniness which underpins the particular uncanniness of the robot voice is, as we know, the concern that perhaps in actual fact we are automata. The robot is too close to home, and so too is its voice. Lyric poetry is a particularly sensitive site for the play of this voice due to the way it brings these features of voice to the fore, and due also to responsibility that lyric has come to own for manifesting the self-expressive human subject. If the robot voice is too close to home, then it will certainly find a home in lyric poetry. The recorded voice proceeds from nothing, from the unthinking, unfeeling silent interior of the machine and so does a robot's voice, because the interiority of robots is intuited as undivided, non-dialogical and alien. But the recording machine never threatened to be a person, only to uncannily imitate or preserve a person. What is unsettling about reading lyrics since the phonograph is the serious effect of presence²⁵⁴ which owes itself to a machinic absence native to one's own speech. What is unsettling about reading lyrics since the robot is the compounding of those effects, the uncanny blur between human and inhuman, the

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²⁵⁴ While writing itself already suggests a voice which comes from nowhere and while this had been a subject of interest to writers before the invention of the phonograph, I mean to highlight how, unlike writing, the effects of vocal presence created by the phonograph are quite literal, and for that reason are more profoundly affecting. To read lyrics since the phonograph is to read in a context wherein the audible voices of subjects may be literally present in their absence, and wherein this feature of voicing is taken as natural.

hyperreality that relegates the pre-written subject to some alien between place, while at the same time the simulation is known to assert itself in its own right.

What all this implies for lyric poetry is the (hyper)reality of lyric voicing, the lyric voice's status as a 'real' voice, representative of our voices as they 'really are', and those voices as they 'really are' are characterised by and contain the silent sounds of robot voices. So, if (as in the preceding chapter) I can identify the silent voice of lyric poetry, its special inner light, with the uncanny and alien emptiness of the robot's voice, I can also hear in it specific formations of the robot voice, because robot voice is consistent with what human voice 'really is' and as it 'really' lodges in the lyric, along with death and the machine. The uncanny ghostliness of death and the machine is already inherent in writing and doubly inherent to lyric as the genre of subjective self-expression particularly. We might point to Keats' short poem 'This Living Hand', as an example of how that ghostliness has been extant and exploitable in writing long before the invention of the phonograph or indeed the robot.

This Living Hand

This living hand, now warm and capable Of earnest grasping, would, if it were cold And in the icy silence of the tomb, So haunt thy days and chill thy dreaming nights That thou would wish thine own heart dry of blood So in my veins red life might stream again, And thou be conscience-calm'd-see here it is-I hold it towards you.²⁵⁵

What Keats does here is to take advantage of an essential and obvious feature of writing. The play is on the temporal and physical disjunction between the act of writing and the act of reading, and the way in which this disjunction paradoxically conjures effects of presence much like the telephone yet to come. Keats prefigures

²⁵⁵ John Keats, 'This Living Hand, Now Warm and Capable' in *The Poems* (Everyman's Library, David Campbell, 1999) p.342.

his death and with that his absence, and in doing so he takes advantage of writing's ability to preserve his presence after death. The effect is of an uncanny return of the flesh to a fleshless medium, or in opposite fashion, a return of the incorporeal to a mode wherein effects of fleshy presence are taken for granted. The gesture draws our attention to the conditions of lyric voicing in a written medium, demonstrating how this medium necessarily blurs the proper boundaries of presence and absence, sound and silence, how it enters something new into the loop of utterance and audition. It demonstrates that the written does not exist as a mere extension of the spoken in a homogeneous field of communication; in being written, lyric statements trouble the distinction and the relationship between absence and presence, said and unsaid. This necessarily constitutes a different kind of speech act to one which is purely spoken, while at the same time it invokes the presence and embodiment of the spoken. We might even understand Keats' poem as less of a statement in the usual sense and more as a little machine which produces effects of his presence in his absence. This would be to claim that the written gesture of reaching out with the dead/living hand is consistent with and restates the mechanics of writing itself; the once living hand may write the poem but in the poem that hand is always already dead, and exists in a perpetual undeath, uncannily able to call upon the reader from the silence of the page (and from the silence of the grave). Keats reacquaints us with presence through the grisly example of his once living body. The gesture highlights just how powerfully felt presence is in writing, particularly lyric writing with its unique structures of address and its association with the expressive voice of human subjects, but it also highlights that that presence is predicated upon, indeed thrives upon, absence. In which case the poem would also seem to imply that all poems are in fact written by such undead hands, and that these undead hands are always reaching out for the reader. To return this reading to supplementarity, we can also say that this poem augments Keats' vocal potential immensely; he is able to effectively call himself back from the grave, but on the condition that he is replaced by a ghost, on the condition that he, in writing the poem, confers upon himself the status of a ghost capable of return. It is only through his writing that he 'speaks' again and therefore presences in any sense after death.

I am here reading Keats as pre-empting something of Derrida's argument in *Signature Event Context*, or perhaps, given the topic of supplementarity, it might be

more appropriate to say that I see in Keats' gesture a similarity with a certain poststructural theory (which came, of course, much later) or that I understand his gesture with recourse to a post-structural frame.

To be what it is, all writing must, therefore, be capable of functioning in the radical absence of every empirically determined receiver in general...What holds for the receiver holds also, for the same reasons, for the sender or the producer. To write is to produce a mark that will constitute a sort of machine which is productive in turn, and which my future disappearance will not, in principle, hinder in its functioning.²⁵⁶

Keats' poem is not merely a witty trick of presence which capitalises on the technics of writing (though of course it is that too) To function as writing the written must be divorceable from the context of both receiver and sender, or rather it must be already divorced and therefore transferable to other contexts. If this is the case, then the uncanny gesture that Keats makes is possible because it makes use firstly of the detachment of the written from the writer, and secondly of the production by this absence of a kind of presence. In other words, the hand can be offered because, as writing, it can travel away from Keats through contexts.

The offering of the hand can be taken seriously because it is coded as present and it can be coded as present because Keats' absence is written into the technology of the poem. The hand does not really come from Keats the writing subject, but from nowhere. The poem therefore expresses a core absence/silence which I consider native to voicing and which relates lyric voice to robot voice. What underwrites the poem is not the solidity of the man John Keats but the guarantee of his never having been there at all as per the demands of writing as a technology. But it is Derrida's figure of the machine here which is particularly interesting.

The fact that Derrida figures the written as a machine seems significant, it implies that what is effectively a voice is produced by writing which is (among other things) a tongueless, toothless instrument. Not only this, but the image of the machine has an anthropomorphic and therefore naturalising power; the machine of

²⁵⁶ Jacques Derrida, 'Signature Event Context' in *Limited Inc*, Samuel Weber trans. (Northwestern University Press, 1988) p.8.

writing confirms the tropic figure of myself as machine and vice versa, the machinic confirms itself as the natural form in which we discover the human voice, it confirms in circular fashion that voice can exist in the form of a machine called writing. The trope is a powerful one. We can read Keats' poem as consistent with writing's necessary divorce from presence and alignment with absence, but we may also do so under the sign of the machine, and this reading prompts a serious stance towards the poem. The ghostliness of Keats' hand is not just the ghostliness of the page/grave, it is also the particular ghostliness of the machine, which is the real ghostliness of our own voices. Keats' poem is uncomfortably, and indeed uncannily, close to home.

Derrida describes writing as 'some sort of machine' but *what* sort of a machine? To answer that we have recourse to the sorts of machines which, like writing, transform acts of speech through supplementary motions. When I read Keats' poem I am aware of not just the trick of presence which necessarily makes poems seem haunted, I am also aware of the machine-death which inhabits voice more generally, and not just in poems which reflect upon their own absence. I find that I retroactively read the hauntedness of writing as reflecting and expressing what seems to be an innate machinic quality of spoken voice.

I have framed this kind of reading as a modern condition, by which I mean modern in the way that any great technological advance or disruptive event necessarily changes the way we think about and live in the world, changes even how it is possible to think about and live in the world. But this kind of reading is modern also in the particular sense developed from the early twentieth century. For example, the modification of the voice which the robot produces is helped along by the value put upon the experience of the 'now', which is characteristic of the twentieth century's modern moment. D. H. Lawrence championed the virtues of modern poetry of the now

...give me nothing fixed, set, static. Don't give me the infinite or the eternal: nothing of infinity, nothing of eternity. Give me the still, white seething, the incandescence and the coldness of the incarnate moment: the moment, the

quick of all change and haste and opposition: the moment, the immediate present, the Now.²⁵⁷

This 'Now' is consistent with the displaced temporality we have been looking at in the sense that Lawrence's insistence on the poetic 'Now' suggests that the only valuable, indeed only 'real' poetic moment is the one that unfolds at the site of the poem and for the length of its duration. In which case, the temporally displaced moment of presencing out of absence, the stranded vocal happening of the poem (as opposed to any mythic temporality that it might instead point to) is that which is truly 'incandescent' to a modern like Lawrence.

For Lawrence, the voice that congeals in and only in the moment, and for the duration of its voicing, is uniquely alive within a modern field of experience which prefers the 'Now' over the posturing of the eternal or infinite. Such poetry is alive in the sense of being immediate, without reference to prior or further contexts (though it is generative of the former and consumes the latter according to Lawrence) and for that reason it appears authentic, or at the very least it seems to be essential and important poetry and, in that sense, so thoroughly Poetry. In this way modern poetry does not offer a present which links to some kind of poetic eternal, whether this is in a byzantine past, a messianic future or a timeless time. Instead it is a thing that occurs in the present and in the present, and in the present again, with only the shining moment of the present as its goal and concern. This is not necessarily just a stylistic choice of modern poets; the attention to poetry's nowness can also translate into a mode of reading. Derek Attridge comments that 'reading poetry requires time; each word needs to emerge and fulfil itself before we go onto the next. A poem is a real-time event'. 258 I would suggest that to read poems as real-time, and especially when in combination with a preference for the 'now' as authentic, might predispose us to hear lyric voice as robot voice, as a voice which comes from nothing and which yet implies the unity of a voicer, existent in the moment of voicing, without roots to either shining origin or destiny. Or perhaps rather auditory technologies, the

²⁵⁷ D. H. Lawrence, (2009, October 13) 'Poetry of the Present' in *Poetry Foundation* https://www.poetryfoundation.org/articles/69403/the-poetry-of-the-present [accessed 09.10.17] Originally published as a preface to Lawrence's *New Poems* (B. W. Huebsch, 1920). ²⁵⁸ Derek Attridge, *Poetic Rhythm: An Introduction* (Cambridge University Press, 1995) p.2.

temporal displacement they engender and the reading/listening practices they create, have predisposed us to read in and for the 'Now'.

2. Silent Interiority

As I mentioned at the beginning of this chapter I will frame my readings through the silent interiority, the subtitle, the silent scream and mouthlessness, in line with what I have identified as characteristics of the robot voice. I will begin with the silent interiority. By 'silent interiority' I mean that we might hear the lyric voice as we hear the robot voice in that, like the robot voice, lyric voicing suggests a lack of interiority. That is to say it suggests an internal and originary silence/absence, which clashes uncannily with the writing/speech which is conventionally the marker of dialogic interiority. This is not to say that the poet lacks interiority of course, but that the poem itself, as a technologically mediated voice phenomenon, proceeds from a null space from which the writing subject has been absented or muted, and has instead been redirected into an essentially inhuman form which, again uncannily, testifies to their humanness. As I have argued, we hear that absence/muteness, that null, as a voice, as a negativity which produces and guarantees the positivity of both the lyric- and writing- subject.

The question now is how to read examples of lyric voicing with this silence/absence in mind, and how this particular kind of listening might expand our readings. There is however the potential for this robot voice to lead to not much more than a mere sense of eeriness which accompanies and undermines lyric utterances, amounting to a suspension of disbelief which frustrates emotional or empathetic engagement. But I will move beyond these vague impressions, and instead ask what new tensions, negotiations and instantiations are introduced into my reading when listening for robot voice in terms of internal silence/absence. These things also have an affective aspect to them, but do not end with a mere shudder at the strangely stranded voice.

Rather, in the following analyses the robot provides me with a vocal figure through which to materialise what I identify as the rehearsal of a vocal ritual, this ritual empties out the writing subject in order to produce a form in which it can take

shape more clearly as the thing we recognise as, and therefore call, human, a lyric form which is in excess of what would be possible for the human outside of it. This reading (and here we engage the affective dimension) enables a space of ritual community which is palpable and attainable in a way that may otherwise feel difficult, even impossible for modern subjects. In a distinctly posthuman fashion, the indeterminacy of the lyric voice revealed by sustained attention upon the void out of which that voice emerges and manifests, suggests (hyper)real presence, albeit presence of a curiously paradoxical sort such as we explored with Keats in the previous section. In this sense presence, though real, is less literal and more affective; it produces an affect of presence and of community with that presence, which characterises the experience of reading and influences my interpretation.

By way of example I take first a poem removed in both age and style from our particular modern moment proper to the robot, but not so removed from early twentieth century modernity. Dollie Radford's poem 'song' ('In the first light of morning') one of many 'song's in her 1891 collection A Light Load, is identified by Marion Thain as performing its lyric tropes explicitly. With a high degree of artifice, it invokes lyric's mythic origins in song and is thoroughly engaged and invested in a nineteenth century conceptualisation of the lyric as poetry of the selfexpressive subject, though whether that engagement or investment is in service of celebration or critique is debatable.²⁵⁹ But even as this poem self-consciously makes the expressive motions of the lonely singer subject, it also lends itself to a reading in line with the robotic silent/absent interiority because of its vivid act of what I will call 'presencing' (as in the making present of a subject, as with Keats) and also because it is framed as a voice which sounds against and out of silence. The immediate and curtailed quality of this sounding is typical of Radford's poetry. D. H. Lawrence himself praised her works on this score when he wrote 'They made me sad. They make me think of the small birds in the twilight, whistling brief little tunes, but so clear, they seem like little lights in the twilight, such clear, vivid sounds.'260 Her 'song' is therefore an excellent example of both public, ritual

²⁵⁹ See Thain, *The Lyric Poem and Aestheticism*. Thain argues that Victorian aestheticist writing like Radford's is wrongly interpreted as stylistically nostalgic, instead such poems engage the question of lyric's functions and possibilities, as well as its relevance in a modern world.

²⁶⁰ From a letter sent by Lawrence to Radford dated January 27th 1916, quoted in *The Victorians: An Anthology of Poetry and Poetics*, Valentine Cunningham ed. (Blackwell, 2000) p.975.

voicing, and of anthropomorphic trope, given its 'sung' rehearsal of personal emotions as it tropes these into a wider musical reality in which the poem itself belongs.

song

In the first light of the morning,

When the thrush sang loud and clear,

And the blackbird hailed day's dawning,

How I wished my love could hear.

When the sun shone on the sand there,
And the roses bloomed above
And the blue waves kissed the land there,
How I longed to see my love.

Now the birds good night are calling,

And the moonbeams come and go,

And my tears are falling, falling,

Because I want him so.²⁶¹

The song which the poem tropically is is that which is ultimately unheard by the absent lover, even in the midst of its singing. The birdsong which the poem contains, the birds' calling, and also perhaps the cosmic 'song' of sun and moon in their metrically measured progression across the verses of the poem, are the figured sonic contents of the unheard song. But what is actually 'calling, calling' is in fact the ironically unheard lyric voice of the poem, the voicing which alone indicates the presence of the lyric subject who voices. Thematically the song emerges out of the grounds of an absence to which in its singing, it appeals. The lover is not there to hear the poem; importantly the poem is not addressed to the lover, rather the poem

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²⁶¹ Dollie Radford, 'song' in *The Victorians*, p.976.

bemoans, and in that creates, the deafness of the lover's absence, because of which the 'song' itself is unheard. 'Song' is thematically contrasted against silence in this way, the lack and deafness of the lover, though generative of the 'song' itself, is in a productive tension with the song which sings of it. The reader, in this extravagant address form, acts as ratifier for the unheard song; we confirm its sounding out of and against silence, as well as its return to silence once more, and in that way ensure that for the duration of our listening, the song can be paradoxically both 'heard' and 'unheard' in a way that re-inscribes its ambiguous status as a written voice event. This is to say that we can identify a relation between the silence/absence at home in the poem, and the image of the silence contained within and related by the poem. 'Song' re-inscribes the emergence of lyric voice from silence/absence, re-inscribing the absence/silence in the midst of lyric voicing. 'Song' is therefore a self-confirming loop, ultimately singing the excessing song of itself.²⁶² It thereby generates powerful poetic effects.

In 'song' the lyric voice passes through the abyss to achieve a magical excess. For example, the singer's tears, the symbol of their human anguish (and so, conventionally, of their human self) manifest musically in the calling of their 'falling, falling', which (to maintain Radford's trope) harmonises with or creates itself as the natural echo to the musical world that the poem itself creates in the instance of its 'song', which is sung silently or at least comes out of silence. In this way the song sustains itself, unassailable in its silence, but it does so with the particular emphasis that the voice of the lyric subject, in its characteristic humanness, exceeds all sounding beyond the capabilities of human voice in its oral, temporally bound context. The song permits itself to sing in the midst of, and because of, its being unheard. The 'song' manages by its own laws to speak to the absent deaf-muteness of the lover and thereby shows that it contains that

²⁶² By claiming that 'song' excesses I do not mean to suggest that as a poem its form is not conservative. Part of song's machinic quality comes from (and most audibly so) its strict adherence to generic form, through which it inherits and repeats a 'singing' voice that long precedes it. I do not mean 'excess' in the sense that 'song' excesses formal boundaries or conventions, instead I suggest that 'song' s' materialising effects, the looping way in which it brings presence out of absence to recursively sing the event of giving voice, is a particular extravagance greatly in excess of mundanely functional discourse. 'Song' is also machinic in this sense, the sense I have been developing throughout this thesis, in which case notions of excess and mechanicity are not mutually exclusive.

silence/absence without being dissipated or prevented by it. The logic of the poem confirms the silent written text as a form of song preceding its potential real-world oral sounding and in this way, it is able to elevate the lyric voice in way which, I think, generates palpable effects of presence, drawing productively on the indeterminacy of Radford, the writing subject.

In 'song' a deeply human presence is materialised, this presence might be read as in defiance of silence/absence, but by the end of the poem the lyric subject submits as if to a law of parting; the tears are associated with the birds' calling goodnight and a return to darkness and with that, inevitably, the ceasing of the birdsong and appropriately, with the literal ceasing of 'song'. 'Song' performs its going home to silence, but it also comes into being out of silence, in which case it creates the presence of a singer who is self-sustained by their own song. So, the 'song' returns to its native silence/absence, but it does this at the same time that the force of the lyric subject's presence is foregrounded by its voicing, and that presence is made particularly strong and also uniquely touching by the lyric subject's delicate capitulation to absence without diminishing. Radford is referred to an absence which does not swallow her up, instead it materialises and sustains her presence in the poem. This arrangement also safe-guards the possibility of the song's repetition. In this sense the poem again confirms itself and confirms itself specifically as the possibility of human coming to be in and as song, a move which I interpret as affirmative and feel as emotionally uplifting, if bittersweet.²⁶³

I read this poem as a human coming-to-be specifically because of the emphasis I place on the indeterminacy of the writing subject (that is, the indeterminacy of the person of the poet) and my refusal, in alignment with the ideas of Jonathan Culler, to either dramatise the lyric voice as a speaker or to pass it off as an illusion. That the presencing of the lyric subject entails the presencing of Radford is the basis for the possibility of meaningful presence in this poem. With Radford's lyric materialisation out of and with silence/absence comes the real promise and

²⁶³ Although, we could take a less positive view of this coming to be. The clichéd nature of this poem, the alignment of the poet's voicing with birdsong, its predictable, over-used rhymes, its instant, easy recognisability, would suggest that this human coming to be in song may be at the price of a certain shallowness of that being, or alternatively, it may suggest that opposing notions of shallowness and depth, of more or less 'live', are actually a false dichotomy, and that the apparently shallow being represented by this poem ought to be a sufficient being.

solace of the poem, as well as its particular success in that 'song' is not *just* a song, but also a means of producing meaningful effects of material presence. We can feed this back into the poem if we understand this promise to be the promise of the lover's return, forming a counterpoint to the poem's grounding absence. If the poem holds the power to materialise, then like a love spell it calls to the absent lover to come out of his absence/silence and into the song. Indeed, it is only by his silent mute absence that he enters into the song at all. Though this presencing is not in any way transcendent, however uplifting it may seem; presence of this kind is bound to the material specificity of the poem and to the duration of its reading.

Not only this but, aided by its sadness, the poem makes an exceptional offering to public voicing. Radford's lyric voice from silence/absence, marked by the conventional humanity of the tear, positions itself as a very accommodating one, easily occupiable, easily re-speakable. 'Song' is also vague enough to imply or attempt a sort of general bittersweet presencing out of a common experience of lack and desire, and in that sense Radford is always already dispossessed of it, even as it returns to produce her friendly ghost.²⁶⁴ The song of my own tears may also fall thanks to, and not in spite of Radford, who is absorbed into the material of her own expression and is materialised only to be gifted.

The indeterminacy that this foists upon Dollie Radford is not, in this case, uncanny in the sense of being disturbing. Instead I would interpret it as a relief, particularly given that Radford, like Keats, is dead. This transmission of the lyric subject, and by extension the writing subject, as a song confirmed by the trope of song and by the integration of the robotic quality of its singing, would seem to absorb the poem's inherent uncanny features rather than fight them, so that it applies them productively, or perhaps it neutralises them. That is to say that the poem produces a lyric voice which in turn produces a (hyper)real presence which is familiar with its internal absence rather than abjecting it. We could say that Radford's poem produces the opposite effect to Keats' poem, even though it makes use of a similar (though formally and stylistically different) presencing machine.

²⁶⁴ I choose 'ghost' over any other undead figure because of the immateriality of its body (which manifests from thin air) and because of the ghost's association with being heard but not seen. The ways in which a ghost makes itself present, the ways in which it exists, seem the most analogous to the 'undead' ways in which the writing subject comes to presence in the poem.

Radford's indeterminate ghostliness across this poem is a becalmed if deeply sad spirit, rather than a vengeful undead.

In its overt, and overtly artificial voicing, Radford's poem provides a clear point of intersection between the lyric and robot voice where the 'human' might be seen to engage the 'inhuman', and so it facilitates my method of reading well. But I believe that this kind of reading can also be successfully and usefully applied to far more recent, openly modern poetry, wherein the lyric gestures are far subtler. I take now as my example the short poems of Adam Warne's pamphlet length Suffolk Bang, which explores the placeness and the being in or being of rural Suffolk. The short poems of Suffolk Bang all possess a common structure and style, consisting of accumulated and coalesced fragments of visual images, apocryphal knowledge and lines characteristic of documented speech, within which a lyric subject is discerned who emerges from the milieu of parts but is also subsumed by them. These poems also involve a complex interplay of sound and silence, continually referencing the silence/absence that attends the formation of the poems, and which plays counterpart to their materialisation of place and subject. The poems are at once ghostly and productive of place, and productive also of a being in that place, which we can understand as an affect of presence. Suffolk Bang, unlike Radford's 'song', does not neutralise its uncanniness in this way, instead it embraces it to create a uniquely situated subject whose voice, for that reason, rings particularly clearly. The two poems below, 'With Passengers' and 'Carol' serve as representative examples.

With Passengers

a strange distemper are near me when robin is saddest then ejected through a section of smoke to afford some mother, mawther native of Bildeston infested with lice ran up and down
but for my love
pig got well directly²⁶⁵

Carol

on the coldest of the year am fond of company else I float away out where goes across the ploughed all the young people had the grace not by frost on the brittle are rosy cheeked goodbye my grief to hear any music²⁶⁶

Each line arrives as though it were an interjection on the last in that each line is written as a fragment of an otherwise grammatically standard statement and not necessarily as a continuation of the lines that precede and follow it. The appearance of consistency in the poem's stating is managed differently in each poem, 'With Passengers' appears to admit more consistency of statement and 'Carol' less. Read together 'Carol', in its stylistic similarity to 'With Passengers', casts doubt on the consistency of the latter, as if the coherence of longer fragments such as 'mother, mawther/native of Bildeston/infested with lice/ran up and down' were to be supposed coincidental, the result of a certain arrangement of otherwise unrelated fragments, fragments which interject upon each other rather than necessarily belong to each other. In any case, neither poem forms a consistent, grammatically standard statement as a whole in itself, and this is despite the fact that the individual lines of

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²⁶⁵ Adam Warne, 'With Passengers' in *Suffolk Bang*, unpublished Manuscript, p.10. A published version of the manuscript used for this thesis is now available, see Adam Warne, *Suffolk Bang* (Gatehouse Press, 2018).

²⁶⁶ Warne, 'Carol' in *Suffolk Bang*, p.11.

each poem behave as if they came from such a statement originally. These poems read less like an example of poetic non-standard sentence construction (though we may also read them that way if we wish) and more as a colloquy of fragments, interrupting and interjecting one another. This destabilises the poems as would-be fabrics of consecutive utterance. But there is not necessarily a unity which is being interrupted as such, rather each line in these poems is being made to belong uncomfortably to the same field of voicing. The allegiance of the parts owes itself not to a lyric subject *first*, but to another counter-pointing inhuman entity, which I would identify as the place, if not the placeness, of Suffolk. This gives a quasi-animatedness to the place which manifests an appropriately quasi-animated lyric voice.

The poems point to the voids between fragments and to the absented bodies from which the fragments suggest they are taken, but they point also to the joins which produce Suffolk as the object to be understood, or perhaps as the object to deliberately escape understanding and in that sense exceed it. Warne re-inscribes void at the level of style, so the poems threaten to return to the emptiness of machine utterance, but do not. Uncannily, this attendant void is what invokes and materialises the specificity of place in the poems, while it also produces the lyric subject as a simultaneous feature, as if the lyric subject were a side effect of the forceful and persuasive material of the place. The unity of the lines can be secondguessed, appearing as though accidental, and yet the whole they form is so reasonable and expressive, obstinately making sense, in that the resultant poems animate a recognisable atmosphere of place from what might otherwise be inanimate fragments. Which is to say that the absence/silence at the heart of the poems does for Suffolk what it does for the lyric voice, and so the two come to their positivity together, the voice of the lyric subject emerging from place, place coming into frame as lyrically voiced. This is, therefore, a powerful form of situatedness.

The placeness of the place is not described so much as invoked through the colloquy between apocryphal fragments. In this case the apocryphal consists of rural family history, tradition, folklore, gossip and hearsay, and oral histories rerouted through lyric voicing. It is not just that some of the content suggests the apocryphal; emerging as they do without context and entering as they do into no specific relation, the fragments, like apocrypha, seem to come from nowhere and yet to also

have always existed, thereby attaining privileged status as knowledge. Stylistically and thematically the poems are in contact with an originary absence and likewise imply an accompanying unsaid, an accompanying silent hidden, which must be intuited but which nonetheless helps to shape the poems. Given this loosely woven yet forceful work of apocryphal knowledge, the weight of the unsaid is palpable, hinted at by all that is said, all that which faces the unsaid's muteness obliquely. In other words, Warne's fragments inspire the question 'fragments of what?'. Furthermore, in repeating the accidental and colliding style afresh, each poem in Suffolk Bang postures as if to rewrite the last, relegating previous utterances to the mire of obscurity and offering in themselves a new combination with a new claim to placeness, new apocrypha. This recalls the immateriality of the material, and casts material existence, and the existence of place in particular, as an ongoing dynamic event. This representation of materiality complements the obscurely historical theme of the poems; the time in which the poems are set is unclear, historical epochs blend together, the historical public and the experiential private amalgamating messily. This makes the notion of an out-of-time, continuous Suffolk permissible and serious, near-tangible rather than merely whimsical, as it might otherwise seem. In these ways Suffolk is invoked from a silent darkness, secret but generative, and with all the implications of witchcraft that such a phrase can muster. This, I think, is why the poems in Suffolk Bang are so effective and affecting, particularly as their placeness is in a mutual constitutive relationship with the poems' strangely emergent lyric subject.

The lyric subject arises in the manner of an apparition at the confluence of lines, and like an apparition is bound to the place it haunts. The lyric subject is pointedly tied to the syntagma that arranges the dynamic Suffolk; Suffolk is not figured as issuing in the form of an intentionalised vocalisation from a stable and preceding point which is the lyric subject. Further, as the poems gesture to the unwritten Suffolk, they are attended by an absent/silent shadow-Suffolk; the lyric subject is therefore implicitly bound to both places, one foot in the materialised world and one in the muted, unborn one. That said, we needn't regard the lyric subject of these poems as a mere illusion or accident of collision; if we are giving credence to the (hyper)reality of simulation, then we ought to take these poems seriously in their aspect as voicing. It is significant for the lyric voice that the

allegiance of the parts is given to owe itself not to a lyric subject first, because this inflects the voice in such a way as to draw out its robotic character.

I have already mentioned that the poems invite second-guessing by their accidental appearance and somniloquist nature; the unity, reality, the affected sincerity of the lyric subject is undermined by that subject's very way of emerging as itself. The lyric subject is in a total bind; the delicate loneliness and the sense of stake in 'Carol' is presented as being just as emergent as the looming social disquiet in 'With Passengers'. Yet these poems also take part in a poetic discourse traditionally suggestive of the writing subject's self-expression; lines such as 'goodbye my grief', 'else I float away', 'robin is saddest', 'but for my love', constitute conventionally lyrical instances of voicing. The poems do not suggest a composition of literal found text imported into a poetic context, instead a traditionally lyric mode of voicing is nonetheless being established, but it locates itself in and as apocryphal fragments to uncanny effect.

In this sense, Warne's poems also reflect the subtitular nature of the robot voice in a way that Radford's did not; whereas Radford's lyric subject presents a unified and directed voice deriving from a silent absence, Warne's poems instead give an emergent voice which is already corrupted if that voice is to be at all. The lyric voice in *Suffolk Bang* exists in a pre-compromised state, or without 'innocence', to make the robot connection more explicit. Warne's poem 'Tale of' can be read as reflecting upon this state.

Tale of

am in your fields
given to learning
unlikely to be legal
with weasel and fox
years Colonel William
expanded the Estate
and made no scruple
a very eminent
owing to accident

strangled in my red hair where the wind is purring are rich and go to hell²⁶⁷

We can extract from these fragments an implicit narrative revolving around two emergent figures: an ancestral and patriarchal authority figure expands his domain, which is inherited (if not actually then by dint of merely existing in a place marked under his ownership) by a weak, disappointing successor or survivor. Contempt between the two figures persists beyond temporal boundaries. The identification of this drama is only significant here in that the latter figure can be associated with, if not identified as, the stereotypical figure of the lyric poet himself; sensitive, isolated, not given to gainful or typically masculine pursuits. The lyric subject emerges as this figure via the first-person lines into which the lyric subject is insinuated as the missing grammatical component '[I] am in your fields', '[I am/was] strangled in my red hair'. This is not merely to say that the lyric subject is the lyric 'I' (which would not be saying much at all) it is to say that the 'I' here is not just any 'I', it is also implicitly identified with the meta-poetical figure of a Poet himself, and it is through the insinuated 'I' that the lyric subject is given the particular characterisation of the Poet. We can therefore associate 'Tale of''s poet figure with the lyric subject who voices the poem and also with the writing subject as the literal Poet. In which case the lyric subject speaks both 'as themselves' and as they would be spoken about, that is, how they would be (mis)represented or (mis)appropriated when spoken of/for. The lyric subject emerges disconsolately and, being apocryphal, as already mythic and written-over. Although, he does feebly resist his corruption through the indirection of 'are rich and go to hell', a contrast which makes the pathos of the lyric subject's speaking as Warne the Poet, starker still. This speaking of/for mirrors the absenting of the writing subject as lyric poet, a relegation of the poet to silence beneath the subtitle of the poem. The voice that emerges is, as we have come to understand such voices, Warne's, but that voice has only the provisional quality of a subtitle, a subtitle which nonetheless belongs to

²⁶⁷ Warne, 'Tale of' in *Suffolk Bang*, p.16.

Warne and which makes intelligible his otherwise unintelligible and inaudible voice. Put another way, 'Tale of' can be read as the tale of the corruption of the lyric poet himself by way of his own poems' speaking and by his own status as Poet. 'Strangled' would indeed suggest the cut off cry, a theme carried through the base level of this subtitular structure, out to the thematic level of hereditary enmity and threat, creating a satisfying synthesis.

3. The Silent Scream

As evidenced by the presence of the subtitle in the analysis above, aspects of the robot voice are very close in nature and may blur into one another. As such the aspects of robot voice identified in this thesis allow for new readings and complex forms of engagement with poems. The following analysis considers the robot voice of lyric in terms of its instantiation as the silent scream which, as we will find, also intersects with the subtitle. The silent scream, as an aspect of robot voice, has much in common with silent/absent interiority as a preceding vocal non-object, or im/material ground, which may be intuited but not heard, the acknowledgment of which affects the reading of the poem. Both silent scream and silent/absent interiority produce the effect of the subtitle because they must be contrasted with what is said, that is, with that which actually constitutes the poem. But while the two forms of voice intersect, there are meaningful differences which enable different readings. Importantly, the silent scream points towards a mythical origin in essential emotion or passion, as we will recall from Rousseau. In its robot form, that mythical origin point is characterised by alienage and unknowability. It also suggests a stifled outburst of that original alien passion-analogue, such as we might understand as seething inside AM's language in I Have No Mouth and I Must Scream.

An audition of the silent scream would be best served, I think, by returning to the cento. A cento is an especially appropriate choice because the cento's act of re-contextualisation necessitates that we to listen to lines outside of the justification of their native poetic logics and original social-historical contexts, and that we instead listen to lines as they behave in their new context, both as fragments and as parts of a new whole within a new context. A cento has the effect of drawing out

different meanings, different address forms and different kinds of voice act from existing lines of poetry, co-opting those lines into a new, quasi-independent phenomenon, conscripting them into a whole which nevertheless emanates from its parts and their conjunction. In this way centos generate subjectivities. Because the lines maintain their integrity as lines, these new subjectivities, meanings, address forms and voices are traceable at least in part to the lines themselves, and the lines therefore assume a degree of responsibility for what is newly created by their recontextualisation. It is in this sense that new effects are 'drawn out'. However, at the same time the reader is also aware (at least to the extent that the reader is aware that they are reading a cento) that despite what is drawn out, the lines still refer to and conjure up an original context which cannot help but vie with the one into which the lines have been newly entered. This means that multiple levels of voicing may exist within one poem and, even more interestingly, the new features introduced into the lines the cento uses may come to inhabit those lines, and those features may then return home to the original poems and their contexts. Because a cento can layer, import and export such an array of voices, meanings, subjectivities, addresses and contexts, it is an ideal type of poem in which to listen for silent screaming beneath audible speaking.

Here I will be looking at Andrea Brady's long cento 'Book of the City of Ladies'. ²⁶⁸ But before I begin I will establish that, while the poem's politics are inextricable from the poem, the primary purpose of this analysis is not to place myself on a political side, or even to demarcate the sides, it is to explore the voicing made possible by the cento form in the particular case of this poem. The poem's feminist politics can hardly be ignored, being as they are the integral element in the poem's concept, construction and reception. In fact, our attention upon the place of women and women's voices in avant-garde poetics, such that this might extend to language more broadly, is key to listening for the poem's robotic aspects and provides a way to hear its interesting silences. It is the poem's functioning as a cento and the voice effects thereby generated that are the ultimate object of this analysis, but that analysis must proceed through feminist politics. In Brady's poem the cento form highlights that, for women, a speech of one's own is at stake. For that reason,

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²⁶⁸ Andrea Brady, 'Book of the City of Ladies' in *Chicago Review* Vol. 59, No. 1/2 (Fall 2014/Winter 2015) pp.180-186.

the robotic notions of an alien silent scream and a suppressive subtitle provide a useful way of reading this poem which, I think, does justice to both its cause and its form. The following analysis also includes a comparison between Brady's cento and the centos of Sophie Collins analysed in the previous chapter. This is in order to highlight the particular ways in which Brady has used the form and to highlight the ways in which these particularities foreground silence in her cento's generation of subjectivity.

Brady selected the lines for her cento using a very specific set of criteria:

'Book of the City of Ladies' was constructed by taking all lines referring to unnamed female figures, all shes and hers, from books of poetry by cis-male contemporary British poets. These were collated and randomized (to diminish the potential for prejudicial juxtapositions) The intention was to investigate the prevalence and characterization of this figure, and to intensify the effects on the reader of repeatedly encountering her across a range of poetries and situations. While obviously not uncontroversial, it was undertaken as an act of feminist poetic research.²⁶⁹

The effect of the reader's repeated encounter with 'her' is first of all to make her seen, though importantly not heard, and without the naturalising context of the original poems. More rightly, we see her being seen, being constructed, but all while disabused of the poetic logics and contextual frames into whose service 'she' is brought, within which her construction as this 'her' might otherwise seem a necessity for the sake of some greater cause (for example, male self-expression) or a reflection of some truth poetically and therefore fairly rendered. Because the mode of this encounter is accumulation rather than naturalisation, the seeing of 'her' is defamiliarised and made available for critique. Due to their inclusion in the cento, the lines speak this critique for themselves against the stark ground of a female silence.

Any cento, by dint of the form itself, creates play between saying and silence. While Brady's poem is presented as 'poetic research' as opposed to a

²⁶⁹ Contributors notes in *Chicago Review*, p.306.

deliberate and direct rhetorical construction with an agenda, the inevitable play of saying and silence draws our intuition towards an endless host of mute female subjects, mute in the midst of excessive speaking in an overwhelmingly male language. Brady's poem contains a silence which is all the more uncanny given that the lengthy poem extends across five noisy pages of text, making 'Book of the City of Ladies' an impressive subtitle indeed. The particular characterisations and effects of the figure(s) of 'her' are not the only poetically interesting and politically important elements of this poem; the accumulation of these unspecified 'she/her' lines, contextualised as a single long poem in the lyric mode of indirect address and associated with the voicing of a female Poet, suggests the presence of firstly, a silenced female 'original' in a language zoned spatially as male, and secondly, it suggests by dint of this original the existence of a stifled, subtitled, fundamentally alien female scream. I describe this silent voice as a 'scream' partly because of its affective aspect (this silent voice surely screams in horror, frustration, anguish, impotence, confusion and so on) and partly because it suggests the pre/extralinguistic. I mean to say that Brady's experiment can, and I think should, be heard in terms of the robot's silent scream. The aural figure of the silent scream provides an interpretive key to both the poem's political critique and to its operations as a cento in the service of that critique.

If there can be said to be an essential political statement extractable from the gesture of 'Book of the City of Ladies', then I would identify it with Anne Boyer's similarly titled (and very short) essay 'The Girls' City' published in the same year

the men's city is strongly built, made of property and force and women...the girls' city is a vacant city, in that it does not exist...they [girls] have no location but the nothing locations of everywhere that is with the men...The girls' city does not exist. Girls are born into a no place in particular that is owned by men; it matters little where or how; they die there in the nothing as they die everywhere that has men; it matters not where, nor how. They have never had a city of their own; the girls have no ruins; they have no histories

to forget; there is no language whose words they must unlearn; the girls have no orations trailing off their lips;²⁷⁰

What Brady has done in her poem is to expose and examine via the process of selection and accumulation, the edifice of the men's city. This is a discursive city and it is built of material women. Women are the silent materials of the discursive city; they *are* the city, they do not belong in or possess the city, the only language is the men's language, the women and girls of which this city is made have no language of their own. However, on a more positive note, we can also read Brady's appropriation as a sign that this language is greater than the men of the men's city, and that language may be a potential girls' resource. Interestingly, this potential for voice is here found via the route of voicelessness.

The poem is predicated on the reduction of multiplicity into a single pronoun, orchestrated from the position of another corresponding pronoun, the male-identified 'I'. Power is leveraged on this reduction. The poem is a ludicrous excess of multiplicity, given its length and number of source texts, but this only serves to emphasise the extent of the powers of reduction which can accommodate and inoculate that multiplicity. Despite the poem's emphasis on its collaged nature as a cento, and despite the critique that it as a cento constitutes, its mode of address is lyric. The poem maintains a stable lyric subject position in that the lines are organised by and into the common 'I', in other words the single 'I' shared by the multiple 'I's of the source texts serves here as an organising principle of the poem, attributing the disparate lines to what is in effect a single voicer and thereby giving us a lyric subject. This lyric subject is engaged in an extravagant act of voicing characterised by the lyric side-glance toward an audience. The voicing is extravagant because its function is not strictly communicative in the pragmatic sense, instead the construction and mediation which the voice act performs serves to ritually establish and codify the voicer as a male subject who gazes upon and appropriates the female object. The poem performs this ritual voice act without directly addressing the audience for whom this performance is made, this is to say

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²⁷⁰ Anne Boyer, 'The Girls' City' in *Towards. Some. Air.*, Fred Wah and Amy De'ath eds., (The Banff Centre, 2015) p.11.

that the poem voices in a triangulated address form. As the Poet Brady adopts this lyric subject position, the 'I' of the poem becomes her. In doing so Brady postures so as to indirectly address her (his) audience via the foil of a consolidated 'she/her' who, just like the rose or the wild west wind, does not and cannot reply to the authoritative, self-individuating, lyric subject who characterises and reports 'her' in order to express himself. In the poem's triangulated address, the various figures of 'shes' and 'hers' are not differentiated, instead all 'she/hers' occupy the single position of the same observed object, which facilitates the indirect address to an audience. It is therefore apparent that 'she' is imagined to be all women and all women are 'her', a general object which makes lyric address possible. This is not just a fanciful function of this particular cento, but a description of the discursive predicament of women in the men's city. In its re-appropriation Brady's cento rehearses and caricatures the poetic trope of the female observed by the male lyric subject, and in doing so allows her to divulge her silence at the heart of the men's language.

Because of the re-contextualisation here, we are not given a simple restatement confirming the language of the men's city. It is significant, for example, that in the framing of this cento as a lyric poem, Brady puts the words of these male poets into her own mouth. The 'I' of this cento is loosely female, that is, as we discussed in the previous chapter, the 'I' is Brady (among others) because of its attribution to the Poet Andrea Brady, who has willingly signed her name to the poem's specular contract. But Brady, being female, is also 'she/her', and as such she too is any woman. The poem works with the irony that even though it is Brady who says 'I', she speaks in the men's language. In this excess of a woman's speaking the woman is absent, 'she' is silent even in the midst of 'her' own speaking as long as 'she' speaks in the men's language, which is all language because the girls have no city. Even though it is constantly there, Brady's lyric 'I' takes a backseat to the masculine voice; the crucial point of the poem is where 'what they say I am' or 'what they say we are' and the silent, multiple voices of 'ladies' intersect, making the latter intuitable. Not only that but those silent voices are also recognisable as a formative original in the sense of Rousseau's original but now inaudible cry, rendered into silence and buried beneath the subtitle of language. The subtitle is offered as the only speakable language, the only language that has been spoken

because the women were silenced in order for the subtitle of the men's language to exist.

Furthermore, the lines of 'Book of the City of Ladies' have an artefactual quality; lifted whole because they contain 'her' or 'she', as pre-existing art objects and fairly assembled without deliberate 'prejudicial juxtapositions', they function in the role of evidence of what was said (written, constructed, made etc.) about 'her', parading the language of the men's city and its foundational material as if the lines 'speak for themselves'. The lines' artefactual quality in the sense of their objecthood, their materiality, their *there*-ness, is insisted upon and cannot be denied (it *is* what men have said about 'her') A number of those lines are therefore made to insist, for example, on their own sexualisations of the women of which they are made, and as such they condemn themselves as objectifying and degrading, they evidence their own culpability and perform their own critique upon themselves.

There is a sort of heaven in these, where she spits on it to lubricate (1.23)

I wanted to fuck her dear dirty body most of the time. (1.29)

She unfastened his sweet dick. (1.37)

There are some porn films in which a woman is only fucked in the ass (1.215)

Of course, the variety of statements about 'her' are many, the poem does not consist solely of such sexualisations; other lines seem to be celebrations of 'her', seem to sympathise with 'she/her' or attest to a feminine power (albeit mediated through the male gaze) These too are in evidence.²⁷¹ But those arguably positive lines are here associated with the same discursive economy that builds the women into the walls

²⁷¹ Out of 234 lines of Brady's poem I identified 21 which I read as overtly sexual, 17 which I read as

euphemistic sexualization, and it was difficult to determine whether this was inherent in the lines themselves or revealed by their inclusion in the cento. I counted 21 lines of this nature. Brady's research would suggest that the subtitle beneath which women are spoken in the men's language tends to speak women in terms of sex, violence and sexual violence, both explicitly and implicitly.

violent, either where some kind of violence was perpetrated or encouraged against 'her' or where violence of some kind was associated with 'her', and 10 lines which I identified as sexually violent in some way, excluding sexual lines aggressively phrased. See some of the above examples. More lines were ambiguous and difficult to identify, many appeared to insinuate a subtle or indirect violence or euphemistic sexualization, and it was difficult to determine whether this was inherent in the lines

of the men's city. It is not that the discursive economy allows for no positive tropes of 'she/her', or that evidence of apparent positivity debunks the discursive economy, instead we can see that the discursive economy is the condition for the repetition of the tropes evidenced by the poem.

The lines of the cento now resist re-contextualisation back into their original sources where they can no longer be taken for granted. There are moments in the poem where, despite randomisation, the collisions of lines refer meta-discursively to the oppressive edifice of the men's city just where they would attempt to naturalise it into invisibility

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Before this 'I' took she floated lazily, was certain as that greyscale orbit smile crush her. (ll.24-5)
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sometimes a seed is necessary like flash in her mouth

She's the only one
her strangling must appear not to be your only way out but better hers
instead, as her face bulges, then it blushes

her motility chasing you down like dogs (ll.95-99)

one self that is generally just dejected (she belongs to "who" more) (1.134)

she drowns us with it all she drowns us she drowns us with her absurd communication. (ll.186-187)

These moments come into the poem as coincidental anomalies, because of course the poets could not have been pre-aware of the context into which Brady would put them. Even so, by their juxtaposition the language of the men's city has been made to divulge something about itself without its knowledge, which is that its mother-tongue is made of silent women, women who scream after the particular fashion of the robot's silent scream.

Because of the status of women in the men's city, because the poem's accumulation insists upon those women, and because our repeated encounter with them so artefactually evidences their role as materialising objects, 'Book of the City

of Ladies' imputes a silent female voice or voices to every line, ready to retell from her perspective, to own triumphantly, to correct, to protest, to affirm, to brag, to exaggerate etc. But the voice is silent nonetheless, and so the readable, audible, actual lines of the poem function as subtitles, writing over the silence, making 'she/her' legible/audible but only as something else, so that her alien multiplicity is muted beneath the subtitle. The rare occasions in this poem where a woman's speech is reported are very interesting. On these occasions 'she' is suddenly vibrant and seemingly present, for example

'That's Raw Data,' she nods, 'Let's fucking eat'. (1.56)

'Before you shoot the dog' she breathed 'make sure you know its master' (1.69)

This creates the impression that the unnamed woman is just on the other side of the glass. But as reported and therefore mediated speech these quotations serve only to negotiate the appearance of proximity to 'she/her', to cultivate shifting impressions of alienation and contact, managed by the observing/reporting male subject 'I' under whose power each 'she/her' is amalgamated, including those whose speech is reported. That is to say that the reported speech of female figures in Brady's poem does not prove that the women really are heard after all, instead it confirms the extent of her silence, demonstrating how that silence can persist even as she seems to speak. Sometimes 'she' is buried in the walls of the men's city, other times she threatens to spill out, but she is as circumscribed by a language which is not her own as much as her speech is contained between quotation marks. The reported speech is ultimately an act of ventriloquism, that is ventriloquism in the more mundane sense of throwing one's voice into the mouth of another and using another's mouth to speak, rather than in the specific poetic sense developed in the previous chapter. Whether she appears to speak directly or not, she is still framed as the same woman that she is everywhere else in the poem, as a ventriloquist's dummy and as the muted material of a discursive city from which her voice is excluded. The moments of reported speech are particularly rich sites for intuiting the silent scream in the poem, and for acknowledging the uncanniness of silence in the midst of speaking. The reported speech particularly highlights the structure of the men's city which builds its language from an original silenced female voice, in that the words of women have here become men's words and are actualised in the poem as men's words even as they are re-appropriated by Brady.

It proves very difficult to inhabit this poem as a woman in anything other than a ghostly way. The 'you' into whom I am positioned as reader is coded male, but Brady's appropriation invites me, as a female, to be instead a female observing males observing females. But this still has the shadow of implicit exclusion where, as a female reader, I ought now to be included by the 'you'. The feeling of exclusion here recognised as familiar will not be forgotten. My insertion into this circuit of address is strange to me; suddenly I am brought to bear on ladies, but even so only superficially. I do not truly occupy the male lyric subject position implied by 'I', neither do I truly occupy the male reader position, it is instead as if I am still looking over his shoulder, unable to say anything back. I exist silently in a gap between lyric voice, addressee, reader and poetic object, and Andrea Brady exists silently in the gap between these selected lines, lyric convention and 'she/her'.

My identification of the implicit female voice in this poem as the robot's silent scream firstly foregrounds its status as a foundational mythic origin. Secondly, my identification emphasises that in Brady's poem this voice is not coldly theoretical or vaguely political but urgent in its affective dimension and also in that it pertains to real women co-opted as material for use in a materialising discursive process. Lastly, it follows from my identification that the alien cry of the girls' city is stifled here. It is also important that we regard this silent scream not as Rousseau's cry of human passion but specifically as the robot's alien, unfathomable, subtitled scream; Rousseau's cry, though it is rendered cold and prolix as language, does not cease to exist, cries of passion can still be expressed and heard, and they work to confirm the presence of the 'human' in language instead of attesting strictly to the human's absence.

As I have stated above, the poem's politics cannot (and should not) be separated from its status as a cento. With that in mind, what is most interesting here is ultimately the way in which Brady has used the cento form to highlight an instance of the robot's silent voice as it exists in contemporary poetry. This is not to say that the robot's silent voice only exists in *contemporary* poetry, just that contemporary poetry is Brady's chosen resource and as such it is in contemporary

poetry that Brady finds the robot's silent voice in this case. The above analysis has already touched upon some of the ways in which Brady does this, but in order to clarify I now look specifically at Brady's technical choices when assembling her cento in comparison with Sophie Collins, whose choices for her own centos were very different despite working in the same form.

These differing technical choices amount to a great difference in the way each of the works function to generate subjectivities. The effectiveness of Collins' centos lies in their verisimilitude, in their convincing similarity to more conventionally produced contemporary poetry and in the recognisability of their collaged voice as Collins. The lines are integrated with each other thematically and stylistically, giving the impression of a coherent whole attributable to a singularly voiced lyric subject, a subject who would otherwise be unproblematically identifiable with the Poet who produced them. In Brady's cento there is no integration. In 'Book of the City of Ladies' the collage is obvious; even without Brady's explanation of the poem as randomised research material the poem is presented as a disjointed collection of parts united only by their shared feature of 'she/her' and by Brady's chosen demographic. Despite this relative arbitrariness this still creates a recognisably lyric consistence if only in terms of its address form and mode of voicing, which is to say that the poem's lack of integration does not undo it as a lyric poem, instead the lack of integration is established as a central and important feature of the poem so that the cracks in the collage become especially noticeable and what falls between those cracks becomes particularly worthy of attention.

This kind of consistence is not the same as the vocal coherence of Collins' centos. In Collins' centos the association between the lyric subject and the Poet comes as if naturally; as we know, even Collins recognises those poems as her own words and as reflective of her own internal processes. In Brady's poem that association is far more mechanical, a result of the reading conventions attendant upon lyric poetry as opposed to any naturalistic identification. In this way those conventions are flagged up and the effectiveness of Brady's poem trades on both the gap between the poem and the Poet and on the implicit identification between the poem and the Poet which nonetheless occurs in light of that gap. Collins' trick is to speak as herself with the words of others while Brady's trick is to seem to speak

without actually saying anything at all. While Collins' uses the cento to draw attention to the ways in which a subject might construct itself, or discover itself in an otherwise external place, Brady draws attention to the interplay of external discursive forces which may act upon or through a subject while at the same time (and paradoxically) seeming to deny that subject a voice.

The selection methods chosen by the two poets are also different. Brady's search parameters were very tight and limited to a particular pool of poetry, Collins' were much looser. Collin's found poems in a digital archive using certain search terms, but then chose lines from those poems selectively and organised them selectively. The kinds of limitation that the two methods describe are very different. With Collins' approach the guiding inquiry appears to be 'what can I say?' or 'what am I saying?' and with Brady's approach the inquiry appears to be 'under what conditions might I/we be thought to be heard?' or 'to what extent can I/we really appropriate another language?'

We see similar differences when we consider the poems' lengths in conjunction with their styles. Collins' centos are short and vignette-like, Brady's cento is a single long-form poem spanning five pages. The length relates to the difference remarked upon above; unlike Collins, Brady is not especially curatorial, selective or discriminating, in fact her choice to randomise the lines of her cento shows that she aimed to push decisively in the opposite direction. As brief vignettelike pieces Collins' centos have a sense of completeness about them in that, despite the lines coming from a previous context, the resultant poems exist self-sufficiently as completed units. Brady's poem however suggests incompleteness in that 'Book of the City of Ladies' could potentially go on and on indefinitely. There are many more eligible poems than the ones which Brady selected from in this instance and there will come to be many more. The same research experiment may be performed again and again, in which case each new cento would become another chapter in the 'Book of the City of Ladies'. If Brady's poem can be said to have a statement then by the nature of the poem it will never finish being made, there will always be things left unsaid. The voice act that the poem performs necessarily finishes at the close of the poem, but it cannot be exhausted by the poem. While this may be the case for Collins as well (poems will continue to be written which meet her search terms) this is not so foregrounded, neither does it appear to play such an important

role in our experience of the poems. The coherence and short length of Collins' centos would direct attention away from their potential indefiniteness, while the disconnectedness and very long length of Brady's cento does the very opposite.

Understood as a silent robot scream the foundational absence/silence of the girls' language can be properly intuited as it lodges in the lines of Brady's cento, and as it properly behaves in the mouth of a female writing subject and speaking to female readers. In this way we see that the uncanniness of the silent voices in the poem is asserted so that, in the manner of uncanny things, they can take up their proper place in the home and refuse to go away. The political and formal potential of Brady's 'research' is to a substantial extent realised when we hear it with an ear to the robot's silent scream rendered into subtitle. We can now see that Brady's cento achieves the opposite effect to Radford's and Warne's poems; instead of invoking and consolidating presence with an emotionally affirmative effect (certainly in the case of Radford) the poem produces and consolidates the absence of women out of what might otherwise appear to be their presence, mobilising the uncanniness of its poetic language and evidencing the impossibility of a silent robotic voice's sounding.

4. Mouthlessness

I move now to a final analysis which hears the robot voice in the lyric in terms of the robot's mouthless voice. Once again, such a mode of reading has the unfortunate potential to amount to little more than a vague unease as the product of a general uncanniness. If written lyrics are mouthless in that, as writing, they need not or do not refer to an original oration from a human mouth, and also in that they do not depend on the mouth to be 'voiced', then what use can the mouthless robot voice be to us in the reading and analysis of poems? To identify that all writing is implicitly and actually mouthless is to identify a core uncanniness in writing, to dispel the otherwise implicit sense of humanity in the lyric subject and to highlight an irony that implies the inadequacy of the term 'voice' for the purposes of reading lyrics, but it would not be enough to stop there. Our listening for the robot voice in

the lyric in terms of mouthlessness can entail further, more specific modes of listening.

As I discussed in my earlier chapter, 'The Unease of a Robot's Voice', the mouth is made to play a role in a human drama, whereby we acquire our place in the world as distinctly human subjects. That humanity is tied to the mouth and its functions (e.g. nutritive, respiratory or sensual) so that in our understanding human speech plays off and interacts with these functions. It is for these reasons that mouthless speech is uncanny; mouthless speech identifies speech, taken as a defining characteristic of humanity and associated with a shared drama of formative human experience, with that which is not human, in fact with that which is not remotely like human life or even life at all. The specific associations we have with mouthless speech therefore constitute a counterpointing inhumanity bordering on monstrosity, which nonetheless, and of course uncannily, attaches itself to and inhabits our speech. Specifically, the robot's mouthless speech does not have at its root an original hunger or lack. Unlike the human child the breast and the lack of that breast have no role in the robot's vocal history, as such the robot, as mouthless speaking subject, is not orientated in the world by its relation to an original Other from which the subject is separated, instead mouthlessness suggests both an inhuman wholeness and the undead; speaking with no mouth the mouthless speaker can speak forever in its completeness and never starve.

Our listening for the robot voice in terms of mouthlessness can incorporate these associations; we can read lyrics in light of the connection between the mouthlessness of writing and the undead, between writing's mouthlessness and an inhumanity which negates the non-speech functions of the mouth. This gives us a potentially fruitful line of inquiry considering the traditionally privileged position of the self-expressive lyric subject who voices mouthlessly in the poem, and that subject's indeterminate relation to the writing subject. A focus on mouthlessness allows us to read the lyric subject as a contested subject within a field of humanity and inhumanity, negotiating uncanniness in its voicing. Naturally, such a focus will be of more benefit to some poems than others. I think that this kind of listening would be particularly useful, and indeed well exemplified, by applying it to an analysis of Sam Riviere's collection 81 Austerities, both as a whole project and in reference to specific poems within the collection.

Similar to Dollie Radford's application of absence on the thematic level, Riviere applies mouthlessness on the thematic and stylistic levels, and in such a way as these interact conspicuously with the essential mouthlessness at the level of the poems as writing, something that Riviere certainly exploits. This works with the indeterminacy of the writing subject to insist on an uncanniness that is located not just in the poem but also in Riviere's own body as a subject under austerity. This is an enactment of dehumanising violence against the body. 81 Austerities is an open critique of neo-liberal Conservative austerity policy, and I think that by listening to the poems as instances of mouthless speaking, synthesised on all levels of the poems and across the collection, we can see the particular power and effectiveness of the collection as a critique. We can read the collection as a deeply unpleasant exercise in extreme impoverishment and deprivation, as an indictment of the ideal subject under austerity, who emerges as an insatiate mouthless speaker, ever starving without dying, and ever complete in the sense of being ever sentenced and self-sentencing to solitary confinement.

It is not just that Riviere highlights the artificiality of poems or that he plays with affects of insincerity and the all-levelling irony of the hipster. He does do these things, but these things are not news and do not in themselves constitute an effective or interesting critique. What I find interesting about 81 Austerities is the way in which Riviere has created what seems to be a de-materialising lyric. To briefly revisit the ideas explored in chapter one, 'Lyric Substance and Robot Substance', the anthropomorphism of lyric trope forges correspondences which connect the external inhuman world to the internal human world, thereby bringing objects into human intelligibility and therefore into materiality. It is in this sense that things possess or are traversed by lyric substance, and in this sense that the human is selfconfirmed as pre-given and pre-known. However, in 81 Austerities that anthropomorphic operation of lyric troping is frustrated; instead the poems refer recursively to an unresolved series of emptinesses and illusions to the extent that no lyric materialisation can take place. While the poems in 81 Austerities possess the form of lyrics, they lack lyric substance, so that the themes of emptiness and deprivation are maintained even at a much deeper level. The sense in which these poems can be said to be without substance is total; the poems lack what might be described as moral substance, they also lack what we would typically regard as

substantial content, they quite deliberately do not 'matter' and have no 'matter' in the ways we would expect, and these thematic choices are not redeemable by any sort of ultimate poetic substance. This gives the *Austerities* a chillingly spineless quality. The words of the *Austerities* read as though divested of everything except their status as content, and despite the fact that they were written by a live human (and Riviere will not let us forget this) they read like a robot poem in that the positive voice which would usually give the basis for the negative subject, the inner light of lyric, has been resoundingly dematerialised. The emptiness of the poems is extensive, but even so they refuse to die, the emptiness of their voicing is what sustains them, and they uncannily continue to voice in their undeath. The *Austerities* maintain their lyric subject even as its voice is drained of positivity; the poems do not become meaningless, instead they locate negativity in and as the subject, who is also pointedly the writing subject. In this sense, the *Austerities* are not poems that can be rescued from themselves, nor can their subject/writing subject be redeemed.

Consider the opening poem 'Crisis Poem', which sets the tone of 81 Austerities and provides us with an interpretative frame for the collection as austerity critique.

Crisis Poem

In 3 years I have been awarded £48,000 by various finding bodies councils and publishing houses for my contributions to the art and I would like to acknowledge the initiatives put in place by the government and the rigorous assessment criteria under which my work has thrived since 2008 I have written 20 or 21 poems developed a taste for sushi decent wine bought my acquaintances many beers many of whom have

never worked a day in their lives
how would you like to touch my palm
and divine how long my working
week has been mostly I watch films
and stare and try to decide what
to wear speaking as a poet I would
rather blow my brains out than run
out of credit as the biographer
of the famously unresolved
50s poet-suicide has commented
capital is the index of meaning
anything is better than stealing
from the Co-op with a clotted heart
without it you don't survive²⁷²

'Crisis Poem' relates the economic conditions of its own making and survival; its content (which alone is sufficient to constitute this as a poem, or so 'Crisis Poem would seem to argue) consists first of perfunctory gestures towards capital and the funding structures which sustain both Riviere and the poem, both in the sense of enabling the poem's possibility and forming the matter of which it consists, and second, the poem lays out and makes prominent the themes of consumption, sustenance and survival, which are ironically played off against the poem's lack of substance as it circles around only itself and the meaning imbued only by the investment of money in it.²⁷³ In other words, there is nothing to this poem other than the material conditions of its own existing, which are also the conditions of its writing subject's persisting.

The poem is sustained by Riviere's acts of voicing which secure government grants which sustain his voicing. The poem effectively consists of only the fact of its own endurance against the starvation of the poet; in a twist of the usual drama the

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²⁷² Sam Riviere, 'Crisis Poem' in 81 Austerities (Faber and Faber, 2012) p.3.

²⁷³ The logic of many, if not all the *Austerities* resembles for me the Epimenides paradox, 'all Cretians lie' or the liar's paradox, 'this statement is false', in the sense that they recursively fold in on themselves, subsist on themselves and go nowhere other than deeper into their own recursion. Deception or insincerity are inadequate charges for statements like these, and inadequate also for the *Austerities*.

writing subject speaks so that he does not starve. But while this bluntly draws the connection between the speaking mouth and the eating mouth, at the same time the poem undermines that relation because it is that same relation which deprives the poem of substance, thematising the poem as a deprivation rather than as a mode or means of sustenance. In other words, the poem starves without dying, the motif of sustenance and consumption is therefore ironised; though the poem contains images of sustenance, the poem is ultimately materialised through the actions of capital (highlighted by the high economic and social value of the food and drink mentioned) and not through any lyrically materialising functions of these images. Indeed, the images are not lyric images in de Man's sense anyway, if anything they are given to us as unintegrated, reasonless objects connected only by a certain shared threshold of capital, they do not have the correspondences that De Man identifies with anthropomorphic trope. The poem is not ultimately sustained by the writing subject's consumption of the products which he describes, nor by any lyric materialisation within the poem, but by the consumption of money, which is not really consumption at all. In this poem Riviere performs the famously impossible act of eating money; while the voice is sustained by this transaction, while it functions as if it were the evidence of the writing subject's being sustained and thus as an advertisement for the lyric subject's humanity, there is actually no eating. But neither is there lyric substance beyond the basic anthropomorphic rendering of Riviere as a subject under austerity. This manifests as the impoverishment of the poem that is voiced, and from that follows the uncanny inhumanity of not just the lyric subject (the organising principle which the writing subject recognises as themselves) but of Sam Riviere, the writing subject to whom these operations of capital are contractually tied by name.

The poem itself of course persists even in the event that the writing subject is starved to death and the poem can be 'voiced' whether the mouth of the writing subject consumes sustenance or not. Lyric poems are independent of the human drama associated with the nutritive functions of the mouth in the sense that they constitute voice events which need not ever pass through a mouth. The physical mouth is not essential to them, regardless of whether or not the mouth or our voicing from the mouth is used as a lyric trope. Riviere's poem is therefore presented here as the ideal voice form of the subject under austerity, in that, even as it asserts an

ostensibly human subject, that subject can be starved but does not die. Further, 'Crisis Poem' would also seem to suggest that these are the appropriate conditions not just of poetry's surviving but of poetry's thriving. The suggestion is a morbid one because it is made, I think, unironically. The 'thriving' that is evidenced by the bare essential (surely the only permissible status under austerity) of the poem's existence is given to owe itself to the funding which had 'sustained' it. Thriving of the poet is defined as surviving, and survival is given to continue even despite the deprivation of the human mouth's basic function. 'Crisis Poem' is then a morbid example of poetry's flourishing under austerity.

Riviere's notes to the *Austerities* maintain the theme of impoverishment via other means; where we would expect notes to open the poems out into a wider nourishing discourse, the notes are invariably vacuous, telling us no more than we would already know and more often than not, less even than that. Many notes are simply 'ok', 'yep', 'neat, yes'.²⁷⁴ The note to 'Crisis Poem' is more substantial 'sets out stall as critique of poetry & arts institutions'.²⁷⁵ This confirms the entrenchment of the poem in sustaining/starving systems of capital; the poem as 'stall' merely has something to sell (which, due to its inclusion in a book of poetry which I paid for, is simply true) and in this way the poem is further alienated from any value beyond that of capital investment.

If 'Crisis Poem' is indicative of the rest of the Austerities then deprivation does not simply inspire or give rise to these poems, neither do the poems just describe deprivation, rather deprivation is absorbed and continued by these poems, and the poems are a means to prolong deprivation. In this way the Austerities, selling themselves as a perversely innocent and ironically pure poetry of an emptied voice, become the vehicle for an insatiate un-life, rather than for the transmission of conventionally 'human' voices. The lyric voice here does not satisfy, it does not replace what is lacking, as the voice is thought to replace the breast that sustains, the Austerities are instead crafted to be a shallow slew of unfulfillment that does not even despair of its unfulfillment but performs it indifferently as the fact of its voicing and locates itself deliberately and insistently in the writing subject.

²⁷⁴ See notes in Riviere, *81 Austerities*, pp.111-113.

If deprivation and impoverishment are caused by the Austerities' frustration of the mouth's nutritive function, it is also caused by their frustration of the mouth's sensual function. The Austerities lack of lyric substance is further maintained through a motif of pornography and fetish, particularly as articulated through the ocular distance of screens and other framing devices, as well as through quotation, imitation and equivocation. The motif refers us to a general deprivation, not just of sustenance, but of anything that would satisfy desire of any kind. Desire in 81 Austerities is not just unfulfilled, it is never fully actualised as 'real' desire (indeed, in the Austerities the 'real' can never be actualised) Satisfaction is indefinitely forestalled by another recursion, by a fetishism which will never ultimately refer to a fetishised object, but only back to fetishism itself. Under the motif of pornography, if not the motif of a fetish-for-pornography, the notion of reality is rendered impracticable, and the poems do not refer the reader to anything 'real' except for the poems themselves, which are again, self-sustaining, empty of all but the fact of themselves existing. ²⁷⁶ The poem 'Clones' articulates and exemplifies this sensual frustration.

Clones

As she climbs onto the mattress to lay out with Anselmo, the food was spiffy and the drilled black sextoy is great but satisfying 1 appetite stimulates another. So guys love Latina virgins in swimsuit. And what a collection of buttholes. The perverts at duke dollars are exploiting women at the lowest level of scum you can imagine for your entertainment dollar, humiliation is on flash here. You got ass, you got potatoes, you got rapier suckin,

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²⁷⁶ Riviere's note to poem 31 'Heavily', makes a statement to this effect - 'the old irony that cannot take any emotion quite seriously...as if there were nothing but inverted commas and porn'. Notes 34 and 36 also refer us back to 31. I think that this statement can be applied to the collection as a whole.

The poem's recursion centres on the line 'but satisfying 1 appetite stimulates another'. Appetite remains so that the possibility of satisfaction in any real sense is negated, rather the 'feeding' of hunger perpetuates hunger. 'Appetite' here refers specifically to sexual appetite, but in the context of the Austerities as a whole and considering the comprehensiveness with which this poem denies the satisfaction of all possible appetites (what is offered is after all 'the whole nine') We are invited to extend that appetite into something far broader and impossible to satisfy. In which case, 'appetite' here also refers to what is essentially a hunger for desiring, a hunger for the desire to consume. As with 'Crisis Poem' above, 'Clones' act of voicing absorbs and continues rather than satisfies or replaces. 'Clones' presents us with a collection of fetishised body parts, acts, scenes and objects, arranged for consumption (and also in the sense of consumerism, 'your entertainment dollar'); like the unsatisfying, non-materialising images in 'Crisis Poem', these images do not materialise anything lyrically, they are not integrated to produce an anthropomorphism or poetic logic which would bring substance to the poem, except for the lyric anthropomorphism which materialises the writing subject as the lyric voicer. 'Clones' instead refers these pornographic fetish images quite deliberately to the recursive emptiness of an unfulfillable appetite. Like 'Crisis Poem', 'Clones' parades its images' inability to satisfy and makes of this sensual starvation and impoverishment the matter of its voicing. Which is to say that again, the voice of this poem is sustained by its lack of substance, both in its deprivation and in its circling about itself as containing nothing but the lyric voicing of a subject who is the writing subject.

The effect is in evidence across all of the openly pornographic and fetishistic poems in the collection, of which there are many. In 'The Sweet New Style'²⁷⁸ the fetish object is a photograph of a woman whose 'real' name is irrelevant except in that it facilitates the fetishisation of her image 'let's call her emma' (1.2) '...jennifer/I mean emma' (11.9-10). The 'style' of the title, and the proper object of the poem's fetishisation, is either the aesthetic composition of the surface of the

²⁷⁷ Riviere, 'Clones' in 81 Austerities, p.8.

²⁷⁸ Riviere, 'The Sweet New Style' in *81 Austerities*, p.10.

photo or, more likely, the style of poem itself, which acts as the surface of a screen which makes available the surface of the photograph. The poem sustains its own gratification which is no gratification at all. Similarly, 'Nobody's Deep'²⁷⁹ begins with the lyric subject's assertion that 'I am very interested indeed/in excessive modes of femininity' (11.1-2) where 'interest' is revealed unsurprisingly over the course of poem to actually be fetish, and what is fetishised is not a feminine fecundity which 'excess' would seem to suggest, but instead the infinity of surface and seeming. The lyric subject's satisfaction (which is no satisfaction of course) is here associated with the non-attainment of the feminine, 280 which necessarily preserves it as surface and fetish object.

...you are impossible to approach because there is no subject is it me or do you look slightly russian no subject apart from your beauty which is no subject to speak of (11.3-7)

...I've never even heard your voice order a sparkling water and if I did it's true I might stop caring...(ll.16-18)

Empty recursion is integrated into the mouthlessness of the poem itself; the poem speaks but it cannot perform the sensual functions of the mouth. Within the established market context, the poem can function as an expression and object of commodity fetish but it cannot satisfy a desire in the way that a human mouth can. Riviere re-inscribes that inability to satisfy thematically and stylistically, so that the

²⁷⁹ Riviere, 'Nobody's Deep' in 81 Austerities, p.43.

²⁸⁰ It is interesting to think about this aspect of 81 Austerities alongside the silence in 'Book of the City of Ladies'. The masculinist depictions of the feminine here further the theme of starving but

never dying in that Riviere's construction of a masculine subject depends upon the consumption of women's bodies. While Riviere starves regardless, women are still consumed and the only topic of conversation under which they appear is their capacity to be consumed, for example here in 'no subject apart from your beauty'. The discursive economy that maintains Riviere's undead masculine

subject is the same one that Brady identifies and which silences women.

poem achieves little more than to mouthlessly voice its own mouthlessness.²⁸¹ In its voicing the poem is a perpetuation of the appetite it also represents, that is, once again the poem starves but does not die, and again the inhumanly mouthless subject who voices in the poem comes to embody the ideal subject under austerity. It is in this sense that I read these poems' self-sustaining as a self-sentenced solitary confinement, which is a perversion of the robot's mouthless wholeness. Where the robot's vocal history involves no original separation, the voice of 81 Austerities suggests no original unification and no possibility of unification. Both imply wholeness of a kind, but while the former's wholeness springs from an essential alien integrity, the latter's wholeness springs from an essential corruption of the human oral drama.

The most pertinent points of 81 Austerities' critique are where Riviere has the above corruption extend explicitly to himself, in so far as he uses the poems to present a human writing subject (with an actual mouth) identified with a speech which is mouthless on all levels recursively. Importantly this identification is, as I claimed earlier, irredeemable and therefore damning. Riviere fully exploits the mouthlessness of poetry which he has been cultivating in 'The Mysterious Lives of the Stars'.

The Mysterious Lives of the Stars

I want something what is it those little boobies from 1964 in the Willy Ronis exhibition in something like somebody's new raspberry sweater I don't wear sunglasses though I like opacity I like that you

²⁸¹ Another interesting point that coincides with our discussion of 'Book of the City of Ladies' is the way in which Riviere seems to gender mouthlessness as male. This undead condition of starving but never dying is associated with the masculine endeavour to establish a subject position as desirer and consumer (specifically of women) a position here bound up with that of the Poet as articulator of desires and desired objects.

can't see my expression as I'm sitting writing this in my favourite T shirt the one with the retro pin-up girl listening to a black telephone on it & with yellow armpits like Rimbaud bless the powers that have taken our grievances away from us²⁸²

The subject of this poem moves quickly away from yet another unsatisfiable fetish for the purely aesthetic object without substance and becomes instead the opacity of the poem itself and the peculiar form of presencing that such opacity can entail. After the fashion of austerity, we can read this poem as a very cut-rate version of Keats' gesture, except that in Riviere's version, the lyrically material manifestation of his body is actually withheld rather than offered, and it is occluded once again by the poem's impossibility of any 'reality'. The poem is a rehearsal of the themes and movements we have already discussed, but in 'Mysterious Lives' Riviere pointedly brings the mouthless speaking of the poem into contact with himself as a specific subject.

In its disconnected mouthlessness (his mouth needn't be present in order to speak) the poem functions as a screen behind which Riviere makes as if to stand; the descriptions of his appearance at the time of writing may have been true, they may not have been, but in the dematerialising, seeming context of the Austerities, it is plain that it does not matter at all. Riviere flaunts the irreality of his voice in its function as the sign of the lyric subject (as the sign of himself) as well as that same irreality's persistent invocation of supposedly 'real' things, the arch 'real' thing being himself as voicer of the poem. The more specific 'things' that the poem seems to point to behind the screen of itself are in themselves yet more examples of pornographic seeming; an image of a pin up girl miming as if listening to someone speak on the phone, the iconicity of the image/name 'Rimbaud' representing a certain poet-as-lifestyle. Both of these things are said to be on or of Riviere's

²⁸² Riviere, 'The Mysterious Lives of the Stars' in 81 Austerities, p.18.

physical body, but we are also led to believe that this supposedly presencing exercise is merely another example of fetishistic play; his opacity is the thing which is liked and therefore practiced presumably for its own sake and nothing more. Riviere's presencing must be ultimately empty or meaningless if it is to perpetuate the pornography-fetish that structures the poem. In this sense Riviere capitalises on the mouthless nature of lyric voicing in order to performatively co-opt himself personally in the Austerities perpetuation of impoverishment and deprivation, in its starving without dying. Using presencing in a way similar to Keats, Riviere makes a (very shallow) presencing gesture within his poem, but this gesture is without the materialising power which brings Keats' living hand into uncanny proximity with the reader. This is to say that Riviere does make himself present, but he appears to us as utterly emptied, thin as a reed, a husk, undead. This is very different to absence. Riviere does not demonstrate that he can be absent from his own poems because he has made them so shallow and empty, if anything 'Sam Riviere' is the only thing that the poems can contain, if that can be called containment. If nothing else the poems are tied to Riviere by capital's being the index of meaning, in that Riviere is the name of the recipient of the government funding which 'feeds' the poems. Instead of being absent from his poem, Riviere is there and it is horrible.

Importantly, this is not to suggest that the above poem, or indeed any of the poems in 81 Austerities, somehow dispel the human as an illusion, or that they claim a sort of complete inhumanity. That would be to correspondingly shore up an opposite and ideal human subject, contrary to robopoetics. Instead, by reading these poems with a focus on their robotic mouthlessness we can see how the above poem attempts to show the human as it is human under austerity, and how it further insists that we recognise this human as familiar and claim it as ours. We find that in this sense there is nothing necessarily uncanny about 81 Austerities, rather we can read it as a project of familiarisation, of coming to terms with what would otherwise seem to be an inhuman nothingness, specifically a robotic inhuman mouthlessness.

Conclusion

Robots trouble the divide between human and inhuman, genuine and artificial, simulation and simulated. But as we have found, so does lyric poetry. Lyric poetry (like the figure of the robot) is a prime instance of anthropomorphism, of the lyric means of bringing the human into reality, which thereby makes the human intelligible to itself. It is in this sense that robots and poems share the same lyric substance, and this shared substance is the grounds upon which I have regarded poems to be robots and listened to poems in the way I listen to robots. The practice of this listening, or even the acknowledgement of this shared ground between lyric poetry and robots, troubles the divide between human and inhuman, genuine and artificial, simulation and simulated, because it presents to us an indeterminate, selfventriloquising subject, neither 'I' nor 'not I' and yet validly human by the selfconfirming terms of anthropomorphism. This presents a challenge to any understanding of lyric poetry based upon the idea that, through the lyric subject, poems convey a simplistic or humanist humanity, whether through the dramatic enactment of a 'speaker' or through an exercise of empathy with a narrowly defined subjectivity. The humanity of an indeterminate subject cannot be reduced to these, nor can it be refused or rejected like these. If robots are a challenge to poetry on this score, then I have taken them and their challenge very seriously in this thesis. In doing so I have taken very seriously the lyric subject and the type of humanity conveyed by that lyric subject. In this thesis I took the lyric subject as worthy of consideration for reasons other than humanist exceptionalism (or New Critical dramatic exercise) and not in spite of but in line with post-structuralist ideas about language. I have regarded the lyric subject as a viable thing upon which to stage an encounter with humanity between humans, without either appealing to origins or making a charge of illusion. In this way I have attempted to redeem or recuperate the lyric subject for use as a modern critical term beyond the dialectical impasses of current critical discourse. In accordance with this new version of the lyric subject, a poem need not represent a narrow boundary defining what the human is and how it can be conveyed, instead it could (in and of itself) be what the human might be as, in that instance, the human is simulated, hyperrealised and active as a ritual of voicing or as instructions for voicing distributable to a network of voicers. Contrary to what popular assumptions about robots might lead one to expect, in this thesis I have tried to look squarely at the human by way of the robot. This has not undermined the human but has instead demonstrated what it might mean to us in and through poetry. The particular meaningfulness of this kind of humanity is quite different from what we may have come to expect from the lyric given modern criticism, and our potential for interaction with it may become expanded as well.

Robots insinuate the act of taking the simulated human for the 'genuine' article, the act of taking the simulation of the human for that which is simulated. In doing so they facilitate the collapse of the one into the another and conduct the lyrical coming to be of humans as (hyper)real things. As such, the meeting of robots and poetry offers the potential for a coming to terms with the lyrical artifice at the heart of a practice long regarded as intensely human, where humanity is defined in opposition to the artificial, representing the genuine or authentic. This would be a coming to terms with the artificiality and simulation which is proper to both the human and to the lyric that conveys it. 'Coming to terms' need not be as sombre as it might suggest, instead I envision this coming to terms as a proliferation of new ways of reading and understanding poems in a dynamic context, ways which factor in the embodied subjects of writer, reader and others, so that 'interpretation' with its implicit demand for the extraction of paraphrasable meaning, takes a back seat to the lived experience of entering into a poem's circuit of voicing subjects and subjectivities.

As robots can give voice (even lyric voice) the elision of robot and lyric voice does not dispel voice as an illusion of some sort, but shows instead that while it is still properly human, voice is not dependent on human specificity, that voice is more than the sign of a narrowly defined type of life. Voice would be better understood as a positivising, recalcitrant material that is found at home in things - machines, the wind and sea, animals, poems, humans and so on. As voicing person-simulators, robots facilitate a peculiar form of confrontation between us and this object voice; robots prompt us to listen for that in their voices which seems missing, silenced or subtitled, but on reflection we can simultaneously recognise those silence/absences as native to our own voices as well, particularly as our voices come back to us through the supplementary effect of voice recording and transmitting

technologies, among which we might include writing and with it lyric poetry. That is, we learn that (uncannily) this type of listening is applicable to other simulations of the human and from here we might begin to apply it to poems. In this thesis, I identified the uncanny, silent/absent voice forms of the silent interiority, the silent scream, the subtitle and mouthlessness which, though familiar in pop-cultural representations of robots, I was nonetheless able to use as the basis for my critical engagement with poems.

The uncanniness of the lyric voice is, I think, one of this work's major claims. In this thesis I also took seriously the breach between real and unreal, material and immaterial, human and inhuman, through which one pours constantly from the other. The uncanny is an appropriate term through which to engage with this breach as readers and writers because it encapsulates this irresolvable presence of the unhomely in the home and vice versa. So the uncanny, as I have explored it here, presents the basis for an unconventional way of making poems mean for us. Voice is a source of both uncanny and transcendent effects in poems, it exceeds both message and medium and so can be taken as extending beyond both the avantgarde deference to writing and the New Critical deference to spoken drama. I have found voice to hold space for all those im/material, silent/absent things about both poetry and robots that necessarily escape the current dialectical discourse as well as our intellectual grasp entirely. As such, voice has provided me with an interpretive key. This voice, which makes positive substance from negative non-substance, has enabled me to see voice's operations in a poem as a negotiation between sounding and silence, presence and absence, rather than perhaps as dramatised speech, as illusion, or even as an auditory entity rendered by the written sign (or as a written sign to be rendered into the auditory).

As I implied at the beginning of this conclusion, this thesis is about the human, and the robopoetics I have developed in line with that concern is a human poetics, but also (by dint of that humanity) a cyborg poetics. 'Human' in my sense was never merely 'human' in the typical sense that we usually understand it, and so 'cyborg' does not preclude or erase the human, it instead includes, produces and proliferates many ways of being human. Indeed, 'human' in my sense is an ongoing process of construction beyond concepts of authenticity. The lyric subject of robopoetics is a networked, cyborg subject, blurry and without origin. It is not

exhausted by reference to a writing subject, neither can a writing subject escape its feedback effect. The human subject which the lyric subject brings into intelligible reality is necessarily indeterminate and its voice is ventriloquised. This cyborgism is not in some sense after or beyond the human, rather we have always been cyborg. That which we recognise as human in lyric, that which we take seriously as an effect of humanity, is and (due to the action of supplementarity) always was simulation, a strange feedback loop between poem and poet, lyrically producing the real and distributing it across a network of voicers, a scenario from which the writing subject is not exempt. This expands the potential for ways of reading/listening to poems, as we read/listen with an awareness of the poem's im/material, materialising nature and in the knowledge of our own part in that ongoing cyborg construction. The way that we interact as readers/listeners with an indeterminate, self-ventriloquising subject would involve more than either deference or denial of a speaking persona; the implications of a poem's giving voice, or of our giving voice to a poem, are instead surprisingly material, or even sometimes physical.

In my reading of Riviere, the unique vacuity of the lyric subject entailed the (anti?)matter of the embodied subject under austerity. In my reading of Warne I read the placing of a subjectivity in the world, as both place and lyric subject became present, materialising simultaneously from the interstices of apocrypha. Likewise, I read in Radford's poem an invocation of presence from the absence that is silence. I was able to hear in that 'song' the specific persistence of the writing subject as she absorbed and neutralised the uncanniness which might undermine her making-present. Meanwhile, in Brady's poem, my attention to silence/absence directed me to the material substrata upon which the language of the poem was based, the embodied subjects of ladies. I was able to read in a way that engaged with the interactions of those strata in the poem, and that reading incorporated my own embodied subjectivity as a lady. I choose to think of this incorporation as voluntary, that my membership in the group called 'ladies' is one based on a personal sense of affinity.

By insisting upon the indeterminacy and ventriloquism of the writing subject as granted by the operations of lyric, I have made the topic of lyric subjects and their voicing about actual, material people and about the interactions between people via the poem. The physical, social and political status of their bodies

becomes part of a poem's context and effects its meaning. As does the status of the reader and their voicing or potential voicing of the poem. But at the same time, because it confers indeterminacy, a poem is not reducible to some fixed version of the writing subject, neither can any definitive status be claimed for its re-voicings. The feedback loop is constantly at work and will continually materialise and rematerialise subjects. I read 'Book of the City of Ladies' as a silent scream, but perhaps it is also silent laughter. I think that there is room for both of those cries in the same silence. Given different voicers, the ladies' conspicuous silence is more like Cixous' laugh of the Medusa; a robot's laugh, as we know, is just as inscrutable as its scream. The question is not 'what is the true identity of this silence/absence?' it is 'what does this voice become in my mouth?' In this sense there are no definitive voice forms to be found by my mode of robopoetic reading. What is more interesting to robopoetics is the join where writing subjects, reading subjects, lyric subjects, poems and contexts meet, a point which is necessarily always changing. So I do not mean to claim that robopoetics offers some sort of 'genuine' engagement with an 'original' or 'complete' human subject, contrasted to an outmoded, illusory or insincere humanist (or any other -ist) subject. The notions of genuineness and origin do not apply in cyborg discourse. Cyborgs are built as they go and are never finished.

Robopoetics is a cultivation of the betweenness needed to evade dialectical gridlock and expand the terms on which we relate to the poems we read and write. But that insistence also ensures that, whatever the human can be, with a poem it is something which necessarily exceeds terms even as it occupies them, leaving space for the human of lyric to always become more and, as a cyborg, never be finished. Importantly, the mode of human becoming in lyric (according to robopoetics) is through the outward-facing ritual of voicing, which finds the voicing of a lyric subject in the mouth of another and another and another, feeding back to realise the writing subject lyrically in a very material and dynamic context proliferating with subjectivities. Which is to say that robopoetics presents an exercise not in empathy but in community.

What does it mean to give voice lyrically? From the perspective of robopoetics, giving voice lyrically is to enter oneself into an anthropomorphic, positivising feedback loop which produces uncanny effects, so that the act of

voicing renders one indeterminate, a cyborg in a field of interactions between writing subject, lyric subject and also (at the very least to the extent that the lyric poem postures so as to be read) the reader. The lyric subject is at base a principle of unity, but it is voice which makes that lyric subject viable as a subjectivity. The voice is neither message nor medium, it is a silent/absent, remaining betweenness which makes positive the negative of ideality and which animates subjects. The lyric poem is a ritual of giving voice that produces hyperreal (real) human subjects, and in so doing it presents an opportunity to bring indeterminate subjects into community with one another and with the material world.

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