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<u>Din, Dazzle and Blur: Noise, Information and the Senses in Early</u> <u>Twentieth-Century Society and Modernist and Culture</u>

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Declaration of Authorship

I hereby declare that the thesis contained herein is the sole and exclusive work of Matthew Wraith.

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Abstract

Modernity brings with it new imperatives for organising sensation into the fundamental binary poles of foreground and background, signal and noise. If there is perhaps nothing particularly new in such a division, the foreground-background division is as it were, brought to the foreground in the Nineteenth and Twentieth Centuries by the daily incursions that the latter makes upon the former. The senses themselves become less a means of access to the outside world than the *noise* in the transmission and reception of the outside world. Recognising our senses means no longer recognising the forms and figures that our senses are supposed to mediate. Modernism, in a variety of different ways, plays upon this unsettled relation between our senses and the things they sense.

If technology was in many ways responsible for this change – making our relation to our senses problematic by assaulting our sensory apparatus with a host of prosthetic extensions and intensifications – the technology of sensation also provided a new way of understanding both sensation and its interference. The theory of noise and information articulated by Claude Shannon at the tail end of the modernist time-grid provides the main theoretical support for my discussion. The metaphysic that the contemporary philosopher Michel Serres' constructs around the concept of communicational noise and its application to the senses may provide a new way of understanding and interrelating some of the main theoretical staples of modernist criticism: chaos and order; time and timelessness; the individual and the universal. My thesis is organised around Sight and Sound.

In Chapter One I look at noise in its 'native' element: that of audition. Taking as its starting point Boccioni's 1910 painting 'The Noise on the Street Invades the House', I will put the painting in within its social context and look at how invasive background noise became a topic of heightened social concern.

I then go on, in Chapters Two and Three to give close readings of individual authors: T.S. Eliot and James Joyce respectively, showing how urban noise is portrayed in their writings and how it affected their modes of representation.

Chapters Four and Five are concerned with light and vision. Chapter four examines the idea of *Dazzle*: how the apparition of intense light was re-evaluated in the nineteenth and twentieth century, changing from its ancient role as the central, binding, unitary source of the visible realm, to noisy agent of disruption and corruption of vision.

In Chapter Five I look at the effect of modern, industrialised speed on the eye that beholds it and the similar corrupting effects.

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Introduction:

The Noise on the Street and the Noise on the Line

There was something definite and distinct about the age, which reminded her of the eighteenth century, except that there was a distraction, a desperation -- as she was thinking this, the immensely long tunnel in which she seemed to have been travelling for hundreds of years widened; the light poured in; her thoughts became mysteriously tightened and strung up as if a piano tuner had put his key in her back and stretched the nerves very taut; at the same time her hearing quickened; she could hear every whisper and crackle in the room so that the clock ticking on the mantelpiece beat like a hammer. And so for some seconds the light went on becoming brighter and brighter, and she saw everything more and more clearly and the clock ticked louder and louder until there was a terrific explosion right in her ear. Orlando leapt as if she had been violently struck on the head. Ten times she was struck. In fact it was ten o'clock in the morning. It was the eleventh of October. It was 1928. It was the present moment. I

Virginia Woolf's Orlando enters the Twentieth Century with a shock to the senses, an inundation of light and noise. The present loses its protective cloak of comprehension and stands naked and exposed before her. The increasing clarity of her perception does not result in a happy, clean and comfortable relation to the world, but builds until it seems to turn into its opposite; it mounts to the point of a disruptive explosion of sensation, in which she is exposed to every whisper and crackle of her immediate environment.

Orlando's account of the experience of modernity, the overload of experience that modernity brought with it, is well attested to both in the writing of period itself and in more contemporary critical and socio-historical reflections. As Tim Armstrong states 'A heightened sensitivity to sensation is central to modern experience.²' The idea that the modern environment was one in which the citizen was accosted by an unbearable abundance of sensation was one of the major tenets of the Nineteenth and Twentieth Century's self-conception. An enormous body of works in the period testify to this. George Beard, in his work *American Nervousness, Its Causes and Consequences* famously popularised the

¹ Virginia Woolf, *Orlando* (London: Vintage, 2004), p.195.

² Tim Armstrong, *Modernism* (Cambridge: Polity, 2005), p.90.

medical category of 'neurasthenia' which became *the* modern ailment *par excellence*. The neurasthenic was afflicted most of all by his own environment and culture. 'From the standpoint only of nerve-force' he writes 'all our civilisation is a mistake'. The popularity of Beard's work led quickly to a swathe of other works that mixed medical diagnosis with cultural critique. Max Nordau and other theorists of *degeneration* told of the spiralling descent into a debilitating state of nervousness that the conditions of modern life had inaugurated, a spiral that engulfed the whole of the artistic endeavour of the time. Later, in the first decade of the Twentieth Century, Georg Simmel wrote of the need of the modern citizen of the modern metropolis to create a 'protective organ' to screen the incoming shocks of his frenzied and unpredictable environment. By the modernist period in the early years of the Twentieth Century, the senses had come to be seen as dangerous breaches in the fortifications that kept the self intact.

Crucially, it is not only the *subject* of perception that became liable to interference from the senses in the period, but also the object. The assault on the senses did more than endanger the physical constitution of body of the modernist subject, but also the singularity and unity of his chosen perceptual object in the outside world. Jonathan Crary's huge work *Suspensions of Perception* sees the central motivating conflict within the modernist period as that between attention and distraction, the need on the part of capital in particular to channel the collective consciousness of the population, and the equal and opposite potential for the dispersal of perception that capital and its technologies wreaked on that same population. The senses can be a threat to that which they are supposed to inform us of.

One simple but particularly revealing way to put this would be to say that sensory perception in the twentieth century, and in particular, the twentieth century city had become

³ George Beard, *American Nervousness, its Causes and Consequences* (New York: G. P. Putnam & Sons, 1880), p.100.

⁴ Max Nordau, *Degeneration* (New York: Bison, 1993).

⁵ Georg Simmel, 'The Metropolis and Mental Life', in *Simmel on Culture: Selected Writings*, eds. David Frisby and Mike Featherstone, no translator credited (London: Sage, 1997).

noisy, it had become burdened by an increasing interference. The word 'noise', in everyday speech, is almost exclusively meant to refer to something we hear. But at an older time in the word's history, and in certain specific contexts, it can have a much more general application. The word comes from the French word *noise* which originally meant conflict, strife, contention, social unrest. It has largely been abandoned by the French language and is only ever heard in the phrase chercher noise meaning 'to whip up storm', 'to protest', 'to cause a hullabaloo'. A lingering sense of conflict has remained in the word throughout its subsequent developments. Noise is not necessarily a conflict between individuals but a conflict of sensations. In noise sensations compete for our awareness. The perception of our chosen object of attention is damaged by unwanted sensations. Noise is the result of a diversity of different phenomena jostling for a place in consciousness. But the older meaning of *noise* is associated with conflict also in the sense that it is a confounding of a prior established order of sensation. Noise is sensation become unpredictable, flouting the regularity we feel sensation should follow. As we will see, in the nineteenth and early twentieth century the noisiness of the urban environment was persistently taken as a sign and a manifestation of a larger breakdown in the social order.

But something else was happening to the concept of noise in the period we are addressing. As sensation began to be stored, encoded and transported, sent down the wires and across the airwaves, contained within media that could transport it effectively to points separated from its origin by unprecedented distances in time and space but which provided it with no safe haven of protection from outside interference, the very definition of noise began to change, entailing a rapid expansion of the concept's sphere of application. New occasions and new settings for noise were appearing on the horizon of the Nineteenth Century, new sensory playgrounds for it to go about its mischief, a new conception of order for it to go about trying to ruin. Noise found for itself, in these new prosthetic sensory experiences, a

new defining opposite. That which noise disturbed was no longer simply peace, composure, productivity, but a much broader concept that could include and reflect back upon, inflect and inform, each of these and more: the concept of *information*.

Claude Shannon and Michel Serres

It was first the telegraph and then later the radio that forced the Nineteenth and later the Twentieth Century to confront and comprehend noise and information together. The atmospheric signals, the sturbs and static that cursed radio from its inception called forth a vigorous, but for a long time futile collective effort to get rid of them. If Modernism's beginnings were to an extent contemporaneous with the beginnings of electronic and radio transmission, a true understanding of the relation of information to its interference came at the tail end of the Modernist time-grid, finally culminating in Claude Shannon and Warren Weaver's 1948 paper 'A Mathematical Theory of Communication'. The effort to understand the noisy channel produced not only an understanding of those noises themselves, but a mathematical understanding of precisely what both communication and information are and how they work. But as this happened, information and noise became indissolubly wedded together. The attempt to understand the distortions of background noise – which Shannon and Weaver termed *equivocation* or *entropy* – and thus liberate communication from its clutches came to reveal only noise and communication's eternal co-dependency.

Claude Shannon spent most of his career as a professor at MIT but during the Second World War he was enlisted to work for the Bell Telephone laboratory, a research institute that was then working on encryption and decryption systems for use in the communication of orders and intelligence. The conditions under which the messages were sent were extremely hazardous, hazardous for the people fighting, obviously, but also hazardous for the

information being sent. The front line of the war was a battle-field of competing signals as much as competing armies. No message could survive perfectly intact all the way to its destination; it was always received thoroughly degraded by atmospheric weather conditions, cross-signalling and a host of other problems. Noise in this situation came to be conceived as missing information. Noise is the sound of uncertainty, the phenomenal manifestation of doubt as to what has been said. Shannon was set to the task of improving this. He was posed with the question of how to effectively communicate across a channel when you know that information will inevitably be lost along the way. He answered this, not through any technical suggestions – more efficient transmission equipment, better protection against the weather etc. – but through a more systematic and scientific understanding of how communication works.

'Missing information' was a phrase that had been used before in the science of the nineteenth century. Ludwig von Boltzmann, one of the main physicists behind thermodynamics had said that the thermodynamic concept of *entropy* was related to missing information. This was, as Jeremy Campbell puts it, 'an intellectual time bomb' auguring the connection between the two sciences. Entropy was the word scientists used to refer to the portion of energy within any physical process that was not pulling its weight. In any transfer of energy, e.g. the burning of coal to power a steam-engine, there would always be a certain amount of that energy that was wasted and that could not be put to do useful work. This was not a problem of the level or intensity of the energy but of its level of order and organisation. Energy in a system of high entropy is disorganised and chaotic. To get any work done, a system needs to have high level of difference and distinction between its different parts. In converting heat into the movement of a steam-engine, one needs a great degree of difference between the coal fire and the water that was to be converted into steam. Once the heat has

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⁶ Jeremy Campbell, *Grammatical Man: Information, Entropy and Life* (New York: Simon and Schuster, 1982), p.42.

thoroughly passed into the water and the system as a whole is of an even temperature, i.e. once the high energy molecules are evenly distributed through the system, then the machine is no longer capable of motion and a further input of energy is needed.

Shannon took the concept of entropy as it appeared in thermodynamic systems and applied it to informational systems. Noise was informational entropy, a heightened disorder within the communicational system. What Shannon had really found was that thermodynamics had been about information all along. A system of low entropy is one in which you can *know* with some certainty where the greatest amount of energy is likely to be. Because in an ordered system there is a greater disequilibrium, heat is more likely to be found in one part of the system than in another. Without any exact knowledge of where each and every molecule was and how fast it was moving, one could make an informed guess: the macroscopic structure informs you of the microscopic structure. As the level of entropy increases the task of prediction becomes more difficult.

Shannon saw that this applies also to communication. An ordered system of communication is one in which, even if you cannot know every single element of a message, every single letter in a written communication, every single sound in a spoken one, every single element of the of the perceptual world to which you are attending, the overall macroscopic structure will help you make an informed guess. Thus the answer to the question: 'how does one communicate across a channel which you know will degrade the information that you send?' is very simple. The person receiving the message will do what anyone would do in a similar situation – talking over a crowded room, reading someone's bad handwriting, etc. He will make a guess. The more orderly and the system of communication, the more likely that guess is to be right. There are many different ways by which a message can be rendered more predictable. In reading and listening over a bad line we are aided by our knowledge of the language being used, and by the surrounding context of the missing

information. Even if a word is unknown to us, we can through the conventions of a language's orthography make a good guess as to what a missing letter might be. This kind of predictability within a system Shannon named *redundancy*. Predictable information would be redundant in the sense that one can, if necessary do without it.

We might at this point venture a rule of thumb: to make the transmission of information as effective as possible one needs to make it as predictable as possible; one needs to maximise its redundancy. But the very word 'redundancy' should warn us against this. For if information is redundant then it isn't doing its job as information. If a message strictly and rigidly follows a pattern that can be foreseen before it reaches us then we are none the wiser for its being sent. We have moved from information that we don't want to information that we don't need. Neither of these is very desirable. Information is quantified by Shannon as the amount of uncertainty resolved in its communication. The roll of a normal die reveals more information than the toss of a coin, because the die, in coming to rest on one of its six faces, has differentiated the result from six other possibilities, whereas the coin toss has only one other possibility to compete with. A one sided coin (or more realistically a coin with heads on both sides) will reveal nothing because its outcome was entirely assured from the very beginning.

Ideal communication would instead be a golden mean: the perfect balance between noise and redundancy. This idea is related most succinctly with the use of a graph in which the amount of information being communicated (the 'y' axis) is plotted against the level of noise or entropy in the signal (the x-axis). The x-axis ranges from absolute redundancy and certainty at its zero point to complete chaos and unpredictability at its far end. This graph, Shannon states, far from depicting a simple nose-dive in which information is gradually reduced to zero as the level of noise increases, is shaped instead like a bell curve: at the far end of the horizontal axis, at the extreme of noisiness, nothing is communicated; the signal is

drowned and undifferentiated. But at the other extreme, where no noise is present, nothing is communicated because there is simply no uncertainty to begin with. If information cannot exist without uncertainty, if, that is, the entropy of a channel is the measure of its information-giving capacity, then a signal of no entropy would provide absolutely no information. In a state of zero equivocation all is entirely predetermined, all is entirely within the realm of the given and the assumed. Any message given across a noiseless channel would necessarily have to be already predicted with absolute certainty on the other side of the communicational divide. No uncertainty would be displaced; nothing would be resolved. Nothing would be secret and thus nothing could be revealed.

Thus, noise is not the simple adversary to communication that practical experience might suggest, but the very precondition to its functioning. It is the *sine qua non* of a message's transmission. Only within and by virtue of this disordering of the code, this entropy within the channel, does any single statement or perception become meaningful.

Shannon's theory came to be massively influential not simply for the petty engineering problems of his own discipline but for an enormous host of other disciplines. Information theory proved itself to be a dynamically synthetic science. As we have seen, it looked back and informed the earlier science of thermodynamics. It also looked ahead and proved enormously useful to the nascent science of molecular genetics, as genes revealed themselves to be microscopic means of coding information about an organism's structure. Really, information theory is relevant to everything, everything of any significance, precisely because it manages to comprehend the nature of signification itself. Anything that means anything to us will necessarily be recognisable as part of a predictable pattern. But it will also necessarily subvert that pattern, fogging and interfering with its perception. The science of information has the potential to address, inform and *redress* some of the oldest and most fundamental problems in our attempt to find the nature of meaning *as such*.

What I wish to get at in the pages that follow is something we might call the *positivity* of noise, noise as more than loss of information, the perception of noise as a peculiar type of *insight*. This thesis is founded on the idea that the interference in our perception of the modern sensorium, the disruption of our attempts to see and hear it, to articulate it, to sing it, to sound it and to picture it, leads us towards a new kind of metaphysic: a metaphysic that modernism in various different ways was beginning to recognise. Meaning itself is opposed to – but also preconditioned by – the disruptive and corrupting element in our perceptions, by that which we see when we fail to see; that which we hear when we stop hearing clearly.

In using information theory to understand the modernist canon, we will not be positing a straightforward line of influence that goes from Shannon to the modernists. Since Shannon's major work in this field appeared in 1948 that would clearly be anachronistic. Shannon's discovery, like all great intellectual discoveries, has a way of seeming to always have been there. It goes to work on its predecessors. Thus the route of influence will be a vastly more indirect one, going from Shannon's work back thousands of years to the beginnings of metaphysics in Plato and then returning to the late nineteenth and early twentieth centuries.

It is a metaphysic explicitly set out in the works of the contemporary French
Philosopher Michel Serres, a figure whose highly wrought and complex writing has
endeavoured perhaps more than any other to apply Shannon's ideas to philosophy proper.

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Noise is one of the central concepts in the writings that Serres produced first in the Nineteen Seventies and early Eighties and which weaves in and out of almost all his work. Drawing implicitly on the earlier mathematical theories of communication and information that emerged in the late forties and early fifties, Serres sees noise at work in all communicational efforts, all perception, and all dialogue. And this includes, importantly, the foundational

dialogues of western metaphysics. Serres' theory of noise is first articulated in an early essay on Platonic dialogue in his *Hermes* series. The essay is not a reading of any of the arguments to be found in those texts, but is rather of an examination of the dialogue form itself. His aim is to show how the central object of the dialogues, the platonic Theory of Forms, is implicit in the dialogic enterprise from the very beginning. Serres does not read the dialogues as a set of propositions, laid out on the page, waiting to be uncomplicatedly understood by the reader, but rather as the drama of attempted understanding by the participants within the dialogue, a struggle in which unity of understanding is the goal and the end point, but never assured from the beginning.

In this way, the most important actor in the drama, the figure that creates the antagonism in the first place is not one named in the *dramatis personae*. For Serres, the participants in platonic dialogue are not themselves antagonists. Their enterprise is not one of a combat against each other in which he who is possessed of the truth wins out against his errant competitor. Nor is it a dialectical struggle in which two partial truths negotiate to produce a whole truth that can include but supersede them both. The participants in platonic dialogue are in fact on the same side; they share a common stake in the communicative effort. Their struggle is one in which they are united, both trying to find 'a truth upon which they can agree'. The real antagonist in the story is that which would stop them reaching this agreement, that which would get between them, stop them communicating, sunder their understanding.

To hold a dialogue is to suppose a third man and to seek to exclude him; a successful communication is the exclusion of the third man. The most profound dialectical problem is not the problem of the Other who is only a variety – or a variation – of the Same, it is the problem of the third man. We might call this third man the *demon*, the prosopopeia of noise.⁷

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⁷ Michel Serres, 'Platonic Dialogue', in *Hermes: Literature, Science, Philosophy*, trans. Joshua Hariri (London, Baltimore: Johns Hopkins University Press, 1982), p.67.

This demonic figure, this corrupter of information, does not just get between the speakers but, in a way, gets between their referents, the ideas they are trying to communicate. The unity that noise works against, the meeting of minds that it tries to disrupt, is not simply a unity of subjects but a unity of objects. What is corrupted through the course of the noisy communication channel is the attempt to gather a distribution of differing things under the banner of one central Idea, one transcendent essence or Form. For Serres, a Form, taken in the platonic sense, is the direct outcome of a successful effort to *inform*. Only when an idea is mutually understood, only when it passes effectively from one consciousness to another, can it transcend the specificity of its expression and its manifestation, only then can it transcend specificity *as such* and become a general category. When an idea passes intact, when it survives sufficiently the hazards of its journey, it passes beyond the particularity of circumstance, its individual details, and ascends to a heaven of timeless Ideas. When it fails to do so, the idea falls and disintegrates out into its individual instances, it falls from essence into accident.

The first effort to make communication in a dialogue successful is isomorphic with the effort to render a form independent of its empirical realisations. These realisations are the third man of the form, its interference and its noise...⁸

Thus noise, for Serres, comes to represent the empirical as such – the purely empirical; a realm of perception unstructured and unrestrained by any unifying understanding of what is perceived. Within this state the object is perceived but unrecognised, uncategorized; apprehended but not comprehended. The object becomes 'indefinitely discernible', revealed only in its differences from everything else. No grounding communality is found between items; no type emerges from the clutter of its instances. This hyper-empirical state of perception is thus incommunicable. To articulate this state, Serres states:

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⁸ Serres, *Hermes*, p.69.

there would have to be a different word for every circle, for every symbol, every tree, and for every pigeon; and a different word for yesterday, today and tomorrow; and a different word according to whether he who perceives it is you or I, according to whether one of us is angry, is jaundiced, and so on *ad infinitum*. At the extreme limits of empiricism, meaning is totally plunged into noise, the space of communication is granular, dialogue is condemned to cacophony: the transmission of communication is chronic transformation... Consequently, in order for dialogue to be possible, one must close one's eyes and cover one's ears to the song and the beauty of the sirens.⁹

The senses present a danger to our understanding to the extent that the objects presented to the senses can be only imperfectly equated. The idea of a dog, the understanding of what a dog is (as opposed to what a dog might be) must necessarily be singular, unitary. But the dogs we see and hear differ endlessly from one another. Nothing is exactly like anything else. One item will always be a slightly faulty reproduction, a mis-replication of the other; each an equally faulty transmission of the absolute. The sorting process that understanding requires always involves a wilful disregard of apparent difference.

More importantly, nothing is ever entirely similar to itself through time. An object reveals as many aspects of itself as there are occasions of revelation. Each new situation in which an object finds itself reveals a new capacity within it. Identifying an object of perception, assigning it to its place within a system of understanding will inevitably mean ignoring its shape-shifting, its modifications, ignoring the endlessly variable sensations it throws out over time, in favour of those that remain at least relatively stable. That is how essence is distinguished from accident. But such changes of state continue, acting as a kind of noise in the transmission of the idea of that object. The changeless ideal type described in platonic metaphysics was set up specifically to counteract the ever-changing and unstable data of the senses.

In contrast to this principle of stability, Michel Serres posits a state of maximum dissimilation. At the beginning of his book *Genesis* he names this *multiplicity* or *the multiple*:

⁹ Serres, *Hermes*, pp.69-70.

a grouping of objects unordered by any defining Idea. *The multiple* is a collective as it is revealed purely to the senses without any intervening thought: *per*ceived rather than *conceived*; a boundless conjunction of tokens without type.

The multiple as such. Here's a set undefined by elements or boundaries. Locally it is not individuated, globally it is not summed up... It is not an aggregate, it is not discrete. It's a bit viscous perhaps. A lake under the mist, the sea, a white plain, background noise, the murmur of a crowd, time. ¹⁰

In positing a realm entirely free from unifying metaphysical support, Serres reaches a new kind of metaphysic of his own; not a metaphysic of essence but a metaphysic of *possibility*. The *multiple* is the sum of all possible entities and events. It exists prior to any singular specific thing and prior to any specific sequence of change. It exists as their background and their logical precondition. It is not a general category to which a thing belongs, but a swarm of endlessly differing specifics: the space that lies veiled behind the single perceivable thing, the chaos from which it emerges and within which it is swamped. 'The raucous, anarchic, noisy, variegated, tiger-striped, zebra-streaked, mixed-up multiple... is possibility itself. It is the set of possible things. It may be the set of possible things.' But crucially, this space of possibility is not revealed to us through closing our eyes and blocking our ears to whatever is actually before us and conjecturing its alternatives. It is precisely the opposite: it is when we attend fully to the wild array of differing and changing forms and sequences manifest in the world around us, without prejudicial categorisation, that we really gain metaphysical revelation. Such an act of attention wouldn't really be attention at all. In fact it can't really be called perception since perception always involves some sort of selection, plucking out the object from its background. Or if we are to use the word 'perception' it must be a perception posed precisely in opposition to the idea of *intention*. The *multiple* is inherent within

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¹⁰ Michel Serres, *Genesis*, trans. Genevieve James and James Nielson (Michigan: Ann Arbour, 1995), p.4.

¹¹ Serres, Genesis, p.22.

perception but is never really that which we perceive. It is rather that which stops us perceiving clearly, that which distracts, disrupts and interferes with perception, the noise on the line of perception.

In the essay on Platonic dialogue, Serres is mainly focussed on symbolic inscription, i.e. visual, rather than auditory communication. He coins the word 'cacography' for the scriptural equivalent of the auditory 'cacophony'. 'Cacography' is bad writing, noisy writing, like scribbly hand-writing; the wobbly lines of the sketched triangle that partially thwarts its aspirations to triangularity itself. 12 This may seem to miss the point of geometry, but 'missing the point' is what Michel Serres is all about. His writing continually asks us to look away from the punctual clarity of the singular idea and refocus ourselves upon the unfocussed: the cloudy distribution of approximations that surround it. If the mathematician becomes impatient with all this, Serres states, it is because he has become accustomed to thinking within a community that has triumphed over equivocation to the maximum degree. 'The subject of abstract mathematics is the 'we' of an ideal republic which is the city of communication maximally purged of noise.'13 The ideal noiseless republic is one in which common understanding has reached the level where all incidents and accidents in the communicational enterprise can safely be ignored. One's interlocutor gets the point. He can stop short your stuttering and dithering and scrawling, your endless striving for the point, because he already understands: he already holds in his mind the perfect idea of a triangle that the scribbled rendering of a triangle is attempting, but failing slightly, to depict. The

¹² The analogy between the quirks and defects in graphic representation and the 'noise' of defective auditory representation has been borne out interestingly in the world of Artificial intelligence. A heightened focus upon the idiosyncrasies of any graphic script came about when scientists first started trying to develop computer programmes that could read normally disordered script, a pattern and type recognition software that could 'see past' such scribbles and perceive the individual grapheme, the letter or word that was being communicated. A major breakthrough in this development came in Oliver Selfridge's 1958 programme 'Pandemonium', inspired by the demonic city council in *Paradise Lost*. The programme could deal with equivocation in the pattern represented because instead of being composed of one central intelligence trying to give a single answer, it was composed of a horde of separate semi-autonomous mini-programmes, or, as he called them, 'demons', each assigned to recognise a particular aspect of the shape in front of them and each giving their own separate signal, or 'shriek' at the same time. The programme was the first to be able to deal with and use noise in its operation. ¹³ Serres, *Hermes*, p.68.

errant line of the inscription is corrected easily at its point of reception. But without this redundancy, without any preordained understanding of the terms of expression, the inevitable accidents involved in that expression begin to overwhelm communication. Without this binding principle of pattern and repetition that holds identities together, everything begins, ever increasingly, to differ from everything else. Any instance begins to differ from its other instances in space, and differ from itself in time.

Thus multiplicity exists in and as a state of perpetual transformation. The transformational possibilities of interference have risen to a level in which there can no longer exist any identities to be transformed. As such, this state is itself timeless: not timeless in the sense of being still and changeless, but in the sense of being composed of nothing but change, with no identifiable underlying invariant subject that survives the change. White noise makes audible the transformational potential of interference at its maximal point, in which there is no longer any privileged identifiable signal to be distorted, no identifiable form to be transformed: interference interfering with interference. It is change without cause or effect, for cause and effect presuppose the persistent forms that absolute noise would do away with. Change becomes purely chaotic, random, untraceable. Identity can only arise when a minimal redundancy and repetition, a shape and a pattern, however faintly perceivable, begins to be heard amongst the chaos. And at this point, emerging from timeless sonority, time and history are born. 'Time' states Serres:

is a threshold between disorder and redundancy, it is the multiplicity next to chaos and prior to all spatialities. It is the first injection of redundancy into pure multiplicity.¹⁴

At the point at which redundancy emerges within the meaningless, furious, protean flux of the multiple there starts to appear the possibility of an effective assimilation into classes of

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¹⁴ Serres, *Genesis*, p.117.

persistently present items in a newly opened, comprehensible spatial field. And with this comes the possibility of a meaningful unfolding of events in a recognisable chain of causation. The perceptual subject is given a shot, a minimal probability of predicting what will follow from one moment to the next. As the odds on this gamble increase in the listener's favour, the pattern within the noise becomes more distinct. Sensation gains a rhyme and a rhythm. The world takes shape and sequence. Things start to speak to us in a language we can understand. Whatever surprises time has in store become surprising answers to specific questions. But as this negentropic order takes hold, the surprises become less frequent... and less surprising. Time crystallises and congeals into absolute rigidity and predictability. And here we reach a second state of timelessness, one this time constituted not by the meaningless fury of accidents, but by the ruthless elimination of all accident.

Information, communication and *time itself*, for Serres, must steer a course between these two, between the Scylla and Charybdis of noise and redundancy. Information, as defined by Gregory Bateson, is any 'difference which makes a difference' and information's two opposite antagonists can perhaps be seen in this light: redundancy is simple lack of differentiation, a changeless and thus entirely predictable purity; noise is absolute differentiation, it is difference that makes no difference.

The mathematical theory of communication that Serres is implicitly drawing upon states that without some corruption, without the entropy of the medium, no information is possible. Serres expresses this idea in taut, unapologetic contradiction:

Systems work because they do not work. Nonfunctioning remains essential for functioning... Given, two stations and a channel. They exchange messages. If the relation succeeds, it is perfect optimum, and immediate; it disappears as a relation. If it is there, if it exists, that means it has failed. It is only mediation. Relation is nonrelation... The channel carries the flow, but it cannot disappear as a channel and it breaks the flow more or less. But perfect, optimum communication no longer includes any mediation. And the canal disappears into immediacy. There would be no spaces

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¹⁵ Gregory Bateson, Steps to an Ecology of Mind (Chicago: University of Chicago Press, 1999), p.381.

of transformation anywhere. There are channels, and thus there must be noise. No canal without noise. The real is not rational. The best relation would be no relation. By definition it does not exist; if it exists it is not observable. 16

Serres takes Shannon and Weaver's theory and applies it beyond the limited scope of person-to-person communication, and onto consciousness itself and the sensations of which it attempts to make itself conscious. The ongoing reception of any information, be it from another human communicant, or simply from the objects of one's conscious attention, can only be set in motion through the intervening rupture of the noisy channel.

Noise destroys and horrifies. But order and flat repetition are in the vicinity of death. Noise nourishes a new order. Organization, life, and intelligent thought live between order and noise, between disorder and perfect harmony. If there were only order, if we heard only perfect harmonies, our stupidity would soon fall downward toward a dreamless sleep; if we were always surrounded by the shivaree, we would lose our consistency, we would spread out among all the dancing atoms of the universe. We are; we live; we think on the fringe, in the probable fed by the unexpected, in the legal nourished with information. There are two ways to die, two ways to sleep, two ways to be stupid – a headfirst dive into chaos or stabilised installation in order and chitin. ¹⁷

Thus, just as Serres sees temporality as brought into existence with the first intervention of redundancy amidst noisy chaos, it is equally possible to see it as deriving from a disrupting introduction of noise into the perfect equilibrium of a noiseless order. Serres' book *Genesis* tends to view noise, strife, disorder as a prior state out from which time flows, hence the title. But ultimately he remains decidedly undecided over which of these twin states of stupor comes first. Noise can be seen either as a prior condition, the primodial state of chaos from which time, sequence and order emerge, or as that which draws an original static pretemporal equilibrium into movement. Whether time is brought into being with the injection of noise into the system, or with the injection of system into the noise, is really immaterial. What is important is that the unfolding of sensate reality over time can only exist with the

¹⁷ Serres, *The Parasite*, p.127.

¹⁶ Serres, *The Parasite*, trans. Lawrence R. Schehr (Minneapolis: University of Minnesota, 2007), p.79.

commingling of two. 'There is only something new by the injection of chance in the rule, by the introduction of the law at the heart of disorder.' Serres plays on the word 'parasite', which in French, in addition to the senses it has in English, can also refer to communicational interference, noise on the line. The noisy communication channel is a messenger that partially consumes his message on the way, rupturing the fidelity of replication at the receiving station and creating an imbalance of understanding between sender and receiver. 19 But this imbalance is precisely that which topples the communicational system into life and motion, makes the system work by stopping it from working.

If some equilibrium exists or ever existed somewhere, somehow, the introduction of a parasite in the system immediately provokes a difference, a disequilibrium. Immediately, the system changes; time has begun.²⁰

Noise, Time and Modernism

It is this idea of temporal inauguration, a setting into motion of an established order of sensation above all that makes Serres' conception of perceptual noise sharply relevant to a study of Modernism. For if Modernism has a single definitive, essential feature, it is surely its obsession with time. Modernism is defined by its temporal self-fixation. It was the first cultural movement to be named after what might have seemed banal and obvious: its existence in the present moment. But existence in the present moment had become, for the

¹⁸ Serres, *The Parasite*, p.128.

¹⁹ This is complicated. The Parasite can be seen as a noisy information-thief. But the main point of Serres' book, The Parasite in fact argues something like the opposite. The Parasite is an information giver as well as an information taker. In a physical thermodynamic system, a demonic intermediary figure like Maxwell's demon can use information, choice, sorting and selection to give form to a chaotic system thus seemingly halting and reversing the supposedly irreversable entropic process that the second law of thermodynamics demands and which has come to be identified with time itself. But information's normally negligible but nevertheless significant physical component means that this negentropic order can only be instantiated at a discrete local level outside of which, entropy (in the original physical, thermodynamic sense) will increase at a much higher rate to compensate. This is very important for a consideration of Serres work as a whole but is a little outside the scope of this chapter.
²⁰ Serres *The Parasite*, p.182.

modernists a *distinctive* feature, precisely because the present seemed to have gained an absolute distinction, an absolute separation, a rupture, from its past. Rather than building up from, or emerging slowly out of the past, modernity seems to be founded on its ruins.

Modernism contains within it an enormous spectrum of different emotional and intellectual responses to the killing off of tradition, and a variety of different suspicions as to the identity of the culprit. But a recognition of the fact of history's destructive nature must be a necessary, if not a sufficient condition of Modernist thought. As Terry Eagleton puts it:

Though all ages are bang up-to-date, not all of them are as entranced by the fact as our own epoch. All periods are modern but not all of them live their experience in this mode [...] What strikes [modernity] as most typical about itself is the dazzling, dismaying experience of time, which no longer comes wrapped in history or habit or custom but is now becoming almost their opposite. The modern is that which reduces everything that happened up to half an hour ago to an oppressive traditionalism; it is less a continuation of history than an abolition of it.²¹

Marshall Berman, in his work *All That is Solid Melts into Air*, clearly himself giddy with the excitement that he describes, defines modernity as an experience of exhilarating and confounding transformation:

There is a mode of vital experience – experience of space and time, of the self and others, of life's possibilities – that is shared by men and women all over the world today. I will call this body of experience 'modernity'. To be modern is to find ourselves in an environment that promises adventure, power, joy, growth, transformation of ourselves and the world – and at the same time, threatens to destroy everything we have, everything we know, everything we are. Modern environments and experiences cut across all boundaries... in this sense modernity can be said to unite all mankind. But it is a paradoxical unity, a unity of disunity: it pours us into a maelstrom of perpetual disintegration and renewal, of struggle and contradiction, of ambiguity and anguish. To be modern is to be part of a universe in which, as Marx said, 'all that is solid melts into air.'.²²

This description of modernity, for me, describes perfectly all the paradoxical qualities and potentials of noise: its ability to murder and create; to transform and to destroy; to create

²¹ Terry Eagleton, Figures of Dissent (London: Verso, 2003), pp.144-5.

²² Marshall Berman All That Is Solid Melts Into Air: The Experience of Modernity (London: Verso, 1982), p.15.

information and to disintegrate information; to connect and unite individuals and to sunder that connection and unity. What Michel Serres' metaphysical speculations bring to this picture is a way of conceiving of the transformations of the world in modernity in which noise has an *active* role. As I hope to show in a variety of ways throughout this thesis, it is not simply the objective conditions of modernity, the frenzy and contestation of the Twentieth Century that produce noise. Noise is the grounding precondition of that experience of transformation and transformation of experience. Without noise, in the sense in which I have described it, nothing could be experienced and nothing could be transformed. Nothing genuinely new could ever happen.

This thesis will gather a diversity of different testimonies to the experience of noise in the nineteenth and early twentieth century, eye-witnesses and ear-witnesses. These will include artists, novelists and poets, but also, crucially the civilians or laity of the artistic and literary world, journalists, popular writers, *citizens*. It will be one of the incidental but recurring propositions of the text that the artists and writers of the avant-garde made a virtue out of public nuisance (a word that is closely cognate with the word 'noise') performing a kind of grand revaluation of the topical concerns of their contemporaries.

However, the relationship that the artistic or literary work has to this state of experience is ambiguous. It can be seen both as reacting in tandem with this change or against it. Susan Buck-Morss has written of the reversal in meaning to which the concept of the aesthetic became subject during the time-span of modernity.²³ The aesthetic originally derives its name from the Greek *aisthesthai* meaning 'to perceive'. Modern aesthetics, at its origin in the Eighteenth Century, pertained primarily to sensation itself and only secondarily to artistic representation. A representation was aesthetically gratifying only by virtue of its resemblance to an originally gratifying sense experience. But as the Nineteenth Century's

²³ Susan Buck Morss, 'Aesthetics and Anaesthetics: Walter Benjamin's Artwork Essay Reconsidered', *October*, 62 (1992), pp.3-41.

assaults on the senses mounted, as sensation increased beyond any simple sense of pleasure and satiety and began to be seen as a source of pain and discomfiture, the role of the aesthetic came more and more to be seen as providing a protective screen against the senses. The aesthetic defected and joined the opposition, reaching a strange alliance with the *anaesthetic*. Art was more and more defined by what it kept out. Its gratifications, like those of ether or opium, were seen in terms of that which it stopped you from feeling. This aesthetic anaesthesia can be seen either in terms of a retreat into abstraction, an elimination of all the contingent details of sensate existence in favour of a pure, autonomous non-representative art. Or it can be seen as an absolute flooding of sensation until it reaches the point of blank inurement, where nothing can get through.

However, there are other contemporary cultural theories, deeply implicated in and relevant to modernist aesthetics that see the role of the art-work as providing precisely an increase in noise. William Paulson in *The Noise of Culture*, a work that draws heavily on the work of Michel Serres, sees the aesthetic and, in particular, the literary, as performing an increase in the entropy of communication. Any literary work, to call itself literature, must be itself a noisy channel of communication in the sense that it confounds the expectations of the reader. It must add a new level of difficulty and a new level of surprise to language.

Literature is unexpected writing, it breaks apart all the predictable sequences of everyday speech, breaks apart redundancy, all that makes one word the probable outcome of the previous word.

Literary language, by its very failure as a system for the communication of preexistent information, becomes a vehicle for the creation of new information... Literary understanding can be seen as... a creation of meaning out of placing meaning in jeopardy.²⁴

²⁴ William Paulson, *The Noise of Culture* (Ithaca: Cornell, 1988), pp.101-2.

In line with the Russian formalist doctrine that art operates primarily through the defamiliarisation of reality, Paulson gives as a simple example of the breakup of probabilities within speech an example from the French poet Francois Villon: 'When I had drunk up all my shame'. This line breaks up the redundant and predictable relation between drinking and liquid.

Most theories of the aesthetic see the literary or art object as a more perfect order, containing a more harmonic interrelation of parts than ordinary perception or ordinary utilitarian language. But Paulson claims precisely the reverse. Paulson sees literature and the aesthetic as a way of productively disrupting the clarity of discourse, fogging textual understanding. It is through this act of disruption that the work gains its autonomy, its separation from ordinary experience and ordinary communication, its shirking of the task of reference. The doctrine of the autonomy of the art work is taken to its logical extreme in language that overwhelms and disorders any sense of the informative, language in which the channel of communication has risen up and interfered with the information it carries, language which robs or steals from the information it is meant to provide. The literary object gains autonomy from the utilitarian task of communication to the extent that it obscures a simpler original statement within welter of disorder. What this disruptive potential within the literary measures itself against is a kind of zero-degree or a-rhetorical un-poetic means of expression; a communication freed from all equivocation. Completely non-figurative, arhetorical writing is impossible as Paulson recognises, but it can exist as a kind of zerodegree, something discourse can never reach but can tend toward. Literature, on the other hand, is defined as a kind of rhetorical excess, a rhetoric that complicates rather than elucidating its object.

Paulson's theory is a theory of culture in general. It is notably unhistorical. But it seems most applicable to Modernist Literature and culture. In all of the history of literature,

the late Nineteenth and early Twentieth century is the period most driven by the will to 'create new meaning'. The disordering and reordering activity that Literature in general, as Paulson sees it, performs upon an innocent original non-literary discourse, we might see as performed by the modernist avant-garde upon the literary tradition that preceded it. The avant-garde is to the prior artistic forms what the literary as a whole is to that non-existent zero-degree a-rhetorical discourse.

However, in a certain paradoxical sense, once we apply Paulson's theory to Modernism in particular, the noisiness of the literary does not increase its independence and autonomy from the task of reference and representation. A corrupted channel of communication may fail in the task of referring to a single object in the outside world beyond itself, yet that very failure can lead to a more adequate representation of the *experience* of modernity, the sensations it produced, since the senses were themselves beginning to fail to represent the world properly. Only a noisy and disrupted art can do justice to the noisy and disrupted experience of the industrialised sensorium.

Paulson's discussions are focussed upon the noise of literature: i.e. the disorder that the medium of writing itself perpetrates upon an original state of clarity. But Serres' writing proposes something quite different. By taking Plato as his starting point, the model that is presupposed in this view is rearranged. For Serres, as for Plato, words do not represent empirical phenomena. In fact the opposite is more like the case. It is the things of the world that have the status of secondary representation. It is the Word, or at least some notion of a super empirical category, that holds the status of the original. The sensible world represents the Word; or rather it slightly misrepresents it: the process of representation is subject to interference. Thus it is only a noisy language that can hope to represent the infinitely noisier phenomenal world.

Modernism's self-conception has often been said to begin with Baudelaire's essay 'The Painter of Modern Life.' In the essay, the poet reacts against a certain aesthetic idealism that sees the sole task of the artwork as depicting an eternal, changeless beauty and truth. This, for Baudelaire, is only one half of the art work. A second necessary element is the temporal, the fleeting and the transitory. Such an element constitutes the 'body' of art in contrast to its eternal soul.

Beauty is made up, on the one hand, of an element that is *eternal*, *and invariable*... and, on the other, *of a relative and circumstantial element*, which we may like to call, successively or at one and the same time, *contemporaneity*, *fashion*, *morality*, *passion*. ²⁵

It is possible to see, in the polarity set up by Shannon and Weaver, and in Michel Serres' metaphysical extrapolation from it, something like the same duality that Baudelaire posits. Not only beauty but meaning itself can only come about from a meeting of the invariant with the variable, the meeting of essence and accident, redundancy and noise. The bell-curve of communication charts the meeting and mixture of these two principles. As it does so, the two principles are relativized: the eternal and timeless is spread out in a spectrum of differing degrees of invariance and the temporal likewise. The absolutely timeless and the absolutely ephemeral stand as two extremes on a continuous spectrum. The aesthetics of Modernism that I wish to draw out in this thesis does not necessarily take as its ideal the optimal mean and pinnacle of the two, but is concerned rather with states of sensation that have slid down towards the far extreme of the x = noise axis. Despite Baudelaire's insistence on the dualistic nature of art and thus the necessity of both, it is clearly this new and under-recognised half that he is most concerned with and wished to emphasise and increase.

²⁵ Charles Baudelaire, 'The Painter of Modern Life', extracted in *Modernism: An Anthology of Sources and Documents*, eds. Vassiliki Kolocotroni et al. (Edinburgh: Edinburgh University Press, 1995), p.103.

What follows is very far from being a summary or survey of modernist culture. My thesis makes no claim to be comprehensive far less exhaustive. My proposal is instead to use the ideas I have just laid out to try to get at something like *Modernism as such*; modernism by definition. I wish to use the idea of perceptual noise, the 'bad-line' of sensation, to examine what Wyndham Lewis was to call the 'time-cult' of the modernist period. To do this I have decided to take as my starting point and recurring point of reference, the doctrines of the Italian Futurists. For it is there that we can see the Will to Novelty in its purist form. Futurism provided in many ways the template for the Twentieth Century avant-garde. Futurism stands out amongst the different groupings within the avant-garde as having no one single conception of the *content* of modernity. Other movements sought to utilise and centre themselves around this or that innovation, this or that feature or image of modern life. Futurism has an abundance of such totems none of which have any particular priority. It was really the pure category of modernity, an essential 'new-ness' and 'now-ness', change for the sake of change, that they sought after.

However to speak of the Futurist's hankering for the new in terms of category and essence is liable to confusion. The futurist's obsession with time change and movement is one divorced from any particular state or sequence of states; they cared little about *from what* and *to what* state of affairs this change took place. But this indifference did not involve removing themselves and standing back from the world of phenomena and thinking about time and change as non-empirical ideas. It was the *experience*, the *sensation* of change that they wanted. The notions of 'from what' and 'to what' became irrelevant not by being refined out of existence in a process of abstraction, but precisely because the frenzy and the pace of change had reduced all sense of a static point of embarkation and destination to an absolute minimum.

For the modernist avant-garde generally, sensation was intimately bound up with the idea of *causing a sensation*, with *being sensational*. Sensation came to be seen in terms of the shock that it registered and provided and in particular the shockingly new. Their conception of sensation was seen in decidedly temporal terms. The opposite of sensation was no longer simply darkness or silence, but repetition. It was *redundancy* fundamentally that they made their enemy: habit, ritual, tradition, all the underlying codes of experience that make it regular, intelligible and easily communicable.

Of course, Modernism cannot be wholly identified with the avant-garde, nor can the avant-garde be wholly identified as a celebratory welcome of sensory chaos. Despite taking Futurism as my starting point, I wish to discuss some of the many reactions *against* the invasive nature of the modern sensorium both within the popular thought and writing of the time and within the 'High Modernism' of the artistic elite. A great many writers and artists looked to art as a way of countering the chaos of modernity. But as it sought to do so, it was compelled to come up with novel artistic forms that could give a sense of shape and order to experience. What T. S. Eliot, in writing about Joyce was to call the mythic method was one such way. In structuring the representation of the modern environment around the external pre-existing form of myth Joyce had found a way of 'ordering, of giving a shape and a significance to the immense panorama of futility and anarchy which is contemporary history.'²⁶

Yet, as I hope to show, Eliot at certain moments comes to a recognition of the primary insight that information theory provides: that of the necessity of a certain measure of noise, a certain dose of anarchy if you like, for any 'significance', or, to put it more technically, any signal, to get through. He saw the close interdependence that meaning has to its corruptibility.

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²⁶ T. S. Eliot 'Ulvsses, Order, and Myth' in *Selected Essays* (London: Faber, 1976)

It could be said that in allowing the concepts of noise and signal or noise and information such a broad reach we have achieved little more than a facile rephrasing of other more familiar, well-established, and indeed ancient concepts like chaos and cosmos, order and disorder etc. But the gift that the theory of information provides most of all, is the triangulation of that dichotomy. We cannot talk of noise in simple opposition to meaning and meaningfulness. Meaning needs uncertainty. It stands in opposition both to the extreme of noisiness and the opposite extreme of purity and pattern. In the course of this work we will continually find that the thwarting of representation and communication within Modernism, comes from the *other* extreme of the bell-curve, a pattern that is too perfectly predictable and repeatable to gain any insight from. Eliot sought to create meaning through imposing a preestablished pattern on the transient jumbled sensations of modernity. But meaning requires that jumbling as much as it requires any pre-established order. Nothing is more meaningless than pattern. Nothing tells us less than that which we know already.

Sight vs. Sound (and the Other Senses)

My thesis is divided into two sections dealing respectively with sound and sight. This division is in some sense arbitrary. The informational conception of noise that Michel Serres works with and which I wish to utilise here lies at some distance from any particular mode of experience, from any particular source channel of information or. Shannon and Weaver's theory of information and the noisy channel was not in any way bound to experience, it was not the result of observation and experiment but rather a categorical, *a priori* understanding of information and its antagonist, an understanding of what any and all information has to be. But the different modes of sensation have very different ways of handling perceptual noise, and different levels of tolerance for it.

Sight stands in contrast to sound in its relative imperviousness to interference. Despite the broad reach of the word 'noise' in Serres' work, it still maintains a firm, specific grounding in audition. Hearing is the privileged sense with which we apprehend chaos and dissociation, metaphysical noise.

These are objects that I seem to live through more than view. I think I pick up noises from them more than I see them, touch them, or conceive them. I hear without divining an isolated source, hearing is better at integrating than analysing, the ear knows how to lose track.²⁷

Inherent within the faculty of hearing, are a number of factors that make it more suitable to the apprehension of *multiplicity*. For one, the sound of an object can never be uncomplicatedly *identified* with the object itself in the way that its appearance can be. The distinction between appearance and reality has been made much of by philosophers to say the very least. But the tireless will on the part of intellectual endeavour to distinguish the two, in some way only underlines the ease with which they are elided together in everyday experience. Except in special circumstances, which I hope to elaborate at length, the sight of a thing is allowed to stand for the thing itself in a way that its sound rarely is. A voice may be recognisable as belonging to its owner but it is rarely thought of as being its owner. All sound is accidental in this sense: accidental, that is, as opposed to essential. The sight of a thing is relatively invariant and stable, fluctuating within strict and predictable parameters. The noise that a thing makes, by contrast, is endlessly variable, contingent upon its circumstance, peculiar to its situation and peculiar to its moment, peculiar to the entirely unforeseeable happenstance that produces and provokes it. A noise is an *effect* of its object-source rather than one of its essential predicates or qualities. Thus the multitude as it is heard, the murmur of the crowd, the auditory collective, embodies more adequately than sight, the kind of summation of the accidental and inessential that Serres means to evoke in the word noise.

²⁷ Serres, *Genesis*, 1995, p.7.

Sound is always in excess of its object, emanating out and away from it. Sound, unlike sight, takes up space rather than sitting discretely *in* its place. If it is perhaps traceable back to its source, the work of tracing is normally the job of the eye, not the ear. A noise tells us firstly that there is something to look for. The eye is the primary means by which we locate things in space. To see something is already to have situated it within a homogenous spatial field. The retina is a plane made up of a multiplicity of separate rods and cones to match the multiplicity of space, each assigned to their own individual point in the field before it. The eye discerns and distinguishes between separate forms and by doing so, it puts them together into one all-encompassing field of tabulation. In ordering its perceptual world in this way, the image betrays itself as already in league with the Idea. But this spatial distribution of vision really has no auditory equivalent. Strictly speaking – and despite the ubiquitous contemporary use of terms like 'soundscape' – sound has hardly any spatial field. The scale of audible pitch is divided up amongst the different corti within the cochlea, but this is a differentiation of tones rather than their different sources. Auditory location is weak and vague and involves a good deal of guess work when visual backup is not forthcoming.

The inherent indiscretion of sound and the ear's lack of any proper spatial distribution entails a very different way of handling any simultaneous plurality of different sounds. Sight comfortably deals with a diversity of objects by having them spread out side by side within its visual field. Sound cannot do this. When the ear perceives many sounds together what it is actually transmitting to the brain is the final unified settlement of a struggle of all against all in which none survive unscarred. Sounds must contest each other for our reception. Each sound petitions us for a hearing, but as they each make their case together, as they audition for audition, none of them ever truly gets the part because none of them can ever truly *come apart*. The more frequencies that are added to any such sonic collective the rougher the timbre of the final synthesis. As sound-waves collide and combine, as peak meets trough, the

resulting wave pattern becomes more and more patternless and complex, moving ever further towards the chaos of white noise. Whenever sounds combine they bring sound further towards the condition of white noise; interference is not *necessarily* a pathology of auditory experience but the precondition for any two sounds being heard at the same time. In auditory experience, simultaneity means war. Michel Serres uses the French archaism *noise* to convey this sense of contested sound. The ear inaugurates this conflict; a conflict which is the inevitable result of any simultaneous combination of different sounds.

Thus, multiplicity is unveiled most completely in the experience of white noise. In its ultimate state, multiplicity becomes 'blank multiplicity', blank deriving from the French *blanc*, meaning white. White noise is sound that holds within itself the entire totality of pitches, all sounded together, each jostling with the other for its place within the listener's attention, each interfering with the other.

Yet the very fact that we use the predicate 'white' to describe this experience suggests that it must admit of a visual counterpart. Normal, functional vision my well section reality into its constitutive parts and identities, but there are a variety of forms of visual experience in which this primary separation begins to break down. Such experiences, as I will argue, came to abound in the nineteenth and Twentieth century. Sight, having loaned to sound the predicate 'white' to help describe the ultimate point of its chaotic mixture and disintegration, has, in the age of technological reproduction, borrowed back the concept of 'noise' to describe its own peculiar form of mixture and disintegration. Vision can be noisy. We have become accustomed to talking of 'a noisy picture' when we experience the blizzard of 'snow' that envelops our TV screens in bad atmospheric conditions. But such a way of talking, I maintain, while grounded in technologically mediated experience, is ultimately separable and independent from those technologies, just as auditory noise cannot be constrained only to discussions of radio, telephony, phonography etc. but is rather an ever present condition of

auditory experience in general. The medium of vision, and the noisy phenomenal manifestation of that medium does not need to be seen only as in terms of the its supplementary electronic extensions. Nor does it need to be seen as the material components of graphic representation as in Serres' scribbly triangle. *Light itself is a medium of vision*. In fact, it is *the* medium of vision. It functions as such only to the extent that it carries within it information, and it is entirely explicable and analysable through the analytical techniques provided by the science of information. At moments when light comes to interfere with the picture that it mediates, we can properly say that the picture has become noisy. Such moments, as I hope to show, abounded and proliferated within modernity. Equally, the retina is one more stage and component in the transmission of visual transmission and its impingement on the picture being received constitutes a type of visual noise. Both these senses are summed up in the word 'dazzle'.

I have concentrated in this work on the senses of sight and sound to the exclusion of the other three senses. This was for three interrelated reasons. Firstly, sight and sound are the only two senses that have so far been susceptible to technological reproduction and transmission and while this thesis by no means restricts itself to technologically mediated sensation, it is primarily from the analysis of the principles by which such technologies must operate that its grounding principles are born. Technology can effect and alter our touch taste and smell but it cannot record and represent them.

But more importantly sight and sound are also the only senses that really admit of the primary separation into background and foreground which my discussions are based around. There is little such distinction in the case of smell and touch, or in taste which is a strange combination of smell and touch. Our mammalian evolution has, of late, involved an enormous fall from the world of smell to the point where it really only ever comes to our

attention when it becomes an interference when it has reached the point of permeation and inundation that in the case of sight and sound are noticeable deviations from a standard norm of discretion and intelligibility. In smelling something we are never reading and interpreting it. In the most refined and discriminating forms of olfaction like wine-tasting and perfumery, we may be distinguishing elements within an original mixture, but these elements are not objects or events and certainly not *patterns*. Smells never achieve the status of objecthood in the sense of being a persistent item locatable at one point in space and interacting predictably with other objects as a specific causal agent in time. This may well resemble the qualities of sound that I have just described. But a sound, despite its vulnerability to interference as compared to sight, still admits of an ordered pattern and sequence – mostly notably in the case of language and speech – that stands in contrast to the interference of its background and makes that background noticeable as such. Smell by contrast, is only ever a background phenomenon.

Smell's permanent background status can be recognised by anyone who has ever had a faint but persistent stink lurking somewhere in their house and has noticed its annoying habit of disappearing as soon as you try to sniff it out. There is always something ghostly and ungraspable about a smell, endlessly exorcised in the act of its intention. We perceive smell, as it were, always and only out of the corner of our eye. For Michel Serres, it is the blended mingled patternlessness of smell and olfaction that makes it interesting, (he is French after all) and gives it a counteractive potential against the too solid and fixed identities announced by language. But whereas in sight and sound, this patternlessness is a noticeable exception from a standard norm of discretion and intelligibility, in smell it is part of its essential condition. We can talk about a smell as being itself an interference but we cannot really talk about it as being *subject to interference* because there is so little pattern and regularity in smell to begin with.

If smell is only ever a background experience then touch is only a foreground experience. Touch has always been seen as the sense providing the most sense of certainty. To grasp something means to understand it completely. Touch is the proof of the hypotheses that the other senses conjecture, the answer to the questions that they raise. Our manual investigations of the world are a type of rough interrogation, one that leaves the object as little room as possible for equivocation. Tangibility is the absolute state of objecthood. It is difficult to think of touch as being subject to noise because there is no distance to be traversed. Touch has no *medium* as such other than our own nervous system. There is no channel in the outside world that leaves itself exposed to the corrupting influence of noise.

These considerations have implications for the way in which smell and touch develop through history. These senses come and go and change rapidly through time, but they lack the sense of a retention of the same essential sensory patterns to give them a history as such. This can be seen by examining properly the deeply flawed but very common idea that the cities of the past were foul smelling maelstroms of stench whereas our own city is in some way deodourised. In the past there were a great many smells lurking around to be sniffed out, but because it is the very nature of smell to inundate and to saturate, they were forever passing beneath the level of proper conscious awareness. A quick reflection will tell us that our own urban environment is saturated by one very volatile chemical, namely *petrol*. But we do not live our lives in any constant recognition of this fact.

History has provided a great many novelties in the sphere of tactile sensation – the mud of the first world war, for example, or the vibrations of new machinery. But these, unlike the developments in sight and sound, were tactile sensations of *novel things* rather than changes in the conditions by which we touched in general. There is potentially a vast and massively various work waiting to be written about all the different tactile experiences that

have been available at any one moment in history, but it would lack a certain sense of coherence and is certainly outside the scope of the present work.

Chapter One: The Problem of Urban Noise



Fig. 1 – Umberto Boccioni, The Street Enters the House, 1911

A figure leans out precariously over the balcony of her apartment, where a new portion of the city is being constructed, as if on the brink of plummeting into the tumult below. Indeed, without any such catastrophe, she is already in amongst the chaos; the chaos has risen up to meet her, the steel girders assembled around her head like hair pins, a half-constructed

Staircase rising and merging with her shoulder, a workhorse straining to mount her back.

Umberto Boccioni, in this 1911 work *The Noise from The Street Penetrates the House*, seeks to give to the pure visuality of his medium, something of the quality of auditory experience.

The vertiginous upsurge of elements in the scene, the warping of space and distance and the penetration of one image by another, allows the scene to partake of sound's mingling circumambience

The noise that has diverted the figure's attention is the noise of Milan being pulled apart and reconstructed in the street below her. The noise she hears is the noise of the new, a world in cacophonous transition. Industrialism, urbanisation, the dizzying transformations that Europe had witnessed in the century leading up to the moment in question had entailed an enormous increase in the volume levels of the urban soundscape. And this led Futurism to a close identification of the new with the noisy and a resulting celebration of the latter for just this reason. The Futurist composer and writer Luigi Russolo writes in his manifesto on noise:

Ancient life was all silence. In the nineteenth century, with the invention of the machine, Noise was born. Today, Noise triumphs and reigns supreme over the sensibility of men.²⁸

Russolo sought to break apart the redundant harmonies of the past by opening them out to the discords and dissonances of the street. The new music, he declared, would be inclusive of more and more pitches within the tone spectrum. It would go beyond discord as normally understood and start to take on the mixed and chaotic character of untuned sound.

Let us cross a great modern capital with our ears more alert than our eyes, and we will get enjoyment from distinguishing the eddying of water, air and gas in metal pipes, the grumbling of noises that breathe and pulse with indisputable animality, the palpitation of valves, the coming and going of pistons, the howl of mechanical saws, the jolting of a tram on its rails, the cracking of whips, the flapping of curtains and flags. We enjoy creating mental orchestrations of the crashing down of metal shop

²⁸ Luigi Russolo, 'The Art of Noises' in *Futurist Manifestos*, ed. Umbro Appolonio (London: Thames and Hudson, 1970), p.74.

blinds, slamming doors, the hubbub and shuffling of crowds, the variety of din, from stations, railways, iron foundries, spinning wheels, printing works, electric power stations and underground railways.²⁹

Russulo's exercise in auditory *flânerie* performs a kind of gathering together of the city. The collective din that assails him from all sides is brought within the fold of the music and made to speak together with it. Moreover, the importance of 'the noise in the street' for Futurism lay just as much in the reverse process of collection: just as the listener gathers together and synthesises the diversity of different sounds, the noise in the street gathers round it a diversity of listeners. At each side of the figure in Boccioni's painting, there stand others on neighbouring balconies. The noise on the street holds a congregation of citizens around it. It alerts the subject to more than simply its object-source; it alerts her to everyone else who is similarly alerted. The collective is alarmed into a collective mutual recognition of itself; alarmed, we might say, into a shared state of alarm.

Sound collectivises us. It is the most public of the senses, mostly because it is so impervious to the methods by which we demarcate our privacy and separate public from private. Sound cares little for our carefully walled-in spaces. It counters the sharply delineated, *digitally* differentiated 'inside-outside' and 'here-there' of visually perceived space with an *analogue* auditory space, gradually receding in concentric spheres, punctuated by muffling impediments, not clear breaks or distinctions. Just as sound is capable of penetrating the house, passing through to our private domestic space, it is also capable of gaining an unequalled access to our own internal privacy, our subjective thoughts. With or without our assent, sound can pass across the ultimate boundary-line that divides subject from world, of which our domestic boundary-lines are external replications. We cannot close our ears or turn away from sound. Hearing is more something that happens to us than something we do. Sound gets inside our heads; not just in the way that sight does but in the sense of

²⁹ Luigi Russolo, 'The Art of Noises', p.85.

invading and cleaving us from our own chosen objects of attention, our own intentions, our own thoughts. Whatever visual strains we may be under, we never find ourselves complaining that we cannot see ourselves think. In this way, the noise on the street initiates us into the outside world of the public, an absolute public without any secreted space of privacy. However, once we begin to see the city's din as a type of background interference, an entropic signal, then its status within human relations becomes ambivalent. If we see noise in opposition not to silence but to *signal* – the formal comprehensible auditory message – then noise becomes less something heard in itself than a barrier to hearing. The noise in the street begins to be seen less as a grouping together of the population, and more as a dispersal of the population. As the noise from the street penetrates the house, penetrating through the walls, it takes on something of the isolating quality of the very walls that it penetrates. At the same time as it forces the subject into recognition of the wider collective in which he takes part, it makes that collective more uncertain and unknowable. The super-individual mass becomes impossible to ignore exactly as it becomes impossible to comprehend, to communicate with, to receive meaning from.

The Canadian sound and musical theorist, Murray Schafer has characterised the changes brought about by the industrial revolution and the attendant urbanisation of Europe and America as constituting a dramatic change in the *fidelity* of sounds, their signal-to-noise ratio:

The country is generally more hi-fi than the city; night more than day; ancient times more than modern. In the hi-fi soundscape, sounds overlap less frequently; there is perspective – foreground and background... The city abbreviates this facility for distant hearing... marking one of the more important changes in the history of perception. ³⁰

³⁰ Murray Schafer, Our Sonic Environment and The Soundscape (Rochester: Destiny, 1994), p.43.

And it is this secondary type of noise, noise *as opposed* to sound, as opposed to signal and information, that the noise in Boccioni's painting, with its swamping of foreground by background, with its disruption of the form and integrity of the figures within it, most clearly resembles and evokes. The painting implies, in Boccioni's own words, 'the dislocation and dismembering of objects, the scattering and fusion of details, freed from accepted logic.' If Boccioni's street noise affects a synthesis and fusion of the street's tenants, it is not a synthesis in the sense of an ordered logical unification, but rather a messy sonic multiplicity into which individuals begin to lose themselves as a signal is lost in its interference. The city that Boccioni heard from his window and tried to depict on canvas was a collective without redundancy, without pattern. This was the gift that urban experience gave to Futurist art.

As the modernist avant-garde proclaimed the need to wage war on redundancy, on repetition and stability, the noise on the street came to play a vital role as harbinger of new possibilities, assailing and interrogating all persistent order, all the already-understood and thus inert and insensible structures of European culture, until they yielded up their future. But the noisiness of the new was something recognised by considerably more than just Europe's artistic elite. In all the excitement being whipped up on the canvas and on the page, the Futurists, as so often, were making a positive aesthetic out what other people at the time were writing to the papers complaining about. The Futurists made a virtue out of public nuisance, performing a kind of grand revaluation of the topical concerns of their contemporaries. The level of the noise on the street, its capacity to invade the individual's private space, had become a topic of immense collective irritation. The unhappy choruses bewailing the noise on the street, that were building in force throughout the second half of the Nineteenth Century, were informed by and themselves informed the wider intellectual currents of the

³¹ Umberto Boccioni, Carlo Carrà, Luigi Russolo, Giacomo Balla, Gino Severini, 'Futurist Painting: Technical Manifesto', in *Futurist Manifestos*, ed. Apollonio (London: Thames and Hudson, 1970), p.47.

time and at times exhibit the signs of an intriguing metaphysic of their own, and with it a theory of time and history that chimes in a certain concord with the one we have been developing.

By the turn of the century, the level of the noise on the street, its capacity to invade the individual's private space, had become a topic of heightened civic indignation. As Emily Thomson has shown, the first decades of the Twentieth Century were a time of heightened, if sometimes ineffective institutionalisation of the campaign against noise-pollution. In North America, noise abatement movements were appearing and becoming active in civic life. In 1906, the Society for the Suppression of Unnecessary Noise was founded in the United States by New York society *belle* Julia Barnett-Rice, gaining endorsements from many notable contemporaries such as Mark Twain. The society sought cooperation with businesses, cleverly gaining their support through the tactical but also accurate identification of industrial noise, not as a mechanical war-cry of progress and advance, but as an waste product and inefficiency in the industrial process. Together with similar societies that started up in Philadelphia the following year, she enlisted the support of the medical authorities who championed her cause on behalf of their convalescent charges. Eventually, she won influential political support and succeeded in passing laws regulating the use of sound within the city and offshore.³²

Two years later in Germany, there appeared the *Deutsche Lärmschutzverband*, the German society for noise suppression started by the philosopher Theodor Lessing, a one time pupil of Edmund Husserl who was eventually to come to a tragic end at the hands of the Nazis. Lessing was an immensely more anti-social and anti-progressive figure than Rice and his activism achieved nothing like the successes of his sister movement across the Atlantic.

³² Emily Thomson, *The Soundscape of Modernity: Architectural Acoustics and the Culture of Listening in America 1900-33* (Cambridge Mass. and London: MIT press, 2002).

Despite or because of this failure, the campaign was accompanied by a much wider historical vision of the role that noise played in what he saw as the decline of western civilisation. Published to coincide with the founding of the association, and borrowing from an eclectic assortment of current fashionable pessimism in philosophical and social throught, Lessing's work *Der Lärm* saw the increased noise-levels of the metropolis as both a cause and an effect of the degeneration of European culture and of the European races. The noises of city life were more than a simple unfortunate bi-product of the onward march of progress, they were an unconscious crying out of the vital instinctual self against the over-regimentation and over-intellectualisation that civilisation inevitably brought about. The impulse to make noise, Lessing believed, was a manifestation of a repressed will-to-power, a nietzschean 'resentiment' on the part of the masses against the order that constrained them. For Lessing, the effort to reduce noise was increasingly central to his wider project to temper and tame the excesses of progress.³³

The institutions erected in defence of quiet were the crystallisation of a long build up of grumblings and resistance throughout the preceding century. If the urban din was not yet accorded the historical significance that Lessing attaches to it, the varied writings on noise in the Nineteenth Century contain elements that would later coalesce into the pessimistic historical visions of the *fin de siècle* that he partakes in.

Increasingly throughout the Nineteenth Century, the public nuisance of urban noise was becoming a public cause. A large assortment of writers and public figures were turning their attentions upon their distraction. Possibly because of noise's capacity to tear us away from our own chosen intellectual endeavours, we find a great many writers and thinkers all throughout the Nineteenth Century who keep something of a sideline in thinking, writing and campaigning about it. Arthur Schopenhauer, whose aversion to noise and distraction had

³³ See Lawrence Baron, 'Noise and Degeneration: Theodor Lessing's Crusade for Quiet', *Journal of Contemporary History*, Vol. 17 (1982), pp.165-78.

famously resulted in his pushing an old lady down the stairs and being successfully sued for damages, felt confident enough to say that all great intelligences were cursed by noise and indeed that a propensity to find noise tormenting was the hallmark of one's refinement:

In the biographies of all almost all great writers, or wherever else their personal utterances are recorded, I find complaints about it; in the case of Kant for instance, Lichtenberg, Jean-Paul; and if it should happen that any writer has omitted to express himself on the matter, it is only for want of an opportunity.³⁴

In England, a looser form of noise abatement movement had already been operating for decades. Since the 1860s there had arisen an anti-street noise movement in Britain, a movement that cathected its collective irritation upon the itinerant street-musicians that pervaded the streets of Victorian London and in particular upon the organ-grinders. The long campaign in London to legislate against the latter is recounted in detail by John Picker in his invaluable study Victorian Soundscapes, whose story I would like to follow quite closely here with a view to extending it out beyond its theoretical frame and its historical period.³⁵

Headed by the MP and beer magnate Michael Bass, the movement against streetmusic counted some of the most illustrious names in Victorian London amongst its supporters, including Alfred Lord Tennyson, E. M. Barry, Thomas Carlyle, Charles Dickens and Dickens' friend and long-term illustrator John Leech, whose regular cartoons in *Punch*, caricaturing street musicians, provided a centre of attention around which the movement could focus. The movement's main figurehead, however, was undoubtedly Charles Babbage, mathematician, inventor and mechanical engineer, most famous now as the inventor of the first programmable computer but whose notoriety in his day stemmed from his concerted efforts to rid the streets of the musicians that he found forever interrupting the labour of

³⁴ Arthur Schopenhauer, Complete Essays of Schopenhauer, trans. T. Bailey Saunders (New York: Willey Book

John Picker, Victorian Soundscapes (Oxford: Oxford University Press, 2003).

invention. A whole chapter of his memoirs is devoted to recounting this crusade. 'I have obtained, in my *own* country', he complains:

an unenviable celebrity, not by anything I have done, but simply by a determined resistance to the tyranny of the lowest mob, whose love, not of music, but of the most discordant noises, is so great that it insists upon enjoying it at all hours and in every street.³⁶

The chapter is written with what at times seems an almost self-parodying precision and taxonomical rigour, as if the methods and mental habits that he utilised in his mathematical and engineering work were being redeployed without adjustment to the interferences that tore him away from them. Among all his many other avid hobbies and obsessions, Babbage was also a major contributor to the then burgeoning science of statistics. The statistician's quest to find deep patterns and correspondences behind the seemingly individual and accidental was always a process of finding signal amongst noise, and this is the operation he was desperately attempting to perform upon the invasive noise of his environment. It seems in many ways, from reading Babbage's writing on street music, that the control he wished to exert upon it was as much a cognitive control as a legislative one. The chapter exhibits a strong desire not simply to be rid of the noise, but to *comprehend* it, to parse it, to divide and catalogue it into coherent sets and systems. Having briefly set out the principal accusation against street music in the first couple of pages, Babbage goes on to draw up a long series of lists and tables itemising the different varieties of music, the different 'Instruments of torture permitted by the Government to be in daily and nightly use in the streets of London' and the different 'Encouragers of Street Music' including 'Ladies of doubtful virtue' and 'Occasionally titled ladies; but these are almost invariably of recent elevation and deficient in that taste which their sex usually possess'. Last of all is a list of the different racial and national origins of the

³⁶ Charles Babbage, *A chapter on Street Nuisances*, Extracted from *Passages in the life of a Philosopher* (London: John Murray, 1864), p. 7.

street musicians, each with their respective instrument of choice, the main culprit being the Italians or 'Savoyards' with their grinding organs.

Elsewhere, Babbage attempts, with equal pseudo-exactitude, to quantify the damage inflicted by street noise upon his productive output.

On a careful retrospect of the last dozen years of my life, I have arrived at the conclusion that I speak within limit when I state that one-fourth part of my working power has been destroyed by the nuisance against which I have protested. Twenty-five per cent is rather to large an income tax to be levied by permission of the government and squandered upon its most worthless classes.³⁷

The tireless and repeated effort on Babbage's part to measure, quantify and itemise the noise in the street outside, really only speaks of the ultimate futility of any such task. As Picker suggests, Babbage's acts of listing and calculation 'are of course, themselves a means to organize and discipline that which in reality defies order and control.'38

Earlier, Schopenhauer in his essay on noise had exhibited a similarly bizarre use of taxonomical language to describe the noises that tortured him. Having discussed his aversion to noise generally, he announces his intention to focus in on particulars. 'Let me now, however, pass from genus to species' he states, and then goes on to rail against his own particular bug-bear, the cracking of whips by coach-men.³⁹ The reference to 'genus' and 'species' seems out of place here because it is an attempt to dignify with the language of science and philosophy what is in effect little more than a purely personal spleen, though it may well be just that. It is misplaced for the philosophically interesting reason that, as we have seen, it is precisely the order of genus and species that noise disturbs and confounds. *Noise*, understood in the sense I am using it here, represents a failure in the task of grouping perception into classes and types. Noise is a set that is distorted and degraded by its members. It is a genus that engulfs and swallows its specifics but also at the same time a compound of

³⁷ Babbage, A Chapter on Street Nuisances, p.11.

³⁸ Picker, *Victorian Soundscapes*, p.57.

³⁹ Schopenhauer, Complete Essays of Schopenhauer, p.91.

specifics that disrupts all sense of unifying genus. Any genus, any higher order type or class, whether we see this in the platonic sense of a heavenly archetype or in the more prosaic sense which we employ whenever we try to put things in order, emerges only from a struggle with noise. Noise is unclassifiable precisely because it is that which must be silenced before any classification can take place.

Street noise in the Nineteenth Century was railed against precisely because of its disquieting ability to overwhelm demarcations and classifications. These latter, as the items in Babbage's lists would suggest, were apt to take on a social and political character. The delicately established identities that were being erected and maintained within the Victorian city came under threat from noise as it broadcast itself across all lines of demarcation. According to Picker, the keenly felt need to legislate against street music gained its sense of urgency and its rhetorical arsenal from a host of deeper seated social imperatives. Of these, Picker identifies three in particular: 'first, protecting the purity of English national identity and culture against the taint of foreign infiltration' – the foreign derivation of so many of the street musicians at the time brought a decidedly xenophobic tone to much of the discourse against street-music. The domestic boundaries that the noise invaded were smaller replications of the national borders that separated peoples. 'Second, upholding economic and social divisions between the lower classes and middle-class professionals' – street musicians were a disturbance to the newly enfranchised and growing professional class in England, 'brain workers' whose livelihood depended on their ability to concentrate and communicate without interference. And third, 'protecting the frail afflicted bodies of (English, middleclass) invalids from the invasive, debilitating effects of (foreign, lower-class) street music. 40

This last was something of an obsession on Babbage's part, as it was for the movement as a whole. The invalid was a symbolic martyr to the cause of noise abatement.

⁴⁰ Picker, Victorian Soundscapes, p.45.

Street music, wrote Babbage 'deprives the patient, who at great inconvenience has visited London for the best medical advice, of that repose which, under such circumstances, is essential for his recovery'. Urban and industrial noise levels were starting to be recognised at the time as a cause of physical impairment. Later in the century, the term 'boiler-makers disease' was coined to diagnose hearing loss caused by high volume working environment. What the Victorian noise-abatement advocates seem to have had in mind was nothing quite so specific but a more general weakening of the constitution, a pervasive debilitation of all human faculties.

Interestingly, both the noise afflicted *and* the noise makers were implicated in this corporeal degradation; the bodily decline and corruption that street music *inflicted* upon those subjected to it was oddly mirrored by the perceived bodily form of the street-performer himself. The latter was far from an object of pity and much more one of revulsion, but Victorian campaigners against noise maintained a similarly intensive focus on the defective nature of his person. Carlyle referred to a particular musician who plagued him as 'a vile yellow Italian'. It is not simply the racism of his description here that concerns us, but the hinted characterisation of one race not as a separate entity in its own right, but as a sickly morbid off-colour corruption of the other. The illustrator John Leech, whose lengthy decline in health towards the end of his life and ongoing torment at the hands of street musicians became an emblem of the cause for his fellow campaigners, presented the Savoyard Organgrinders in his cartoons with similarly distorted bodily forms: stout shaggy-bearded swarthy Neanderthals, interchangeable with the monkeys who accompanied them. Picker describes the motivation behind this portrayal of the Savoyards as a desire not simply to denigrate them but to personify the distortions and interferences of the sounds they produced.

⁴¹ Babbage. A Chapter on Street Nuisances, p.7.

Even as Leech vented his frustration at the street noises in the cartoons, however, he used them literally to embody those noises, to locate disturbing sounds in grotesque caricatures of foreign bodies – to make the audible not just visible but corporeal.⁴²

The street musicians represented in their very physical form a kind of *corporeal noise*. Charles Babbage worked throughout his career towards the elimination of human error. The Difference Engine which became his life's work was a machine that could calculate and keep account of human endeavour, uncorrupted by the accidents by which it was habitually beset. In the figure of the organ-grinder, these Victorian crusaders for quiet saw human error incarnate; human error become errant humanity, a noisy body.

In the decades following the London campaign for quiet, this strange concept of human corporeal noise was to be developed into a more general over-arching theory of the human population, its development through time and its ultimate fate. The theory of degeneration that rose to prominence in the final years of the Nineteenth Century united the previous concerns described above into an elaborate diagnosis of modern man and the culture that he produced and consumed. The three conceptual divisions that Picker identifies as being transgressed by noise – the racial, the socioeconomic and the medical – were synthesised in the figure of the degenerate. The degenerate of the fin de siècle imagination was in essence a medical specimen, a figure afflicted by a general and all-pervading but unified and comprehensible physical corruption; but the medical perspective blends into an economic one in as much as the degenerate's condition results in an unfitness for the higher forms of human labour, relegating him to an abject and insubordinate class within society; and finally, through the transmission of this condition down the generations, this class attained something like the status of a genetic strain or race within that population.

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⁴² Picker, Victorian Soundscapes, p.69.

The degenerate was noisy in the obvious sense of making noise – taken to fits of feeble minded shrieking and babbling – and his condition was effected by noise, the degrading influences of the urban din. But he was noisy also in the sense of being a *noisy reproduction*, a *bad copy*, a faulty transmission of some imagined proper human prototype or blueprint. Max Nordau, the most popular and well-known theorist of degeneration, introduces the topic to the readers of his best-selling book by borrowing his governing definition from a previous writer, Francis Morel:

'The clearest notion we can form of degeneracy is to regard it as *a morbid deviation* from an original type. This deviation, even if, at its outset, it was ever so slight, contained transmissible elements of such a nature that anyone bearing in him the germs becomes more and more incapable of fulfilling his role in the world; and mental progress, already checked in his own person, finds itself menaced also in his descendants.'43

Turn-of-the-century theories of degeneration are usually portrayed as being obsessively taxonomical, an endeavour to parse the human race out into rigid classes and types. But Nordau is here seeking not just a system of classification, but an account of how these separate classes first appear; less a Linnaean-style taxonomy than a Darwinian historical account of the process of speciation from common ancestry. In this account, degeneration starts off life not as a classification or type in its own right but as a slight breach in the reproduction of a more universal human type, a minimal corruption or falling away from typicality. And it is this breach, this initial misreplication, which sets modern society and culture on its trajectory towards a state of panoramic nervous commotion.

As well as borrowing the central definition of degeneration from Morel, Nordau was also mainly in agreement as to its aetiology. Morel lists a long set of modern life-conditions that contribute to degeneration, from poisons in the water to the rise in tobacco smoking.

Nordau accepts this list but makes a point of adding one factor, or set of factors, of his own:

⁴³ Max Nordau, *Degeneration* (New York: Bison, 1993), p.16.

the growth of cities. The rise in urbanisation over the preceding years had meant that more and more people were living in conditions to which they were maladapted. The frenzied conditions of city life weakened and damaged the individual, and among these factors, as we are just about to see, the city din holds a prominent position.

Nordau saw the degeneration brought about in the increasingly demanding way of life in the metropolis, not simply as retarding or even halting the onward progress of civilisation, but as constituting a distinct retroactive historical motor of its own. Degeneration for Nordau was more than a condition, it was a process; not just a process affecting the individual but a motivating principle governing human history. As Daniel Pick has observed, theories of degeneration acted as the antithetical vision to the all the enlightenment's hopes for progress. Has counteractive progression, for Nordau, looked (at first glance) set to dominate the course of the following years. The identification of this historical principle allows Nordau to indulge in an imaginative projection of current trends into the next century. In the final chapter of his book, titled 'The Twentieth Century', he moves from diagnosis to prognosis, providing a long description of the urban population's descent into mass hysteria, driven to collective neurosis specifically by the noise on the street. He elaborates for the reader an imagined state some twenty or so years ahead in which draconian noise-abatement measures are levelled to counter and contain the rising cacophony.

The increase of nervous irritability, far beyond the present standard, has made it necessary to institute certain measures of protection. After it has frequently come to pass that over-excited persons, being unable to resist a sudden impulsion, have killed from their window with air-guns, or have even openly attacked, the street boys who have uttered shrill whistles or piercingly sharp screams without rhyme or reason; that they have forced their way into strange houses where beginners are practicing piano or singing, and there committed murder; that they have made attempts with dynamite against tramways where the conductor rings a bell (as in Berlin) or whistles – it has been forbidden by law to whistle and bawl in the streets; special buildings, managed in such a way that no sound penetrates to the outside, have been established for the

⁴⁴ Daniel Pick, *Faces of Degeneration: a European Disorder c.1848 – c. 1914* (Cambridge: Cambridge University Press, 1989).

practice of piano and singing exercises; public conveyances have no right to make a noise... The barking of dogs having driven many people in the neighbourhood to madness and suicide, these animals cannot be kept in town until after they have been mute by the severing of the recurrent nerve...⁴⁵

And thus he continues on for pages. It is at times difficult to work out in Nordau's writings whether it is the noise-afflicted or the noise-makers that are the main focus of his diagnosis. There is in fact a grammatical ambiguity in the fifth and sixth line of the quotation above as to whether the phrase 'without rhyme or reason' refers to the air-gun attack or the 'piercingly sharp screams' that provoke it. We are left to assume, in line with Theodor Lessing's thesis, that both were mutually causative elements; that the process of collective degeneration was a spiral of mutual provocation, a positive feedback-loop of nervous reaction and counteraction escalating onward through history. Degeneration was constituted both by noise making and a corresponding heightened nervous sensitivity to noise.

However, at this point, Nordau curiously about-turns on his prognosis, revealing it as a false projection, a misconceived prophecy. 'Will it come to this?' he asks, to which the immediate response comes: 'Well, no; I think not.' Following the quasi-Darwinian evolutionary logic at the heart of Nordau's conception of history, the very weakness of the degenerate, together with the severity of the conditions in which he lives must inevitably bring about his eventual ruin.

Degenerates, hysterics, and neurasthenics are not capable of adaptation. Therefore they are fated to disappear. That which inexorably destroys them is that they do not know how to come to terms with new realities... The normal man, with his clear mind, logical thought sound judgement and strong will, sees, where the degenerate only gropes; he plans and acts where the latter dozes and dreams; he drives him without effort from all the places where the life-springs of Nature bubbles up... Let us imagine these beings in competition with men who rise early and are not weary before sunset, who have clear heads, solid stomachs and hard muscles: the comparison will provoke our laughter... Degenerates must succumb therefore. They can neither adapt

⁴⁵ Nordau, *Degeneration*, p.538.

themselves to the conditions of Nature and civilisation, nor maintain themselves in the struggle for existence against the healthy.⁴⁶

The 'new realities' and 'conditions of civilisation' to which the degenerate cannot adapt and which therefore see him off were, as Nordau maintains above, *noisy conditions*: it is the noise itself that weakens him, and thus weakened it was the noisiness and urban frenzy generally that ensured he would not survive. Noise thus has a dual role in the process of degeneration as told by Nordau. It is both a major causal factor in the reduction of modern humanity to a state neurotic hyper-sensitivity but also, if viewed from the point of view of the human stock as a whole, it can become its own cure. Noise cannot cure any individual from the damage that it has wreaked upon him *as an individual*, but it can cure the human race of the damage done by those damaged individuals themselves. And in this cacophonous cull of enfeebled peoples, Nordau gets his happy ending.

Darwinian evolution is dependent on a process broadly equivalent to communicational entropy. In order for the variety of life forms to develop through their long history, diversifying into new unprecedented morphologies and levels of complexity, a long series of minute errors in reproduction – genetic slips of the tongue – must occur. The evolution of any life-form is a long process of slightly lo-fi and thus divergent reproductions. Nordau's book itself actually exhibits little understanding of this principle. (Indeed Darwin himself, lacking any proper concept of the gene, could be only highly speculative regarding its details). Nordau, if he could be called a Darwinian at all, was certainly a less than faithful one; and the evolutionary theory murkily implicit in *Degeneration* contains many elements belonging more strictly to a pre-Darwinian Lamarckian theory, long since discredited, in which the damages inflicted upon an organism in its own lifetime, together with the successful adaptation that another *individual* organism might make, are then passed on

⁴⁶ Nordau, *Degeneration*, p.540-1.

through heredity. For Nordau, taking his cue from Morel, the noise that smudged and smeared the clear crisp conformity of the human type, the noise that caused human individuals to deviate from typicality, was not this more figurative concept of noise-asgenetic-miscommunication but *real* noise: the noise in the street that invades the body; the urban din and clamour in which his human population lived, laboured, thought and communicated every day.

Urban noise signals the finitude of the city space as an informational channel. The space of the city can only carry so much information before the soundscape starts to disintegrate into chaos. In perceiving the sounds of the cityscape as a meaningless maddening din, the auditory subject has hit up against the limitations of his environment as a resource of significance, a space with which it is possible to relate coherently. And from this finitude, from this Malthusian saturation of the air, the possibility of a Darwinian selection of the fittest emerges. Only those capable of tuning or integrating the chaos into a meaningful pattern will be able to withstand it; only the cognitively strong will survive. From our own contemporary perspective in the cities of the twenty-first century – an environment inconceivably noisier than Nordau could imagine, subject to auditory burdens that dwarf the whistles and piano-playing of Nordau's nightmare – finding ourselves in nothing like his imagined state of collective hysteria, his vision seems laughable and ridiculous. And yet we, in Nordau's prognostic eye, are of the tribe of the strong; we are the descendants of the capable elect who made it through the noisy bottleneck, and without knowing it, our laughter is the scornful mocking laughter of the survivors looking back at the enfeebled and fruitless generations our ancestors left behind in the purifying process of history. The urban din thus plays both roles in the Darwinian historical process: it accounts for both the principle of random mutation *and* that of natural selection.

Nordau's sense of human history is one constituted by the corruption and deviation from but eventual return to a trans-historical ideal human type. It is a history driven by a noisy loss of form followed by return to form; an accumulation and an eventual shedding of deleterious distortions in the human stock. In this way, we can see a certain Serresian metaphysical logic at work within his writings. Noise, in Nordau's conception as in Serres', arises as the antagonist to *type*. Noise brings with it and manifests a fall from the essential, ideal, properly functioning human form. And this fall is what sets modern history on its path.

It is difficult to tell exactly whether to see Nordau's type as a quasi-platonic Form or a more mundane nominalist label. It often seems that the theory of degeneration, and the theories of eugenics and anthropometry more generally, were hovering at an indeterminate transitional point between two quite distinct sets of metaphysical assumptions. Their theories seem caught between – and in some cases *effect* a transition between – two different ways of conceiving of populations. (I am here using the term population in the most general sense of any collective or set of imperfectly equitable items.) On the one hand, a diverse collective of this kind can be seen in terms of the platonic system of type and token. The human population in this view is a set of more or less deviant and corrupt reproductions of a single transcendental perfect specimen. There is, in the way Morel and Nordau define their terms, more than a hint that this model is being assumed. Yet at the same time, eugenics and anthropometry were beginning to effect a replacement of such a system with a more modern statistical conception in which the older terms type and token are replaced by the newer conceptions of average and distribution, mean and spread. In this view, a sense of unifying type emerges purely as the middle point in a pre-existing diversity of approximations and is nothing more than a human intervention imposed to manage and describe that prior reality; not a transcendental thing-in-itself waiting to be recognised by the human intellect, but

something that the intellect constructs for itself.⁴⁷ Yet whichever set of metaphysical assumptions we use to make sense of the multiplicity of the sensible world of human populations, the relationship of such a diversity to *noise* that Serres describes still holds. Noise can be seen either as the accidental intervention that occurs between the heavens and the earth, distorting the likeness of mundane forms to their ideal perfect archetypes, or simply the noise that occurs on the purely immanent level of one item's reproduction of another. In any case, it is this disruptive intervention that pushes or pulls time and history into being.

However, the main brunt of Nordau's critique was not simply the biological state of modern man, but the cultural state that came with it. Alongside the errant humanity due to be wiped out by history, was the whole project of the artistic and literary avant-garde that Nordau saw as born of the degeneracy of the age. The degeneration of human physiology and neurology was matched, so he believed, by the aesthetic degeneration of cultural traditions. 'New forms!', he exclaims, 'Are not the ancient forms flexible and ductile enough to lend expression to every sentiment and every thought?'. 48 Once rid of these distorted and parasitic strains of the human race, culture could return to its ancient and established clarity of artistic expression.

The label 'degenerate' would of course become a staple in the critical repertoire of the emerging Fascist movements in Europe in the nineteen twenties and thirties. The Futurists were just as liberal in their use of the word as was Nordau. In 1937, the Nazi's touring exhibition of degenerate art was stopped at the Italian border by Mussolini at the request of the Futurist Impresario Filippo Marinetti because of the Futurist's inclusion within the show. The question of whether this inclusion was justified or not we must leave to those who take

⁴⁷ My historicisation of these two models into old and new is of course strictly inaccurate: there have always been thinkers like Aristotle for example who deny the independent reality of Universals. But modern sciences like statistics, and Darwinian evolutionary theory certainly gave such a view a new impetus and comprehensibility.

48 Nordau, *Degeneration*, p.544.

such categories seriously. But we *can* say that corruptions and innovations of form displayed in Boccioni's painting, and in Futurist art more generally, were vivid portrayals of the conditions that Nordau saw as leading to the degeneration of the people and its art.

Little did he know as he was writing that the era of Modernist experimentation in every area of the arts was only just beginning and with it would come a whole host of imaginative engagements with just the kind of auditory dissociation he describes, a complex assortment of reactions and testimonies to the transforming auditory world around them.

Chapter Two: T. S. Eliot's Background Noise

In Anglophone literature, by far the predominant *listener* of the modernist period was T. S. Eliot. Few other writers pay such close attention as does Eliot to the specifically auditory experience of modernity in such intensive detail. In so many of Eliot's poems – certainly in his early career – the public realm is one less seen than heard, and indeed less heard than *overheard*. The world of other people is an exterior that faintly but insistently returns upon a location from which it has been screened. The subject's heard experience is less one of reception than of interception. He is placed in the midst of sound and communication, tapping it at a midway point in its transmission, siphoning it off on its way to somewhere else.

Eliot characterised the ideal state of poetic creativity as a condition of absolute receptivity to the minutiae of its surrounding conditions, a capability to incorporate and integrate its background into its foreground, and this includes the noises of its very mechanical production.

When a poet's mind is perfectly equipped for its work, it is constantly amalgamating disparate experience; the ordinary man's experience is chaotic, irregular, fragmentary. The latter falls in love, or reads Spinoza and these two experiences have nothing to do with each other, or with the noise of the typewriter or the smell of cooking; in the mind of the poet these experiences are always forming new wholes.⁴⁹

The idea that a poet's activity is one of ordering and integrating the irregularity of experience is conventional wisdom. But for myself, the most interesting aspect of this declared aesthetic comes in the last four words: 'always forming new wholes'. These seemingly innocuous words suggest on closer inspection something a bit more problematic. For while Eliot sees his job as bringing order to the inchoate, with the word 'always' he seems to recognise the

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⁴⁹ T. S. Eliot, 'The Metaphysical Poets', in *Selected Essays* (London: Faber, 1976), p.287.

Sisyphean perpetuity of this task. The 'whole' can never be quite made whole; the job of complementing and completing these phenomenal fragments is itself never quite complete. *Poiesis*, the process of creation, never manages to crystallize properly into poetry before being once again broken apart by the incoming chaos of its background. This ongoing process could well be said to characterise the nature of his poetic innovations and of modernist innovation generally: breaking traditional poetic forms apart in order to better manage the invasive chaos of the twentieth century environment. But Eliot remained committed to the possibility that such background interference could be finally overcome. It seems to me that the restlessness imposed by noise represents a fundamental antagonism to the great spiritual quest that was to motivate Eliot throughout his poetic career: the search for a moment of stillness, an instant of access to what scholastic philosophy would call the *nunc stans*: a revelation, within the flow of time, of an eternal changeless truth that exists outside it.

This search began at the very inception of his creative life. One of the very first poems he ever wrote, one seldom collected, was significantly titled 'Silence'.

Along the city streets
It is still high tide,
Yet the garrulous waves of life
Shrink and divide
With a thousand incidents
Vexed and debated:--This is the hour for which we waited---

This is the ultimate hour When life is justified. The seas of experience That were so broad and deep, So immediate and steep, Are suddenly still. You may say what you will, At such peace I am terrified. There is nothing else beside. 50

The poem moves from a vexed divided sea of experience to a silent perfection beyond experience. It moves, that is to say, from noise to a noiseless order. Eliot here displays an intuitive sense of the connection between auditory interference and temporal movement; in the sudden quieting of the city's noise, the poet encounters a collective in which everything is given in one single absolute instant, a frozen totality terrifying in its absolute containment of all outside chance and possibility. Without noise there is 'nothing else beside'; no contingency, no outside variable that could alter the arrangement.

This development is mirrored and reversed at the opposite end of Eliot's poetic career. In 'Burnt Norton', Eliot was to provide his most sustained meditation upon the search for the stillness of the instant: 'the still point of a turning world. Neither flesh nor fleshless / Neither from nor towards.' But he will find any attempt to articulate this mystical stillness beset by hazards whenever that articulation comes in any auditory form.

Words move, music moves
Only in time; but that which is only living
Can only die. Words, after speech, reach
Into the silence. Only by the form, the pattern,
Can words or music reach
The stillness, as a Chinese jar still
Moves perpetually in its stillness.
Not the stillness of the violin, while the note lasts,
Not that only... (*CPP*. p.175 – Part V, 1 - 9)⁵¹

Sound and voice, the living phenomenal aspect of the word, cannot exist in perpetuity. A voice is not a *thing* that can endure independently from its production like the Chinese jar. An enunciation is not an object but an event. A voice persists only to the extent that it is actively

T. S. Eliot, *Inventions of the March Hare: Poems 1909 – 1917*, ed. Christopher Ricks (London: Faber, 1996), p.18.
 T. S. Eliot *Complete Poems and Plays* (London: Faber) 1969. All subsequent Eliot references to this edition

⁵¹ T. S. Eliot *Complete Poems and Plays* (London: Faber) 1969. All subsequent Eliot references to this edition except where stated otherwise in a footnote. References are indicated in the main text by *CPP* followed by page and line number.

produced at every moment. But in the following lines it becomes clear that it is not just an inconstancy of the Word's vocal production that ensures its inherent instability, restlessness and evanescence, but the possibility of an interference from its ambient surroundings. The Word, Eliot will say, is attacked by a plurality of interfering voices:

Words strain,
Crack and sometimes break, under the burden,
Under the tension, slip, slide, perish,
Will not stay still. Shrieking voices
Scolding, mocking, or merely chattering,
Always assail them. The Word in the desert
Is most attacked by voices of temptation,
The crying shadow in the funeral dance,
The loud lament of the disconsolate chimera. (CPP. p.175 – Part V, 13 - 22)

It is not the speaker who is tempted and attacked, but the Word itself. The parasitic voices that assail and tempt add themselves to the sound of the word and integrate with it, but in doing so they subtract information, subtract meaning from it, beckoning it to a state of sheer multiple sonority. A siren-like temptation, they offer only immolation and disintegration. These intermediary noises disturb the eternal stillness of a clear and perfect understanding and set the world into restless motion. It is the addition of these demonic voices – this noise on the line – that provokes and lures time into being. Time is motivated by the slippage and perishability of the Word, moving toward an auditory chaos.

This conception of time and chaos inevitably came to play a part in Eliot's larger political and religious convictions. The noisy agitation described in 'Burnt Norton' moves beyond any local and discrete experience of time and into the larger movements of human history. History, for Eliot, is constituted by a struggle between the single unifying Word and its multiple noisy antagonist. The already manifestly Christian idea of the 'Word in the desert' can be found obliquely in his later political and social essays where he elaborates his vision of contemporary society and the idea of the Christian society from which it had fallen. In

After Strange Gods, Eliot declares as the 'struggle of our time' the effort 'to re-establish a vital connection between the individual and the race...⁵². Liberal Individualism, Eliot felt, had sundered the relation between the particular and the whole, species and genus, the individual and the collective. Modern society had become nothing more than the aggregate of a myriad sum of individuals, a collective each unit of which was taken as a whole unto itself and thus fallen and fragmented into a state of discrete and isolated cells. It is this kind of collective, a collective aggregated but not integrated - a multiplicity - to which the experience of noise attests. Noise is the agent of disconnection between individuals and its end result: it is a collection without connection. Individuals are disconnected from each other and from all notion of the single totality to which they belong. A liberal society may be one composed precisely with reference to an abstraction, the non-empirical first principle of the individual subject. But the experience of *living* in such a society was, for Eliot, one of being cast adrift in an anarchy of meaningless sensation, a vexed and divided sea of experience. The individual, even the poet with his superior powers of sensory integration, becomes one isolated particular in a sea of isolated particulars; a single voice drowned amongst divergent singular voices.

In his social and political writings, Eliot turned ever more to Christianity for the saving spiritual unity that would heal this fracture at the heart of the city. The mystical order that came to him in the silence of his first poem can be seen in some way to correspond to the social and political order that he mourned and sought to resurrect in his polemics. This endeavour culminated in the elaborately devised vision of *The Idea of a Christian Society*, the model of a revived Christian state in which a highly conscious elite – what Eliot called 'The Community of Christians' – administered the disparate elements within society through a

⁵² T. S. Eliot, *After Strange Gods: A Primer of Modern Heresy – The Page-Barbour Lectures at the University of Virginia 1933* (New York: Harcourt, Brace and Company, 1934), p.53.

knowledge of the transcendent whole that they constitute. The 'Idea' of the essay's title refers specifically to this totalising social conception: an ideal vision divorced from empirical realities.

In using the term 'Idea' of a Christian society I do not mean primarily a concept derived from the study of any societies which we may choose to call Christian; I mean something that can only be found in an understanding of the end to which a Christian Society, to deserve the name, must be directed... My concern with contemporary society, accordingly, will not be primarily with specific defects, abuses or injustices but with the question, what – if any – is the 'idea' of the society in which we live? To what end is it arranged?⁵³

Eliot's fearful suspicion of modern society is not only that it might be guided by the wrong principles, but that it might not be regulated by any principles whatsoever, by any idea of what it is. Eliot presents a conception of a collective that has lost the capacity for collective self-conception. It has been noted before that Eliot's Community of Christians bears some resemblance not just to traditional ecclesiastical Christian hierarchies, but to philosopher kings, the Guardians of the city in Plato's Republic. And by a short path of association, the 'Idea' of a Christian Society adapts the eternal Form of the Good that Plato saw as their guiding insight.⁵⁴ As we will see, such an association is made fleetingly by Eliot himself in the manuscript of *The Wasteland*. For Serres, as we have already seen, this Form is the result of an elimination of disruptive noise in the very dialogue in which it is articulated. The transcendence of any transcendent Idea, its escape from empirical manifestation and particularity, must always be at the same time an escape from entropy and equivocation. My purpose in writing about Eliot is to trace the intimate relationship between his acute sensitivity to the noise breaking through from the background of his contemporary society and his vertiginous sense of that society's fall from its Idea into fragmentation, the 'bad connection' as it were between individual and Other, and between individual and Idea. Eliot's

⁵³ T. S. Eliot, *The Idea of a Christian Society* (London: Faber and Faber, 1939) p.8.

⁵⁴ E.g. Roger Kojecki, T. S. Eiot's Social Criticism (London: Faber and Faber, 1971) p.111.

unhappy teleology is one of a collective destined towards a state of noisy incomprehension of itself. The words with which his subjects might reveal themselves to each other are lost within the disordered totality of that very collective confabulation. And *the* Word, the logos, the singular articulation that could gather them all together and speak for them is broken apart.

And yet, hovering around and dogging Eliot's invocations of a lost unifying noiseless order is an equivalent fear of it. Throughout Eliot's poetic work, he retains fleetingly that sense of terror in the face of peace that he proclaimed in his first poem; a disquiet at the quiet that comes from the elimination of all disorder and equivocation.

'The Music from a Further Room' - Early Poetry

One word designating a signal's background noises in English refers to them as 'atmospherics'. And this is a helpful way to think of background noise in the context of its persistent repeated presence in Eliot's work. This is particularly apparent in the early monologues in the first collection, for these monologues, such as they are, are more notable for what is *not* enunciated than for what is. The poems, instead of allowing their characters to carry the meaning of the poem as a whole, become instead careful meditations on their surrounding atmospheres and ambiences, the auditory exterior of the spoken word. The subject of 'Portrait of a Lady' shows, as the poem opens a heightened sensitivity to the leakiness and liability of sound, the invasive potential contained in the murmur of the surrounding public:

Among the smoke and fog of a December afternoon You will have the scene arrange itself – as it will seem to do – With 'I have saved this afternoon for you'; [...] An atmosphere of Juliet's tomb Prepared for all the things to be said or left unsaid.

We have been, let us say, to hear the latest Pole

Transmit the Preludes through his hair and finger-tips.

"So intimate, this Chopin, that I think his soul

Should be resurrected only among friends

Some two or three, who will not touch the bloom

That is rubbed and questioned in the concert room." (*CPP*. p.18 – 1-18)

Noise *questions* sound. It makes it questionable; makes it uncertain, equivocal. Noise *is* equivocation. For Shannon and Weaver the two words were interchangeable. Noise questions sound and in so doing turns sound into a kind of question. Information is the answer to the question that noise raises. For Prufrock this question will be overwhelming; it overwhelms its answer. But in the 'Portrait', it makes itself felt only as background music. The constant reference to this music in the poem starts out as a complement to the refinement and civility of the dialogue, but slowly comes to offset and disturb it.

And so the conversation slips Among velleities and carefully caught regrets Through attenuated tones of violins Mingled with remote cornets (*CPP*. p.18 – 14-17)

The sound of violins mingle with that of the cornets; together they mingle with the conversation. But this mingling of sounds involves and implicates not only the actually articulated conversation but also the 'velleities and carefully caught regrets', the unrealized potentials, the paths not taken, the words not spoken. The noise in this way seems to contain within it both the articulated and the unarticulated. The atmospherics against which the dialogue takes place pose themselves as a background, that which the speech in the poem articulates itself in contradistinction to, a kind of voicing of the unvoiced, a multiple speaking of the unspoken. The atmosphere sets the scene for the dialogue; it offers itself as an array and an arrangement of possible utterance; an atmosphere 'prepared for all the things to be said or left unsaid'. This plural equivocal auditory soup does not so much *open up* the field of

possible utterance as *fill it out*. It makes audible the wide spectrum of the unsaid. It is from this spread of possibility that the speakers must carefully select their words, and it is through the interposing medium of this spread of possibility that they must utter them.

The music that continually appears and reappears throughout the poem could be seen as in some way presiding over and governing the tightly circumscribed conventions, the rehearsed platitudes and sham intimacies of the Boston bourgeois milieu. The music could be seen as that which forces the speaker into his dance of borrowed shapes like a tamed performing bear. But any music, any sound, once out in the open begins to be corrupted. The music is rubbed and questioned, it jams discordantly with other sounds and with the speaker's own internal tom-tom. In becoming thus corrupted, bleeding into its own background, diffusing out from any particular sound into the pure *possibility* of sound, it begins to act less as a containment and restriction of what can be said and more as an open space of exile for that which has been left unsaid. Everything about which the reticent narrator must hold his tongue is held poised in the auditory background. It is only when the narrator's trivial chatter on current events is interrupted by distant music that his tight-lipped 'self-possession' fails him.

An English countess goes upon the stage.

A Greek was murdered at a Polish dance,
Another bank defaulter has confessed.

I keep my countenance,
I remain self-possessed
Except when a street piano, mechanical and tired
Reiterates some worn-out common song
With the smell hyacinths across the garden
Recalling things that other people have desired. (CPP. p.20 – 74-83)

The street piano's song, it is implied, rising up from the scene's auditory background, seems to have the capacity to draw the speaker into some non-descript form of self-abandonment.

Odd that it should do so, for the mechanical instrument might be thought to be the perfect

symbol of every disingenuous forced social ritual that the poem has previously been describing. In its metallic automatism, a song repeating itself to the point of redundancy, it seems to be the very embodiment of regularity and conformity to pre-established rule, the very opposite of expression. But the very 'tiredness' and 'worn-out-ness' of its iterations suggests a kind of repetition in which entropy has set in, a repetition that has become subject to diminishing returns. Not so much a stale and unmeaning repetition of the same as a slight failure in such repetition. An element of chance and uncertainty is at work. Outside contingencies have been allowed in. Paradoxically, it is the very entropy at work within the song that gives it life and allows it to give life to its listener. The degradation of the piano's song, its own faltering regularity and self-possession, permit the listener a similarly irregular and improper loss of self-control.

If the narrator of the 'Portrait' suffers from a tightly circumscribed sphere of communication, the case is more extreme in the previous poem in the collection. 'The Love Song of J. Alfred Prufrock' is famously a failed communication. The initial epigraph from Dante presents an infernal state of incommunicability, a noisy solitude in which no message is capable of getting through to the world of others. The poem is in fact a retreat from and substitute for an act of communication. It divides itself evenly between dreadful anticipations of, and retrospective apologetics for, a central non-event: the unsung song bathetically announced in the poem's title. (Bathos enters in before the poem proper has even begun: there is something about the very name J. Alfred Prufrock, his shrinking from first name terms, that makes him seem an unlikely troubadour.) The 'you' of the poem's opening lines turns out to refer not to the object of the speakers fruitless affections (the figure who appears later as 'one'), but to someone else, a third person, a kind of vice interlocutor. 'You' may refer to a divided and projected part of the speaker himself, or perhaps simply to you or I the

reader or listener. Or perhaps both: the 'muttering retreats' down which we are invited to follow him suggest an enunciation inhibited in its passage outward and twisted back upon itself, almost spoken to us, but not quite. Or, put the other way, a private utterance, spoken to its speaker but still just capable of being overheard. A mutter is a thought that leaks.

A certain leakiness, a porosity of passage, characterises not just the poem itself but the multitude of voices and sounds within it. The ambiguity of the poem's address, its wavering out beyond a defined and identifiable audience, is constantly repeated within the frame of the poem. Prufrock himself takes on the same role of an interposing third party, a partial substitution for a signal's point of reception, a bifurcation of its line of passage. For Prufrock's environment, however secluded, is awash with stray auditory signals. These are heard in the elevated chit-chat of the ladies in the room as they: 'come and go / talking of Michelangelo'. They are heard in the sniggering of servants and in the voices of the bodiless gossips, the 'they' that Prufrock will overhear tut-tutting at the sight of his balding and his withering body: 'they will say: 'how his hair is growing thin!... how his arms and legs are thin!". (CPP. p.14 – 41-44) We hear invasive noise again in the simultaneity of the 'voices dying with a dying fall / beneath the music from a further room'. (CPP. p.14. – 52-3) And finally we hear it in the song of the mermaid's singing each to each but not to Prufrock. (CPP. p.17 – 124-5) Eliot was adamant that a good poem was in no way reducible to its informational content, that its 'meaning' was more of a cover or alibi for its true effect. The 'meaning' of a poem, he stated, was only the piece of meat with which the guard dog is distracted while the prisoner escapes. Taking this principle up to and beyond its limit, he gives us in 'Prufrock' a poem that has been evacuated of its declared content. The love song itself is absent and in that silence we begin to hear the polyphony of surrounding noises.

If the nameless lady in the neighbouring poem in Eliot's first collection, seeks an ideal musical communion protected from the disturbing noises of the public, Prufrock,

overhearing the 'music from a further room', finds himself situated on the other side of such a consecrating division and bears witness to its ultimate futility. The communicational intimacy of one-to-one contact is corrupted, becoming instead the panoramic 'each to each' of the mermaid's song.

From within the confines of his noisy retreat, his retreat into contemplation of his auditory background, Prufrock indulges in a fantasy of timelessness. Andrew Marvell, in the poem to which Prufrock makes an ironic allusion, seeks to end his coy mistress's coquettish indulgences in an all too limited duration of time by evoking the spectre of mortality. The poem rolls towards an overwhelming imperative: *carpe diem*. Prufrock appears to be indulging in exactly the deluded vision of temporal abundance that Marvell would wake his mistress from: 'And indeed there will be time' Prufrock states:

Time for you and time for me And time for yet a hundred indecisions And for a hundred visions and revisions Before the taking of toast and tea

And indeed there will be time To wonder 'Do I dare?' and 'Do I dare?' Time to turn back and descend the stair.

...

Do I dare
Disturb the universe?
In a minute there is time for decisions and revisions
Which a minute will reverse. (*CPP*. p.14 – 37-48)

An abundance of time perhaps... but in the culminating reference to the exactitude and discretion of a minute, we come to understand that the timelessness Prufrock has found is not an indefinitely *expansive* stretch of time, but rather an indefinitely *divided* moment in time. The normal divisions of public time become themselves multiply divisible into countless visions and revisions, and Prufrock stalls like Zeno's athlete in the calm of an ever receding instant. Prufrock lives within the present as much as Marvell would want, but he knows,

better than Marvell, that the true wealth of the present is as much revealed in the experience of *dread* and uncertainty as it is in that of wilful action. He engages with the present precisely as he flinches and withdraws his attention from the future. It is in recoiling from the inevitable moment of communicative action, rather than in seizing it, that Prufrock gains access to the singular instant. If Marvell proclaims his love in anticipation of the imminent possibility of death, it is the awful prospect of that very proclamation from which Prufrock shrinks. This suspension of will and action in the poem veers ironically, throughout the poem, between meditative mystical stillness and ordinary neurotic inactivity; from stasis to stagnation. One of the first things one notices about the poem before having worked out anything of what it might actually mean – and also one of the things that make it so instantly loveable – is its wild fluctuations in register, Prufrock's continual pricking of his own solemnity.

For Max Nordau, a peculiarly modern strain of mysticism had become one of the dominant affective features in the culture of the *fin de siècle* – exemplified in a range of artists and movements from Wagner to Tolstoy, the Pre-Raphaelites to the Symbolists – precisely *because* of the chronic state of will-lessness that the environmental conditions of modernity had produced within the citizen. The attitude of timeless contemplation and apparently intimate understanding of the inexplicable connection between things that had risen to cultural pre-eminence in the final decades of the twentieth century was, for Nordau, a symptom of the neurasthenic degeneracy of the age. The noises and other sensory onslaughts to which modern man had fallen victim had weakened his constitution to a state of absolute passivity, which he falsely sanctified with piety. Mysticism in the modern age was nothing more, Nordau believed, than the glorification of one's inability to do anything productive. In a way, 'The Love Song of J. Alfred Prufrock' is a demonstration of Nordau's diagnosis. Prufrock continually pulls the ecstatic divinatory insight down to the ground, placing it back

inside the confining context of a doubtful, unhappy and distracted consciousness. The grandeur of his 'visions' become clouded by a plurality of 'revisions', finally deflated into the comically sham-ritualistic 'taking of toast and tea'. (CPP. p.14 – 34)

The standstill that Prufrock finds himself at is one of *aporia*, a pathless path, a state of perpetual doubt. He does not know how to proceed, what to say, because he is all too aware of the multitude of alternative possible utterances that any final declaration will substitute itself for. 'How should I begin?' he asks. 'Shall I say I have gone at dusk through narrow streets...' (*CPP*. p.15 – 70) Prufrock, muttering and stuttering his visions and revisions, cannot initiate his message because he is caught in its primordial state, the multitude of possibilities that precede and precondition all singular utterances. He is left endlessly trying out different opening lines to himself without conviction. 'How should I presume?' he asks a moment later. His problem is not simply one of what to say, but of what has really been said, what knowledge of the other can be assumed within the dialogue. Even the minimum redundancy of a common code, a minimum mutual understanding, is lacking. Communication is thwarted in both directions.

I believe it is possible to see the noises that take the place of any purported one-to-one communication in the poem, the noises that, in a way, speak for him as the audible manifestation of just this all-pervasive and invasive uncertainty. Noise *is* the sound of uncertainty. It is the initial doubt that information must resolve in order to properly call itself information, raised up to the level of the message itself. If Prufrock is paralysed by doubt, frozen in an aporetic stillness, it is the doubt of one who hears in his surroundings, *cannot help but hear*, the absolute equivocation of his calling.

One might justifiably argue of course that the sounds he hears are quite definitely *sounds* as opposed to noise. They seem to insist on their discretion, each remaining single, identifiable (if not always locatable) sonic items: these voices, that snigger, this music. They

seem to resist assimilation into the primal unknown stuff of pure noise. But we should recall from what we said of Michel Serres that a state of *assimilation* is precisely what noise is not. Noise integrates sounds only by disintegrating them, slicing and splicing them into an untotalisable mass of differing tones and sequences. It is not that the individual tones within noise are indiscernible; they are 'indefinitely discernable', endlessly differing from each other. Noise is not an assimilation but the exact opposite: in noisy perception we find it impossible to recognise any common similarity between items. In any case, whatever local unity and discretion the sounds that surround Prufrock might have, together they are far from Eliot's poetic ideal of a single harmonic totality redeeming the dissociated sensations of ordinary experience. What Prufrock attests to is the abject failure of this project, a project given up on before it has even begun.

And would it have been worth it, after all,
After the cups, the marmalade, the tea,
Among the porcelain, among some talk of you and me,
Would it have been worth while,
To have bitten off the matter with a smile,
To have squeezed the universe into a ball
To roll it toward some overwhelming question,
To say: "I am Lazarus come from the dead
Come back to tell you all, I shall tell you all"-If one, settling a pillow by her head,
Should say: "That is not what I meant at all.
That is not it, at all." (*CPP*. p.16 – 87-98)

The message, he fears, would not get through. His dialogue would be distorted in its passage, or its receiving consciousness would be insufficiently tuned. The very will to utterance is revealed as itself based on a false assumption of shared understanding. Communication fails and the message falls, broken amongst the surrounding bits and pieces. What Serres terms the 'granular space of communication' is embodied in the intervening clutter of objects laid in the path of the dialogue, demanding articulation, insistently making their presence heard as part of the poem. The atmospheric details and preliminary chit-chat rise up from their

subdued status as a scene-setting device over which his love-song would be sung and take on a life of their own as the subject of the poem. The speaker exhausts himself in the act of describing the items of his world. 'After the novels, after the teacups / After the skirts that trail along the floor / And this, and so much more?... / It is impossible to say just what I mean!' (*CPP*. p.16 – 101-104) The environment that he perceives around him offers an incommunicably vast variety of choices for enunciation, and he finally gives up all attempts at any such condensation. The universe that Prufrock must squeeze into a ball in the act of self-enunciation thus becomes a kind of spherical die, an infinitely sided shape, an infinite array of possible determinations that cannot come to rest, cannot resolve its uncertainty, but must roll in perpetuity, not towards an answer but towards the overwhelming unanswerable question that precedes it, the yawning gulf of possibilities that called for such a resolution.

However, it is part of the paradoxical logic of noise and communication that one can equally ascribe Prufrock's inability to move onwards towards a communicative engagement with his beloved to an excess of *certainty* as to an absolute uncertainty. Prufrock's mute state, the unsingability of his song, in fact seems to oscillate between two radically opposed but effectively identical states of incommunicability, and two radically opposed but effectively identical conditions of temporal stasis. At important points in the poem, Prufrock seems to be terrified by the very *lucidity* of his perception of the other, and his imagination of her equally penetrating reciprocal knowledge of him. The couple are struck dumb, not in a state of doubt, but in the desolate clarity of their exposure to each other. Prufrock pictures his beloved before him in intimate detail, all the way down to the hair on her arms. But in this obsessively detailed close up, he loses any sense of who the arms belong to:

And I have known the arms already, known them all – Arms that are braceleted and white and bare But in the lamplight, downed with light brown hair! (*CPP*. p.15 – 62-64)

The woman dissolves into her details, dispersed into a collection of minute parts. Prufrock seems to know everything about his beloved, except the beloved herself, the singular identity that holds the multitude of specifics together; he knows everything about her except who she is. His perception, instead of being disrupted and disintegrated by a demonic intermediary, is bedevilled by the very details of its content, details revealed precisely in the absence of any such intermediary. It is the noiselessness of the channel (a noiseless channel being strictly no channel at all) rather than its noisiness that curses Prufrock's relations. If any disrupting noise were to intervene, these details would be comfortably lost within the bigger picture. Without it they all stand out, insisting on recognition.

All this points to the central paradox at the heart of information as it is mathematically understood: *that absolute information and absolute noise amount to the same thing*.

Perception is dependent on its adversary. Noise must protect us against noise. Only noise can make meaningful a message's content. Hans Christian von Baeyer, in his recent book on the science of information, ends his chapter on noise with a cheer for the indispensable healing powers of its interference.

Without noise... neither science nor consciousness could exist. If the world is thought of as an infinitely complex and sharply detailed landscape in which we dwell, then noise is a thick blanket of snow that softens the contours into large, rounded mounds we can perceive and sort out without being overwhelmed. Time has been called God's way of making sure that everything doesn't happen all at once. In the same spirit, noise is nature's way of making sure that we don't find out everything that happens. Noise, in short, is the protector of information. ⁵⁵

Baeyer's analogy is in a certain sense decidedly apt for the present circumstance. For the absolute immediacy of Prufrock's perception represents just such an all-at-once and once-and-for-all concurrence of separate moments. From the vantage point of his interminable

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⁵⁵ Hans Christian von Baeyer, *Information: The New Language of Science* (London: Phoenix, 2004), pp.127-8.

instant, Prufrock gathers together into one point in time the totality of its past and future. Slipping into the present perfect tense so beloved of Eliot, in which a past experience can be claimed as a present attribute, Prufrock talks in the world-weary tones of one who has experienced not just an entirety, but an eternity. 'I have known them all already, known them all.' Time fails in its task of filiating information out into a manageable stream of change. The resulting state is a paralysing changeless vision of all that was and will be.

The distinction between this paralysing clairvoyance and the opposite but equivalent state of absolute confusion might be said to correspond to the difference between sight and sound. The visual picture of Prufrock's anonymous lady is given in infinite static detail, but any attempt to voice this knowledge becomes impossibly disrupted. Sound, as I have said before, is by its very nature much more vulnerable to interference. Prufrock recognises this in a certain respect as, despairing of verbal articulation, he indulges in fantasies of a visual self-projection of his own interior: 'It is impossible to say just what I mean / but as if a magic lantern through the nerves in patterns on a screen...' But if we leave the finite realm of approximations to noiselessness; if, that is, we allow for the impossible state of a perfect communication channel, the question as to what sensory medium we might gain this information from becomes immaterial because the information is precisely immediate. It does not matter how such knowledge might be said to reach us because it does not really reach us at all, but inheres within us from the very beginning. Prufrock does not see the eyes and arms, does not hear the dying voices, but knows them; he has known them all before they are seen or heard.

From a strictly mathematical point of view, Baeyer is inaccurate in suggesting that a perception entirely free from noisy mediation would entail an unmanageable deluge of information. Without noise, one would not 'find out everything that happened' but would, strictly speaking, find out nothing. An infinitely noiseless channel would mean infinite

proleptic certainty. All would be entirely foreseeable within a pre-established pattern and order. And this is precisely what Prufrock's repeated declarations of the 'all' that he has 'known already' represent. 'Already' suggests not just a present that holds within it the entirety of its past, but one that, as such, has pre-empted the entirety of its future. The communicational crisis that Prufrock finds himself in is here not one of interference but of *redundancy*. His repeated unhappy declarations of unlimited foreknowledge suggest a situation in which, no matter how chaotic and irregular, how various and stochastically distributed the elements of his world may seem, all are entirely predictable from the outset. His non-communication is envisaged in these lines not so much as the rolling of a spherical die, but as the tossing of a one-sided coin. An immovable and unyielding predetermination gifts Prufrock with an almost tragic insight into his fate which he relates in a voice that, despite his protestations to the contrary, can only be described as prophetic:

For I have known them all already known them all – Have known the evenings, mornings, afternoons, Have measured out my life with coffee spoons; Have known the voices dying with a dying fall Beneath the music from a farther room

So how should I presume? (*CPP*. p.15 – 49-54)

Granted the possibility of perfectly noiseless perception, any experience, any information communicated or perceived, any passage of time, will only ever be a recurrence of the already said and done. As Steve Brown states in his discussion of Michel Serres' use of information theory:

Zero equivocation is a state of absolute clarity between sender and receiver. There is no interference, perfect transparency. And thus no information whatsoever, since for such a circumstance to occur there must be absolute identity between the two parties, rather like the complete reversibility of cause and effect in Newtonian mechanics. Communication is properly speaking unnecessary... zero equivocation and maximum

equivocation are equally lacking in information, equally 'noisy' in Serres' sense of undifferentiation.⁵⁶

The noise that Prufrock hears is a known-already noise. It is the noise of the known already. If he cannot make contact with his beloved it is because he has already gone beyond mere contact with her, mere connection. He has already measured out her life, like his own, down to its finest granular specification. This infinitely and impossibly detailed knowledge sounds like the conjugal ideal of two selves united together into one identity; but it could equally be seen as the very thing that keeps them apart, keeps them from imparting anything meaningful to each other. Any possible action or utterance, any possible *change*, is pre-empted and thus precluded. Time is kept from moving forwards. And the vice-like grip of this eternal moment is made all the more inescapable as Prufrock's clairvoyance is returned back upon him in turn.

And I have known the eyes already, known them all – Eyes that fix you in a formulated phrase, And when I am formulated, sprawling on a pin When I am pinned and wriggling on the wall, Then how should I begin To spit out all the butt ends of my days and ways?

And how should I presume? (*CPP*. p.15 – 55-61)

The eyes that Prufrock imagines, recalls or foresees confronting him, are the mirror image of his own unhappy omniscience. Just as he dissects his beloved up into a set of anatomical features and faculties – arms, hair, eyes – those very eyes pin him to the wall like an entomological specimen. Stopped dead in the tracks of his own self-creating self-enunciation, Prufrock is formulated, sentenced to an immobile position within a body of science, a onceand-for-all statement of all that he is. The eyes stare back at him with the same paralysing

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⁵⁶ Steve Brown, 'Michel Serres: Science, Translation and the Logic of the Parasite', *Theory Culture Society*, Vol. 19, 3 (2002), pp.1-27.

foreknowledge with which he faces them. They have known him all already. Pinned to the wall, Prufrock's enunciation would be reduced to the fragmentary butt-ends of his experience, but this discharge of utterance is fragmented and excessive not in the sense that it interferes with any clarity of expression, but precisely because it has nothing new to express. It can only be a superfluous and redundant appendix to the already complete understanding of the gaze that pins him there in the first place.

From this perspective, Prufrock and his nameless beloved begin to look, not so much like distant strangers caught in a perpetually unfulfilled courtship riddled with awkward misunderstandings, but more like an old married couple sunken into a contempt bred of familiarity in which neither is capable of communicating anything to the other because each understands the other all too well.

Michel Serres writes, in a passage quoted above, of 'the song and beauty of the sirens'

- a song to which we must stop our ears if we are ever to engage in successful dialogue.

Communication depends for its success on the relative distinction of its intended signal from
the degrading influence of the empirical auditory world, the discordant chorus of voices that
assail it like the shrieking voices that tempt the Word in 'Burnt Norton'. But in Serres'
subsequent writing, he recognises that communication depends just as much on the presence
of this distorting influence as on its abeyance. Without noise, communication is obsolete. In
'Prufrock', it is this second state of non-communication that the song of the mermaids seems
to represent. They are not the noises from outside invading in upon the speaker: they are the
voices from within. Like the poem itself as a whole, they are bound up entirely within the
cellular, solipsistic world of a single consciousness, the infernal solitude from which no
message can escape. The mermaids are imagined creatures that only Prufrock knows and
hears and, as such, their song is entirely noiseless and immediate. It is not the siren-voices

that assail the speaker or the spoken word; it is the real empirical human voices that interrupt the siren's song:

We have lingered in the chambers of the sea By sea-girls wreathed with seaweed red and brown Till human voices wake us, and we drown. (*CPP*. p.17 – 129-131)

This interruption awakens Prufrock from his mute stillness. Time and change begin again.

But such a temporal awakening brings with it an imminent mortality. Prufrock falls from one state of insentience to another. Beckoned towards the future by the disruptive sound of human voices, lured away from the eternal unchanging present, Prufrock finally meets his noisy end.

'What is that Noise Now?' - The Waste Land

The audibly decomposing composure of the young man in 'Portrait of a Lady' and the solipsistic inferno, both noisy and noiseless, that Prufrock finds himself caught helplessly within are, in *The Wasteland*, writ large upon society as a whole. Their individual plights of inexpressible thought and feeling are depicted on a panoramic scale, mapped out on the ground of early twentieth century London. In fact, 'depicted', 'panoramic' and 'mapped out' are all very much the wrong words to use for this poem. For the setting of the poem, the Waste Land itself, is not primarily a landscape *shown* to us, but one picked up audibly. If sound is not the best sense for registering a landscape; if, that is, the multiplicity of space is quickly reduced to meaninglessness when channelled through the ear, this only makes the ear all the more faithful a witness to the dearth of meaning that Eliot perceived as the Waste Land's affliction. The fundamental spatial poverty of hearing that I have previously described, what Serres calls the ear's ability to 'lose track', makes it the better register for the

state of disorder that Eliot saw in the cultural landscape of Europe. *The Waste Land* is, in every sense of the word, an *audit* of its civilisation. It is in the act of listening to the straying, mingling, overlapping sounds and voices of the landscape that Eliot passes his unhappy judgement on the dissociation at work within it. The decline and breakdown of civilisation is presented as a kind of invasive background noise, a set of voices mingling and interfering with each other.

Eliot makes constant reference to the collective sounds emanating from the populations he presents. From the crowds flowing over London Bridge, 'Sighs short and infrequent were exhalled'. And at the end of the poem, in the desert, the appearance of the hooded hordes is presaged by the auditory upsurge of their collective lament.

What is that sound in the air Murmur of maternal lamentation Who are those hooded hordes swarming Over endless plains... (*CPP*. p.76 – 51-54)

The question as to the identity of this set of voices could equally be posed with regard to the one who asks it - or indeed to any of the multiple speakers who address us throughout the poem. Voices stray or barge into the space of the poem unannounced and unidentified. A large portion of the severe difficulty that the poem is met with in its first time readers derives from an inability to work out who exactly is speaking at each moment. Hugh Kenner suggests that *The Waste Land* is a 'telephone poem': that the poem simulates the novel experience initiated by the relatively recent invention of the telephone, of hearing voices without first being able to visually locate and identify their speakers. But any telephone call, once the speakers are established to each other, can proceed as normal in a clear unfolding and exchange of information... and this is not how the poem proceeds. It is not simply that the identity of the speaker is unannounced, but that it is in a constant state of transformation, swelling and bursting into different voices. We can hear this from the very opening lines:

April is the cruellest month, breeding
Lilacs out of the dead land, mixing
Memory and desire, stirring
Dull roots with spring rain.
Winter kept us warm, covering
Earth in forgetful snow, feeding
A little life with dried tubers.
Summer surprised us, coming over the Starnbergersee... (CPP. p.61 – 1-8)

Is the 'us' that winter kept warm, the same 'us' that summer surprised? It seems unlikely. They seem to belong not only to different identities but even to different species. Yet the lines flow into one another and mingle without clear distinction, compounded together. The central consciousness of the poem is decentralised by a host of other consciousnesses. The integrity of the poem's 'I' is broken down as a plurality of interfering but ultimately inseparable speakers feed off it parasitically and divert it from the path of traditional poetic development. If we are to accept the telephone metaphor, it would surely have to involve not a normal effective transmission, but a faulty interrupted one: the experience of 'crossed wires' perhaps, in which the channel of communication reveals to the listener something of its own tangled fabric; or simply the invasive noise of a bad line. The poem takes the form not of a singular spoken message in itself, but as a singular *channel* through which a plurality of spoken messages flow together in equivocation.

This noise, this audible uncertainty, is itself heard and felt by characters within the poem. One of the unidentified voices who stray into our earshot, the neurotic woman in 'A Game of Chess', is herself driven to distraction by straying sounds. As she begs her companion to come close, desperately imploring him to speak, the uncertain space between them is disrupted by the noises from outside. The space that separates them from each other is made audible:

'My nerves are bad to-night. Yes, bad. Stay with me.

Speak to me. Why do you never speak? Speak. What are you thinking of? What thinking? What?'

I think we are in rats' alley Where the dead men lost their bones.

'What is that noise?'

The wind under the door.

'What is that noise now? What is the wind doing?'

Nothing again nothing.

'Do

You know nothing? Do you see nothing? Do you remember Nothing?' (*CPP*. p.65 – 111-123)

In her desperation to gain access to his thoughts, the noise provides no common point of reference. The first simple answer to her question does not satisfy her because the noise, in its noisy unpredictability, changes from one moment to the next: 'What is that noise now?' The noise's equivocation becomes eventually more than an uncertainty over what it is, but whether it really *is* or is not (what we might call 'ontological equivocation' a hovering indeterminacy between presence and absence, which is surely what a background always is). Her companion's ultimate insistence that the sound she hears is no sound at all merely confirms her in her agonising solitude. The speakers are situated on either side of a central indeterminacy. The noise voices the void that each one presents to the other. A few lines later, this emptiness is filled with popular song:

'Are you alive or not?' Is there nothing in your head?'

But
O O O O that Shakespeherian Rag –

It's so elegant –

So intelligent – (*CPP*. p.65 – 126-130)

The music emanating from nowhere continues her sentence after she has finished speaking – a continuation, but also a divergent inflection of her voice from outside it. But more than this, the song itself is a kind of corruption of the canonical voice of Shakespeare. The indeterminate semi-presence between life and death that she fearfully suspects of her

companion is reflected in the strange afterlife that modern popular culture had given to the utterance of the past. Shakespeare's voice is heard dying but as yet undead in the plaintive 'O O O'; the original voice faintly perceptible within the debasing, trivialising music to which it has been put.

This dying Shakespearean voice recurs in the final passage in the chapter, in Ophelia's suicidal valediction within the equally debased setting of a London pub: 'Goodnight, ladies, good night, sweet ladies, good night, / good night'. (CPP. p.65 – 172-3) The passage is another ambiguous continuation of the conversation previously heard, where Lil's friend recounts castigating her for her decaying teeth and her abortion. The Shakespearean dialogue is spliced with that of the pub gossip just as both are spliced with the sound of their surroundings – the hour and the setting in which the conversation is taking place is made obvious through the shout of the barman: 'HURRY UP PLEASE ITS TIME. / HURRY UP PLEASE ITS TIME.'(CPP. p.65 – 141) The repetition of the phrase leads the voice to drift out from its original purpose and it starts to inflect and cryptically comment upon the dialogue that it interrupts. The barman's declaration of finality provides a kind of death-knell for Lil's decaying body, and from there it recedes out into outlying semantic fields, suggesting the terminal state of the culture as a whole. That the barman's cry is a kind of calling-of-the-hour for a European culture in its dotage has for a long time been a critical commonplace. What is less often remarked upon is how the very fact of its interruption of the dialogue, the way it breaks apart the flow of the verse, performs something like this very disintegration. The invasion of voices from the poem's background edge the poem closer to the state of entropic chaos into which all meaning is engulfed and from which a new redemptive order must emerge.

This 'death by noise' is repeated once again in the original manuscript of the poem, the much longer jumble of writings that would later be cut down into the poem we know as The Waste Land. The fourth section of the Poem, 'Death by Water', later trimmed to a mere ten lines depicting Phlebas the Phoenician drifting dead at sea was, in the manuscript, a ninety three line story of the voyage that brought him there together with his crew. The preceding journey towards the sailor's solitary fate is described as a process of increasing alienation and isolation, together with the ascending noisy uproar of the sea around them. The crew travel away from the shore, away from terra firma, away from the established recognisable world of 'public bars and streets'. Their increasing distance out to sea is measured audibly in the increasing groundswell of the surrounding waves, swamping any distinct sound or signal from the shore. The lookout's job, strangely, is depicted as the work of listening to this process.

And when the lookout could no longer hear
Above the roar of waves upon the sea
The sharper note of breakers on the reef,
We knew we had passed the farthest northern islands,
So no one spoke again. We ate, slept, drank
Hot coffee, and kept watch, and no one dared
To look into another's face, or speak
In the horror of the illimitable scream
Of a whole world about us.⁵⁷

The noise of the whole world becomes less a sensible space in itself than that which renders the outside world insensible and confused. It bars them from clear perception of the world and from each other. The men within the crew are cast adrift from each other just as collectively they are cast adrift from dry land. Amongst the screaming interference, the men sail away from consensual reality as delirium takes hold.

However within the insulating, individualising, multiple scream about him, the sailor finds momentarily his own deluded harmony.

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⁵⁷ T. S. Eliot, *The Waste Land: A Facsimile and Transcript* (Orlando: Harcourt Brace, 1971), p.67. I have added some punctuation missing from the transcript.

On watch, I thought I saw in the fore cross trees Three Women leaning forward, with white hair Streaming behind, who sang above the wind A song that charmed my senses, While I was Frightened beyond fear, horrified past horror, calm.⁵⁸

The passage presents a certain reversal of the events in *Prufrock*. Whereas Prufrock's internal siren-song is disrupted by the human noise about him, here, the sailor, driven in upon himself by the blank inuring noise of the waves and the wind, finds the perfect inner order of the siren-song. It is, as I say, a delusional perfection, a harmony that he and only he can hear. If we recall Serres' statement: 'If there were only order, if we heard only perfect harmonies, our stupidity would soon fall downward toward a dreamless sleep', then we might see in this charming of the senses a perfection just as terrifyingly meaningless and blank as the absolute auditory corruption of the outside world. The harmony that the sailor hears already constitutes his death. The last lines we hear spoken by the sailor himself, before he is depicted dead at sea in the passage that made it to the final edition, describe his terminal state as a pure and noiseless order:

And if another knows, I know I know not Who only know that there is no more noise now.⁵⁹

And yet, a harmonic state of pure repeatable predictable tonal sequence was still what Eliot elsewhere saw as the redemptive hope of poetry. Eliot holds out the possibility that, in amongst the indecipherable sonority, a genuinely decipherable unifying order might be just perceptible. In what is now perhaps the most famous of Pound's excisions from the manuscript, in the section that would be stripped down to become the 'Fire Sermon', the speaker directly apostrophises the city as a whole:

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⁵⁸ T. S. Eliot, *The Waste Land: A Facsimile and Transcript*, p.67.

⁵⁹ T. S. Eliot, The Waste Land: A Facsimile and Transcript, p.69.

London the swarming life you kill and breed, Huddled between the concrete and the sky, Responsive to the momentary need, Vibrates unconscious of its formal destiny

Knowing neither how to think, nor how to feel,
But lives in the awareness of the observing eye.
Phantasmal gnomes, burrowing in brick and stone and steel!
Some minds, aberrant from the normal equipoise
(London, your people is bound upon the wheel!)
Record the motions of these pavement toys
And trace the cryptogram that may be coiled
Within these faint perceptions of the noise
Of the movements, and the lights!

Not here, O Glaucon but in another world⁶⁰

'The movement and the lights' will be the respective subjects of our chapters on the modern disturbances of sight. As for the 'noise', it is difficult to imagine the word being used in this particular sense in an era before the technologies of sound had set up 'noise' as the fundamental antagonist to pure communication. 'Noise' here is given a sense of the yet-to-be decoded. It is the white noise of the air-waves. But it is also the resonance of the 'vibrating' masses themselves, their noisy miscommunications each to each. The noise is presented as an 'equipoise', a balance, a sound indifferent to its determination, providing evenly and equiprobably for all possibilities as to its meaning. But in the perceptions of one aberrant mind, Eliot suggests, standing apart from the huddle, a single signal can be detected and decrypted.

This signal, in the last reference to platonic dialogue, starts to be identified with the notion of a transcendent Form or Idea. Glaucon is Socrates' main debating partner in *The Republic* and is the midwife present at the twin birth of western metaphysics and western political theory. It is to Glaucon that Socrates intimates his vision of the ideal republic, the perfect state of the collective that can only be achieved when the guardianship of the city is

⁶⁰ T. S. Eliot, *The Waste Land: A Facsimile and Transcript*, p.43.

given over to the Philosopher. The Philosopher is the only one capable of directing and shaping the city justly by measuring it against the transcendent Idea of justice itself. As we saw in Serres' early essay on platonic dialogue, any idea can only achieve transcendence through a struggle against noise. The communication and reception of an idea across a noisy channel is 'isomorphic' with the struggle of transcendence itself. The Form of Justice, the single idea of The Good, the just state, is attained through winning out against the deforming and transforming agents in the channels of its communication. In the passage excised from *The Wasteland*, this timeless Form to which the city might be directed, the city's formal destiny, seems to be almost traceable within the equivocations of the sensorium. It hovers cryptically, like the siren's song, as a mirage of that state of perfection from which the modern city crowd has fallen and to which it might return.

All of which suggests the beginnings of a process of emerging redundancy within the city's noisy indeterminacy, and sets the stage for the final thunderous declaration. In the final chapter, the hooded hordes amass in the desert, awaiting the revelation and achievement of 'their formal destiny', the utterance and restoration of the 'Word in the desert' that Eliot finds so vulnerable to the shrieking voices of interference in 'Burnt Norton'. As the thunder speaks, it seems to presage an imminent breaking free from the tortuous solitude within which the desert hordes and the citizens of London have been confined.

I have heard the key
Turn in the door once and turn once only
We think of the key, each in his prison
Thinking of the key, each confirms a prison. (*CPP*. p.77 – 411-14)

Once again, the discrete cellular world of the solitary individual is broken by a noise at its threshold. The noise from outside penetrates the house. But this disturbance might not be seen as a chaotic intrusion upon a silent order, but something more like the opposite. What disturbs the prisoner is the sound of a 'key', a cipher, the possibility of a code that can

decipher the indecipherable chaos of the city, the 'faint perceptions of the noise', the 'movement and the lights'. The prison wall is one 'built of noises and cacophony' and what disturbs it is that which might bring this noise to order: the divine utterance, the divine word enunciated by the thunder.

But what does the thunder say?... The thunder, coming from the Brihadarhanyaka Upanishad of the Vedic scriptures, says simply 'DA'. In the Hindu Fable, the gods, the men and the demons each ask of their father Prajapati: 'Speak to us, O Lord!', to which he replies the single syllable DA to each group. Each group interprets this word in their own different way Datta (give), Dayadhyam, (sympathise), Damyatta (control), John Xiros Cooper has suggested that in turning to Sanskrit at the end of this work of immense refracted pan-European heteroglossia, Eliot found the nearest language available to the original ur-language from which they all stemmed. The Vedic scriptures represented a flight from Europe but not from Indo-European, and should be seen not as a point outside the babel-like din of a divided Europe, but a journey to its unitary well-spring. The content of the story itself provides an interesting corollary to this idea. The syllable 'DA' becomes a kind of root or radical of the different interpretations. But in this very plurality of interpretation, has Eliot not found the very noisy equipoise he sought to redeem? The sound of the thunder seems to embody exactly the equivocation it was meant to resolve. Like its visual counterpart, the thunderous noise forks and divides itself into a plurality of different points of reception, and at each point of reception it has transformed itself into a different word. It can thus be seen as containing the sum of its possible determinations. It is the very paradigm of noisy communication. Each aberrant mind finds within the sound its own aberrant utterance. Each figure finds revealed to him his own formal destiny, but together, the sound of their collective destiny is just as formless as ever, just as unequivocally equivocal. In fact, the thunder seems less like a single

enunciation uniting together the errant tongues of Europe, and more like a final repetition of the original confusion. The thunder matches the din of Babel with a din of its own. The original auditory catastrophe, the Babylonian divine self-withdrawal that broke apart and dispersed humanity's voices and set them loose upon one another in noise and contention, is not resolved at the end of the poem, but finally and conclusively repeated. This is the final achievement of timelessness, not the timelessness of a perfectly transparent lucid intonation, but the exact opposite: a voice at the maximum point of its degradation. But at this maximal point, it gains a kind of purity of its own. As Maud Ellmann notes, the only voice in the poem that is truly 'inviolable' is the voice of Philomel, the bird whose wordless song reappears throughout the poem⁶¹:

Above the antique mantel was displayed As though a window gave upon a sylvan scene The change of Philomel, by the barbarous king So rudely forced; yet there the nightingale Filled all the desert with inviolable voice And still she cries, and still the world pursues 'Jug jug' to dirty ears. (*CPP*. p.64 – 97-103)

The song is wordless because the barbarous king has cut out her tongue. The voice is inviolable because it has already been violated. Like the thunderous voice in the desert, her song also offers itself up to plural understanding, to *double-entendre*; a modern degraded sensibility has had its way with her. But dirty ears cannot defile anything that has already been defiled to the maximum degree, cannot rob anything of meaning that no longer makes any claim to meaning. Both the thunder in the desert and Philomel's song achieve timeless perpetuity not through being stabilised in perfect incantatory order and repeatability. Their timelessness is the chaotic timelessness of sheer sonority, uncorrupted by even the impediments of the Word itself.

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⁶¹ Maud Ellmann, *The poetics of Impersonality: T. S. Eliot and Ezra Pound* (Sussex: Harvester, 1987).

Eliot's final incantation suggests not the redemption of meaning from noise, not the attainment of a pure noiseless Republic. It is rather the *apotheosis* of noise. It seems as if, despite Eliot's well-known suspicions of democracy, his suspicions as to the very coherence of the concept of democracy, he comes close, in the final verses of *The Waste Land*, to the position that the eighth century ecclesiastical scholar Alcuin was perhaps the first to articulate (and warn against): that the voice of the people is the voice of God. It is not however the people that have cohered and gathered together in the singular expression of one divine Idea. It is the divine Word that has broken up and become as plural and equivocal as the voice of the people. The poem *is* in a way, the expression of a kind of *vox populi*. Or rather it is an inassimilable mixture of different popular voices, as if the divine Logos itself had started to breed and populate the space of possible interpretation.

Eliot's Synchronised City

This all may seem a strange conception of divinity. Yet the apotheosis of noise and confusion that brings *The Waste Land* to a conclusion has its own biblical equivalent. In presenting a joyful and regenerative irruption of noise, Eliot was, it is clear, alluding to a particular passage in scripture. The New Testament provided a similar joyful repetition and revaluation of the Confusion of the Tongues at Babel. In the book of Acts, after Jesus has ascended, the Apostles are gathered to celebrate the Pentecost. But their gathering is suddenly disturbed by a violent eruption. A noise from outside invades the house:

¹And when the day of Pentecost was fully come, they were all with one accord in one place. ²And suddenly there came a sound from heaven as of a rushing mighty wind, and it filled all the house where they were sitting. ³And there appeared unto them cloven tongues like as of fire, and it sat upon each of them. ⁴And they were all filled

with the Holy Ghost, and began to speak with other tongues, as the Spirit gave them utterance ⁶²

This is the noise of the *Paraclete*, the Holy Ghost. The holy inspiration that it provides, the Gift of Tongues, allows the Apostles to preach the Word to the cosmopolitan multitudes gathered in Jerusalem. A diverse crowd of men gather together at the sound of the eruption, men without any common code of utterance, without any principle of redundancy in their communication: 'Parthians, and Medes, and Elamites, and the dwellers in Mesopotamia, and in Judaea, and Cappadocia, in Pontus, and Asia'; a noisy set of differing, divergent tongues. The auditory manifestation of the Holy Spirit allows for this diversity, speaks of it and to it. It does so not by correcting it, not by bringing the diversity back within the fold of the one single unified Word, but by breaking the Word itself apart into all its multiple alternate versions. Within this equivocation, every figure within the disaggregated city can hear his own language being spoken.

⁶Now when this was noised abroad, the multitude came together, and were confounded, because that every man heard them speak in his own language. ⁷And they were all amazed and marvelled, saying one to another, Behold, are not all these which speak Galileans? ⁶³

Michel Serres devotes a short chapter of *The Parasite* to an interpretation of the story of the Pentecost in the New Testament. In the figure of the *Paraclete*, Serres finds a radically new version of divinity and a new conception of the global communication and communion that divinity presides over. This new conception of divinely ordered (or rather disordered) communication is one in which everything relates to everything else without any common code or principle of redundancy and without even the intermediary of translation that might make the different utterances cohere around one commonly recognised object: 'The new

63 Holy Bible, 'Acts 2:6-7'.

⁶² The Holy Bible, Containing the Old and New Testaments, King James Version, ed. Trinitarian Bible Society (London: Eyre & Spottiswoode Publishers, 1984), 'Acts 2:1-4'.

meaning spread everywhere starting from wind and noise. Not a single language translated in several different languages, but several spoken and several heard at the same time. '64 It is an auditory congregation of simultaneous difference. The separate individuals, separate races, separate languages, come together not in recognition around a simple solitary unified truth; they are joined together in noise and equivocation. Each figure and each utterance is a contingency in a set composed only of contingencies, chance events. Precisely because of this equivocation every possible sound is included within its embrace.

We may gain a better understanding of this reading of the Pentecost, and the role it plays in Eliot's work, by looking at what it is defined against. The disordered system of the Paraclete is defined by Serres in contradistinction to a cosmic system determined absolutely by the command of God. The chaos of absolute noise, the de-codification of all human interaction, is situated at the opposite pole from a cosmos in which all such interaction is entirely pre-arranged by God from the beginning of time. One such system is that of Gottfried Leibniz, a figure who reappears continually throughout Serres' work. Leibniz's system takes as its starting point the idea of the 'monad', the single simple atomic point in which dwells our essential 'substance', our soul, our subjective consciousness. A monad is, in Liebniz's view, completely disconnected from all other monads by a fundamental metaphysical divide. The monad lives out its existence in solitude, bound causally only to its own past and future, and to the God who is the single determining agent, its prime-mover. The monad is, as Leibniz expressed it, 'windowless'. It may appear to the individual that she is entirely capable of interacting with the outside world but this, according to Leibniz is entirely illusory. If I appear to feel pain at precisely the point at which you hit me, or if I appear to hear and comprehend the words you speak, this is not because your fist or your words have acted upon me in any way, but because it has been separately prearranged that the phenomena I perceive

⁶⁴ Michel Serres, *The Parasite*, trans. Lawrence R. Schehr (Minneapolis: University of Minnesota, 2007), p.41.

and their supposed source will coincide at exactly the same point. In my every perception of the world, I am merely meeting a heavenly appointment to perceive it thus. The illusion of such interaction is given by virtue of a 'pre-established harmony' dictated once and for all at the beginning of time by a God who exists outside it.

Michel Serres reads Leibniz's system as corresponding to the logic of communicative systems.

The first known system of communication is that of Leibniz. It is both radical and simple. No one relates to anyone or anything; doors and windows are not only closed but absent; everything and everyone relates to everything else through the intermediary of God. As the absolute mediator he is all-knowing and all powerful... This system is perfect, can be mathematically determined in its parts, *de jure* and *de facto*. Inversely this mathematics is optimal communication. Every parasite is reduced to nothing in it... In the centre the King is seated... God is the name Leibniz gives him. He is the universal in communication, the common language, esparanto, Volapük, music, algebra, the universal characteric, the *calculus ratiocinator*. ⁶⁵

The Leibnizian God is described by Serres as providing a universal common language, yet in the absolute domination of this singular common code over the variety that it substitutes itself for, inter-individual communication is rendered impossible. We are once again confronted with the essential communicative paradox: the very perfection of communication constitutes its breakdown. Leibniz's cosmos is an entirely noiseless system and thus every event within it, every perception, is entirely redundant. It is situated at the absolute zero end of the x = noise axis in Shannon and Weaver's bell-curve graph. The monads gain no real access to the outside world, they discover nothing of it because the entirety of their perception is already destined to appear the way it does by absolute necessity. The phenomenon perceived is already part of the communicational system's initial redundancy. Time for the monad is but the unfolding of its own predetermined inner workings and constitution. Time still moves forward in this system; the system does not quite exist in the Eliotian *nunc stans*. Yet every

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⁶⁵ Serres, *The Parasite*, pp.43-4.

event in time can only be the redundant repetition of the absolute eternal foreknowledge of the God who set it all in motion.

Leibniz's monadic system depends crucially on the notion of synchronicity. Leibniz's theory of pre-established harmony was modelled upon the work of the seventeenth century Flemish philosopher Arnold Geulincx who had sought to resolve the ancient mind-body problem with reference to a notion very similar to Liebniz's. 66 Mind and body, or body and soul, were for Geulincx, like Leibniz's monads, absolutely and eternally separate. Their apparent coincidence was explained with an analogy known as the 'two clocks' theory. The mind and the physical world were coordinated not because the one affected the other, but because both had been constructed by God like time-pieces. Every individual soul was possessed of a clock that chimed its sensations in unison with the body and the outside world but independently of it. God in this theory is a kind of watch-maker. He is the hand that winds all individual souls, and human history is their unwinding.

Geulinex's use of the analogy of clock-time has manifold implications both for Eliot's poetry and for modernist thought and literature generally. Eliot and many of his contemporaries could not help but be imaginatively affected by the ever-increasing centralisation, homogenisation and standardisation of time that was underway in the decades leading up to the moment of *The Waste Land*. In the Nineteenth Century, the idea of a temporal co-ordination of individual souls was given a precise secular equivalent.

The development of the railways both allowed for and in fact forced the integration of all the multiple local times of the countryside that had previously existed each unto themselves with reference only to the rising and setting of the sun. The 'Taylorisation' of the work place led to an environment dominated by an acute consciousness of passing seconds. The technologies of transmission allowed time to be carried out from the metropolitan centres

⁶⁶ For the interrelation between the two theories see Bertrand Russell's chapter on Leibniz in Bertrand Russell, A History of Western Philosophy (London: Unwin Hyman, 1979), pp.545-6, 551.

to encompass all outlying territories. This culminated finally in the introduction of a global standard time at the Prime Meridian Conference in 1884, directed from Greenwich.

Benedict Anderson believes the temporal co-ordination of the diverse population to be a primary founding principle and precondition of the modern nation-state. The nation is held together by a notion of simultaneity. Modern compatriots are led to a feeling of belonging together not so much by sharing in a common landscape, common language or common culture, but through sharing in a common moment. The set of mutual loyalties that engendered the 'imagined community' of the nation was synthesised in what we might call 'acts of synchronic imagination'. The clock beat out the rhythm to which modern citizens marched in unison through history.

The idea of a sociological organism moving calendrically through homogeneous, empty time is a precise analogue of the idea of the nation, which also is conceived as a solid community moving steadily down (or up) history. An American will never meet, or even know the names of more than a handful of his fellow 240,000-odd fellow Americans. He has no idea of what they are up to at any one time. But he has complete confidence in their steady, anonymous, *simultaneous* activity.⁶⁷

However, what the occasionalist doctrines of Leibniz and Geulincx teach us is that synchronicity is not a principle of unity. The separate consciousnesses of Leibniz's monads are not bound together by the common instant that they share, but are kept separate from each other precisely by that temporal commonality. The clock-timed co-ordination of the population was not that which unified its separate constitutive elements, but that which explained away the appearance of such unity. The fact of synchronised clock-timed activity held out the possibility that the subjective sensation of the collective, as registered by the monadic subject, was separated from the objective existence of every other individual within

⁶⁷ Benedict Anderson, *Imagined Communities: Reflections on the Origins and Spread of Nationalism* (London: Verso, 1983), p.26.

it by an unbridgeable, metaphysical gulf. This, I believe, was something that Eliot implicitly understood.

Throughout Eliot's early work, he constantly returns to images of entire populations engaged in synchronised activity. The mass co-ordination of modern life allows Eliot to speak of a diverse grouping of individuals in one breath. He adopts the role that he conjures for himself in the manuscript version of 'The Fire Sermon': that of a 'mind aberrant from the normal equipoise', observing the patterns and redundancies within the cityscape from an imagined Olympian perspective. But these acts of simultaneous description are never in any way redemptive. The clockwork co-ordination we observe does not entail the kind of bound organic unity that was Eliot's Christian-social ideal. It is rather the very thing from which the citizens need to be redeemed. We can observe a high density of this technique in a short early poem, 'The Preludes':

With the other masquerades That time resumes, One thinks of all the hands That are raising dingy shades In a thousand Furnished rooms. (*CPP*. p.23 – 19-23)

The poignancy of the image lies, I think, in the contrast between the citizen's complete unison and their complete anonymity, their precise replication of each other's action and their utter obliviousness to each other's existence. It is, as Eliot says later in the poem, 'a vision of the street / As the street hardly understands'. (CCP. p.23 – 33-4)

The image of the city's population as a mass of identically co-ordinated but nameless body-parts returns a few lines later: 'short square fingers stuffing pipes, / And evening newspapers, and eyes / Assured of certain certainties'. (CCP. p.23 – 43-4) Benedict Anderson sees the daily printing of newspapers as vital to the forging of the temporal community that the nation state is based upon. The punctual publication of the news on a daily basis and the

consequent near-simultaneity of its consumption, he states, creates an 'extraordinary mass ceremony' which functions as the secular, national equivalent of what religious ritual was for pre-national communities. Eliot recognised the homology in a way, but he refused to see it as a substitution of equal value. He believed the effect of newspapers upon the public was not to unite the masses into anything like holy congregation, but to 'affirm them as a complacent, prejudiced and unthinking mass'. Their unity was the mind-numbing unity of mass reproduction rather the unity of corporate worship. The eyes assuring themselves of certain certainties exhibit redundancy at many levels: their simultaneous, unconscious repetition of each other's actions and sentiments is paralleled by the newspaper's repetition of their own prejudices back to them, telling them what they know already. And of course the very redundancy of the phrase 'certain certainties' itself mimics this stale lifeless mimicry. Each individual adds nothing to the whole, just as the newspaper adds nothing to his prior experience. It is a community without communion, without interaction, without the nourishing exchange of new information.

Modernist literature abounds with these acts of synchronous imagination of the collective. Eliot's close neighbour in the modernist Cannon, Virginia Woolf's *Mrs Dalloway*, features many. They are greeted by a very different emotional reaction. Yet the stream of consciousness technique that Woolf uses hints at the same troubling sense of unbridgeable monadic separation. The separate private existences that interweave themselves through the course of the text are provided with a punctual common point of reference in the grand chiming of Big Ben that recurs continually throughout the novel. The clock announces itself at the beginning:

There! Out it boomed. First a warning, musical; then the hour, irrevocable. The leaden circles dissolved in the air. Such fools we are, she thought, crossing Victoria Street.

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⁶⁸ Anderson, *Imagined Communities*, p.39.

⁶⁹ Quoted in John Carey, *The Intellectuals and the Masses: Pride and Prejudice among the Literary Intelligentsia 1880-1939* (London: Faber & Faber, 1992), p.7.

For Heaven only knows why one loves it so, how one sees it so, making it up, building it round one, tumbling it, creating it every moment afresh; but the veriest frumps, the most dejected of miseries sitting on doorsteps (drink their downfall) do the same; can't be dealt with, she felt positive, by Acts of Parliament for that very reason: they love life. In people's eyes, in the swing, tramp, and trudge; in the bellow and the uproar; the carriages, motor cars, omnibuses, vans, sandwich men shuffling and swinging; brass bands; barrel organs; in the triumph and the jingle and the strange high singing of some aeroplane overhead was what she loved; life; London; this moment of June ⁷⁰

Clarissa Dalloway is brought by the sound of Big Ben to a sudden apparition of the greater collective in which she is situated. The clock's chime is a call to mass-consciousness, a call for a massing together and co-ordination of separate consciousnesses through the shared recognition of one single auditory source announcing the moment in which they co-exist.

However, if we follow the implications in the idea of synchronicity as I have just described them, the sound of the clock becomes ambiguous. It does not so much call the collective together as announce the principle by which they are kept apart. Woolf partially recognises this disparity in a way. The entirety of the collective that Clarissa is made aware of and pronounces her love for is one that she is 'building around' herself, 'creating it at every moment afresh'. And each individual does the same. The greater external world of the city and its population that the invasive sound of Big Ben calls Clarissa to recognise is not really external to her at all. It is, to use a Woolfian phrase, an envelope of sensation, one in which she is enveloped, but one that keeps her forever separate from the envelopes of the other.

Returning to *The Waste Land* one last time, we hear a clock, the clock of Saint Mary Woolnoth by London Bridge whose sound is not simply isolated and unmeaning, but 'dead'. The word 'dead' suggests the possibility of a once living sound, but a possibility that has now passed. Like the etherised patient-sky in the first lines of *Prufrock*, it is subject to an

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⁷⁰ Virginia Woolf, Mrs Dalloway (London: Penguin, 1992), p.4.

ironically twisted anthropomorphosis: given life at the same as it is taken away from it. It is this dead sound that strikes the beat to which London's moribund population marches in senseless unison, each focussed firmly on himself.

Under the brown fog of a winter dawn,
A crowd flowed over London bridge
So many, I had not thought death had undone so many.
Sighs short and infrequent were exhaled,
And each man fixed his eyes before his feet.
Flowed up the hill and down king William Street,
To where Saint Mary Woolnoth kept the hours
With a dead sound on the final stroke of nine. (CPP. p.63 – 60-68)

This is the world of the commuter. The crowd are on their way to work in the City. It is the noiseless invariant order of a clock-timed existence, experience pre-planned and scheduled in advance, experience grown numb and insensate through habit and repetition. The citizens learn nothing new from their environment.

It is from this perfectly redundant and patterned time that the invasive intervention of the Paracletan noise in the final passage must redeem modernity's citizens. We can only free ourselves from the sealed and solitary fate of the monad by a disruptive upsurge of noise in the system.

Chapter Three: 'A Shout in the Street' – The Noises of James Joyce

'Sllt. The nethermost deck of the first machine jogged forward its flyboard with sllt the first batch of quirefolded papers. Sllt. Almost human the way it sllt to call attention. Doing its level best to speak. That door too sllt creaking, asking to be shut. Everything speaks in its own way. Sllt'.⁷¹

Leopold Boom is standing in the newspaper office of the Dublin newspapers *The Freeman* and *National Press*, listening to the sound of the printed paper being threaded through the press. One of the pleasures of James Joyce's *Ulysses* is the tireless attention that it pays to the submerged and rarely discussed but enormous share of our lives that we spend in communion with the inhuman, the world of non-communicative objects. But here, in the act of listening to them, Bloom discovers the beginnings of a kind of communication.

Senseless reality begins to gather and organise itself into speech; a voice, or a signal, emerges from the noise. This communicative potential with the supposedly mute world of things becomes one of Bloom's little recurring preoccupations throughout the book. Later, in the Ormond bar, he returns to it, this time considering it not as speech, but as music. But a curious revision occurs; his previous observations become subject to second thoughts:

'Sea, wind, leaves, thunder, waters, cows lowing, the cattlemarket, cocks, hens don't crow, snakes hissss. There's music everywhere. Ruttledge's door: ee creaking. No, that's noise.' (U.364)

The two passages mirror and oppose each other. The sound of the door, in Bloom's understanding, is given voice and then robbed of it. Auditory structure and organization emerge from the noise and then descend back into it. We might say that Joyce is less concerned to make the auditory world speak and sing than to present the process by which communication emerges from noise and submerges within it. This liminal position between

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⁷¹ James Joyce, *Ulysses* (London: Penguin, 1992), p.154. All subsequent references to this edition with page number given in the text.

sense and non-sense is, as many readers of Joyce's works will testify, where Joyce spends a great deal of his time.

These are just some of the countless instances within *Ulysses* in which Joyce moves from the usual practice of using words in their conventional, referential capacity, to a practice of using the alphabet as best he can to transcribe the noises emanating from the world. The world breaks through the words and makes itself heard in something closer to one to one correspondence. We hear the 'crush, crack, crick, crick' of shells and pebbles underfoot (*U*.45); the 'khrrrrklak' of a gun being fired (*U*.52); a yawn: 'liiiiichaaaaaaach!' (*U*.226); the 'Pflaap! Pflaap!' of a fire-engine's machinery (*U*.560); pebbles dislodged by a rat: 'Rtststr!' (*U*.144); a hen's 'Ga ga ga ga Gara. Klook Klook Klook' (*U*.367); the 'Tap. Tap. Tap. Tap.' of a blind-man's cane (*U*.373); dental floss being twanged on the teeth: 'Bingbang, bangbang' (*U*.162); and a fart: 'karaaaaaaa... Pprrpffrrppfff.' (*U*.376)

Some of these noises are not heard by the characters, but rather recalled or imagined – as in the gun-shot. On occasion, there is a noise that is evidently a mixture of the heard, the recalled and the imagined. Molly, in bed at night, listens to the sound of a train passing-by: 'frseeeeeeeeefronning'. We might wonder at this rendition of a train whistle, until we realise that the 'onningg' at the end does not originate from the whistle itself. Molly, having been singing 'Loves Old Sweet Song' that day, has mingled the sound of the song with the sound of the train.

Derek Attridge, in a detailed study of the onomatopoeic effects in *Ulysses*, warns against the naïve notion that these sounds can be thought of as in any way *immediate*. He lists a number of factors that limit and complicate 'the simple picture of unmediated imitation one might be tempted to apply to nonlexical onomatopoeia', not least of these being the extraordinary poverty of the sounds available through the twenty-six letters of the alphabet in comparison to the unfathomable breadth of possible sounds in the outside world. 'Given on

its own to a group unfamiliar with *Ulysses*,' he suggests, 'I don't imagine many people would identify it as a train-whistle. The sense we may have of the vividness of an onomatopoeic representation is seldom a result of the precision of its imitation.'

Yet perhaps Attridge is slightly mistaken in his simple equation between *immediacy* and *identifiability* or *recognisability*. For they are not the same thing. To recognise something requires more than the undisturbed registration of a sensation. It involves placing the sensation within a larger overriding category of similar things. Recognition *needs* the intervention of the word, or at least a general idea, a category or identity akin to the word. Noise is precisely the break-up and dispersal of such categories.

We can see this clearly if we take perhaps the most famous of all the sound effects in *Ulysses*, Leopold Bloom's cat's noise in the 'Calypso' chapter: 'mkgnao!' (*U*.66) Once again we may be slightly puzzled by this particular orthography. I, for one, have never quite understood the inclusion of the 'k'. But this, I think, is the point: Joyce is not trying to present *the* correct transcription of a cat's sound. There is, in fact, no such thing as *the* correct transcription. It is part of the hyper-realism of *Ulysses*, (in its opening chapters) that he does not attend to the over-arching category of 'miaows' but rather to one particular instance, by one particular creature. The concept of a 'miaow' is dispersed amongst its differing real-life manifestations

In writing about *Ulysses*, I wish to chart some of the ways in which this process occurs in the text, looking at three chapters in particular but making many side-glances at other episodes on the way, and to show how these unique neologisms help create Joyce's rhetorical effects.

But I wish to do more than this. I wish to draw a parallel between this noisy dispersal of the Word and the social condition or predicament of the two main characters. The noisiness of Dublin means – and noise generally means – that its various phenomena cannot

be fully grouped together into pre-established types or categories: they cannot be gathered under a sign. Dedalus and Bloom both belong to many different kinds of groups and identities: nations, religions, families, the city itself. But they belong with difficulty; they suffer from intrusions, foreign invaders, states of exile. If Leopold Bloom struggles to find unity and identification with those around him, Stephen Dedalus struggles *against* any such bond of identification. 'When the soul of a man is born in this country there are nets flung at it to hold it back from flight' he states in *A Portrait of the Artist as a Young Man*. 'You talk to me of nationality, language, religion. I shall try to fly by those nets.'⁷² The noisy dispersal of stable linguistic identities is evidence of just such a partial escape from external social signification.

With identity comes destiny. Once disparate phenomena begin to gather together into a perceivable class or type, this entails also a regular predictable, if not necessarily preordained, chronological sequence for it to follow. Belonging to a nation or religious community binds one to the narrative that goes with it. Roman Catholicism and Judaism, the religions to which Dedalus and Bloom respectively are ambiguously affiliated, both have a history and an eschatology attached to them that appear amongst the many discourses that interweave through the text. Nationalism, and particularly nationalisms striving for national independence like that of Ireland in the period, similarly construct themselves in terms of a historical chronology leading from past to future. Even family membership brings with it a sense of enchainment to lineage. Noise, as it scatters the elements of the group, unchains them from this sense of predictable history. Noise is by definition unpredictable; in noise we can never say exactly what will come next. Thus noise allows for individual chronological trajectories independent of the macrocosmic metanarrative.

⁷² James Joyce, *Portrait of the Artist as a Young Man* (New York: Viking Press, 1972), p.203.

Of course, Joyce's Homeric parallel that lies buried within *Ulysses* could be said to provide *Ulysses* with its own temporal schema, its own undergirding or overarching sense of predestination. However, just as the Odyssean structure makes inevitable some sort of final homecoming within Joyce's later reinterpretation, it also provides *Ulysses* with many of the myriad narrative instances of the hero's deviation from this journey. If there were no such divergences from the hero's itinerary, there would simply be no Odyssey; the story is made up of a catalogue of digressions from its principle trajectory. The Odysseus story undergirds the Joycean heroes' line of passage *together with* their excursive deviations from it. The Homeric parallels are not redemption from the random unpredictability of everyday modern life; they are themselves a figure for it.

Here, as ever, the writings of Michel Serres will come in useful. For Serres shares with Joyce a common project of Homeric interpretation. Serres examines many of the pivotal moments within *The Odyssey* as mythic figurations of the paradox of communication. Odysseus' hazardous passage through the Mediterranean is likened to the passage of information through a channel. If the project of examining the Homeric parallels in Joyce's work is now a somewhat thinning strand within Joyce studies, this I believe is due to depletion rather than completion and the hidden substratum that Serres identifies within the Odyssey story itself can perhaps reinvigorate it.

Nestor

As we saw in our discussion of *The Waste Land*, Eliot sees the barren isolated citizens of London redeemed through the spiritual regeneration of a noise from heaven, a divine din. Stephen Dedalus, in the 'Nestor' chapter of *Ulysses*, sitting in the office of his employer Garret Deasy, also makes a fleeting but suggestive identification of God with an eruption of

noise: a 'shout in the street'. Unlike in *The Waste Land*, however, the eruption of Stephen's noisy God does not mark the text's *grand finale*, but features at a seemingly incidental point at the beginning of the novel, recurring intermittently, in memory, through the course of the day. And whereas in Eliot the identification serves to elevate and glorify noise, in Joyce it appears to blasphemously denigrate divinity.

The remark follows in response to the confident assertion of his employer, Garret Deasy, to whom he is talking: 'The ways of the Creator are not our ways', Deasy states, 'All human history moves towards one great goal, the manifestation of God.' Stephen's curious rejoinder to the assertion is slightly puzzling. Like so much else in *Ulysses*, it co-opts a contingency of its circumstance into its rhetoric. At the moment in which Deasy makes his statement, a shout from the hockey match in the playground outside invades in upon the conversation:

Stephen jerked his thumb towards the window, saying:

- That is God.

Hooray! Ay! Whrrwhee!

- What? Mr Deasy asked.
- A shout in the street, Stephen answered, shrugging his shoulders. (U.42)

It is hard to know quite how to read this remark and, in particular, how it relates to the confident assertion that precedes and provokes it. Is the line a counter-argument to Deasy's or merely, as Stephen's shrug might seem to suggest, an indifferent diversion from it? With *The Wasteland's* conclusion and Serres' invocation of the Pentecostal noise in mind, could it possibly suggest a cryptic counter-eschatology or anti-eschatology of its own?

Some readers have sought to find allusions in the passage to a host of biblical and ecclesiastical shouting and wailing. Don Gifford traces it to the passage in Proverbs: 'Wisdom

crieth without; she uttereth her voice in the streets¹⁷³. Jules David Law hears in the line an echo of the chanting that Augustine hears from a neighbouring house that spurs his conversion.⁷⁴ All this liturgical allusion hunting may seem to miss the point. It ignores the clearly dismissive gesture with which Stephen couches his statement and his more general rejection of all religious claims made upon him. It seems to be trying to reunite him against his will with the piety he rejects. Stephen, in his puritanically individualistic zeal, his determination to belong to nothing and no one, feels the claims made upon him by any national or religious community to be restrictive. He feels bound by no Word placed upon him from without, no racial or religious conscience forged elsewhere than the smithy of his soul. And he feels bound to no historical progression that would be determined by such a Word or conscience. The narrative of History is something he would awake from rather than see fulfilled.

It is not the wisdom uttered by the voice that Stephen identifies with God, but the sonic projection of that utterance. The God Stephen is invoking is a God without transcendence, a God inseparable from the sound by which his word is carried. Even if we accept Gifford's allusion to the proverbial wisdom being cried out in the streets, it is the cry and not that which is being cried that Stephen seems to be parodically sanctifying: not the absolute universal Word, but merely one particular calling of it. Stephen's statement is, as Calvin Thomas suggests, 'the radical reduction of a major phonotextual symbol and constraint - *the* transcendental signified itself - into a mere vocal effect, a shout in the street'75. But Stephen is doing more than this. His gesture is in fact doubly dismissive: he is reducing the Word not only to its phenomenal aspect, not only to a sound, but to a noise, a *background*, a

⁷³ Don Gifford, with Robert J. Siedman, *Ulysses Annotated: Notes for James Joyce's Ulysses, Second Edition Revised and Enlarged* (Berkley: University of California, 1988), p.39.

Jules David Law, 'Joyce's "Delicate Siamese" Equation: The Dialectic of Home in *Ulysses*', *PMLA*, 102 (1987), p. 200.
 Calvin Thomas, 'Stephen in Process/Stephen on Trial: The Anxiety of Production in Joyce's "Portrait" ',

⁷⁵ Calvin Thomas, 'Stephen in Process/Stephen on Trial: The Anxiety of Production in Joyce's "Portrait" ', *Novel*, 23 (1990), p. 296.

sound exterior to the dialogue. The noise, Stephen suggests, can be ignored; it is an unintended auditory presence, present by sheer chance, an accident.

We might however be able to take Stephen's remark seriously, seeing it not as parody, but as the seriousness and piety of a sincerely convinced heresy. The cry to which Stephen has reduced God is a string of half-words, half way between significance and mere outburst. Its very disruptive and disrupted nature gives it less than complete determination and thus he is granted a degree of liberty from its commands and the time that follows from them. The shout in the street represents not the transformation of the world in accordance with the Word, but the transformation of the Word in accordance with the world, the sum of contingencies and stray phenomena with which the environment is saturated. The exposure of the words to this accident and contingency, the injection of the purely circumstantial into the formal and intended sound of speech, offers itself as a microcosmic version of a greater possible breakdown in the ordered temporal and historical sequence that Deasy's eschatology posits.

This liberation of historical possibilities through the interjection of noise has the potential to affect the past, not just the future. Earlier in the episode, Stephen muses on the lost possibilities, the counterfactual might-have-beens of history.

Had Pyrrhus not fallen by bedlam's hand in Argos or Julius Caesar not been knifed to death? They are not to be thought away. Time has branded them and fettered they are lodged in the room of the infinite possibilities they have ousted. (*U*.30)

Just as a signal becomes information by virtue of its victory over a variety of alternatives, a possibility concretizes into an historical fact once it has ousted all other possibilities. The noise from the hockey field is a cry of victory. But just as noise within a channel displays the incompletion of the informational battle, the commotion and contestation that disrupts the sound outside is evidence that the player's own battle has not been entirely won.

Time in Deasy's orthodox Christian eschatology is predetermined. However we may choose our own individual destiny, the ultimate course of history will lead us only to one inevitable end. He sees an inescapable necessity in the course of human events. Christian eschatology speaks of its final hour as a revelation: we learn something from it. Yet there is always something redundant about any history described in terms of the perfect fulfilment of prophecy. If the future is not just the outcome of the past but the manifestation of past conception, then it will add nothing to that conception. 'As it is written, so shall it be'. There can be no real revelation of that which has already been revealed. As we saw earlier in *Prufrock*, there is no glory in the coming of that which you have known already.

The noise is not a revelation as such, but the preconditioning background that enables any revelation. Tony Thwaits, looking carefully at the letters used to render the shout itself, spots a secreted tetragrammaton, 'yhwh', dispersed but still faintly visible in the text.

'Hooray! Ay! WhrrWhee!': Joyce's Stephen has gestured towards the schoolroom window through which the sounds of the hockey game can be heard, and placed God firmly in the same street. Behind Stephen's back, the text agrees, hearing in the shout the name which cannot be spoken.⁷⁶

This may strike one as a prime example of the most shameless kind of hermeneutic opportunism. (We are just likely to find the name of the Egyptian sun-god *Ra* hidden within 'Hooray' as we are to find the Hebrew god.) But is it not precisely the point about noise, undetermined unarticulated sound, that it provides so promiscuously for so many interpretations? The holy name is indeed present in the outburst, but it contends there with a host of other possible words and sounds. Perhaps we can hear an alternative God, a Paracletean God, not in the name hidden within the noise, but in the noise itself, the entropic abundance of possibility that allows for that name faintly to be heard.

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⁷⁶ Tony Thwaites, 'Currency Exchanges: The Postmodern, Vattimo, Et Cetera, Among Other Things (Et Cetera)', *Postmodern Culture*, 7 (1997), art.3.

The shout in the street is recalled by Stephen later in the 'Scylla and Charybdis' chapter, set in the library, where Stephen exchanges literary and philosophical insights with the Dublin *literati*. Again, the phrase is used as a point of dissent; only here it is not dissenting from orthodox Christianity, but from the platonic theory of Forms and the theosophical doctrine held by the poet A.E. to whom he is talking, that art exists in order to represent these Forms.

Unsheathe your dagger definitions. Horseness is the whatness of allhorse. Streams of tendency and aeons they worship. God: noise in the street: very peripatetic. Space: what you damn well have to see... Hold to the now, the here, through which all future plunges to the past. (U.238)

Stephen commits himself, not to 'horseness', not to the transcendent idea of a horse, but to time-bound, sensual manifestation of the horse; just as in Deasy's office he commits himself to a god he can hear over the God known through written scripture. Such a sensual manifestation constitutes a scattering and dissociation of the Idea, a fall from essence to accident, from necessity to contingency.

Stephen's artistic commitment to the unique individuality of the sensuous encounter, its disconnection from any super-empirical grouping, is also, in one and the same gesture, a commitment to his own unique individuality as an artist. In attending to the dissociated particularity of his sensory world, he disassociates himself from the artistic cliques and groupings into which Irish imaginative life was gathered. In the abundance of possibilities in the outside sensory world, he finds an artistic freedom from the conventions of his time.

'Proteus'

Just as noise can break down the necessary and essential into the contingent and particular, the latter may be broken down further into the purely possible. Just as the equivocation of a

super-empirical category breeds forth the differing items or instances of the empirical world, the equivocation of any one of those items breeds the countless uncertain possibilities of what it might be. These terms – necessary, contingent, possible – may be thought of as differing points on the 'x = noise' axis of Shannon's bell curve. The necessary is the noiseless redundant zero-point of the axis; it is that which we know already without any information being sent. The contingent represents the curve's central apex; it is information that has successfully won out against its contestants. The possible represents the down curve at the far-end of axis; information that is still uncertain, still in contest with its contraries and alternatives.

The name that logicians and metaphysicians give to this scale of certainty and uncertainty is *modality*. The study of modality derives originally from Aristotle and it is to Aristotelian metaphysics that Stephen Dedalus turns when contemplating the 'ineluctable modality of the visible' and the 'ineluctable modality of the audible': the changing and equivocal sensory information received while on a long meditative walk along the beach in the section of *Ulysses* immediately after the his encounter with Deasy and the divine shout in the street. As Joseph E. Duncan states in writing about the Aristotelian references in the chapter:

Modality always raises the problem of the relative certainty or uncertainty of judgements or events... In the field of logic, then, modality is a qualification as to the certainty or uncertainty in a statement. Although the earth is subject to the regularizing tendency of nature, this tendency is counteracted by spontaneity and chance, independent and irregular forces that are essentially unknowable and unpredictable. In a larger sense, then, ineluctable modality is the inevitable continuing presence of uncertainty and unpredictable possibility in the changing world of the actual as contrasted with the necessity found in the realm of the universal and eternal.⁷⁷

⁷⁷ Joseph E. Duncan, 'The Modality of the Audible in James Joyce's *Ulysses*', *PLMA*, 72:1 (1957), pp.288-9.

The chapter presents Stephen in his quest to 'hold on to the now, the here.' But in this instance his mission is antagonised not by the timeless and the assured, as in the struggle against the theosophists, but by the temporal and the uncertain. He does not seek to snatch knowledge and truth from heavenly necessity, but to redeem it from the sea of the merely possible.

Stephen wanders down the beach musing on the endlessly shifting and unpredictable sights and sounds around him. (Stephen investigates the ineluctable modality of both the audible and the visible; but for reasons I gave in my introduction, the audible is much more subject to instability and uncertainty, much further along Shannon's axis than sight). Is it possible amongst this instability, he asks throughout the chapter, to gain reliable knowledge of things in themselves? Is it possible to gather these shifts of shape into a stable identity, a true description or form of words? This he attempts to do while seated on a rock composing poetry, but he finds his creation flowing away from him: 'His mouth moulded issuing breath, unspeeched: ooeeehah: roar of cataractic planets, globed, blazing, roaring wayawayawayawayaway.' (*U*.60) A moment later, while urinating into the water, he manages to find the articulation he was looking for. The noise of the waters appears to quarter itself evenly.

Listen: a fourworded wavespeech: seesoo, hrss, rsseeiss, ooos. Vehement breath of waters amid seasnakes, rearing horses, rocks. In cups of rocks it slops: flop, slop, slap: bounded in barrels. And, spent, its speech ceases. (U.62)

The separation of the waters into different rock-pools mirrors Stephen's own division of the originally uncountable mass of sound into four separate words. Yet the metaphor reveals what Stephen secretly must know; it reveals just how provisional and arbitrary this division is. The continuing agitation of the water inside the rock-pools suggests an organisation of sound that cannot quite contain that which it articulates. Both the words and the rock-pools

need wait for nothing more than the upsurge of their background element before they are once again re-assimilated into undifferentiated substance.

The sea whose edge Stephen is skirting is the most prominent symbol of the noisy problematic modality of the audible. As Duncan states: 'The sea, constant in its change but unpredictable, becomes the perfect symbol of the inevitable earthly uncertainty which is the material of the problematic proposition...' And it is the sea, and the sea-god who presides over it, that provides the chapter's Homeric parallel. The original episode in Homer is Menelaus' report to Telemachus of his encounter with the sea-god Proteus, from whom he tries to gain news of Odysseus' home-coming. But the figure evades Menelaus' questions through endless shape-shifting. He can only be made to answer the question by being held firmly and given no room for escape. Michel Serres sees the Proteus and the sea that he presides over as a figure for the sum of possibilities intimated in the experience of noise.

He's a prophet, he possesses the gift of prophesy, but refuses to answer questions. He contains all information, admits no information. He's the possible, he's chaos, he's cloud, he's background noise. He hides his answers under the endlessness of information.⁷⁹

It is not only the true identity of the bodies around him that Stephen imagines buried beneath this equivocal subterfuge of sensation, but also, in a way, his own identity; not his identity as discovered through subjective self-awareness, but his position in relation to the greater collective in which he partakes. The Homeric parallel works to make the equivocal uncertainty surrounding Stephen more than that of idle philosophical enquiry but an uncertainty as to his relation and connection to his own father, and by extension, his mother recently deceased, his ancestors, his kin and kind generally.

⁷⁹ Serres. *Genesis*, p.14.

⁷⁸ Joseph E. Duncan, 'The Modality of the Audible in James Joyce's *Ulysses*', p.290.

A reflection in a later chapter provides a possible remedy for this uncertainty. In the 'Scylla and Charibidis' episode in the library, Stephen is again given to dwell on the everchanging flux of all things. Given that his body is constantly renewing its constitutive material, is he the same person who borrowed money from the poet A.E.? For, if not, it is not he who is in debt. But he demurs a moment later. Despite the changes, a memory persists within him that survives those changes. It is memory that unites him to his past: 'I, entelechy, form of forms, am I by memory, because under ever-changing forms.' (*U*.242-3) Memory here becomes a possible principle of unification within change. If the sensation of objects cannot be gathered into one unchanging essence, they can at least be chained together through a continuous linkage of recollected changes.

In 'Proteus', something like this principle of memorial connectivity is imagined to pertain. And not just within the single individual, but through the generations. Stephen is prompted by the sight of three midwives walking along the beach to entertain the idea of a string of navel-chords receding back through time which function as a kind of telephone line through history by which may dial-up the mother of mankind:

The cords of all link back, strandentwining cable of all flesh. That is why mystic monks. Will you be as gods? Gaze at your omphalos. Hello. Kinch here. Put me on to Edenville. Aleph, alpha: nought, nought, one. (U.46)

Time and familial history are here imagined as a communication channel; a way of making all times present to the present through an imaginary technology. A similar thought will later occur to Leopold Bloom as he stands in funereal contemplation of the passing of Patrick Dignam.

How could you remember everybody? Eyes, walk, voice. Well, the voice, yes: gramophone. Have a gramophone in every grave or keep it in the house. After dinner on a Sunday. Put on poor old greatgrandfather. Kraahraark! Hellohellohello amawfullyglad kraark awfullygladaseeagain hellohello amawf krpthsth. (*U*.114)

Here, however, noise intervenes in this fantasy of pan-historical immediacy. The 'Kraahraak' and the 'krpthsth' and the repetition of phrases, evoking a scratched groove, suggest a technology that is itself subject to the flux and decay of the sensory. The technology is not exempt from the effects of time. The modality of the audible realm is ultimately no less ineluctable for being recorded. Noise will do the work of decay, death and forgetting. Information will be lost.

However, the 'Proteus' chapter suggests another way in which Stephen might overcome the noise and equivocation of the auditory and visual world. It is a solution suggested by the chapter's Homeric parallel. If Menelaus can only get past Proteus' endless equivocations through seizing him and holding him in place, this might suggest the role tactility has in getting to the unequivocal truth of the object. Stephen suggests as much at the very beginning of the chapter. Pondering the theories of Aristotle who said that objects are not visible in themselves but only by their colour, he pauses for reflection. 'But he adds: in bodies. Then he was aware of them bodies before of them coloured. How? By knocking his sconce against them, sure. Go easy. Bald he was and a millionaire...' (*U.*45) Later, this tactile confirmation of a solid and lasting reality will take on more emotional overtones. Stephen, suddenly struck by a sense of his own solitude amongst the subterfuge of appearances, 'the veil of space', quietly calls upon the powers of touch, a touch from an yet unknown imaginary woman, to lift him from it:

'She trusts me, her hand gentle, the long lashed eyes. Now where the blue hell am I bringing her beyond the veil? Into the ineluctable modality of the ineluctable visuality. ... Touch me. Soft eyes. Soft soft soft hand. I am lonely here. O, touch me soon, now.' (*U*.61)

However, the Homeric parallel appears one more time in the chapter within a complex knot of different associations, and here the tactility's potential to redeem knowledge is made more questionable. Stephen's mind lingers for a moment on the image of the drowned man he has

heard about earlier in the day. 'The man who was drowned nine days ago off Maiden's rock. They are waiting for him now. The truth, spit it out. (U.57) The parallel with the Proteus story might be easy to miss here, but the seizure of the sea-god by Menelaus is evoked in the violence of the phrase 'Spit it out.' The manual investigation of the world is here pictured as a type of rough interrogation, a way of questioning that leaves the object as little room as possible for equivocation. But implicit in the act of grasping is the potential for harm: the grasping hand always has the potential to *deform* that which it wishes to be *informed* by. The object is forced to reveal its secret under a duress that it cannot bear. The result is an expectoration, an abject discharge of information, like the butt-ends of speech that Prufrock is forced to emit, every bit as noisy as the audible and visual information that the grasp sought to break through. 80

The image of the drowning man is once again burdened with personal significance. Through associations evoked in the lines quoted from Shakespeare's *The Tempest* – 'Full fathom five thy father lies' –, he takes on the guise of Stephen's own father. But there is also more than a hint that Stephen's mother, who died spitting out an endless ocean of phlegm from her diseased innards, is implied. As Stephen imagines trying to save the drowning man, quietly the pronouns change gender. 'A drowning man. His human eyes scream to me out of horror at his death. I... with him together down... I could not save her. Waters: bitter death: lost.' (*U.57*) The protean ocean has intervened between the generations.

It is interesting to compare Joyce's most obvious successor as Irish modernist novelist, Samuel Beckett, who also considered the effects of truth under duress in *The Unnameable*, where the narrator tells of his experience at the hands of his anonymous torturers: 'I have to puke my heart out too, spew it up whole along with the rest of the vomit. It's then at last I'll look as if I mean what I'm saying, it won't be just idle words. (Well, don't lose hope. Keep your mouth open and your stomach turned. Perhaps you'll come out with it one of these days.)'

'Sirens'

The noises of Dublin presented in *Ulysses* reach a climax in the Sirens chapter, the chapter that Joyce in his table of correspondences associated with the ear and with the art of music. The chapter is set in the Ormond bar where different characters have come to drink, talk and sing. The Homeric parallel behind the chapter is, of course, the Siren pass in *The Odyssey*: the strait of water skirted by beasts that sing so beautifully that they lure sailors from their course to destruction on the rocks. Odysseus can only avoid his fate by tying himself to the mast while his oarsmen continue on, their ears plugged with wax. There are many ways in which the chapter reproduces elements of this scene, not least the emotional pull of the singing that takes place in the bar. There is also present throughout the chapter, a strong focus on what has become (since no earlier than the Nineteenth Century) the most common interpretation of the Sirens story, that of illicit sexual temptation and seduction. Yet, in 'Sirens', the most conspicuous seduction is that of the Penelope figure, Molly, rather than of the hero. Though never appearing in the scene as such, she is on Bloom's mind, as he knows that she will be meeting her lover. Bloom does have his own moment of long distance infidelity, writing a forlorn and emotional letter to Martha Clifford, a woman who has answered his newspaper advertisement, but this is more an act of desperation than of temptation.

A less obvious but I think pertinent way of making a link between text and meta-text in the chapter would be to view the siren pass as a kind of communicative channel. Just as *Odysseus'* passage homeward is complicated by a strange attractor, a sound pulling him away from his targeted destination, a message can be similarly disrupted by noise on the line. For Bloom, the noises that he hears around him, the noises that he conjures in his auditory

imagination and the noises that he at times produces, preside over his sense of connection and communion with the social world in which he is placed.

However it is equally possible to see the noise that features in the text as affecting the passage and process of the chapter's own communication to the reader. For the chapter is the first in the book in which the language used to describe it starts to veer seriously from the course transparent communication. The siren pass, in this view, can be seen as a channel of communication between the world depicted in the book and the reader, one in which the sirens-noise on the line diverts, but by no means destroys, the message being put across.

The analogy between the siren's pass and the channel of communication is one suggested in Michel Serres' 1985 book *The Five Senses*. The Siren voice is, for Serres, that inassimilable portion of reality that resists its assimilation into language and information. As he states in his 'Platonic dialogue' essay: 'In order for dialogue to be possible, one must close one's eyes and cover one's ears to the song and the beauty of the sirens'. 81 Yet communication also depends upon these voices. Just as communication is thwarted by the corrupting siren, it is also made impossible in a channel without noise. Blocking one's ears to these voices creates the all-too-facile communicative system of Leibniz, a system in which, as we saw in discussing Eliot, all interaction between communicants is merely the running of one's own inherited God-ordained programme.

Before reaching the vile straits, God-Ulysses has already dictated everything that will follow to his monad-sailors. Thus the helmsmen on our ships blindly follow the course dictated to them, not the route they can see before them; language, and not the given; the orders given, not the world they perceive.... Ulysses-Leibniz suppresses all noise; hardly surprising, then, that his messages are heard. The monads recite the lesson imprinted on their memory at birth by God; as one they row against the pull of the Sirens, united in deaf solitude⁸²

⁸¹ Michel Serres, 'Platonic Dialogue', in Hermes: Literature, Science, Philosophy, trans. Joshua Hariri (London, Baltimore: Johns Hopkins University Press, 1982), p.70.

⁸² Michel Serres, *The Five Senses: a Philosophy of Mingled Bodies*, trans. Margaret Sankey and Peter Cowley (London: Continuum, 2008), p.125.

In Serres' work *The Parasite*, as I discussed, the Leibnizian system is contrasted with the deafening erruptive white-noise of the Paraclete. But in the later work there is another possibility, somewhere between deadening order and absolute chaos. Odysseus is contrasted instead with another character in Greek mythology that was faced with a ravening noisy destruction but who, instead of blocking it out, faced it down: Orpheus, who it was said could charm the beasts with his music. Music becomes the principle by which a sound can pass through a noisy channel without being destroyed in its passage. Music can survive interference because it is composed of interference. Music, almost by definition, produces its effects by the careful mixing of different sounds together, letting them disrupt each other in productive ways.

Leibniz presupposed a world without noise, his solution required no effort, for him the universal resided with God. But as there is in fact noise, philosophy is obliged to invent a solution bound to Orpheus, just as Leibniz is bound to Ulysses. Before there can be successful meaning and communication — the precondition of logic and language — it must presuppose a music which is victorious over noise, must invent it, must risk composing it, discovering in the process an improbable time. 83

In positing music as victorious over noise, we have not simply arrived back at a world of noiseless order, the pre-established harmony of Leibniz. The victory that music declares over noise is not one of elimination. Music *uses* noise, uses discord, integrating it into itself. Music does not exist in a state of perfect harmony. If it did it wouldn't move at all. Having established a key, tonal music moves by the introduction of auditory elements foreign to it. It modulates from its essence through the appearance of 'accidentals'. It does not operate only according to the precision of the laws of Harmony. It always involves a slight deviation from perfect Harmony.

Seeing music not in contrast to noise, but as way of *using* noise, is useful for an understanding of the way in which Joyce uses noise in the chapter. The strangeness and

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⁸³ Michel Serres, *The Five Senses*, p.126.

relative opacity of the text is due, I believe, to the fact that Joyce is trying to use language to do something that language is unaccustomed to doing and that music is much better at; gathering a diversity of different things together not into the singular identity of a linguistic sign, but into a mixture and mingling of difference.

'Sirens' comes straight after the Wandering Rocks chapter in which the corporate life of the city is presented as the tangle of intertwining trajectories of its separate citizens through the streets. In Sirens we have a similar presentation of Dublin's collective life, only here it is presented as a sum of noises, a collective co-resonance and polyphony. Like *The Waste Land*, the chapter charts the city through picking up noises from it. Just as the Olympian 'eye' from which we view the 'Wandering Rocks' synthesises the disparate movements of the various citizens of Dublin into a complex piece of choreography, the perspective of the 'Sirens', more an ear than an eye, *orchestrates* the citizens into a complex auditory pattern. This pattern is not a static arrangement; sound never can be. It is an ongoing movement composing and decomposing itself as it goes along. This can be seen looking at a description of a group of the men present, all engaged in their own separate activity.

Bloom ungyved his crisscrossed hands and with slack fingers plucked the slender catgut thong. He drew and plucked. It buzz, it twanged. While Goulding talked of Barraclough's voice production, while Tom Kernan, harking back in a retrospective sort of arrangement talked to listening Father Cowley, who played a voluntary, who nodded as he played While big Ben Dollard talked with Simon Dedalus, lighting, who nodded as he smoked, who smoked. (*U*.357)

The men's different postures and noises and activities cannot be grouped together into any one over-arching description of the group as a whole. Each individual is given his own specific description. But all separate descriptions are run together in the same breath. The passage is not quite a list or catalogue separating the men out from each other, for the description cites all their multiple and mingled inter-relations as well. Their communion is not one of sameness, but of a shared moment of simultaneous difference.

The chapter opens with an even more radical medley of different words, sounds and phrases. Shorn of all context that could make them signify properly, we hear them as sounds. The opening contains both words and noises, but also, importantly, a kind of mixture of the two: a half-heard word, a corrupted word, as in the boots' mocking imitation of Miss Kennedy's reprimanding 'impertinent insolence!': 'Imperthnthn thnthnthn'. (*U*.332). Leopold Bloom is introduced into the scene, not quite by his name but as 'Bloo-who' (*U*.331). His name is smudged and made uncertain by a questioning resonance in its enunciation. His identity is put in doubt by the sound that carries it.

Through this auditory environment, Bloom moves alone and feeling lonely, awaiting the hour of his cuckoldry. The noises about him both confirm him in his isolation and, fleetingly, alleviate it; they both mediate his connection to others and corrupt that connection. It is disconnection that Bloom most of all suffers from, a disconnection from Catholic Ireland and a disconnection from his wife. The Siren voices that the scene takes as its Homeric parallel can be seen as figure for this disconnection; alien auditory presences, noises on the line that takes the hero homeward.

Frequently in the Bloomian chapters of *Ulysses*, Molly herself is heard as a scrambler of words, her utterance is a miscommunication of other utterances and inscriptions. In the very first scene in which she appears, she is shown questioning Bloom as to the meaning of the word *metempsychosis*, which she mispronounces as 'met-him-pike-hoses'. Later, Bloom recounts her rendering of a male singer's voice as 'bass-barreltone'. The character of Molly in this way holds together two divergent meanings of the word 'infidelity': the sense of faithfulness to one's spouse and the sense of accuracy of reproduction. The latter of these is in fact much older, but it was given a new lease of life in the terminology of sound reproduction: 'low-fidelity' and 'high-fidelity'. Molly is a low-fidelity lover. And Blazes

Boylan, the figure who has come between her and Bloom, the *third* who turns his connubial company into a crowd, is presented through the noise that he produces: the jaunty 'jingle jangle' which announces his presence, and continues to do so, in reality or in Bloom's imagination, after he has left the bar, turning imperceptibly into the sound of the bed springs that herald Bloom's betrayal. It is a noise that has come between man and wife. At the moment Bloom imagines he is being betrayed, his thoughts and the text itself, erupt in frustrated noise.

Now. Maybe now. Before.

One rapped on a door, one tapped with a knock, did he knock Paul de Kock, with a loud proud knocker, with a cock carracarra cock. Cockcock. (*U*.364)

However, through the musical orchestration of noise, the text suggests a way in which this interference can be transformed into harmonic progression. As Simon Dedalus sings to all assembled, something like this integration without assimilation takes place. As Simon's voice sours through the room, Bloom feels for one moment a sense of the connection he lacked. Exiled from his home, he finds a home away from home.

- CO-OME, THOU LOST ONE! CO-OME, THOU DEAR ONE! Alone. One love. One hope. One comfort me. Martha, chestnote, return!

- COME!

It soared, a bird, it held its flight, a swift pure cry, soar silver orb it leaped serene, speeding, sustained, to come, don't spin it out too long long breath he breath long life, soaring high, high resplendent, aflame, crowned, high in the effulgence symbolistic, high, of the etherial bosom, high, of the high vast irradiation everywhere all soaring all around about the all, the endlessnessnessness ...

- TO ME!

Siopold!

Consumed.

Come. Well sung. All clapped. She ought to. Come. To me, to him, to her, you too, me, us. (U.355-6)

This moment of intimate connection in fact coincides not with the final chord, but with the clapping at the end, the mutual noise making of the assembly. It is an intimacy registered by Bloom in the blending and splicing together of the name of the singer, Simon with his own,

together with the name of the character, Lionel, who sings in the opera: 'Siopold'. They are joined together in the simultaneous mutual interference of their names with each other, joined in one noisy word.

Finnegan's Wake

The splicing of more than one word together into one equivocal noisy word, like the 'Siopold' that marks Bloom's inclusion into the noisy but orchestrated gathering at the Ormond bar, became one of the predominant techniques of Joyce's later work, *Finnegans* Wake. The Wake is quite definitely the noisiest work in all of literature. James A. Connor suggests that this noisiness, in line with Shannon's mathematical principles, increased the informational content and capacity of the Novel itself as a medium:

Here is a work that belongs at the top of Shannon's bell curve, halfway between pure order and pure chaos; constructed and yet constructed in such a way that it packs a certain measure of improbability into every line.84

In Finnegan's Wake, according to Connor, Joyce sets the noisy interferences that he heard on the early European radio back into the older form of the Novel. 'In doing so', Connor states, 'he increased the amount of information that could be passed from one place to another within language. In a very real sense, he reset the linguistic level of entropy.⁸⁵

A sense of noisiness is central to the experience of reading the novel. It is an experience similar to that described by Alice after listening to 'Jabberwocky', a poem written in a similarly distorted version of the English language: 'It seems very pretty... but it's rather hard to understand... Somehow it seems to fill my head with ideas – only don't know exactly

⁸⁴ James A. Connor, 'Radio Free Joyce: Wake Language and the Experience of Radio', James Joyce Quaterly, 30:1 (1993) [pp.825-43], p.826

85 James A. Connor, 'Radio Free Joyce', p.826

what they are!' Alice cannot *quite* make sense of the poem, but she recognises a slight degree of sense making within it. It is a poem written not in English, but in something a bit like it, an approximation to it, an impersonation of English sounds and rhythms. And this seems to me a very good description of 'Wakese' the language that Joyce was to spend the last half of his career tirelessly inventing. Wakese is situated within the vicinity of English, closer to it than to another language, but not quite within its parameters.

It is the 'sort-of-ness' and 'not-quite-ness' of Joyce's text, its approximate quality, that makes Shannon's theory of noise and information vitally relevant to its understanding. For Shannon's statistical understanding of the conditions by which something may be said to inform or to make sense tells us that there is no absolute iron division between sense and nonsense, comprehensible English and the noise that disrupts it. Sense differs from nonsense by degrees. The English language is not a strictly defined set of allowable words and phrases kept from its exterior background by any wall or barrier. It is not a fortress erected to keep out the multitudinous barbarian armies of gibberish. Any sequence of sounds or alphabetical characters can be more or less English. A message admits of differing degrees of what we might call 'englishiness' or 'anglitity'.

That the language of the *Wake* is a form of high-entropy communication has become a critical commonplace and features not only in works of Joyce criticism, but as an illustration in popular science books on Information theory.⁸⁷ But it might be interesting to approach the description of this state from the opposite end of the noise spectrum. Most studies of this kind seek to show how, through a Shannonian process of *increasing* entropy, the text has slid further along the 'x=noise' axis, away from the normal redundancies of proper English. But it is equally possible, I believe, to locate Wakean language by moving in the opposite direction:

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⁸⁶ Lewis Carroll, *Alice's Adventures in Wonderland and Through the Looking-Glass*, (London: Macmillan, 1958) p.156

⁸⁷ See Jeremy Campbell, *Grammatical Man: Information, Entropy and Life* (New York: Simon and Schuster, 1982), p.71-2.

observing a process of increasing redundancy. In looking at that peculiar variety of noise that occurs when the message takes the form of written communication, like a telegraph signal – what we might call typographical noise –, Shannon brilliantly describes a development by which we can observe a smooth and steady approach *upwards*, from absolute noise to comprehensible English, made in clearly traceable, statistically quantifiable stages.

The prior state from which we start is chaos, purely random, absolute typographical white noise. It is the masterwork produced by the famous monkey with a typewriter; what Shannon would call *zero degree English*. Here is an example I have produced in imitation of the monkey:

Freuiv rfukdav srfn ir vfdbhksfwapdmsf rfbjh ebjkrzf fesv rbaps xosnd fhfsk d hefbhre frjkf hmrf rifens ifsnjrfbjkrs hfrsk apwnw delsfenj fre zeo esdbj

The next stage, which Shannon calls 'first degree English', is also random. But here, the letters appear according to their statistical likelihood in English. This is not the work of our familiar simian secretary, but it is the kind of sequence that would appear from a random selection of letters from the bag in a game of scrabble; for any scrabble set has already calibrated the quantities of each letter (and the points accorded to it) in accordance with the likelihood of its appearance in an English word. There are thankfully far more 'E's and 'S's in a scrabble set than there are 'Q's and 'X's. This new arrangement means that a random assortment becomes one degree more likely to produce an English word. Shannon's example goes like this:

Ocro hli rgwr nmielwis eu ll nbnesbya th eei allenhttpa oobttva nah brl.⁸⁸

⁸⁸ Claude E. Shannon and Warren Weaver, *The Mathematical Theory of Communication* (Urbana: University of Illinois Press, 1964), p.43.

The next stage Shannon calls a Second-order approximation. Here it is not simply the frequencies by which each single character appears in English, but the frequencies by which one letter follows another, the frequencies of two letter combinations or 'digrams':

On ie antsoutinys are t inctore st be s deamy achin d ilonasive tucoowe at teasonare fuso tizin andy tobe seace ctisbe. ⁸⁹

Already in Shannon's example, through a slightly modified randomness, we have the short words 'on', 'be', 'are' and 'andy'. Someone has heard, in amongst the din, their name being called.

A Third-order approximation produces letters in accordance with their likelihood of appearing in three letter combinations or 'trigrams'. Shannon's own example again:

In no ist lat whey cratict froure birs grocid pondenome of demonstrures of the reptagin is recoactiona of cre. ⁹⁰

Here, in just three steps, we seem to be already drifting into the borderless territory of the *Wake*, as one drifts off into a dreamy sleep. (Or better, as one enters into the dreamful stage in sleep from the dreamless chaos that precedes it: as our sleep becomes slightly 'wakeful' so to speak). 'Pondenome of demonstures of the reptagin' is quite simply beautiful, and fully worthy of Joyce. Again by chance, or slightly less than pure chance, the short words 'of' and 'the' have appeared. The other words are not English words but they seem to be *on their way* to making sense to an English speaker. In fact, we can hear within certain words a cluster of different words each competing with each other simultaneously. 'Demonstures' holds within it the possibility of 'demons' 'monsters' and perhaps 'demonstrate'. And with this in mind, the 'pondenome' that precedes it, takes on a twinge of 'pandemonium'. The phrase itself is a noisy pandemonium in which demons and monsters demonstrate. What they demonstrate is

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⁸⁹ Shannon and Weaver, *The Mathematical Theory of Communication*, p.43.

⁹⁰ Shannon and Weaver, The Mathematical Theory of Communication, p.43.

the monstrous and mongrel hybridity that the demon-noise, to which Michel Serres alludes in our introduction, creates through his destruction. We hear in each word a plurality of possible words none of which has priority. All contend for our distracted attention. Wakean language is not a third-order approximation to English, nor a fourth or a fifth. But it sounds like it. And if the novel means anything, it does so by virtue of what it *sounds like* more than what it precisely denotes or describes. The slightly less than absolute decay of meaning that Shannon's approximations represent had to have, in some way, come about in Joyce's auditory and linguistic imagination before the novel could be written. Whatever muse it was that sang to Joyce, she did so over a bad line. *Finnegan's Wake* could only grow from this rich bed of vegetative sense.

Wakean analysis trains one in this kind of plural interpretation. *Finnegans Wake* is a work that teaches you how to read it, but it is not an easy-going teacher. Its didactic method is not one of helping the reader along with handy tips and words of encouragement, but of forcing the reader to acquaint herself with the relevant techniques and background information, on pain of utter bewilderment. Indeed, were it not for this rigorous preparatory training regime, we might have serious reason to doubt Connor's claim above that the *Wake* is a text 'that belongs at the top of Shannon's bell curve', and even then it seems fairly suspect. The characterisation of Wakean language as the perfect optimal level of linguistic communication is certainly not one that would be met with assent amongst most of those who have read it, let alone the much larger body of people who have started reading it and promptly given up.

Shannon's theory of communication proved definitively that the apex of his bell-curve must exist, but it was always rather murky about what it would actually look or sound like. This is because the gain in information provided by an increase in informational entropy is necessarily relative to and dependent upon a symmetrical increase in redundancy, an

increase in the prior knowledge that allows it to be comprehended. And such knowledge comes in many shapes and sizes. Redundancy can mean the regularity and predictability contained within the message itself, or knowledge of the code or language being used, or ultimately any general knowledge that might make that message's equivocations easier to parse and place limits on. In the case of *Finnegans Wake*, the knowledge needed is quite simply a panoramic knowledge comparable to Joyce's own. The *Wake does* belong at the top of Shannon's bell-curve, we might say, provided one is already in possession of an encyclopaedic general knowledge, polymathic erudition, Tiresean knowledge of history and fluency in every major European language, not to mention an ultra-nerd's affinity with early twentieth century popular culture.

Even granted anything like this erudition, there are no guarantees. The history of the text's reception is full of instances where literary criticism breaks down into cries of exasperation. Some of the most polymathic of world literati have come aground in confusion against *Finnegans Wake*. Jorge Luis Borges, one of few figures in twentieth century literature comparable to Joyce in his scope of reference and an avid admirer of his work from across the Atlantic, wrote a terse and unhappy review of the novel upon its final publication. (Borges is always terse but rarely this glum).

I have examined it with some bewilderment, have unenthusiastically deciphered nine or ten *Calembours*, and have read the terror-stricken praise in the *NRF* and the *TLS*. The trenchant authors of these accolades claim they have discovered the rules of this complex verbal labyrinth, but they abstain from applying or formulating them; nor do they attempt the analysis of a single line or paragraph... I expect they share my bewilderment.⁹¹

It is highly unlikely that Joyce was aware of Borges' existence. But even before the novel's final publication, as Joyce was releasing the small but steady stream of previews known as

⁹¹ Jorge Luis Borges, 'Joyce's Latest Novel', trans. Eliot Weinberger, in *Selected Non-Fiction* (New York: Penguin, 2000), p.195.

Work in Progress, many of his closest friends and allies were given to similar expressions of bafflement. These figures included Ezra Pound, Joyce's brother Stanislaus and his patron Harriet Shaw Weaver. Samuel Beckett, an unswerving devotee of Joyce's, sought to counter these cries of dismay by gathering together a clique of similarly minded Joyce critics to give what he saw as a fair shake for Work in Progress: his symposium, the title of which was clearly marked with the tincture of the text in question, Our Exagmination round his Factification for Incamination of Work in Progress. But at times, in Beckett's own contribution to the collection, he seems to match the exasperation of Joyce's critics with an exasperation of his own against the common reader for failing to live up to the required standard of learning: 'If you don't understand it Ladies and Gentlemen, it is because you are too decadent to receive it...' 92

All this ongoing criticism of the text while it was still in production allowed Joyce the possibility of a cryptic form of dialogue with his critics within the final draft of the book. ⁹³ Those who saw the last seventeen years of Joyce's career as a sad waste of time are given a voice within the text, charitably or deviously, depending on how one interprets it. The endless bickering and sniping that goes on between the two brothers, variously named Shaun and Shem, Mutt and Jute, Butt and Taff, can be seen to echo the fraternal conflicts between the Joyce brothers over James' work. In chapter one of Part III, Shaun presents a letter written by Shem and subjects it to vitriolic condemnation. The letter is perhaps a microcosm of the *Wake* as a whole.

it is not a nice production. It is a pinch of scribble, not worth bottle of cabbis. Overdrawn! Puffedly offal tosh! Besides its auctionable, all about crime and libel! Nothing beyond clerical horrors *et omnibus* to be entered for the foreign as second-class matter. The feullest ever fired since Charley Lucan's. (*FW*.419.31 – 420.5)

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⁹² Samuel Beckett, 'Dante... Bruno. Vico... Joyce' in *Our Exagmination round his Factification for Incamination of Work in Progress* (Norfolk, Connecticut: New Directions, 1962), p.13.

⁹³ I am indebted, for these insights, to the work of my supervisor, Steven Connor, on this topic. See Steven Connor, *James Joyce* (Plymouth: Northcote House Publishers, 1996), p.80.

The inclusion of these voices of criticism does not act in any way as a corrective to the noisy self-equivocations of the work. Instead, the protest shares in the very condition it protests against. The criticism is engulfed by the corrupting process as any noise raised against noise inevitably will.

However, despite the immense difficulties posed for anyone trying to find a univocal message within all this noise, or even a set of distinct and easily separable messages, we can at least gain some insight from the text into the workings and the origins of the noise itself. For throughout *Finnegans Wake*, the general noisiness *of* the text concretizes down to into a particular source of noise *within* the text. *Finnegans Wake* is not simply a large heterogeneous compilation of different discourses, genres and styles. It is also a large heterogeneous compilation of different *channels* for the transmission of those discourses and each channel comes with its own type of interference.

Perhaps the most obvious is that suggested by James A. Connor at the outset of the subchapter: the radio and broadcast and communication technologies more generally. For Joyce in exile, radio was the only way he could be sure of hearing the tones and idiosyncrasies of Irish speech that all his work relies upon so crucially. But he also became fascinated by the way in which these voices were distorted in their line of passage, with the noises that intervened and in particular the effect of one signal interfering with another, splicing together two messages simultaneously. He found innumerable ways to allude to the techniques and experience of listening to the radio in the *Wake*. These references are concentrated within Part III chapter 2, taking place in the family home where HCE and his wife sleep and the pub where he is publican. The mysterious but ubiquitous Four Old Men stand in vigil over HCE's sleeping body, on or *as* the four posts of the bed. They are kitted up with state-of-the-art radio technology, connected by a 'tolvtobular high fidelity daildialler, as

modern as tomorrow afternoon' (FW 309.14-15) 'supershielded umbrella antennas... for dis tance getting... capable of capturing skybuddies, harbour craft emittences, key clickings, vaticum cleaners, due to woman formed mobile or man made static and bawling the whowle hamshack and wobble' (FW 309.17-22). By means of this technology, we might imagine, the Four Old Men receive and/or transmit the dream that the 'man made static' (i.e. man at rest in sleep) is dreaming and which the entire novel might be. 'Man made static' is both the origin, the recipient, the medium and the interference of this dream. It hardly needs to be said, also, that the language itself, like so much of Wakese, is a product of the interferences it describes: 'Vatican' has interfered with 'vacuum' to make 'vaticum'; 'howl' has mingled with 'whole' to make 'whowle'.

Most of the chapter is made up of a series of radio and television broadcasts transmitted, apparently, across the space of the pub. We recognise weather reports, horse-racing commentary, the shipping forecast and a TV sermon, the channel jumping wildly between all of them. Also intermixed with these is the kind of general gossip concerning HCE, his foibles and fables, that preoccupies so much of the rest of the novel. It is difficult to tell exactly whether a lot of this is being broadcast by the radio or is part of the conversation amongst the patrons of the pub over which the radio is broadcast. But the signal is just as vulnerable to this type of interference as another. Out in the open, sound is just as likely to come up against competing signals. The confusion between broadcast and local conversation is perhaps nothing more than their mutual interference of each other.

It is not only technologically mediated experience that provides the source of auditory interferences. In what is perhaps the most famous passage in the book, the one Joyce gave at public readings known as the 'Anna Livia Plurabelle' section, two washerwomen are presented sitting gossiping to each other about the characters in the book. They are situated, as critical convention traditionally has it, on opposite banks of the river. As they speak, the

noise of the river between them floods the very words which they speak. The river worms its way into the dialogue both in the form of its noises and in the names of famous rivers which appear and reappear amidst the confluence. 'Well you know or don't you kennet' puns on the name of the Kennet river in England. (FW.213.11)⁹⁴ The words with which they speak instead of losing meaning through the noise, become over burdened with significance. One phrase 'Allalivial, Allalluvial!' seems to contain within it the name 'Anna Livia'; the Spanish 'la luvia' meaning 'the rain'; the adjective 'alluvial' referring to flood and in particular the flood of Genesis; the Dublin cockle merchant's street cry 'All alive – o!'; and perhaps an 'Allelujah' for good measure. As the passage progresses, the women continually and increasingly mishear each other as the noise of the river gets between them and invades upon their utterance. The women, it is suggested, are moving further apart as the banks diverge towards the sea. At the end of the passage, as night falls, they begin to merge completely with their environment as one becomes a stone and the other an elm, echoing the names of the characters Shaun and Shem.

Can't hear with the waters of. The chittering waters of. Flittering bats, fieldmice bawk talk. Ho! Are you not gone ahome? What Thom Malone? Can't hear with the bawks of bats, all them liffeying waters of. Ho, talk save us! My foos won't moos. I feel old as yonder elm. A tale told of Shaun or Shem? All Livia's daughter-sons. Dark hawks hear us. Night! Night! My ho head halls. I feel as heavy as yonder stone. Tell me of John or Shaun. Who were Shem and Shaun the living sons or daughters of? Tell me, tell me, tell me elm! Night night! Tellmetale of stem or stone. Beside the rivering waters of, hitherandthithering waters of. Night! (*FW*.215.-6)

This is perhaps a kind of programmatic passage, one that explains the operations of the Novel as a whole. The novel progresses by way of misunderstanding, produces itself continually by a repeated mishearing of itself, or as Joyce would put it 'intermisunderstanding' between the

⁹⁴ James Joyce, *Finnegans Wake* (London: Penguin, 2000), p.213. All subsequent references to this edition with page and line numbers given in the main text. Line numbers refer to the original rather than my transcription.

multiple characters of the tale. The task of interpreting the *Wake* is not one of passing through this noise to get at a truth behind it, but precisely of listening to the noise itself.

Even without the noise of the waters, the very nature of their discussion bespeaks of noisy distortion: gossip is an inherently noisy business. The word 'noise', up until the nineteenth century, carried a sense of 'common talk', 'rumour', 'report' or 'slander'. 'Rumour' itself comes from a middle-French word meaning noise or din (in particular the noise of a marching army). To these connections already implicit within the standard form of the language, Joyce adds his own. He speaks of rumours 'blurtingly bruited abroad by certain wisecrackers.'(*FW*.33.15-16) 'Bruited' comes from the French word *bruit* meaning 'noise', but if spoken with the original French pronunciation it can sound like 'breeded', a word usually reserved for the propagation of the less venerable forms of life. The spread of gossip starts to sound like the spread of contagion.

Frederic Jameson makes some very curious comments regarding the role of gossip in *Ulysses*, an examination of which might be useful to a study of the later novel. The extrinsic and arbitrary Homeric structure of *Ulysses*, he states, is the necessary response to a world in which 'the older traditional narrative unities have disappeared, destroyed in the process of universal fragmentation.' However, *Ulysses* contains within it a type of communication that can counteract this process, a means of reclaiming the knowledge of the community, a process that Jameson calls a *dereification*:

[There is] a kind of speech which is neither uniquely private, nor forbiddingly standardised in an impersonal public form, a type of discourse in which the same, in which repetition, is transmitted again and again through a host of eventful variations, each of which has its own value. That discourse is called gossip: ...it is by means of gossip and through the form of the anecdote that the dimensions of city life are maintained within humane limits and that the unity of city life is affirmed and celebrated. 96

⁹⁵ Frederic Jameson, 'Ulysses in History', in *James Joyce and Modern Literature*, eds. W.J. McCormack and Alistair Stead (London: Routledge & Keagan Paul, 1982), p.131

⁹⁶ Frederic Jameson, 'Ulysses in History', p.133.

This is not gossip as I know it. One can almost hear the citizen of Dublin chuckle as Jameson, without it seems a hint of irony, talks of the 'host of eventful variations' to which an original story becomes subject. For the 'eventful variations' on an original story in *Finnegans Wake* overwhelm the story itself. Far from enacting a binding redemption from 'universal fragmentation', gossip performs its own type of universal fragmentation.

The radio's power of dissemination was only ever an amplification of the power of dissemination already contained in the inherent pre-technological communicative networks of the community. As Janine Utell puts it: 'The universal transmission of radio in Part II [is] itself a new wrinkle in the oral transmission of gossip and stories.' The contagious spreading of messages in the *Wake* can be seen shortly after HCE's encounter with the cad, the event around which much if not most of the gossip in the book circles.

Our cad's bit of strife... with a quick ear for spittoons (as the aftertale hath it) glaned up as usual with dumbestic husbandry... but, slipping the clav in her claw, broke of the matter among a hundred and eleven others in her usual curtsey (how faint these first vhespers womanly are, a secret pispigliando, amad the lavurdy den of their manfolker!) the next night nudge one as was Hegesippus over a hup a 'chee... to her particular reverend, the director, whom she had been meaning in her mind primarily to speak with (hosch, intra! jist a timblespoon!) trusting, between cuppled lips and annie lawrie promises... that the gossiple so delivered in his epistolear, buried teatoastally in their Irish stew would go no further than his jesuit's cloth...(FW.38.9-24)

However, it is not simply the speed and breadth of transmission that makes the everyday oral discourse of the community so much like the technological channels of the radio and television. It is the interference of the message along its line of passage. As the washerwomen tell us, 'every telling has a taling and that's the he and the she of it': every articulation of the item of gossip fictionalises it slightly. (*FW*.213.12) And this 'taling' becomes even more problematic when 'taling' becomes 'retaling' as it is by the 'scandalmunkers' (*FW*.95.34) and

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⁹⁷ Janine M. Utell, 'Unfacts and Evidencegivers: Rumour, Reputation and History in *Finnegans Wake'*, *James Joyce Quarterly*, 41:4, (2004), p.693

'queer Sir Rumoury' (*FW*.96.7) in Part I Chapter 4. The chain of hearsay along which the stories pass is a noisy channel, each member of which is both the connection of and the agent of interference, each member of which adds his or her own inflection, his or her own corrupting influence. The result is not an absolute transformation in which the anecdote is born anew at every point in its journey. The process is more one of deformation: every teller, or 'taler' leaves his mark on the process making the end result even more equivocal and open to interpretation. Every telling tells one less and more at the same time. The rumours are thus a multi-authored work as any rumour, having reached the status of rumour, will inevitably be. But these different authors do not share out the task of articulation evenly. They rather speak through each other, or across each other, each interfering with the other's words.

In this way, all the noisings of the multitudes concerning the mysterious letter, found under a midden heap at the beginning of the book, are in some way reconstructing the conditions of that very midden heap: they bury the true contents of the letter under an ever larger pile of disinformation whereupon it is subject to decay.

However, upon actual inspection, the letter reveals itself to share in the condition of the talk surrounding it. In the long interpretation of the letter given after ALP's 'mamafesta', the report concludes that it too is a multi-authored document. 'Closer inspection of the bordereau will reveal a multiplicity of personalities inflicted on the documents or document...' (FW.107.23-5) But within the same page, the report seems to change its mind on this. Or rather, the conflicting plurality disintegrates to such an extent that it loses its sense of being constituted of many discrete voices and becomes one noisy identity, 'a single-minded supercrowd' as it is put elsewhere in the book. (FW.42.22)

In fact, under the closed eyes of the inspectors the traits featuring the *chiaroscuro* coalesce, their contrarieties eliminated, in one stable somebody similarly as by the providential warring of heartshaker with housebreaker and of dramdrinker against freethinker our social something bowls along bumpily, experiencing a jolting series of prearranged disappointments, down the long lane of (it's as semper as

oxhousehumper!) generations, more generations and still more generations. (*FW*.107.28-34)

This comparison between the different voices of the letter and the different identities of the social body through time is important. For the noisy channel of word of mouth applies equally to the oral history in which the *Wake* couches itself. Gossip and history are very hard to distinguish in *Finnegan's wake*. Janine Utell states that: 'for Joyce, the line between gossip and history is necessarily blurred because they are different aspects of the same thing.' Oral history is simply gossip spread through time as opposed to residing in one place at one time. 'The fall of a once wallstrait oldparr is retaled early in bed and later on life down through all Christian minstrelsy', as it says in the book's opening page. The stories become subject to the same decay.

And yet, a decayed and corrupted message from the past is strangely appropriate if one believes that the past existed in a chaotic or 'fallen' state. The historical schema of Giambattista Vico that forms the backbone of *Finnegan's Wake* (or would do, if this sprawling text could ever stand up straight) states that the beginnings and the end of history are constituted by chaos in a cycle of rise and fall, *corso* and *ricorso*. The process of increasing noise and unreliability through which the past reaches the present gives it a paradoxical kind of fidelity. Similarly the even greater doubt and obscurity into which we look into the future becomes an accurate portrait of a future characterised by chaos. For chaos is nothing more than the concrete manifestation of doubt. A chaotic state, as Shannon and even the earlier theorists of thermodynamic and entropy will tell you, is simply one that we know less about, one that we are less able to describe. Vico's *ricorso*, the descent into a new disorder that he prophesised, was characterised less by savagery, murder etc. than by *doubt*

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⁹⁸ Janine M. Utell. 'Unfacts and Evidencegivers', p.690.

and scepticism. It was a 'barbarie della reflessione' a 'barbarity of reflection', nurtured in the academies at the heart of civilisation. Noise is the phenomenal manifestation of that doubt.

The gossiping washerwomen could be said to be moving further and further towards this state. One possible interpretation for their increasing inability to hear each other is that they are moving further down the river, nearer to the mouth of the sea and thus further apart and with a greater chaos and tumult between them. The river, like history, and like the messages sent across it, moves from predictability to unpredictability, from a steady unidirectional flow to a state of greater hithering and thithering until it reaches the sea where all directions intermingle: the sea's grand *ricorso*.

This journey out to sea and down through history is one which the character of Juan in Part III chapter 2 positively welcomes, as he prepares to flow down river in a barrel. He describes himself, like the washerwomen, as listening to signals over a noisy channel, 'peeking into the focus and pecking at thumbnail reveries, pricking up ears to my phono on the ground and picking up airs from th'other over th'ether...'. He finally bids a fond farewell to his sister Issy.

it is historically the most glorious mission, secret or profund, through all the annals of our— as you so often term her — efferfreshpainted livy, in beautific repose, upon the silence of the dead, from pharoph the nextfirst down to ramescheckles the last bust thing. The Vico road goes round and round to meet where terms begin. Still onappealed to by the cycles and unappalled by the recoursers we feel all serene, never you fret, as regards our dutyful cask. (FW.452.8-24)

Joyce's last book enacts the *ricorso* that it describes. It takes the reader down river to a point where the predictable course of probabilities by which English letters and words follow each other do not apply. This can feel to many like drowning. Or it can feel to others like the freedom that Juan feels as he waves goodbye.

Chapter Four: Dazzle - Literature and the Visual Arts

High on Hollywood Hill in Los Angeles, the Griffith Observatory has taken on something of the tinselly showiness of its hometown. While enduring quietly as a centre of secondary research, this function has been well and truly relegated to second place by its status as a popular tourist attraction. And its appeal as such, one might suspect, is now less due to the opportunity it offers for contemplation of the dazzling firmament above, than for that of the dazzling firmament below, down in the Los Angeles basin where the city radiates a vivid display of light and smog in all directions. The heavens come a poor second to the earth in their capacity to attract attention. And this in a town where the ability to attract attention is everything, and second place is last. In fact, Los Angeles has made the stars of the night sky all but impossible to see. The terrestrial galaxy of LA has for a long time now reduced the Griffith's capacity for primary astronomical investigation to an absolute zero; it is simply impossible to see past the impenetrable glare of the institution's immediate environment. Observatories all across the developed world tell the same story. Astronomers have now very largely become a sect of desert dwellers. Like the early Christian Desert Fathers, they have taken to seeking out barren landscapes, far from the distracting dazzle of human collective life, to maintain undisturbed, their lonely communion with the heavens.

'Light pollution' as it has come to be known stands as one example of a fact that was always undeniable and yet endlessly awkward in its implications: the fact that radiant light – so ancient and established a metaphor for the all-illuminating revelation of Truth itself: the God, the Good, the Big Idea – has an annoying capacity to obscure. Light can pollute vision, disintegrate the image. Light, raised in intensity beyond a certain threshold becomes not the source of vision but the corruption of the visible, not the revelation of the ideal, but the interfering noise in its transmission.

Light always, like sound, radiates out from its object-source in all directions. We recognise this as a scientific fact and yet to *see* this as such is to fail to see properly. Light, in functional vision, is actually itself invisible. Functioning sight demands that we see the image simply *as* its object; it is founded on the principle – strictly speaking an illusion – that light and colour, the visible aspect of the object, do not depart from it, but rather cling faithfully to its surface. Once this principle is relaxed the 'reality effect' of the fixed and focussed image begins to disintegrate, leading towards a state of dazzle, or what we might call *cacoscopy*. Dazzle acts as a barrier between the sensation and the knowledge of the things sensed.

In the preceding chapters we found that noise could be both an affliction and a vital creative principle; the artists, thinkers and citizens of the nineteenth and early twentieth centuries struggled against noise, but in certain instances also welcomed, celebrated and even deified it. We will, in the following chapters, be making similar claims about modernist attitudes to light. But our emphasis will necessarily be different; for Light has never been short of celebration and deification. Some of the first Gods known to history were sun-gods and an association and even identification of light with god remains constant throughout Jewish and Christian tradition, and appears in innumerable instances within classical literature. Our emphasis then, will be on a different potential within the dazzling image, on light's capacity to corrupt; the apparition of light as a form of corrupted vision, the decay of sight. There was over the course of the nineteenth and twentieth century, a certain subtle revaluation of light. As I hope to show, the period witnessed a great many diverse salutations to the power of light, both the ancient lights of the heavens and their newer technological supplements and substitutes; but even as this power was celebrated, it was celebrated as a potentially destructive, liberating power: the power to disorder and reorder.

This of course has grave implications for the ancient identification of light with eternal divine truth and perfection. The modernist revaluation of light that I wish to draw out

in this chapter very often took the form of taking this metaphor and turning it against itself, turning the tenor against the vehicle. The German theorist Hans Blumberg made a career and a new quasi-discipline out of the study of the most stable and persistent metaphors by which we encode and exemplify our central philosophical concepts. Certain metaphors within philosophy achieve a status beyond that of a simple and dispensable example or turn of phrase and take on an active role in shaping the argument itself. His 'metaphorology' of light, offers a set of differing uses to which the concept of light can be put in philosophy.

Light can be a directed beam, a guiding beacon in the dark, an advancing dethronement of darkness, but also a dazzling superabundance, as well as an indefinite, omnipresent brightness containing all: the letting-appear that does not itself appear, the inaccessible accessibility of things. ⁹⁹

Blumberg's list is given as a quick preliminary summary. He ticks off the different functions rapidly without really pausing to consider how they contradict each other. For it is exactly the notion of light as a 'dazzling superabundance' that renders doubtful its status as the 'inaccessible accessibility of things.' It is precisely when light goes beyond the merely adequate and sufficient and becomes a superabundant excess that it bars the accessibility of things and becomes accessible in itself. It has been the most persistent promise of philosophy to give us access to this inaccessible light, to *make* it appear. And in appearing, the things it would illuminate begin to disappear. As we perceive the medium of our perception we lose sight of any individual percept by itself. A discussion of light's status within philosophy requires a 'metaphorology' not because of its indispensability to the truth that it is being made to mediate, but because of its propensity to disrupt and defect against it. Light as a metaphor for truth was always destined to turn upon that which it tried to illustrate; the vehicle would always drive off without the tenor.

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⁹⁹ Hans Blumberg, 'Light as a Metaphor for Truth', in *Modernity and the Hegemony of Vision*, ed. David Michael Levin (London: University of California Press, 1993), p.31.

Thus, light's power to corrupt goes beyond a mere visual corruption and starts to affect the divine or transcendental truth that light was intended to embody. Dazzle, or Cacoscopy, will be studied as operating at three distinct but overlapping levels: the visual, the rational and the moral. At a basic level, dazzling light corrupts the visual picture, mingling and muddying the field of vision. Like background noise, it swallows up individual items into one noisy totality. As I will show, this played an important part in the development of modernist painting and the visual arts. But the corruption of sight leads inevitably towards a sense of the corruption of rational order in general. The sense of sight has persistently been thought of as the highest or noblest of the senses, the mode of perception closest to conception, the one most easily appropriated to thought and comprehension. If, as Serres asserts in a travesty of this implied ranking of sense and thought, the senses are enslaved to and tyrannised by the categories of language and conception, then sight clearly takes on the role of house-negro or *Judenrat*. To see under normal circumstances, that is, to see properly, is to have already parsed and sectioned reality. The field of vision (at least in contrast to the spaces intimated by other senses) even before it has been processed properly into information, is already a kind of primitive tabulation or taxonomy where clearly identifiable items are laid out and articulated side by side, ready to be labelled. The inclusion of the source of light within the visual picture confounds this intimate bond. The dazzling of the eye becomes a dazzling of the mind.

Finally, this confounding of rationality brings with it an associated sense of a breakdown in moral and civic order: light at a dazzling intensity pierces through the regulations governing the modern individual and the modern city.

I will return to the noisy light-pollution of the nocturnal city. But first I want to look at the less obvious corrupting effects of daylight.

Daylight

The history of the visual arts in Europe over the course of the nineteenth century feature as one of their main currents an increasing interest in light as such over and above the objects that light brought to light. The foundational figure in this regard is undoubtedly J. M. W. Turner. Turner was the first but not the last nineteenth century painter to make this reprioritisation. For this he earned the title, reattributed later to the Impressionists, of 'Painter of Light.' During his life, this became more than simply an aesthetic preference. He was, according to John Ruskin, 'a sun worshiper of the old breed' putting modern man back in touch with pagan heliolatry. His last words were reported to have been 'The Sun is God'. He was found dead on the morning of December the 19th 1851, slumped on the floor, having followed the last glimpse of sunlight coming through the window as it moved across the room.

Yet despite this final deification, sunlight, as it is presented in his oil paintings, is never entirely allowed any degree of transcendence. The sun is rarely given its own discrete place in the heavens, standing above and separate from the mundane sphere that it shines on. It is instead endlessly dispersed, scattered and refracted through the noisy mediation of mist and smoke. Graham Reynolds has pointed out that 'The Sun Rising through Vapour', the title of a painting he exhibited in 1807, could easily be the name of half his works.¹⁰¹

¹⁰⁰ John Ruskin, *Fors Clavigera: Letters to the Workmen and Labourers of Great Britain*, vol.4, ed. Dinah Birch (Edinburgh: Edinburgh University Press, 2000), p.194.

Graham Reynolds, *Turner* (London: Thames and Hudson, 1969), p.12.

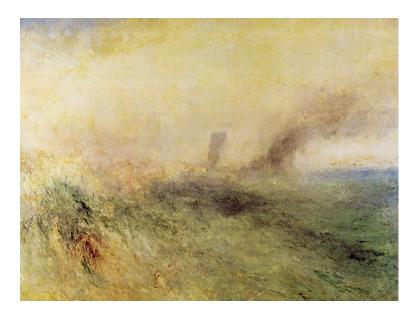


Fig. 2 – J. M. W. Turner, Seascape Folkestone, c.1845



Fig.3 – J. M. W. Turner, Norham Castle, Sunrise, c.1845

The mixture of fog and light that the canvases depict is not a backdrop against which the figures stand out. It rather envelops the figures, making the source of light less something seen than something seen through. There is no clear distinction between heaven and earth. Every point in between the two is saturated by a rich visual plenum. Sunlight is here depicted in a fallen state of imperfection and approximation: a profanation of the Sun-God. Instead of

a sun unapproachably distant and distinct, it is here trapped within the sublunary atmosphere, mingled and muddied with the elements. In fact, we could equally think of the sunlight as itself constituting the polluting element: the agent, rather than the object of the corrupting process. Isaac Newton's optics confounded the ancient and – despite Newton's best efforts – oddly persistent association of whiteness with purity. The white-light of the sun has always been thought of as in some way innocent: light which has yet to be touched by the corrupting stain of colour. It was believed until Newton's time that colour was something superadded to white-light. After Newton white became not an absence of colour but the chromatic collective in its fullest manifestation; colours yoked together in mutual noisy interference of each other, combined together *into* whiteness rather than taken away from it.

Michel Serres writes of the potential that such visual atmospherics have to corrupt not simply sight but any philosophical system that takes light and vision as its central mode for the apprehension of a central and unified truth.

The philosophies about which I have spoken come into play in [an] imaginary world where there is only one system and where this one system is constructed on only one norm or principle... They come into play in an ideal world of light and dark where there is only one exterior and one interior, only one shadow and one light. This imaginary world is on the moon. Without any atmosphere, where a screen separates space into black and white, furnace and glacier, blinding light and opaque night. But the atmosphere, the milieu (the medium) makes light diffuse... In order to have only light, one would have to live at the single-point light source, or the medium would have to be removed creating a vacuum. As soon as the medium intervenes, the ray of light wanders about the world. ¹⁰²

Turner was the single most important precursor to the Impressionists who shared his fascination with the disruptive effects of light. Their technique has been summarised by Keith Roberts as 'the disintegration of form in sunlight... breaking up the forms to be described

¹⁰² Michel Serres, *The Parasite*, trans. Lawrence R. Schehr (Minneapolis: University of Minnesota, 2007), pp.69-70.

into touches of pure colour that only fuse back into what they represent when the canvas is seen from a certain distance'. 103



Fig. 4 – Claude Monet, *Impression*, soleil levant, 1873

The word 'Impressionism', coined as an insult by the critic Louis Leroy to describe Claude Monet's 'Impression, soleil levant', was adopted enthusiastically by the painters themselves. The idea that painting should render an impression of the object, as opposed to what might be thought of as the true reality of that object, has been seen as partaking in a more general movement inwards, a prioritisation of the subjective over the objective. But the subject for the impressionists was not a kind of central intelligence that lay at the ultimate end point of the process of visual registration – sifting, sorting and making sense of the light patterns that it receives. The effect of impressionist painting is really the result of the absence or abeyance of this kind of subject: they posited a type of seer who doesn't know precisely what he sees. In fact, the fog and interference of the pictures effects a fogging of the very distinction between subject and object. The separation between the two is undone through the

¹⁰³ Keith Roberts, *Painters of Light: The World of Impressionism* (Oxford: Phaidon, 1978), pp.11-12.

inclusion within the visual picture of a third, an included middle: not simply subject and object, but also that which goes between the two, the light that mediates them. Just as the painting breaks down the distinction between the figure and its background, it also breaks down the distinction between the viewer and the viewed.

The Impressionist's distinctive practice of painting *en plein air*, getting in amongst the visual ambience of their surroundings, aided this sense of immersivity. The artist, and through him the viewer, no longer stands back and apart from the scene he purveys but rather mingles with it. The Sun-god that Turner worshipped and that presided over the artists who followed him is, like the noisy God of Eliot and Dedalus, a God who can envelop and include everything in His disintegration.

At first glance, the cloudy obscurity of painters like Turner and Monet was everything that the Modernist avant-garde of the early twentieth century were battling against. So many of the movements of the period - Cubsim, Constructivism, Vorticism - sought, in contrast to the washes of paint that the earlier movements had presented, a new style of depiction made of hard edges and solid blocks of colour. The vorticist manifesto in the first edition of the journal Blast cursed the English climate for its indistinct, hazy mediocrity and the type of art that it inspired. The scene it describes could easily be a Turner seascape.

CURSE the flabby sky that can manufacture no snow, but can only drop the sea on us in a drizzle like a poem by Mr. Robert Bridges. CURSE the lazy air that cannot stiffen the back of the SERPENTINE, or put Aquatic steel half way down the MANCHESTER CANAL. 104

The title of the journal, 'Blast', could be seen as referring to the force they invoked to blow this murk and drizzle away from European art. And we might think of 'dazzle' as its appropriate visual equivalent. The concept of dazzle was to have an important role in the

Lewis, Percy Wyndham, et. al., 'Manifesto', in *Blast: Review of the Great English Vortex*, 1 (1914), p.11.

formation of the Vorticist aesthetic and that of other movements. However, the role that dazzle took on was not exactly one of greater clarity and precision. We have an ingrained tendency to think of something that dazzles as standing out; a dazzling object is one that is blatantly and unignorably apparent. But this is not necessarily the case; not, that is, if by 'apparent' we wish to mean *identifiable* as opposed to merely visible. In the naval battles of the First World War artists and admirals co-operated on a plan to use the powers of dazzle precisely to *decrease* the eye's ability to pick out a single identifiable figure from its background.

About half way through the war, the allied naval forces came up with a novel form of camouflage that could be applied to merchant ships at sea and was referred to as 'dazzle-paint'. The plan is usually credited to Lieutenant-Commander Norman Wilkinson who was himself a marine painter before the war, though in his memoirs he states that other similar plans were already being considered when he first suggested it to the naval command. The scheme's intention was, like all camouflage, to break-up the coherence of the figure, using harsh stripes of different coloured paint to create a noisy visual picture behind which the boat could elude the German submarine's targeting capacity. If the paint could not exactly make the ship undetectable, as could the various forms of land-camouflage, it could at least confuse the enemy as to its position, trajectory and outline.



Fig. 5 – A Dazzle-Painted Merchant Ship, Fleet Library at the Rhode Island School of Design

Henry Newbolt, a poet with important links to modernist movements in Britain but who also kept a side-line as a naval historian, described the effect of looking at a dazzle-painted ship.

You look long and hard at this dazzle-ship. She doesn't give you any sensation of being dazzled; but she is, in some queer way, all wrong – her proportions are wrong, she is somehow not herself, not what she ought to be. ¹⁰⁵

The painted ship did not make itself invisible but made its appearance unexpected; it reduced the redundancy needed to overcome noise and make it a recognisable figure.

The scheme also had the added advantage of marshalling the skills of many of Britain's artists, who were at the time lounging uselessly around the Royal Academy, and recruiting them into the war effort. It was as much an aesthetic conception as a purely military one, and the recruitment of artists appealed to a certain martial inclination within the avant-garde movements of the time. (The word 'avant-garde', after all, derives from military terminology.)

The hiring of new artists to design and paint the Dazzle Ships had a precedent in the earlier forms of land camouflage. In France, the chief camoufleur Lucienn-Victor Guirand de

¹⁰⁵ Henry Newbolt, Submarine and Anti-Submarine (London: Longmans, Green and Co., 1918), p.46.

Scévola had intentionally employed artists associated with Cubism to paint artillery. 'In order to deform totally the aspect of the object', he later wrote, 'I had to employ the means that Cubists used to represent it' Picasso was later to take credit for the entire enterprise of military camouflage, saying to Gertrude Stein as they passed a camouflaged military cannon in the street: 'It is we who created that. That is cubism'. As Roy Behrens points out in his Encyclopaedia of Camouflage, the Dazzle Ships were said by many at the time to resemble 'Cubist paintings on a colossal scale'. ¹⁰⁷

The sight of these aesthetic colossi in all the main British ports was met with an excited popular reaction. Wilkinson cites in his memoirs one G. F. Norton who wrote an ode to the new scheme:

Captain Schmidt at the periscope,
You need not fall and faint,
For it's not the vision of drug or dope, but only the dazzle-paint.
And you're done, you're done, my pretty Hun.
You're done in the big blue eye,
By painter-men with a sense of fun,
And their work has just gone by.
Cheero!
A convoy safely by. 108

Back in London, the appeal of dazzle camouflage found expression in high society. Those who were yet to call themselves 'The Bright Young Things' organised one of many themed balls around the concept of naval camouflage. The Dazzle-Ball, as it was known, was held in the Ball-room of the Royal Albert Hall on the evening of March 19th, 1919 and invited its guests to dress up in white and black striped costumes in imitation of the patterning of the ships. The event was a great success and elicited an enraptured review in *The Times*.

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¹⁰⁶ Quoted in: Tim Newark, *Camouflage* (London: Thames and Hudson, 2007), p.72.

¹⁰⁷ Roy Behrens, *Camoupedia: A Compendium of Research on Art, Architecture and Camouflage* (Iowa City: Bobolink, 2009), p.48.

Norman Wilkinson, A Brush with Life (London: Seeley Services & Co., 1969), p.78.

Here it seemed was a token, unmistakable if bizarre, of some of the things which the dark years have achieved, of the breaking of bonds, of the setting free of the spirits which dwell within the form of things. Here was life in motion, the negation of the fixed, a new emancipation of beauty. 109

Here we find a perfect expression of what we might call *the joy of dazzling* and of *being dazzled*. It is not, as in the case of the verse from Norton above, simply a victorious joy in evading the eye of the enemy; the dazzling image is not merely a subterfuge behind which the integral subject can survive intact. The joy that they found in the patterns is rather a positive *identification* with dazzling image. The subject is freed from bondage to a discrete and delimiting visual form and the sense of formality that goes with it. In the dazzled eye of the beholder, the figure is liberated from bondage to the focussed image.

The reaction from within the control centres of the war was slightly more muted. Franklin Roosevelt, then Assistant secretary to the American Navy, though encouraging Wilkinson's efforts, regarded similar plans underway in his own fleet as an exercise in primitive superstition. It was, he said, a form of 'Juju black art bad man no can see'. Towards the end of the war the British Admiralty set up a committee to examine how effective Dazzle painting really was and concluded that there was no evidence to prove that the paint scheme had really bamboozled the enemy in any way. Yet the report nevertheless cautions against doing away with the operation entirely:

In view of the undoubted increase in confidence and morale of officers and crews of the Merchant Marine resulting from this painting... It may be found advisable to continue the system though probably not under present wholesale conditions. ¹¹¹

The exhilarating effect that the patterns had on the home side thus became an end in itself.

But the morale and *esprit de corps* that the patterns aroused were in a way in keeping with the

¹⁰⁹ 'The Dazzle Ball: Symbolism and a Magic Wand', *The Times*, Thursday 20 March, 1919.

¹¹⁰ Wilkinson, A Brush with Life, p.91.

¹¹¹ Ouoted in Newark, Camouflage, p.72.

concept and purpose of camouflage more generally. As Neil Leach has argued in his book on camouflage, any uniform military banner or insignia has a camouflage-like effect as it allows individuals to integrate and lose themselves within a greater collective, blending in with their social background, losing their individual distinction.¹¹²

Given this assessment of the true worth of the Dazzle paint scheme, we might venture to say that this collaboration between the military and the art-world did more for the latter than it really gave back in return. Camouflage and dazzle-paint in particular held an enduring fascination for modernist artists. Long after artists had stopped painting the ships, in the sense of applying paint to them, they were depicting their images on canvas and paper.

The most important figure in this regard was Edward Wadsworth who was a major contributor to the Vorticist collective centred around Wyndham Lewis's journal *Blast*. Early in 1918, he had been sent on a training course to learn the principles and practice of the camouflage technique. In April he was in Avonmouth and Bristol, and by July had been moved to Liverpool where he was a supervisor at the docks and where he remained until the end of the war. Wadsworth was one of Wilkinson's most enthusiastic recruits and the techniques of camouflage painting were much more than a simple diversion from his earlier civilian art-practices. The image of the Dazzle Ships was one to which he returned again and again in his own work.

His most famous depiction of the pattern is in an oil painting, *Dazzle Ships in*Drydock at Liverpool. In this painting, the bow of the ship abuts sharply on the eye of the viewer, overwhelming the canvas. But within the outline of the ship, the lines of black, white and grey that lead out and away from the central upward line mean that we cannot gain a proper visual purchase on the object. It is not that the ship's outline, or any other outline in the painting, is indistinct; it is that the artificial lines of colour take precedence in the eye's

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¹¹² Neil Leach, *Camouflage* (Cambridge, Mass.: MIT Press, 2006).

attention over the line that demarcates the ship as a whole. These painted lines do not confine themselves entirely within the borders of the ship's image but seem to be in illicit continuity with the similarly coloured lines of scaffolding to the side of the ship and with the painted lines of the other ships in the background.

One very curious fact about this painting that makes it almost unique in art history is that Wadsworth was applying his painterly skills to both sides of the art-life divide. He both applied paint to the object in the real world, and applied paint to the canvas to represent it. His artistry is present within and outside the frame of the painting. Thus the clear space that separates art from life, appearance from reality, begins unnervingly to subside. But these two surfaces of application do not act in concord. Their aims are completely different. Wadsworth the artist wishes you to see the ship, Wadsworth the ship-painter wishes you to see a jarred assortment of angular shapes and lines. *Dazzle Ships in Drydock at Liverpool* is not a Cubist or Vorticist work of art. It is a realistic painting of a large-scale, three dimensional Cubist-Vorticist work of art.



Fig. 6 – Edward Wadsworth, Dazzle Ship in Drydock at Liverpool, 1919

More confusing still are the series of woodcuts that Wadsworth produced at around the same time. It is in these works that the Dazzle Ships' intended aim of confounding the eye that beholds them is extended most fully into its graphic representation. There are certain features inherent in the very medium of the woodcut that aid this confusion. The crudity of the medium, its rigidity and immalleablity, mean that there is a relatively smaller scope for the subtle blendings of shade that might make its central figures emerge securely from its background into the appearance of a three-dimensional shape. Woodcuts tend to either produce an entirely flat image with no figure-ground distinction, or an absolute differentiation in which background is simply blanked-out. The Vorticists, with whom Wadsworth was strongly associated while the movement lasted, welcomed this rigorous delimitation, seeing the medium's limitations as its main asset. Wyndham Lewis at least suggested as much in reviewing an exhibition of German woodcuts in the first issue of *Blast*.

The quality of the woodcut is rough and brutal... a surgery of the senses, cutting not scratching... sturdy, cutting through every time to the monotonous wall of space, and intense yet hale: permeated by Eternity, an atmosphere in which only the black core of Life rises and is silhouetted. The black, nervous fluid of existence flows and forms into hard, stagnant masses in this white, luminous body. 113

Lewis, in the same article, praises woodcut images of harbour scenes made by Wadsworth on display in the same gallery. Whether Wadsworth recognised his own work in this description history has not recorded, and chronology dictates in any case that these harbour scenes could not have been his images of Dazzle Ships. But we can say with some confidence that the latter could not be less well described by Lewis here. To say this is not to chastise Lewis in any way but merely to note how Wadsworth pushes the medium against the aesthetic that his movement valued in it.

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¹¹³ Percy Wyndham Lewis, 'On Some German Woodcuts', *Blast: Review of the Great English Vortex*, 1 (1914), p.136.



Fig. 7 – Edward Wadsworth, Dazzle Woodcut 4, c. 1920



Fig. 8 – Edward Wadsworth, Dazzle Woodcut 3, c. 1920

If a 'surgery of the senses' implies a clean removal of the object from the carcass of its surrounding circumstances, Wadsworth depicts a figure that can only inconstantly and through effort be discerned within those surroundings. If Lewis sees the woodcut as getting down to a 'black core of Life', a hard kernel of visual reality, the Dazzle Ships are all shimmering surface, hiding their core integrity behind a subterfuge of appearances. And if Lewis saw the medium as freezing reality into a stagnant eternity, Wadsworth presents us with an image that simply will not stand still. The eye must continally reassert the sense it has made of the picture. The individual ships never keep to their discrete place for long before collapsing back into a flat jumble of stripes.

The visual integrity of each figure is troubled by the unbroken continuity of the lines with their surrounding colours. In *Dazzle Woodcut 3* in particular, the white background of the sky and the foreground that reflects it seem to seep into and become part of the pattern of the ship, as if the sky was leaking into the foreground. And once there, it begins to take on a structure and objecthood of its own, like the famous vase carved out of the space between two silhouetted profiles in the illustrative print devised by psychologist Edgar Rubin some three years before Wadsworth started work on dazzle patterns.

In this way, we can see that Wadsworth's prints exhibit an unexpected congruence with the oil painted seascapes of Turner and Monet. The easily apparent differences in style and technique come to seem like two different routes arriving at the same effect.

Wadsworth's woodcuts of Dazzle Ships allow their central figures the same kind of escape from the delimiting boundaries of the focused image as did the paintings of Turner and Monet. Only here they do not escape through a cloudy, gaseous or particulate dispersal, but through deep, strong rivulets of white. As in these older works the light of the sky becomes a principle of interference. Like them it confuses the distinction between heaven and earth, viewer and object, art and life.

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There is more at stake in the breakdown of the figure-ground distinction in modernism than mere pictorial style. D.H. Lawrence, another 'sun-worshiper of the old breed', believed that it was a fundamental change in the relationship between the human figure and his cosmic background that had brought modern man to his current state of mediocrity. 'Modern', for Lawrence, started quite far back. It was Judaism and thence Christianity that had ruptured mankind's original pagan unity with the rest of the universe.

Perhaps the greatest difference between us and the pagans lies in our different relation to the cosmos. With us, all is personal. Landscape and the sky, these are to us the delicious backdrop to our personal life, and no more. Even the universe of the scientist is little more than an extension of our personality, to us. To the pagan,

landscape and personal background were on the whole indifferent. But the cosmos was a very real thing. Man *lived* with the cosmos, and knew it greater than himself. 114

For Lawrence, the problem of modernity was not that the superhuman background had swamped the human foreground; it was that it hadn't swamped it enough. The problem was Modern man's petty, narcissistic need to stand out against his wider environment rather than accepting it and letting it overwhelm him.

These judgements appear in one of Lawrence's last books, published posthumously, entitled *The Apocalypse*. It is a curious work of exegesis on the last book of the bible, not from any orthodox Christian perspective, but as a kind of springboard for Lawrence's own ideas. Lawrence hated the pious Christian interpretation under which the Book of Revelation had been smothered; but this deadening process, he found, was already at work within the text itself. He believed the writings on the Apocalypse to be (very plausibly) a multi-authored work written and rewritten over many centuries. The final version, written by John of Patmos, was a reworking of texts, motifs and images that derive originally from Pagan sources. And it was this original pagan *Apocalypse* that he sought to liberate from beneath the later revisions. This original kernel within the work was not a set of propositions; it was not contradictory to the Christian interpretations in that sense. For the ancient pagan way of thinking, according to Lawrence, was not in any way reducible to its propositional content. It was instead composed of direct sensual encounters.

We have lost almost entirely the great and intricately developed sensual awareness, or sense-awareness, and sense-knowledge, of the ancients. It was a great depth of knowledge arrived at direct, by instinct and intuition, as we say, not by reason. It was a knowledge based not on words but on images. The abstraction was not into generalisations or into qualities, but into images. (p.91)

¹¹⁴ D. H. Lawrence, *Apocalypse and the Writings on Revelation* (London: Penguin, 1995), p.76. (All subsequent references to this edition with page numbers given in the main text).

Lawrence found in the ancients something of the same primacy of the image that Ezra Pound had earlier seen as a necessity for poetry. 'Go in fear of abstractions.' Pound told budding imagistes. 'Don't use expressions like "dim lands of peace." It mixes an abstraction with the concrete. It comes from a failure to realize that the natural object is already the *adequate* symbol.' Thus, Lawrence's quest to free the individual from the restrictions placed upon him by Christianity was one and the same with the task of freeing the images of the pagans from the dictates of the later exegetes, freeing the vehicles of scripture from the tenors to which they had been assigned.

Of all these images the most enduring is that of the sun. It is an image that, in the writings on the Apocalypse, is closely associated with Christ. He quotes the scriptural description of Christ as he is revealed in his second coming: 'his eyes flashed like fire, his feet glowed like burnished bronze, his voice sounded like many waves... and his face shone like the sun in full strength.' (p.74). But the Christ that is revealed through this imagery is anything but the 'Jesus meek and mild' that parsons have preached in countless Sunday school lessons. 'And what is this Jesus?' Lawrence asks?

It is the Splendid One, almost identical with the Almighty in the visions of Ezekiel and Daniel. It is a vast cosmic lord... his face shines like the sun in full strength, the source of life itself, the dazzler, before whom we fall as if dead. (p.74)

This ancient image of visual power shining through the subsequent accretions of piety, was a manifestation of a primal Will to Power that had been all but suffocated. In a spirit implicitly derived from Nietzsche, Lawrence sees the moral law that dictated Christian love and renunciation as the expression of mass resentment on the part of the many against the strong and vital few. This critique is extended to all modern egalitarian principles, ranging from Democracy to Communism. 'Petty little Bolshevists, every one of us today, we are determined that *no* man shall shine like the sun in full strength, for he would certainly

outshine us' (p.75). Here we can see the correspondence that Lawrence posits between political and social order on the one hand and *visual* order on the other. The dull conformity that he sees in his contemporary surroundings is compared to the field of vision. A democratic society in which everyone has their place, their own identifiable share in the political sphere, is one in which no figure takes up more than his fair share of the eye's spatial distribution. The dazzling object is one that exceeds its own boundaries, that will not conform to focus, will not let itself be delimited by the eye, or by the law.

Lawrence's beliefs fit easily into a tradition of antinomian heresy. It is not religion as such that he objects to, but religious or moral *law;* he characterises his contemporary society as a 'democracy of thou-shalt-not'. The text slowly changes from a work of biblical interpretation to a passionate call to break the egalitarian stranglehold of mediocrity that had been placed on mankind. 'When the will of the people becomes the sum of the weakness of a multitude of weak men it is time to make a break' (p.72). The dazzling power of sunlight is the force that Lawrence wishes to tap in order to break through these restrictions. From this degraded state, he urges 'an escape from this into the Vital Cosmos, to a sun who has a great wild life, and who looks back at us for strength or withering, marvellous as he goes his way' (p.76).

Lawrence calls for a liberation, but it is not really the liberation of the *individual* as such. Freedom for Lawrence doesn't mean personal freedom. If a single individual can outshine the collective, it is only by virtue of his partaking in a much larger order – or rather, a much larger *disorder*: a dazzling corruption of separate identities. The Sun-Christ who presides over this cosmos is not the regular, predictable scientific object we know from cosmology – the 'scientific little luminary, dwindled to a ball of flaming gas' (p.76) as Lawrence calls it – but nor is it the law-bound divine order of the Christian cosmos and the Christian church. The individual's inclusion within this super-individual totality is not a

matter of taking up a single discrete place within it, but of receiving its radiance and reflecting it back in mutual self-abandon.

When I can strip myself of the trash of personal feelings and ideas, and get down to my naked sun-self, then the sun and I can commune by the hour, in blazing interchange, and he gives me life, sun-life, and I send him a little new brightness from the world of the bright blood. (p.77)

In a letter to Bertrand Russell in 1915, he had chided the philosopher for his over-reliance on the power of thought. Lawrence confided that, since the age of twenty, he had become increasingly convinced that alongside the intellectual power of the mind, the mental-consciousness, there existed another kind of consciousness, what he called 'blood-consciousness', a way of knowing that defied rational thought and operated by instinct. It is very clear from the way he describes it that it corresponds very closely to the 'naked sun-self' that he posits in *The Apocalypse* a decade and a half later.

There is the blood-consciousness, with the sexual connection, holding the same relation as the eye, in seeing, holds to the mental consciousness. One lives, knows, and has one's being in the blood, without any reference to nerves and brain. This is one half of life, belonging to the darkness. And the tragedy of this our life, and of your life, is that the mental and nerve consciousness exerts a tyranny over the blood-consciousness and that your will has gone completely over to the mental consciousness... Plato was the same. 115

It is curious, given Lawrence's ascription of the tyrannising mental consciousness to the realm of the *eye* – 'its source or connector' he says elsewhere – that the god presiding over the other half of man's being, should be such a decidedly visual entity as the Sun. But the dazzling power of the Sun is not an activation of the eye, but a thwarting of its analytical powers. Only by disabling this faculty through the sun's blinding optical potency can

¹¹⁵ D. H. Lawrence, *The Letters of D. H. Lawrence – Vol. II – 1913-16*, eds. George. J. Zytaruk and James. T. Boulton (Cambridge: Cambridge University Press, 2002), p.470.

Bertrand Russell and his dreary kind ever reunite themselves with their neglected other halves, if this is possible at all.

The great sun, hates the nervous and personal consciousness in us. As all these modern sunbathers must realise, for they become disintegrated by the very sun that bronzes them. But the sun, like a lion, loves the bright red blood of life, and can give it an infinite enrichment if we know how to receive it. But we don't. We have lost the sun. (p.77)

Finding the sun again was, by the late nineteen-twenties, more than a pursuit of intellectuals like Lawrence. As his reference to 'the modern sunbathers' makes clear, communing with sun was becoming a popular practice at his time of writing. It is sometimes worth reminding ourselves just how novel the simple act of lying in the sun was for a generation still emerging from the cloak of Victorian mores. Robert Mighall has written of the various clarion calls that were being made on the British public to strip off: ranging from the strange and cultish, to the pornographic, to the therapeutic. ¹¹⁶ Of these the last was undoubtedly the most prominent. Centres like Dr. Auguste Rollier's heliotherapy centre in the Swiss Alps where the 'malurbanised millions, blackened and blighted in slums and smoke' could come and studiously sun themselves.

This type of treatment provides the starting point for Lawrence's most direct adaptation of his ideas into literary form: a short story simply called 'Sun'. It is the story of Juliet, a young mother afflicted by an unhappy marriage and a mysterious illness who is advised by her doctor to give herself a course in heliotherapy abroad in Greece. Sceptical at first, she starts warily. Her first encounter is described as a visual one. Still bound to the law of the eye, she meets the eye of the sun in a blinding exchange of glances.

She slid off all her clothes and lay naked in the sun, and as she lay she looked up through her fingers at the central sun, his blue pulsing roundness, whose outer edges

¹¹⁶ Robert Mighall, *The Sun: One Man's Search for Happiness* (London: John Murray, 2008).

streamed brilliance. Pulsing with marvellous blue, and alive, and streaming white fire from his edges, the sun! ...So, dazed, she went home, only half-seeing, sun-blinded and sun-dazed. And her blindness was like a richness to her, and her dim, warm, heavy half-consciousness was like wealth. 117

Having confounded and disabled the eye, she is, in Lawrence's terms, able to commune with her blood-consciousness. She soon finds, under the sun's influence, more than simply physical restitution, a psychological and spiritual self-transformation.

It was not just taking sunbaths. It was much more than that. Something deep inside her unfolded and relaxed. By some mysterious power inside her, deeper than her known consciousness and will, she was put into connection with the sun, and the stream flowed of itself, from her womb. She herself, her conscious self, was secondary, a secondary person, almost an onlooker. The true Juliet was this dark flow from her deep body to the sun. 118

This reawakening of the blood brings with it, predictably for Lawrence, a sexual reawakening. Lawrence, despite the Nietzschean flavour of his views, shared none of the German's shrill and vivid misogyny. In *Apocalypse*, he is contemptuous of the later apocalyptists' identification of the 'woman clothed in the sun' as a prostitute. She is for Lawrence a figure complementary to the dazzling Christ figure, whose sexual power matches his own strength. We can see the transformed sun-kissed Juliet as a secularisation and modernisation of this archetype. After an encounter with a peasant boy, her imagination is aroused and they exchange glances on a daily basis. She recognises in him something of the same elemental solar energy. And yet this attraction is never consummated. Very little actually happens in the story apart from her daily solar interchange and the growing heat of the advancing summer. As Mighall phrases it in another context, this is not so much sex *in* the sun as sex *with* the sun. 'With her knowledge of the sun, and her conviction that the sun knew her, in the cosmic carnal sense of the word, came over her a feeling of detachment from

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 ¹¹⁷ D. H. Lawrence, 'Sun' in *The Complete Short Stories* (Pickering: Blackthorn Press, 2007), pp.459-60.
 118 D. H. Lawrence, 'Sun' p.462.

people.' Her relationship with the peasant is still conducted through the studied, analytical faculties of the eye. She watches him, studies him, makes guesses and comes to conclusions. But despite this detachment, they are united by their shared partaking in the Sun's fierce but benevolent radiation. Their communion is not fundamentally a one-to-one interaction but a mutual inclusion within the noisy spectacle of the sun that gathers and mediates their congress.

Nightlight



Fig. 9 – Giacomo Balla, Street Light, c.1910-11

In Giacomo Balla's painting 'Street Light' we see the bright image of a street lamp disintegrating out into a swarm of luminous flecks. Behind this self-exceeding radiant noise, the moon persists, partially obscured. In contrast to the blinding whiteness of the orb, the

¹¹⁹ D. H. Lawrence, 'Sun', p.461.

moon has taken on an old, faded, yellowish hue. The illuminating power of the street-lamp was part of in the futurist doctrine that Marinetti was to call *modernolatria*. The technologies of illumination were always among those privileged technologies that managed to be, more than simply a feature of modernity, a symbol of it. The new technologies were displayed triumphantly at exhibitions and displays of street-lighting and vividly illuminated shop windows became popular tourist attractions. But the Futurist veneration of street-light was not this conventional acclaim given to electric light's illuminating power, but a veneration of precisely its power to obscure.

The painting was inspired by the rallying cry that became the title of Marinetti's essay launched two months after the first manifesto: 'Let's murder the moonshine!'. For the futurists, blotting out the heavenly bodies with their own man-made power represented the ultimate victory of the modern over the ancient, the dynamic masculine 'now' over the weakly abiding, feminine 'then'. But more than this, it was a victory of the temporal as such over the timeless, a desecration of what Marinetti called the 'mystical cult of the ideal': not the achievement of a perfect vision or vision of perfection, but its final destruction.

A cry went up in the airy solitude of the high plains: "Let's murder the moonshine!"

Some ran to nearby cascades; gigantic wheels were raised. And turbines transformed the rushing waters into magnetic pulses that rushed up wires, up high poles, up to shining humming globes.

So it was that three hundred electric moons cancelled with their rays of blinding mineral whiteness, the ancient green queen of loves. 120

As against the still and timeless light of the heavens, the Futurists posited a light generated through the energies of endless motion – an ideal motion and a setting into motion of the once timeless ideal.

¹²⁰ F. T. Marinetti, 'Let's Murder the Moonshine' (1909), in *Let's Murder the Moonshine: Selected Writings*, ed. and trans. R. W. Flint (Los Angeles: Sun and Moon Press, 1991), p.59.

This association of the technologies of light with rapid and disorientating change was tied in with the rapid changes to which those technologies had become subject in the preceding period. The dazzling spectacle of light technology was matched by the dazzling rate of its innovation. Andreas Bluhm and Louise Lippincott, in their extended and developed catalogue to the exhibition on the history of light given in Amsterdam, have conjectured that a European city dweller who had reached the age of seventy by 1900 had been witness to the euphoric beginnings of gas-light as a child, and then as an adult to the widespread use of the kerosene lamp, the arc-lamp and then finally the invention of the light-bulb. 121 Each of these innovations thought of itself as the ultimate; each had, by the time of its supersession, come to be seen as dubitable and untrustworthy. It is a rapidity of innovation and redundancy comparable to that of the information technologies in our own day. The history of the city throughout the century leading up to the modernist period can be seen as a process of the city's ever increasing exposure to itself. Darkness and obscurity were driven back as the nocturnal city became the object of ever heightening visibility. The electrification of houselighting in St Petersburg, according to witnesses, brought with it the ability to see a fly on the wall at forty paces from the light source. 122

Yet this increasing exposure was always accompanied in the collective imagination by a suspicious sense of the potentials for *over*-exposure. Paul Virilio speaks of a modern 'chronoscopic' conception of time which replaces the older means of dividing temporal succession into past, present and future, with a time that progresses through the stages of 'underexposed – exposed – overexposed'. 123 This will become important later in the next chapter where we consider the durations associated with photography. But it is possible to see the larger historical time-frame that modern citizens experienced through the course of the

¹²¹Andreas Bluhm and Louise Lippincott Light: The Industrial Age: 1750 – 1900 Art, Science & Society (New York: Thames and Hudson, 2000), p.234.

122 Sasha Archibald, 'Blinded by the Light', *Cabinet*, issue 21 (2006), pp.97-99.

123 Paul Virilio, *Open Sky*, trans. Julie Rose (London: Verso, 1997), p.28.

nineteenth century as subject to something like the same movement from darkness to dazzle. There is, of course, no one exact date, nor even one particular technological development, identifiable as the point at which industrialised light began to spill over into excess. The potential for dazzle should rather be seen as hovering around and dogging the nineteenth century cult of light at each point in its development; a nagging sense that the new superabundance of light in the cityscape had begun to trouble the picture it was meant to reveal.

Even the faulty, shimmering light of the gas flame was seen at one point as offering an excess of visibility. One German visitor to London, Max Schlesinger, remarked upon the spendthrift excesses in lighting he saw on display there. At a time when European cities were competing for the title of *ville lumière*, he takes a certain satisfaction in his own country's optical propriety and restraint:

The stairs of every decent London house, have generally quite as much light as a German shop, and the London shops are more strongly lighted up than the German theatres. Butchers and such-like tradesmen, especially in the smaller streets, burn the gas from one inch tubes, that John Bull, in purchasing his piece of mutton or beef, may see each vein, each sinew, and each lump of fat. The smaller streets and the markets, are literally inundated with gaslight especially on Saturday evenings. No city on the Continent offers such a sight. 124

The ostentation of the butcher's shop display results in a kind of obscenity; the meat bulges with distasteful detail. The gaslight has provided Schlesinger with more information than he wished to know.

As electric light appeared on the scene, it was accompanied by a heightened feeling of the need to restrain it and put it back in its place. Manuals such as Louis Bell's *The Art of Illumination* started to describe of the damage being done by intense illumination, both physiologically to the eye, and also to taste and visual composure. The work offers tips in

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¹²⁴ Quoted in Lynda Nead, *Victorian Babylon: People, Streets and Images in Nineteenth Century London* (New Haven & London: Yale University Press, 2000), p.88.

how to arrange the lighting in one's house, so as to balance the need for illumination with the preservation of traditional domestic presentation. But electrified light was seen as a threat to more than these aesthetic niceties. At stake in the electrification of vision was visibility itself. The mounting cascoscopy that began to surround the citizen at every turn, began to be seen as a threat to the very coherence and comprehensibility of his environment. By 1928, another German traveller, the architect Ernst May, was writing of the lights used for advertising in Times Square in New York:

Here the eye does not read any writing, it cannot pick out any shapes, it is simply dazzled by a profusion of scintillating lights, a plethora of elements of light that cancel out each other's effect.¹²⁵

Light had finally reached its point of saturation where nothing could be discerned amongst it; an obscurity to rival darkness. But just as in the case of sunlight, this visual obscurity came to represent, through its thwarting of the eyes powers of representation, a rational and a moral corruption. Balla and Marinettti's profane and sacrilegious light is similar to Lawrence Sun. If the ideal whose cult the Futurists wished to desecrate was more obviously an aesthetic than a moral one, there is a sense in which, in the Nietzschean tone of their proclamations, their revaluation of prior values, morality is never far away. Their murder of the heavens can be seen as a kind of criminal defiance against a paralysing lunar perfection, a self-liberation and escape from its watchful eye, and a prideful assertion of freedom, movement and change.

The bond of association between excessive polluting light and the transgression of pre-established order was given concrete historical embodiment in the discourses surrounding the industrialisation of light in the Nineteenth Century. Once again, as in the case of street noise, what was for the Futurist avant-garde a vital power to be tapped had been seen as a

¹²⁵ Quoted in Wolfgang Schivelbusch, *Disenchanted Night: The Industrialisation of Light in the Nineteenth Century*, trans. Angela Davies (Berkley, Los Angeles: University of California Press, 1995), p.154.

nuisance and threat for a significant portion of populations of Europe. If we look at the cultural history of street-lighting in the century leading up to its grand apotheosis in Marinetti's manifesto and Balla's painting, we can see throughout the different reactions to the altered city spectacle a persistent connotative alliance between the lights of the city and the sinister freedoms the city offered. It is important here that we say 'freedoms' here rather than loftier sounding 'Freedom'. This freedom is no vacated abstraction: the street-lamp is not a torch of liberty. It represents not so much Liberty in the sense of a political or social ideal, but the sum of that ideal's rather less exalted manifestations. The light produced by the street-lamp represents a plenum of liberties offered and liberties taken. During the course of its history in the Nineteenth Century, the illuminated Street, in parallel to one of street-lighting's main functions as an assertion of civic order, came to be associated with licence and libertinism.

Street-lighting was always more than a simple means of rendering the night city visible for its inhabitants. It was a means by which the city could be made visible to its guardians, the keepers of law and order, and thus controlled. 'A light is as good as a policeman' was a popular phrase in London during the Nineteenth Century. The watchful eye of the streetlamp took on a role of *supervision*. It quite literally looked over the street from above. The streetlamp became the city's guardian, as if the blinding bright light that Plato's Philosopher King must stare into for the authority to legislate the republic had promptly dispensed with its human intermediary. Louis Sebastien Mercier had, in the late Eighteenth Century, written a utopian vision of Paris in the year 2440 in which street lights had developed to the point where 'their combined impact left no shadows at all.' This new urban space was one in which the criminal and unwanted elements in society had no place to

¹²⁶ Quoted in Joachim Schlör, *Nights in the Big City: Paris – Berlin – London 1840-1930*, trans. Pierre Gottfried Imhof and Dafydd Rees Roberts (London: Reaktion, 1998), p.66.

hide; they had been driven out of every dark nook and corner. 'On the street corners there were no more prostitutes with painted faces and one foot in the gutter, offering their coarse and vulgar pleasures...' ¹²⁷ Ubiquitous light, it was fantasised, could make such figures visible and thus make them disappear: an ideal light that could turn the environment on which it shone into an ideal city.

The streetlamp did not provide this role simply through what it illuminated but also through its own self advertisement, its spectacular illumination of itself. It was in looking *at* the shining image of the light, rather than simply using it to look, that the subject was forced to recognise the authority it stood for. As the social historian of the nocturnal city Joachim Schlör, states:

Street-lamps stand as signs of [a] comprehensive claim to power, which is not restricted to the pursuit of criminals (made easier in the light), but intended to make clear to the whole population who it is that owns the street. 128

But the street lamp's eye can never possess the single agency of human sight. What its radiance lacks is precisely the fixity and focus, the intent and *intentionality* needed for it to stand proxy for the any single agent. The streetlamp's gaze is entirely indifferent to what it sees. And its image – the look of it, as opposed to its look – is equally undetermined, an image that equivocates its own image, a noisy and uncertain combination of possible images combined together into an image of the very possibility of sight.

The street-lamp, like the sun, shines on all alike; it provides for a multiplicity of different perspectives. It allows for both the gaze of the law-maker and the gaze of the law-breaker. Bluhm and Lippincott cite suspicions as to this disturbing plurality of potential vision in the early days of the institution of public lighting:

¹²⁷ Quoted in Schivelbusch, *Disenchanted Night*, pp.132-3.

¹²⁸ Schlör, Nights out in the Big City, pp.58-9.

Many innocent citizens, for whom the light was supposed to be an improvement, came to believe that illuminating the night would only make the work of burglars that much easier. In 1819, the *Konische Zeitung* reported anxiously on the establishment of a gasworks in Paris, believing it would lead to a deterioration of morals: 'Artificial light dispels the fear of darkness that prevents many a weakling from committing sins. The light assures the drinker that he can stay in the bar until nightfall, and it debilitates couples in love.' 129

This latter fear of the potentials of public lighting to sunder romantic intimacy gains a particular significance when we come to consider the most obvious criminal beneficiary of the public street-lighting. In opposition to the private one to one affections of darkness, stands the corrupting *public* affections of the prostitute, and this publicity and publication of pleasure became closely associated with the light that shone on it and, in a way, for it. The newly illuminated streets of the Nineteenth Century provided a well-recognised ground for procurement. Nocturnal cityscapes of the time presented rows of streetlamps each with their attendant lady standing beneath. Street lamps became themselves a type of advertisement for the prostitute. Its gaze was one that, like hers, shone on all alike. Bluhm and Lippincott extend their commentary on the criminal associations of street-lighting into a discussion of prostitution:

The illuminated boulevard became the whore's favourite territory. Under the new light of the gas flame, and in imitation of the *flâneur*, she ruled the streets or so it was believed. City guides warned of the dangers lurking round every corner, thus stimulating the tourists curiosity: 'Nowhere are the Nymphs of the pavé to be seen in greater force than on the boulevards. As soon as the lamps are lit, they come pouring through the passages and the adjacent *rues*, an uninterrupted stream, until past midnight.' ¹³⁰

The light that we most commonly associate with prostitution is now the lurid 'red light' that signifies the part of town where it can be procured. The association is itself ancient but the first citations of the use of the term 'red light district' come from the 1890s in the United

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Bluhm and Lippincott, *Light*, p.212.

¹³⁰ Bluhm and Lippincott, *Light*, p.212.

States. ¹³¹ Red light is a light that tries to remain as close as it can to darkness. Through associations with the photographic darkroom, it gains suggestions of a light beneath which the image can emerge unscathed. It is the most private and, scientifically, the most discrete of all the colours in the spectrum. Yet the indiscretions and transgressions of the profession are perhaps better signalled by white light than by red. White light is the result of the multiple infraction of its refraction. Red light demarcates a stopping point, a warning, an injunction. Red light forbids; white light elicits mingling. The ladies who stood in the full publicity of the streetlamps on the boulevards were posing a more disturbing threat to public order than those who secluded themselves away in demarcated areas. And the loss of bounded and sectioned vision that the street-lamp brings, its dazzling, self-exceeding rupture of its own visual boundary lines, becomes an apt symbol of this transgression.

A common theoretical resource for discussions of the history and phenomenology of street-lighting has been Gaston Bachelard's *The Light of the Candle*. Bachelard writes of the intimate psychological relationship that humans have with candlelight. Candlelight, he states, does more than provide illumination for others. It possesses, or has always been imagined as possessing. in itself the faculty of sight. We cannot help but humanise the candle, turning the light that it casts into a subjective gaze, a consciousness in its own right. As we hold vigil round the candle, we start to experience that candle as holding vigil over us. 'This distant lamp is certainly not 'turned in on itself'. It is a light that waits. It watches so unremittingly that it guards.' Yet Bachelard's analysis was directed at candlelight

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¹³¹ There is one possibly apocryphal story of the origins of the association between red light and prostitution that makes the lights an advertisement of the presence of the client rather than of the prostitute herself. In the early days of the railway in Europe, so the story goes, overnight trains, rather than departing at a time scheduled in advance, would leave once a sufficient numbers of passengers had gathered. While waiting for this moment, the train workers would set out into whatever town they were in and seek out its illicit pleasures. When the train was sufficiently full to leave, some poor railway superintendent would have to go and retrieve his straying staff. The red lanterns were used in order to facilitate this process. Of course, the use of red lanterns dates back to well before then in ancient China and Japan.

¹³² See Schivelbusch, Disenchanted Night, p. 96 and Nead, Victorian Babylon, p. 103.

¹³³ Gaston Bachelard, *The Flame of a Candle*, trans. Joni Caldwell (Dallas: Dallas Institute of Publications, 1988).

specifically (in keeping with the bucolic, antiquarian flavour of all his writings). The human light cast by the flame of the candle is continually and explicitly contrasted with the new harsh, powerful inhuman potential of electric light. It is as if the subjectivity assumed by candlelight is granted only by virtue of its fragility. Only a frail and modest kind of light has the necessary singularity and selectivity to approximate to human vision. Electric light tears through this singularity, turning both its own image and the world that it illuminates into a spectacle of multiplicity.

Considering this, we may perhaps reconsider the word 'supervision' that the streetlight was meant to embody. The supervision that it entailed was more than the surveillance of the law. The latter was only one possible perspective contained within it. The streetlamp's vision was a vision over and above any one vision. It provided a supervision in the sense of a superabundance of vision, a look of looks, a supervision within which each subject's vision of the other, the gaze of the whore and the gaze of the policeman, co-existed together as *sub-visions*. But this way of putting it suggests a certain hierarchical and taxonomic structure that it should not be thought of as having. In the illuminated street of properly-functioning vision, images co-exist together side-by side; but in the spectacle of the light itself, and in the interfering intrusion of latter into the former, they exist impossibly mixed into one another, they co-exist as irretrievable potentials along with every other potential image.

The intensification of industrialised light brought about by electrification led to a corresponding intensification of its association with moral corruption. The Victorianist of the early nineteen sixties Michael Harrison goes as far as the slightly outlandish claim that the electrification of the lights in Victorian London brought with it an epidemic of criminality. The installations of arc-lamps throughout London coincided with and, Harrison implies,

brought about a range of horrors including a spate of murders and disappearances, such as those of Jack the Ripper and the dynamiting of Clerkenwell prison in 1867.

Shops all over London were calling attention to themselves by hanging the fizzing, clicking, blue-white brilliance of the arc-lamps outside their premises. Against the sad, shy, muted golden glow of the gas lights came the sharp white stridency of electric light. And... something very odd and something very disturbing happened.... Over London came, not so much a general moral corruption, as the frightening evidence that old evils had roused themselves; had grown stronger... and bolder. 134 [ellipsis his]

In fact, the darkness of the old dark night did as good a job as any policeman at keeping the unwanted and inassimilable portions of the city crowd out of sight and out of mind. The newly and unwillingly omniscient citizen of the Nineteenth century was not granted this moral censorship, this bowdlerisation of the city space. The ability to tune out the unwanted frequencies of the social spectrum was strained to breaking point as images of what Steven Marcus famously called 'The Other Victorians' came increasingly to impose themselves on the scene of any night time home-coming. One famous chronicler of darkness, Robert Louis Stevenson, encountered the horrors that, in his fiction, he saw lurking in the shadows, met with by a new horror in the very light that dispelled them. He writes of the then new arclighting being installed in urban centres around Britain:

A new sort of urban star now shines out nightly, horrible, unearthly obnoxious to the human eye... A lamp for a nightmare! Such a light as this should shine only on murders and public crime, or along the corridors of lunatic asylums. A horror to heighten horror!¹³⁵

If we look at the statement closely, it is clear that Stevenson hates the light itself as much as that which it would illuminate. 'Should' is the crucial word here. He does not dislike the light *because* it shines on murders and public crime, but rather finds the harsh glaring intensity of

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¹³⁴ Michael Harrison, London by Gaslight 1861-1911 (London: Peter Davies, 1963), p.132.

Robert Louis Stevenson, 'A Plea for Gas Lamps', in *Virginibus Puerisque and other Essays* (Newcastle: Cambridge Scholars, 2009), p.92.

the light itself so obnoxious as to have no place in the world of respectable citizenship. Such a light *deserves* only to shine on criminality and insanity. There is a close bond of association at work between the excess of light produced by the street-lamp and the excesses that it brought to light. The light's theft of space, its intrusive trespass against the eye that beholds it is at one with the transgression of moral, legal and rational boundaries in the scene he would have it purvey.

As one moves into the period of Modernism proper, this sense of the intrusive nature of public light was reflected in poetry. The Russian poet Mayakovsky, in a striking snapshot from his accelerated, motor-powered *flânerie* through the city in 'From Street to Street', presents a streetlamp, in a reversal of its supposed role as guardian and protector, as a predatory and rapacious defiler of night's innocence:

The bald-pated Street-lamp blatant lascivious rips off the night's black stockings.¹³⁶

A more sombre and slow-moving tone than Mayakovsky's is set by T. S. Eliot in 'Rhapsody on a Windy Night', where the inarticulate mutterings of the street-lamp dictate a similar sense of dangerous eroticism.

Half-past one,
The street-lamp sputtered,
The street-lamp muttered,
The street-lamp said, 'Regard that woman
Who walks towards you in the light of the door
Which opens on her like a grin.
You see the border of her dress
Is torn and stained with sand,
And you see the corner of her eye,
Twists like a crooked pin.' 137

¹³⁶ Vladimir Mayakovsky, *Selected Works: Volume I*, trans. George Hyde (Moscow: Raduga, 1985), p46.
 ¹³⁷ T. S. Eliot, *Complete Poems and Plays* (London: Faber, 1969), p.24.

The midnight vision is one composed of minute images. They each have a certain precision and distinction. But they do not add up to any coherent whole. The image of the lady who motions towards him is one revealed only at its edges, the borders of her dress, the corner of her eye, a sum of peripheries without a centre. This is the familiar Eliotian feminine that we have already encountered: woman as a collection of disparate body parts and inconsequential details. Her picture is inarticulate but not in the sense of being under-articulated but in being over-articulated, composed of too many details until they drown out that which they detail. The vision controlled by the street-lamp creates a de-realisation in its very hyper-empiricism. The abundance of detail creates not certainty but the doubt and uncertainty of a noisy channel. (Noise we must always remember is *not* loss of detail: it does not give less than we need to know but more than we need to know. It is not lack of specificity but the opposite; it is lack of generality.)

More importantly, the images of the figure are ones that the poem's subject has had imposed upon him. The poet's usual task of selecting which particular aspects of the scene to bring to the foreground has been usurped. The poetic voice is surrendered by the human observer, and given over to the light itself. It is the street-lamp that dictates his recognition of these features; they are granted consciousness in spite of his real, willed object destination: his door, his bed, his toothbrush on the wall. The light does not mediate a union between the two figures; they do not make eye contact. The speaker is directed rather to the corner of her eye, just as she is seen from the corner of his. The woman and the fragmentary circumstantial details of which she is constituted appear as siren images with all the associations and entailments we have come to recognise in the word 'siren'. She is the strange attractor in the narrator's journey and in his perception of the nocturnal city through which he moves. Her image, together with the light that makes it visible, is the noise in the passage of visual information. The figure constitutes at once an image of corruption and a corrupted image.

Elizabeth Wilson has written of the way in which the image of femininity in the spectacle of the modern metropolis became a symbol for the labyrinthine unmappable space that the city had become. Woman's body, in its blurred and bleeding boundary-lines, became a privileged form and figure for the city's loss of form and figure, a conception of its inconceivability:

At the heart of the urban labyrinth lurk[s] not the minotaur, a bull-like male monster, but the female Sphinx, the 'strangling one', who was so-called because she strangled all those who could not answer her riddle: female sexuality, womanhood out of control, loss of nature, loss of identity.¹³⁸

This loss of boundary lines and identity does not come about not only in the ecstasies of full unmediated sexual contact, but in the visual experience that precedes it. A loss of visual boundary lines comes before any tactile mingling. The interfering light that goes between and gets between observer and object performs the same ubiquitous escape beyond the controlling parameters. The riddle that the woman and the light that reveals and corrupts her image pose is the uncertain questioning of identity that noise always brings about. In Eliot's poem, the woman emerges towards him *from out of* the light of the door as opposed to what we might expect, emerging into the light. The light of the door is figured as a mouth that might consume and re-assimilate her into its inchoate whiteness within which she is indistinguishable from the myriad possibilities of what she might be.

Later in the poem, this defiled and disintegrating femininity comes to associate itself with another image to which the street-lamp directs the speaker: the moon. And here we are brought back fittingly to our starting point, the murder of the moonshine called for by Marinetti.

Half-past three, The lamp sputtered, The lamp muttered in the dark.

¹³⁸ Elizabeth Wilson, *The Sphinx in the City: Urban Life, the Control of Disorder, and Women* (London: University of California Press, 1991), p.7.

The lamp hummed:
'Regard the moon,
La lune ne garde aucune rancune,
She winks a feeble eye
She smiles into corners.
She smoothes the hair of the grass.
The moon has lost her memory.
A washed out small-pox cracks her face.

The street-lamp's eye here does not corrupt and obscure the moon with its own disintegration as it does in Marinetti. It reveals the all too human face of the moon in the vivid details of her ageing and scarred appearance. It does not so much disintegrate the image as reveal its own disintegration. A moon that time has started to decay; like Marinetti and Balla's moon, a figure of timelessness grown old.

In a way, what is notable about Marinetti's battle cry against the moonlight was that it performed a reversal in the contrasting set of associations of the transcendent and the immanent. If we read the essay again with more of its preceding context, we find that it is the Moon, the ideal light that is portrayed as a siren-like temptation.

But while we, all of us, were raging to free our arms and legs from the last clinging lianas, suddenly we felt the carnal Moon, the Moon of lovely warm thighs, abandoning herself languidly against our broken backs.

A cry went up in the airy solitude of the high plains: "Let's murder the moonshine!"

Some ran to nearby cascades; gigantic wheels were raised. And turbines transformed the rushing waters into magnetic pulses that rushed up wires, up high poles, up to shining humming globes.

So it was that three hundred electric moons cancelled with their rays of blinding mineral whiteness, the ancient green queen of loves. 140

The ideal is portrayed as oddly carnal: warm, physical, with all the self-abandonment and loss of form inherent in carnal reality. But the male light that they posited to confront her charms was not a correction to its degradations, not a light more perfect than hers, but an even more

¹³⁹ T. S. Eliot, Complete Poems and Plays, p.25.

¹⁴⁰ F. T. Marinetti, 'Let's Murder the Moonshine', p.59.

violently self-abandoning one. The streetlamp's light, as pictured in Balla's painting, completed the act of self-destruction, corrupting the form pictured in it to a near ultimate degree: a state of dazzle.

There is, though, in Marinetti's description, a second potential source of visual disruption in addition to the light. The cascades of motion that he presents as being the light's source of power are themselves a potential source of visual noise. Even without any turbines and wires, without any conversion of energy, the spectacle of constant speed was already a generator of excess vision, optical interference. In the Twentieth Century's spectacle of rapid change, all images begin to interfere with each other. Industrialised vision is characterised by an experience of *blur*, a retention of the image in the face of its object's movement and eventual disappearance. If the eye's relative imperviousness to noise is due in part to its having access to the openness of space, then visual noise will always involve some sort of displacement. This displacement can take the form of a radiant image's outward projection of itself, but it can equally occur when an image that would otherwise be discrete starts to move into another image's space, trying to take over its territory. In motion, the fixed parameters that normally let images co-exist together side by side begin to melt.

It is to this form of visual noise that I now turn.

Chapter 5: Blur – Literature and the Visual Arts

Too bright for our infirm Delight
The Truth's superb surprise
As Lightening to the Children eased
With explanation kind
The Truth must dazzle gradually
Or every man be blind.

Emily Dickinson 'Hope'.

The dazzled subject is one who cannot quite distinguish and separate the image he sees from the image he has just seen previously; the image of intense illumination imposes itself on the eye and stays there, superimposing itself upon its successors. But this process goes both ways. Equally, when the flow of images, whatever their degree of luminosity, reaches a velocity in which the eye fails to clear one away properly before the inception of the next, images begin to accumulate towards the same optical saturation. The dazzle of the industrialised environment was not caused only by the unremitting intensity of its illumination, but also the unremitting intensity of its speed, the combined swiftness of its objects' passage through it. Paul Virilio has termed this new and perhaps more peculiarly *modern* type of illumination 'the light of speed'. 'With the appearance of the motor', he states, 'another sun rises, radically changing vision, and its lighting will increasingly change our life.' 141

In fact, considering the potential visual disruption that any rapid cascade of movement causes, it comes as something of a surprise to discover that there is in fact no *direct* etymological link between the word 'cataract' in the sense of a waterfall or torrent of rain and the now more common medical use of the word to diagnose an optical condition. The word originally referred to the floodgates of heaven that held back and controlled the rains and by

Paul Virilio, Negative Horizon: An Essay in Dromoscopy, trans. Michael Degener (London: Continuum,

^{2005),} p.120.

association came to refer to the rains themselves. But keeping to the original sense of a gate or barrier, the word also developed into a term for a portcullis, a defensive secondary gate superadded before the main door of a castle; and it was from this sense that seventeenth century physicians drew for an analogy to describe the extra barrier that, despite the 'main doors' of the eye being open, still impeded the entrance of light. Nevertheless, there is a sense in which the two usages recombine together into semantic complement. Any moving object or sequence of objects, if accelerated to sufficient speed, begins to blur and fog vision, streaking points of light across the retina, scrambling its own visual message with an effect similar to the diffusion and confusion of the image performed by the cataractic crystals in the lens.

The interference of the citizen's visual picture through the rapidity of one object's movement into another's place was something that the Nineteenth Century was to spend a lot of its time trying to get used to. At the very beginning of the Twentieth Century, Georg Simmel wrote of the hazardous condition that the speed of modernity had made of the bodily senses. Simmel's famous essay of 1903, 'The Metropolis and Mental Life', brought together suspicions on the part of medical practice about the potentially damaging toll that the rapidity of the new industrial sensorium could have on a citizen's psychology and made of these a developed theory of the mind of modern man and his relations to his environment.

The psychological basis of the metropolitan type of individuality consists in the *intensification of nervous stimulation* which results from the swift and uninterrupted change of outer and inner stimuli. Man is a differentiating creature. His mind is stimulated by the difference between a momentary impression and the one which preceded it. Lasting impressions, impressions which differ only slightly from one another, impressions which take a regular and habitual course and show regular and habitual contrasts-all these use up, so to speak, less consciousness than does the rapid crowding of changing images, the sharp discontinuity in the grasp of a single glance, and the unexpectedness of onrushing impressions. ¹⁴²

¹⁴² Georg Simmel, 'The Metropolis and Mental Life', collected in *Simmel on Culture: Selected Writings*, eds. David Frisby and Mike Featherstone, no translator credited (London: Sage, 1997), p.175.

It is only slightly pedantic to point out that it is not really 'lasting impressions' that Simmel is referring to. The slow and manageable life of the past was characterised not so much by lasting persistent images, but by *images of persisting things*. Persistent images are part of the problem. It is the lingering of the past within the present image that causes it to disintegrate. The motive urgency of the modern metropolis, the desperate need on the part of its citizens endlessly to be forever somewhere else, created a visual environment in which everything was always already *visibly* somewhere other than where its visual impression made it seem to be. The modern citizen is forced by the rapidity of change to live in more than one visible moment at once, to experience them together indiscreetly, overlapping into simultaneity.

Strictly speaking, it is not the fact that the flow of impressions moves too fast that creates this derealisation, it is that they move too slowly; not a delayed reception of the object, but a delayed *erasure* of the object beyond the time of its passing: images quick to come and slow to leave. The subject perceives the object in its instantaneous state and position *alongside* a continuous series of its preceding instants simultaneously – a wake made visible, comet-like. Point becomes streak, achieving a kind of distorting linear radiance; the true, original and coherent object is obscured in the trail of its own past. Single images extend out this way linearly and thus interfere with the image coming later. The one-thing-after-another of normal healthy time experience became a kind of one-thing-on-top-of-another.

Faced with these new demands on his consciousness, Simmel's city dweller loses any affective attachment to the fugitive objects of his environment. He gives up the attempt to track them, attend to them, and relate to them personally. 'There is perhaps no psychic phenomenon which has been so unconditionally reserved to the metropolis', Simmel states, 'as has the blasé attitude'. The stresses created by the citizen's inability to fix his gaze upon his object are surmounted by his ceasing to try. Disinvesting himself from his own field of vision, disclaiming any part to play in what he sees, the surge of sensory data mounts to the

point of inurement. Simmel wrote of the need felt by the modern citizen to grow a 'protective organ' around himself. Yet this protective organ was one constituted entirely by that which it must protect against. In this way the ailment becomes its own cure. Once the optic nerve, along with the other sensory channels, has reached a point of exhaustion, the blurred picture itself becomes a shield against sensation. All the citizen need do is sit back and let this happen. Visual interference turns into its own protection against itself; confusion turns into the very protective shield needed to combat confusion.

In the blasé attitude the concentration of men and things stimulate the nervous system of the individual to its highest achievement so that it attains its peak. Through the mere quantitative intensification of the same conditioning factors this achievement is transformed into its opposite and appears in the peculiar adjustment of the blasé attitude. ¹⁴³

Simmel's conception of the subjectivity that lurks behind this wall of indifference is one of calculating rationality. The blasé subject relates to his world on a purely conceptual level, allowing no feature of his environment any privileged affective position, but instead reducing them all to one singular denominator, just as the money economy reduced them all to their universal exchange value. This affectless calculation is perhaps best exemplified in the opening pages of Robert Musil's *The Man without Qualities* where the central character is seen coldly observing the motions of the city from his window.

For the last ten minutes, watch in hand, he had been counting the cars, carriages and trams, and the pedestrian's faces, blurred by distance, all of which filled the network of his gaze with a whorl of hurrying forms. He was estimating the speed, the angle, the dynamic forces of masses being propelled past, which drew the eye after them swift as lightning, holding it, letting it go, forcing the attention – for an infinitesimal instant of time – to resist them, to snap off and then jump to the next and rush after that. 144

¹⁴³ Simmel, 'The Metropolis and Mental Life', p.179.

Robert Musil, *The Man Without Qualities*, trans. E. Wilkies and E. Kaiser (London: Secker and Warburg, 1979), p.7.

Yet it is possible that the celerity of urban sensation removes even this lowest of common denominators. Even purely quantitative numerical calculation requires a minimal sorting and separation of items. Counting the cars must necessarily involve attending to each one, identifying it, plucking it out from the 'whorl of hurrying forms' that has become their invasive background. The subject has to make that minimal self-assertion against the everchanging scene that overcomes him, to interrupt the uninterrupted change, to 'resist' and 'snap-off'. Only then can the visual field depict a set of countable units rather than the uncountable and indecipherable noisy stuff of light.

'Snapping-off' from the blur inevitably brings to mind the actions of the still camera. What the Nineteenth Century and Twentieth Century found in the experience of blur was something equivalent to the human shutter-speed: the short but now observable period of time that it takes for the retina and the eye as a whole to process optical data and leave it behind. It is possible to see the parallel developments of still photography and those of locomotion as in some way running in competitive tandem, each trying to outdo the other in their respective achievements of motion and stillness. Yet, as I hope to show, photography did not simply provide a means of capturing and fixing the single simple image of one moment of time. The camera's ability to manipulate and extend the length of exposure made it the perfect instrument not simply for redeeming vision from the blur of modernity, but for depicting and studying the blur itself.

In contrast to Simmel's view of twentieth century consciousness as one of petty calculation, I would like to assemble a case, drawn from a diversity of testimonies of the visual experience of speed and the visual experience of blurred photography, for the prevalence within that experience of the irrational, the inassimilable, that which confounds logic, corrupts ontology. These testimonies are of those who, instead of withdrawing completely behind the cataractic blur of the moving image and dealing with the perfect and

simple entities of their own conception, *attend to* the blur in the blurred picture, trying to see it without seeing through it, without tracking and capturing that which lies behind it.

What follows is not just a modern history of blur, but a blurred history of modernity, one in which temporality is tangled up out of sequence through the very course of its movement and thus one in which the story's beginnings already contain a faint distorting vision of its end.

Blurred Snapshot 1 - 1855

The beginnings of this cataractic modernity begin well before Simmel's time. It was the invention and popularisation of railway travel that first accelerated the eye beyond the point of coherence. Railway travel was unlike any previous means of transport in the visual picture it offered its passenger. When actively engaged in producing and managing one's own speed, as in the case of pedestrian locomotion or riding a bicycle or even riding a horse, one already must possess the singularity of intent and intentionality needed to screen out the confused and fleeting multitude. The steam railway, in contrast, allowed its passenger an unprecedented combination of speed and energy along with complete passivity, and this put the eye into a whole new predicament.

From this combination, there emerged a type of vision that Wolfgang Schivelbusch, in another of his social histories recounting the travails of the modern eye, has termed *panoramic vision*. The railway traveller became witness, in a very short space of time, to a vast cross section of his environment, its features and its population. The greater collective and landscape in which he lived, a place and population that had previously, no matter how fervent his patriotic loyalty to it, been almost entirely an imagined entity, was now a genuinely experiential one. As the railways developed out from individual urban centres,

reaching and integrating ever more outlying territory and eventually forming a national network, the nation itself, as contemporary commentators frequently suggested, had become one vast city: the nation had been gathered into a crowd. The newfound potential to observe a sizable portion of the nation-space in one continuous slice meant that the nation had gained the grounded visibility previously accorded only to experiences of smaller entities.

However, the speed that made this possible also meant that the whole was bought at the price of its constitutive parts. Seeing everything meant not really seeing anything. The railway traveller could gain this panoptic vision of the whole only on the condition that he lost his particular attachment to any of it. 'The traveller who gazed through the compartment window at such successive scenes, acquired a novel ability... the ability to perceive the discrete, as it rolls past the window, indiscriminately.'145 The intercity panorama represented a *unification* of the experience of nationhood, but not a unification into any one entirely coherent and discrete shape. It was a unification into a confused and luminous mass of light and colour. Neighbouring images started to interfere with each other in the same way that neighbouring tones in the scale of sound frequencies do. The newly visible nation was a noisy and discordant one. At the very moment that all the previously disparate isolated points that made up the national territory were being joined together into one continuous chronological sequence, the very sequentiality of that moving picture was being strained to breaking point as one moment's picture was piled-upon another. This effect is most pronounced the nearer to the foreground the object is. In this way, foreground and background swap roles. It is the foreground that is indistinct; the background achieves a relative clarity and discretion.

Reactions to the experience of blur were divided. For many, according to Schivelbusch, perhaps most, train travel involved only a dulling of perception, a loss of experience. The blur of the foreground world contributed to the monotony of train travel

¹⁴⁵ Wolfgang Schivelbusch, *The Railway Journey: The Industrialisation and Perception of Time and Space* (Lemington Spa: Berg, 1977), pp.60-61.

generally. They experienced blur as an assimilation, a homogenisation of vision. However, this was not universal. Certain witnesses to the transport revolution in the Nineteenth Century managed to capture a point before the blur descended into blankness and saw in the landscape not a *deformation*, but a *transformation*; not a descent into the pure shapelessness, but a new reality being re-sculpted before them from that very formlessness. Just as the right amount of entropy in any information channel can increase its capacity to inform, these witnesses saw revealed to them a new world to which they had previously been blind. Losing hold upon the object of vision meant seeing a new object. Victor Hugo, writing in 1837, wrote of the transformed shapes of the landscape in the scene out of his train window:

The flowers by the side of the road are no longer flowers but flecks, or rather streaks, of red or white; there are no longer any points, everything becomes a streak; the grain fields are great shocks of yellow hair; fields of alfalfa, long green tresses; the towns, the steeples, and the trees perform a crazy mingling dance on the horizon; from time to time, a shadow, a shape, a spectre appears and disappears with lightning speed behind the window: it's a railway guard. 146

By being put into rapid motion, the ordinary features of his environment become surrealistically animated and anthropomorphised. William Wordsworth, a generation earlier, in the poem that has over the years come to embody the Romantic poetic stereotype, famously privileged the inward recollected image over the immediately perceived one. The daffodils at the time of their apparition were a joy to behold, but their real aesthetic wealth could only be cashed-in later in the bliss of solitude and repose as they 'flash upon the inward eye'. Hugo's flowers, or rather the flecks and streaks that they have become, represent an immediately perceived object *in continuum* with its recollection. In fact, the visual presence of this continuum stops it being a recollection at all because it was always continually there before the eye. It is neither a wholly external nor a wholly mental object, but rather the one turning into the other before his eyes. Not the present nor the past, but the present passing.

¹⁴⁶ Quoted in Schivelbusch, *The Railway Journey*, pp.55-6.

The transformations of the environment brought about by train travel for many bore resemblance to the transformed landscape of dream. The American travel writer in England, Matthew F. Ward, wrote of the added charm that locomotive velocity gave to the English countryside: 'The beauties of England, being those of a dream, should be as fleeting.' In saying this, he perhaps got it half right. For the dream isn't simply characterised by the rapidity of the image's disappearance, but by the unconscious retention and reordering of the image once the *object* has disappeared from sight. Aristotle saw the retinal after-image as analogous to and possibly in some way the cause of the dream. Puzzled initially as to whether in dreaming we are exercising our faculty of reason or of sense perception, he concludes finally that dreaming originates within sense perception but is the lingering perception of an object after it has left the scene, just as a projectile's movement is caused by the motion of the hand that threw it even after losing contact with that hand. The afterimage, for Aristotle, is the inauguration, the starting point of the dream image:

When we have looked steadily for a long while at one colour, e.g. at white or green, that to which we next transfer our gaze appears to be of the same colour. Again if, after having looked at the sun or some other brilliant object, we close the eyes, then, if we watch carefully, it appears in a right line with the direction of vision (whatever this may be), at first in its own colour; then it changes to crimson, next to purple, until it becomes black and disappears.¹⁴⁸

If a sense of 'dreaminess' cannot be imagined without some sense of clouded or obscured vision, then the obscuring fog in the case of railway vision is simply the image of the past clouding that of the present. Both the pleasant dreaminess of Ward's landscape and the nightmarish spectrality of Hugo's railway guard can be ascribed to this effect. They stand at two opposite affective extremes, but both stand together in opposition to the blank calculation

¹⁴⁷ Matthew F. Ward, English Items; or, Microcosmic Views of England and Englishmen (New York: D. Appleton & Co., 1853), p.71.

Aristotle, On Sleep and Dreaming, trans. David Gallop (London: Aris & Phillips, 1996), p.87.

of Simmel's blasé metropolitan. Far from perceiving the world as a rational matter-of-fact, they both see a world startlingly remade through the very act of sustained seeing. Once the object's image is retained in the wake of its passing, the sense of reality, dependant on the complete identification of that image with that object, is lost. The scene from the window becomes literally a half-remembered one. Not a scene *recalled* by the perceiving subject, but a scene retained and sustained by his eye through all its fleeting changes.

One very prominent figure in the nineteenth century who made the case for the aesthetic possibilities of the engine-powered eye was Charles Dickens, a very regular and enthusiastic train traveller. 'Poetry on the Railway', published in Dickens' own Journal All the Year Round, was a typically jaunty run through what would later, at the dawn of the next century, become an aesthetic doctrine of intense seriousness. The need to save culture from the dead weight of tradition by tapping into the vital powers of industrial speed was to become a principal tenet of the futurist avant-garde. But here we find it in a jovial piece from 1855. Poetry, Dickens states, has grown old, all its traditional domains exhausted. And all poets, he said, secretly know this already. The sea, the sun, the stars, the sky, love, flowers, war and man's first disobedience that brought death into the world, had all worn themselves out in endless repetition. But the novelty of train travel, Dickens asserts, might be the medium's salvation. 'Take instead, oh ye poets, the wires of the Electric Telegraph, and run your tuneful fingers over those chords. Sing the poetry of railways.' In making this case and offering possibilities for poetic description, Dickens wanders off on fanciful yet apt flights of allusion. The mixture of smoke, sunshine and speed, viewed from the standing-cars, offers him a plenitude of mythic images:

Nothing is defined, nothing is fixed: all the shapes are irresolute fleeting, confused like the events in the memory of an old man. The tunnel becomes a phantom tube - a dry Styx - the train seems changed into Charon's boat, and the engine driver turns

into the infernal ferryman. And the end of that awful navigation must surely be Tartarus. You think so, you fancy yourself in the boat, as Dante and Virgil were in the Divine Comedy; ghosts cling to the sides vainly repenting, uselessly lamenting.¹⁴⁹

The irresolute and fleeting spectacle viewed from the train was always a potentially haunted one; it was always contaminated by remnants and revenants of its own past. The after-image that clutters the passenger's vision shares with the notion of a spectre the sense of an image ruptured in time from its object and become pure appearance, pure apparition. The ghosts seen clinging to the sides of the train could be seen as the product of the train's motion. It is the image's very propensity to cling, to remain momentarily stuck to the eye as it passes them, that makes them ghostly.

Dickens continues with his conjectures and suggestions as to possible avenues that a poet might take in singing the poetry of railways, until he inevitably hits upon the possibility of writing poetically about a train crash: 'A railway accident! Ah poets! How much of poetry could you find in that were you so minded'. Dickens muses upon this possibility at length and eventually starts to consider the idea of a haunted railway line, a line in which the victims of past accidents drift eternally between stations. 'Can you form an idea, poets, of a haunted line?' In invoking the lingering and haunting spectacle of disaster, Dickens has one particular crash in mind, a highly publicized disaster that had happened the previous July. Accidents on the railway were at the time extremely common and reports of disasters inundated the popular press. But in a way, his ghostly invocation chimed with more than this one past event.

Unknown to Dickens at the time of writing, his idle and cheerfully morbid speculation on such accidents was to come to seem eerily prescient as, five years later, Dickens himself was involved in a railway accident which he also wrote about at length in his journalism. The

¹⁴⁹ Charles Dickens, 'Poetry on the Railway', in *The Railway through Dickens' World: Texts from Household Word and All the Year Round*, ed. Ewald Mengel (New York: P. Lang, 1989), p.50.

spectral images that accompany the train journey begin to look like more than a ghostly revenant of the past but an equally ghostly portent of the future.

Dickens' crash, as he presents it in the later piece, is itself anticipated with uncanny presentiments of doom as he describes the vivid but unexplainable sense of dread he had felt throughout the day leading up to the event. 'Something troubled me, and hung about me like a damp shirt. What was it? IT WAS A PRESENTIMENT. A foreboding of evil it was, and I will say it to the day of my death.' These feelings of foreboding accompany him throughout the day and start to build as he boards the train as it begins its accelerating trajectory. As his journey is described, fleeting images of the environment he is accelerating through are co-opted to the narrative task of building tension:

Fields widen, trees and hedges roar by us as if an inundation were bearing them away or as if we were in the ark and they were drifting past us.

Three stations soon distanced. Whiz, faster! Whiz, faster! Slide like a bullet through a gun barrel. Whiz! That's a viaduct arch. Whish! Click! Clack! That's another station and some shunting rails. 151

The deformation of nature that his accelerated vision enacts comes like an omen of impending crisis. The cataractic rush of images is shown at its final catastrophic point of culmination in the biblical disaster of the flood. The image of a bullet sliding through a gunbarrel presages sudden violent termination. In a way, something of this presentiment of catastrophe accompanies all vision streaked by the actions of rapid transport. In fact, one word that might very pointedly describe the temporal and visual experience of the world seen from the train window would be a 'pile-up'. The spectacle of industrial speed represents a kind of full-scale collision of every image with its predecessor. The hideous potential for disaster that haunted the prospect of train travel in the popular imagination of the nineteenth century was given a kind of spectral portentous embodiment for train travellers every time

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¹⁵⁰ Charles Dickens 'My Railway Collision', in *The Railway through Dickens' World: Texts from Household Word and All the Year Round*, ed. Ewald Mengel (New York: P. Lang, 1989), p.161. ¹⁵¹ Charles Dickens, 'My Railway Collision', p.162.

they looked out the window. The retina itself becomes the point of impact in this disaster scene, its sluggish inability to match the pace of the oncoming impressions results in full-scale derailment. Images collide out of sequence and are scattered across the visual field like train carriages at the scene of a crash. The idea that fate might somehow intervene in the otherwise smooth and steady file and sequence of the train's movement, the idea that the motion to which the passengers had entrusted themselves might be subject to a catastrophic arrest, was rehearsed, bloodlessly, before – or rather *within* – their very eyes.

Train travel was haunted by the possibility of an accident perhaps because train travel, more than any other mode of transport (before or since), had eliminated all sense of accident, all sense of random variation. The route taken by the train was necessarily decided for it in advance; all capricious twists and turns, diversionary forays and gallops forward were rectified and ironed out of the journey. Even the minute, negligible background accidents that accompany any other mode of transport: the jolts and buffets of horse-powered transport, the motor-car's rattle and throb, aeroplane turbulence, were subdued to a minimum in the smooth regularity of the train tracks. But the eye, through its capacity to accumulate images, compounding them together into a state of mutual interference, brought back into the picture in heightened form, a sense of mounting disorder. The disturbing retention of the past within the present moment turns it into the presentiment of a catastrophic future, a crisis of vision that turns into a vision of crisis, an image of a disaster to come.

As a picture blurs, it starts to provide a noisy excess of information, information beyond any accurate representation of what is present and thus the present image breaks open and begins to suggest possible futures, destinations other than the one predicted from the journey's start. The 'presentiment' that Dickens feels and indeed *sees* cannot exactly be thought of as a prediction; it resolves no uncertainty as to the future. It is rather the manifestation of uncertainty itself. The catastrophe is not the final revelation of a single

destiny, but the final realisation of every *possible* destiny all at once in a dazzling chaos of contingencies. The proleptic leap that the train traveller experienced was not the portent of a future fixed by irrevocable laws of determination. For the straight, smooth, cast-iron inescapability of the railway tracks were already the perfect metaphor for that type of future. Blur and uncertainty reveal the possibility of a future *other* than the predictable one, a swerving or deflection *away* from the inevitable. Michel Serres would maintain that a future without such twists of fate is no future at all. The more an event can be predicted from before it has happened, the less it tells us, the less it can be perceived. Time that moves by way of iron laws from a prediction to its perfect fulfilment with no intervening sense of *event* is not time, but pure repetition. Blur - the noise of the image - *intervenes* in such repetition, offering a future event beyond the one scheduled in advance. This disruption of the visual picture suggests the possibility that the train, like the visual image seen from it, might not necessarily arrive at its destination in one piece.

Blurred Snapshot 2 - 1911

To reiterate: Dickens' haunted railway was an image of a present containing and retaining its own past in the way that all images do when accelerated to a point where the eye cannot follow. It is an image that unknowingly provided a very real portent of Dickens' own future. It was an image, he said, that might give poetry a future and, as I have suggested, in saying this he also pre-empted (if not portended) the doctrines of the Italian Futurists, a cultural movement that made pre-empting the future its business. But, as I will argue, the effect of the arrival of industrially powered velocity upon the eye does not so much seem to have been a sudden sweeping away of the past at the inception of the future, but a muddying and mixing together of all temporal categories.

'Futurism' was actually a problematic name for the movement that Marinetti and his friends started in 1909. The 'future' for Futurism was not a *telos* that they worked towards. They were not labouring after some preconceived desired state of affairs. Aside from the striking designs of futurist architects like Antonio Sant Elia, sadly mostly unbuilt, the Futurists spent very little time describing in any detail the future whose banner they marched under. The future itself was a clammy abstraction of the sort that writers like Marinetti violently opposed. Henry Newbolt, the man largely responsible for introducing Futurism into Britain, said this of their name:

A more appropriate name for [Futurism] would be Presentism, for it is the present, the moment of actual life, that it seeks to defend and express; but as its success is a matter of expectation rather than possession, it is content to claim the future only. 152

The futurist's future was one in which they could live more fully in the present. Only in the future could they unite with the moment of true immediate existence. Only in the future could they look into that infinitesimal crack of time, the temporal point which, though possessing no identifiable span, is yet the only point at which true awareness dwells; a present unique and vividly alive. This singular living instant – this pure now – was one to which, in 1909, they had no access. This was because everywhere they looked in the present they were brought back to images of the past. The living present was everywhere contaminated by the dead past amongst which it lived. And in the desire to liberate themselves from it, they set down a programme for its sacrificial destruction. 'Come on! Set fire to the library shelves! Turn aside the canals to flood the museums!' cried Marinetti in his first Manifesto. But the destruction of the past's remnants was to be only one means by which they believed the individual could be freed from its bondage. As well as the 'fight' option, they also kept open

¹⁵² Henry Newbolt, A New Study of English Poetry (London: British Academy, 1919), p.244.

the option of 'flight': of accelerated engine-powered escape away from all that kept them bound. This was also one of their central doctrines as laid down by Marinetti in the first Manifesto.

We affirm that the world's magnificence has been enriched with a new beauty: the beauty of speed. A racing car whose hood is adorned with great pipes like serpents of explosive breath... is more beautiful than the *Victory at Samothrace*. ¹⁵³

Through the intoxicating power of speed, the futurists imagined, they could reach a kind of escape velocity and leave their futile bondage to place and tradition behind them. William Butler Yeats, though by no stretch of the imagination a Futurist himself, reached through the flux of his own internal creative antinomies a decidedly Futurist position when he wrote his 1919 poem 'An Irish Airman Foresees his Death'. The airman's motor powered virility grants him nobility and elevation from his origins, a nobility realised at its fullest in his rapt engagement with the present moment at the point of death.

Nor law nor duty bade me fight Nor public men nor cheering crowds A lonely implulse of delight Led to this tumult in the clouds

I summoned all brought all to mind The years to come seemed waste of breath A waste of breath the years behind In balance with this life this death.¹⁵⁴

Yeats' airman is the perfect hero of the avant-garde. If an avant-garde is always a kind of refigured aristocracy, then the airman's elevation is its exact inversion. He gains his lofty excellence not through his connection to the past, to tradition, to place and its people, but through the absolute disconnection from these, a disconnection that is as much temporal as geographical, a clarified instant.

¹⁵³ F. T. Marinetti, 'The Founding and Manifesto of Futurism', in *Futurist Manifestos*, ed. Umbro Apollonio (London: Tate Publishing, 2009), p.21.

⁵⁴ W. B. Yeats. *Collected Poems* (London: Vintage, 1992), p.133.

Umberto Boccioni's triptych, States of Mind (1911), uses speed similarly as mark of social and indeed national distinction. In a kind of nod to the heaven and hell scenes in medieval triptychs, the painting similarly strains its original population out into two separate camps with two separate destinies. Here the differentiating factor, the variable that allows them to be filtered, is not Christian virtue, but *speed* and movement. The first canvas presents a farewell scene at a railway station. The subsequent two canvases present 'those who go' and 'those who stay': the soldiers as they are shot off to war and the women they leave behind in sedentary misery.



Fig. 10 - Umberto Boccioni, States of Mind I: The Farewells, 1911

In the first canvas, the men, soldiers on their way to the Italian military adventure in Libya, embrace their loved ones. The scene is painted in swirling circular strokes and outlines. The coils of the lovers' embraces curl together with the smoke which, while the train is stationary, is not combed into the linearity of the train's file and motion and can billow out expansively. But then the crowd is split into two: the elect and the unelect, the quick and the deathly. And to accompany each party, the swirling circular brush-strokes of the first canvass are split into

that emphasise the affective and physical force that operates most strongly upon them. Those who stay are given firm downward strokes. Those who go are depicted in amongst and behind a rash of blue sideward streaks and a jumbled collage of geometric shapes. We see the soldiers through the partially obscuring screen of the window upon which the sensory rush of the passing environment, available directly to the eyes of the soldiers themselves, is presented. No object in the scene can be identified. Images are driven to a speed at which they simply yield up the raw unmeaning light of which they are composed. They become a linear radiant trace of their own trajectory through time.



Fig. 11 - Umberto Boccioni, States of Mind II: Those Who Go, 1911

In 1911, Boccioni gave a talk at the Circulo Artistico Internazionale in Rome in which he stated: 'the conditions of speed in which we live, the continual rush and swirl of objects around us gives them an infinite fluidity so that they exist only as luminous entities.'



Fig. 12 - Umberto Boccioni, States of Mind III: The Those Who Stay, 1911

This is what the Futurists called *dynamism*, the artistic presentation of speed and motion, and the discovery, development and theorisation of different ways to depict speed and motion within the still image. A collective of futurist artists proclaimed in 1911 that: 'the gesture which we would reproduce on canvas shall no longer be a fixed moment in universal dynamism. It shall simply be the *dynamic sensation* itself. 155

The mimicking of retinal retention on the canvas was the dominant technique in seeking to render this sensation. If objects were given a visible wake of retained images, the painter could display the subject's movement through each of its succeeding points in space. 'On account of the persistency of an image upon the retina', the manifesto proclaimed, 'moving objects constantly multiply themselves; their form changes like rapid vibrations in their mad career.' 156 Through this simultaneous presentation of different moments, the futurists could represent something of the dazzling experience of metropolitan existence.

¹⁵⁵ Umberto Boccioni et al., 'Futurist Painting: a Technical Manifesto', *Futurist Manifestos*, ed. Umbro Apollonio (London: Tate Publishing, 2009), p.27.

156 Boccioni et al., 'Futurist Painting: a Technical Manifesto', p.28.

The sixteen people around you in a rolling motor bus are in turn and at the same time one, ten, four, three; they are motionless and they change places; they come and go, bound into the street, are suddenly swallowed up by sunshine, then come back and sit before you like persistent symbols of universal vibration. 157

Many of the Futurist painters used this technique. Giacomo Balla most famously painted 'Dynamism of a Dog on a Leash' in which a dog scurries along the pavement beside its owner. In scurrying its legs multiply into a quivering fan of different moments. Later, Balla was to paint a piece called 'Abstract Speed: The car has Passed' in which the subject was nothing more than a point in the distant hills, having the purely punctual identity of the vanishing point itself. Yet radiating out from that single point is the car's optic remainder; a smooth and diminishing slur through all of its previous positions. We see nothing of the car's present state at all. We see only its past.



Fig. 13 – Giacomo Balla, Abstract Speed - The Car has Passed, 1913

This is an odd state of affairs for a movement calling for a liberation from the past. It is as if the past that the futurists demanded so vociferously to be exorcised has been let in

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¹⁵⁷ Boccioni et al., 'Futurist Painting: a Technical Manifesto', p.28.

through the very depiction of the object's flight from it. This is perhaps what the Futurist's contemporary Italian critic Cecchi meant when he described the Futurist's striving after dynamism as the act of men who 'drag behind themselves the dried leaves of movement.'

The Futurists wanted life, and got death. They wanted to present the vitality of their subject's living instant, but they got the object's ghostly afterlife as retinal image.

But perhaps Marinetti and the Futurists were not as puritanical in their temporal hygiene as we have come to think of them. The conceptual future in which the Futurists invested the most imaginative energy was, contrary to what one might expect, a future strangely inclusive of and indeed dependent upon its past, even as they called for its obliteration. Despite passionately advocating the destruction of all prior cultural traces, it was the experience of that destruction and not the experience of the purified state that it would bring about that Marinetti and his followers longed for: 'Oh the joy of seeing the glorious old canvases bobbing adrift on those waters discoloured and shredded!' In this sense, the ideal present moment advocated by Marinetti is one in which the images of the past are still in play within it. What thrills him is not the thought of the empty art gallery, or a world without any ancient art whatsoever. The liberated living present that the Futurists hoped one day to achieve was not a single isolated moment with no trace of what has gone before, but an arena where separate moments meet to contest each other; a field in which the new must inevitably win out over the old, but in which the battle itself is more important than the victory. To make what I admit is a fine but important distinction: the Futurists did not wish simply to be rid of the past, but to be endlessly in the process of getting rid of it.

Marinetti's call for destruction operated through the curious logic of *blasphemy*. As T. S. Eliot was later to point out, blasphemy is always a strangely pious act. The blasphemer always surreptitiously upholds the law that he seeks to violate. Without such a law, without the aura of veneration that society and tradition places upon the sacred spaces of the museum

and the objects it preserves, the act of desecration would have no force. Blasphemy depends upon and employs the pieties that it transgresses. In this sense, the Futurist's doctrine should not be seen as representing a refutation or negation of the cultural value that was stored within the museum's archives, but rather the *expenditure* of that reserve of aesthetic power. The past is released explosively into the present, yielding up its stored potential, giving itself up to the present as spectacle. The present swells to include that past in the very act of destroying it. Past and present meet in the confluence of the flooded museum. They meet in the grand conflagration of burning library shelves, combining together into a radiant spectacle of light. That was the Futurists' future; that was the present in which they wanted to live.

In this sense, it is just as much the action of the past upon the present as the action of the present upon the past that brings about the futurists' visionary cataclysm. The violence of their vision is one not simply brought about by an uprising revolutionary present against the redundancies of the past, but by the interfering persistence of the past within the novelty of the present. It is this interference from the past that allows for the ongoing creation of the future.

Finally, the Futurist's glorification of war can perhaps better be understood in this light. As will become important later, war can be seen as a large-scale historical blur. As blur is the over-lapping of moments, war is the over-lapping of epochs. Despite Marinetti's description of war as the 'world's only hygiene' it is the apparition of the dirt of the past as contained and dispersed within the purifying solvent of the present that gives war its essential aesthetic charge, just as even the most minimal daily satisfactions of routine hygiene are more often felt by seeing the dirty water we are leaving behind than the clean body that emerges from it. The present did not reveal itself as the triumphant succession of one era over another, but as the intermediary violent chaos between eras, the multiple confusion that exists

before succession is decided. The intensity of the present moment that the experience of war plunged the Futurist subject into was not the knife-edge boundary-line that divided time and kept the past from the future, but the battle-field where past and future met, fought and mingled.

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All these time-streaked apparitions and swollen instants made visible a certain conception of time, and in particular a conception of the present moment, that was being developed within philosophy at round about the same time. A host of different thinkers were reconfiguring notions about the how we actually perceive time. The traditionally conceived sharp and punctual present moment, the new psychologies and philosophies claimed, was unviable; a consciousness composed of these kind of instants would exist in an amnesiac stupor, forever dumbfounded by an interminable novelty. Posited in place of this goldfish temporality, the real unit of true time-consciousness was what became known as the 'extended' or 'thickened present'. Time consciousness could only be achieved through a spreading out of the present moment, a dilation of the instant of apparition into the immediate past and future on either side of it.

The psychologist William James provided one such re-conception. Time experience, for James, is the product of the way in which perceptions linger in perception, like retinal after images. Only through this mixing of perception and retention can different moments be collected and collated into a line of temporal sequence, only then can the perception of the moment become the perception of movement:

[T]here is at every moment a cumulation of brain processes over-lapping each other, of which the fainter ones are the dying phases of processes which but shortly previous were active in a maximal degree. The amount of the overlapping determines the feeling of the duration occupied. 158

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¹⁵⁸ William James, *Principles of Psychology* (New York: Dover, 1950), p.635.

James' conception of time perception is one that includes a necessary element of distortion in its picture. Moment becomes movement through the loitering semi-presence of the past image in the present visual field. Time consciousness is brought about through the very disruption of the image. Tim Armstrong has suggested as much in commenting on the quotation above: 'This description arguably makes time into nothing but a kind of fatigue, the drag or noise in the perceptual apparatus.' Noise is precisely what time has become for James, and in describing it thus we have come close to Serres' conception of the role that noise plays in allowing time to progress.

What blur allows is a way of coming to know time *as such*, a way to *see* time, to *experience* it rather than simply experiencing the single moment that we happen at any particular moment to inhabit or the single object to which we happen at any particular moment to be attending. Modernism and Modernity have continually been conceived as deriving from a new 'dazzling and dismaying experience of time.' From a Kantian perspective, alarm-bells start to ring at this point. For time, in Kant's view, is never an experience. It is a category that lies behind experience, an inevitable structure that experience takes on, but not a perception in itself. This would perhaps be true if our perceptual apparatus replicated exactly the moment currently before it. But the sluggish and dubitable nature of our perception means that time can, in a way, be pictured for us in the very distortion of our visual picture. Only a goldfish sees clearly. The time through which the goldfish moves is a perfectly transparent and thus invisible one. Our time is clogged and muddy with old moments and thus takes on a visible presence in itself.

Another of these philosophical re-conceptions of time was that of Edmund Husserl.

For Husserl, the thickening agents of the thickened present were what he calls 'primary

¹⁵⁹ Tim Armstrong, *Modernism* (Cambridge: Polity, 2005), p.91.

¹⁶⁰ Marshall Berman, *All That Is Solid Melts Into Air: The Experience of Modernity* (London: Verso, 1982), p.15.

retention' and 'primary protention'. The present could only be perceived by having the sensation of the past and future folded back and mixed into it. Retention is the minimal trace of the past still clinging to the future. The immediate 'now-apprehension is, as-it-were, the nucleus of a comet's tail of retentions.' But Husserl maintained that this trace is altogether distinguishable from memory. It has to be an inextricable part of the perception itself.

For the comprehension of a sequence of representations (A and B, for example) it is necessary that they be the absolutely simultaneous Objects of a referential cognition which embraces them completely and indivisibly in a single unifying act. ¹⁶¹

There is a lot at stake in this modification of the idea of the present. For the present of perception is for Husserl the validating source of all temporal understanding. The present is 'self-giving'; it is what we know before anything else, it is what is given directly without mediation. Everything else has something of the status of a copy or a token, a reproduction. Yet the admission of more than one point in time into this foundational instant seems to corrupt its immediacy. The retention comes between subject and object, as a kind of noise within the picture, the telltale sign of the work of mediation.

Jacque Derrida's deconstruction of Husserl's phenomenology of time hinges crucially on this ambiguity in the concept of retention. Neither an entirely immediate datum of perception nor an entirely secondary recollection, the retained image acts as a kind of bridge between presence and non-presence, allowing the one to cross and fraternise with the other. If the absolute purity of the now is put in doubt, if that fundamental validating source of experience – that *thing* that all memories and anticipations are memories and anticipations *of*, is shown as itself liable to the trace of its opposite, the structure begins to crumble. For Derrida, the trace of other moments that is inherent in the comprehension of the self-giving instant makes that instant slightly less self-giving. It starts to become more of a repeatable

¹⁶¹ Edmund Husserl, *The Phenomenology of Internal Time Consciousness*, trans. James S. Churchill (Hague: Martinus Nijhoff, 1964), p.40.

token than a unique, never-to-be-repeated, one-time-only occurrence. And thus it starts to take on the qualities of the written word or alphabetic character; it becomes ever so slightly sign-like in its potential reiteration. It becomes less the accident that overcomes a pre-existent structure and more like the pre-existent structure itself.

However, it is equally possible, and perhaps more intuitive, to conceive of the retention of visible experience not as making the image *more* repeatable, but less repeatable. Blur and retention, the noise in the image, is precisely that accident which intervenes in the repetition of the form through time. It is that which makes the instant not a perfect repetition of another, but a failed repetition. Any identifiable object or image, simply by persisting through time, can come to be seen as a repeatable character, partaking of an overarching reapplicable identity. Noise is that which confounds this continuity, that which makes this identity less identifiable. The trace does not slide the visual signal backwards down Shannon and Weaver's bell-curve, returning it to the ranks of a redundant pre-assumed code within the informational enterprise; it slides it in the opposite direction towards a state of absolute instability of identity.

Yet Derrida's critique of the foundational claims made of the instant still remains useful in its re-appropriation of Husserl's terminology. He makes use of the German word for a temporal instant that Husserl used: 'augenblick' or eye blink. The instantaneity of sight, Derrida suggests, having been caught in bed with its opposite, i.e. the dead retention of the past, becomes a kind of non-sight or blindness, a closure or withdrawal from visual experience.

As soon as we admit this continuity of the now and the not-now, perception and non-perception, in the zone of primordiality common to primordial impression and primordial retention, we admit the other into the self-identity of the *Augenblick;* non-

presence and non-evidence are admitted into the blink of the instant. There is duration to the blink and it closes the eye. ¹⁶²

Derrida would see this closure of the eye as a retreat from the changing succession of unique instants towards a set of iterable tokens, a retreat from primordial presentation towards secondary *re*presentation. But it is equally possible to see the secondary status of the instant as being revealed in the very failure of its representation. As the open eye collects and compounds moments, the 'real' present moment of apparition loses its privilege and is lost amongst a cloud of others. The very openness of the eye creates a cataractic secondary barrier between the subject and his world. In a way, this type of non-seeing within the activity of sight can be borne out by experience. David M. Levin has observed the curious nature of sustained sight. If we stare fixedly at anything long enough, he says:

Instead of clear and distinct perception, [there is] blurring and confusion; ... instead of stability and fixation at the far end of the gaze, we find a chaos of jerking, shifting forms, as the object of focus violently tears itself away. 163

The fixed stare does not fix its image (try it and see.) Even a still and persistent object will be put into motion by the eye that tries to hold it there. The more steady and unflinching one's gaze, the less still and steady its object. The visual picture starts to swirl and cloud over increasingly as the glare continues.

But there is another way of seeing the blink of the eye which I think is the reverse way of saying the same thing. If to open one's eyes and look fixedly is always to inaugurate this rupturing distortion of sight upon sight, this incestuous mingling of moments, then the blink of the eye, the real eye-blink rather than its cataractic supplement, is the point at which we coincide with ourselves once more, get back in synch with our sense vision, even if it is a vision of nothing. Looking and seeing what is presented before us always begins to make

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¹⁶² Jacques Derrida, *Speech and Phenomena and Other Essays on Husserl's Theory of Signs*, trans. David B. Allison (Evanston: Northwestern, 1973), p.65.

¹⁶³ David Levin, *The Opening of Vision* (London: Routledge, 1988), p.69.

questionable the very presence of that present... But then the eye blinks and the shifting images are delivered to darkness, a darkness to still the fragmenting de-synchronisation of sight. The eye's ability to close upon what it sees gives it the potential to redeem, momentarily, the temporal confusion that always accompanies extended visual concentration. In *obscurité* we find clarity; only in the darkness can we see the instant as such.

Snapshots: the eye-blink, the negative that demarcates the boundaries of an image's temporal duration lending it momentary closure and composure, is given concrete embodiment in the action of a camera's shutter. The still camera can capture an image only if it can cut it off from its own past and future; only if it can place a rupturing wall of darkness, or in other words a shutter, between one instant and the next and thus stem the confusion of one image *with* the next. Only in the enclosure of the darkened chamber is it safe from the rush and swirl of images outside.

Blurs and streaks were the curse of the medium in its infancy. Early on in the history of the still camera, the technology had struggled greatly to reduce the time needed for a coherent image to emerge. The length of this period had meant that sitters for portraits had to sit or stand deathly still for long periods. They could be rendered into a still image only by themselves emulating it. This can be observed hilariously when looking at the earliest photographic pornography where the subjects have all clearly taken on the bored, slightly uncomfortable expression of someone in a dentist's waiting room (an effect, however, often eerily similar to that of the illustrations in the *Karma Sutra*). But this turned out to be the medium's momentary birth pang. Photographic chemistry soon developed new techniques that could render the object in its instant.

These were all fully in place by the time that Eadweard Muybridge made his historic achievements in action photography, capturing sharply each minutely dissected stage of a body's motion and separating each out onto a different frame. The question that Muybridge's technique succeeded in answering: 'is there ever a point in the galloping horse's stride at which all four of its hooves are simultaneously off the ground?' could have been asked at any point in the history of human-equine relations. But it was a significantly apt question for a world in which the speed at which things moved had created a new threshold to visibility. The invisible was not only hidden behind an obscuring object, or hidden in darkness, or in distant space, or in the microscopic world: a truth could be hidden in time; an image obscured by its neighbouring images in the rush from one point to another. While Muybridge's series of frames was clearly a vital stage in the development of what was to become the cinematographic image, it could only answer its appointed question while remaining in the form of still photography, where the minute instant is stilled and can be studied and perused at leisure.

A little while later, Étienne-Jules Marey developed a photographic technique he called chronophotography that, like Muybridge's, separated the body's motion out into separate quickly successive shots, but unlike Muybridge's, kept them all on one frame, super imposed upon-one another.

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¹⁶⁴ In fact the speed of new technologies of locomotion created new hiding places in distant space as well as time. Cary Grant's confrontation with the crop-duster plane in Hitchcock's *North by North West* appealed to and arose from a new fear that, in a world of greatly increased speed, we are at risk from beyond the vanishing point itself. Even in the wide, flat, open horizon of maximum visibility in the agricultural American Midwest, the very curvature of the earth provided an obscurity where the fearful imagination could dwell.

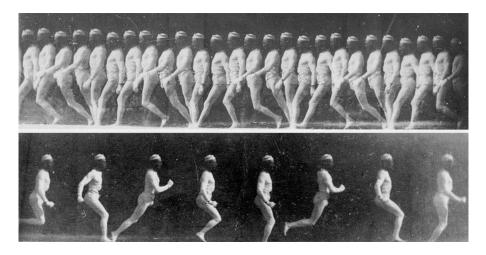


Fig. 14 – Étienne-Jules Marey, George Demeny walking and jumping, c. 1883

However, this superimposition could only be made to make sense through the rapid interruptions of the camera's shutter, the blinking eye. The shutter of the camera is the curtain behind which the stage set is changed, or a kind of chrysalis behind which the metamorphosis of motion is hidden from us. Instead of a single figure of movement, the changing postures and positions become a sequence of different figures. The eye-blink *renews* the figure's form at each moment, making the sequence, if not quite an exact repetition of the same, a steady predictable variant of a recognisable identity.

Opposing itself in one sweep to Muybridge's separated frame series, Marey's chronophotography *and also* to the cinematographic moving image, Futurist photographer and theorist Anton Bragaglia devised what he called *Futurist Photodynamism*. Like Marey, he superimposed a diversity of different instants onto one photographic frame, but unlike Marey, he saw that diversity in its pure multiplicity, without any interrupting shutter that closes upon its image's development through time and thus seals its parameters. Bragaglia's eye was a genuinely unblinking eye. It allowed the moving figure to *build upon* all his own previous states and positions, letting the image become the trace of its trajectory, an extended sweep through every point in its motion. The figure distorts and eventually destroys his

portrait, sundering the likeness of his photographic image through the unlimited superimposition of a subsequent image, creating a vaguely nebulous but directed stream of light. The photograph becomes not a portrait of the figure's 'real' likeness, but of his dynamic motion.



Fig. 15 – Anton Bragaglia, Change of Position, 1911

Bragaglia opposed himself to the other techniques vehemently:

We despise the precise, mechanical, glacial reproduction of reality and take the utmost care to avoid it. For us this is harmful and negative element, whereas for cinematography and chronophotography it is the very essence. They in turn overlook the trajectory, which for us is the essential value. The question of cinematography in relation to us is absolutely idiotic and can only be raised by a superficial and imbecilic mentality motivated by the most crass ignorance of our argument. ¹⁶⁵

This might appear to protest too much. Clearly the cheap circus-tent sideshow atmosphere that still surrounded cinema at the time had to be forcibly kept at more than an arm's distance from an artist of the radical avant-garde. But there *is* a sense in which Bragaglia's superimpositions were very much distinct from Marey's. Whereas Marey's

¹⁶⁵ Anton Giulio Bragaglia, 'Futurist Photodynamism', in *Futurist Manifestos*, ed. Umbro Apollonio (London: Thames and Hudson, 1970), p.39.

chronophotography, through the imposition of the blinking eye, separates out a figure from its past, Photodynamism aggregates the figure to his past. Bragaglia's camera does not freeze, but *dams* the flow of appearances, letting them pool and accumulate on the spot. Chronophotography did its best to stop this from happening. Its aim was to preserve the clarity of each single moment in order for it to be scrutinised. Similarly, the cinematograph, by matching the speed of the object with the counteractive speed of its own mechanism, managed to constrain and regulate its image, applying itself unfailingly to the task of focussed representation. The spool of cinematic film is a rug that is at every moment being pulled from beneath the feet of the photographic figure, sundering his accumulative transformation, keeping him down endlessly to the solid ground of a fixed and focussed image.

In fact, in a way, Bragaglia's photodynamism had the opposite effect to the earlier technologies. If one looks at Marey's chronophotographic work carefully, one notices that the figure is at his most distinct when he is moving most rapidly. The partition of the motion into a series of different split-second exposures means that it is when he is moving fastest that he is most likely to exceed and escape from the parameters of his previous position in time for the next exposure to occur. As he slows, his manifold poses begin to clot and disrupt each other. For Bragaglia's photodynamism it is the other way round: the figure becomes most distinct at the points at which he slows and comes to halt. He distorts his own image most thoroughly when he is at his most rapid. Bragaglia takes these observations and makes of them a curious metaphysical aesthetic:

The greater the speed of the action, the less intense and broad will be its trace when registered with Photodynamism. It follows that the slower it moves, the less it will be distorted. The more the image is distorted, the less real it will be. It will be more ideal and lyrical, further extracted from its personality, closer to *type*, with the same

evolutionary effects of distortion as followed by the Greeks in their search for their type of beauty. 166

The figure in motion in a photodynamist portrait does not simply become his own trajectory, but his own *ideal*. The build-up of different instances on the same still picture yields not simply empirical knowledge of an object's motion, but a transcendent truth of that object.

Bragaglia's startling justification of his work describes the extended process of exposure as a movement from image to essence. The image degrades, blurs, warps itself into universality. It bleeds out from particularity until it becomes more a type of thing than a thing in itself.

What conception of the 'ideal' can Bragaglia be invoking here? What type of *type* is he talking about? The very phrase seems a travesty of the futurist doctrine, a heretical rejection of their call to desecration, a reversion to the 'mystical cult of the ideal'. Yet there is possibly an alternative metaphysic that Bragaglia may be beginning to suggest. It is the one articulated fully in the works of Michel Serres.

Michel Serres devotes the central part of his work *Genesis* to an explication of Honoré de Balzac's 1845 short story 'Le Chef d'Œuvre Inconnu' or the 'Unknown Masterpiece'. In the story, Frenhofer, the old master painter, has been working at the same painting, a portrait of a divine female beauty, for years without letting his two frantically curious admirers Poussin and Porbus see a thing. After adding detail after detail, finishing touch after finishing touch to the work, *La belle Noiseuse*, 'the beautiful trouble maker', he finally arranges to unveil the masterwork before the two younger painters. At the climactic moment of the story, the painting is revealed and the two stand staring, dumbfounded and confused at what appears to them to be nothing but 'confused masses of colours contained by a multitude of strange lines, forming a high wall of paint.' The painter has, through his deluded and

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¹⁶⁶ Anton Giulio Bragaglia, 'Futurist Photodynamism', p.39.

unceasing attention, worked and reworked the portrait into a state of incomprehensibility. This unhappy state of affairs finally, but only momentarily, breaks through Frenhofer's armour of self-denial. Could it be that through his arduous labours he had in fact failed to reveal anything? Could he have spent all this time, not revealing the image, but degrading and interfering with it? Could his labours have come between the work and the image he tried so hard to depict?

Every painter, from the master to the amateur, has at one time or another been afflicted by the peculiar aesthetic ailment we might call 'Frenhofer's Syndrome'. Every painter has, at least once in his career, stood back from his offering and found in it not a meagreness and paucity, not the failure of falling-short, but a much more troubling because much less remediable *excess*. The disgust and dismay at the sight of his master-work is made all the more painful by the recognition of how infinitely better it had been just a moment ago; how much better it could still be now had he just been able to leave it alone at the right time instead of picking away at it like a scabby spot. The painting stands there like a photographic film that has been over-exposed to the light of his own labour. Somewhere, buried and waiting like a fossil in the sequentially arranged strata of the layers of paint – somewhere back in time – lies the true lost likeness of his muse. The image – the *clear image* – stands as a golden mean on the temporal journey from two states of blankness: the innocent blankness of an untouched canvas, and the absolute confusion he has produced.

But for Serres, the noise of the portrait in Balzac's story, the trouble that the beauty stirs up, is not something extraneous to the figure depicted within it. It is rather a depiction of everything most particular about her. It does not involve any loss of detail, it consists rather of an overabundance of detail; like Prufrock's beloved, the figure is drowning in her own detail. Every peculiarity, every distinguishing mark is shown upon the canvas. What is absent from the portrait is precisely the conventional, the regular, the undistinguished. This is what

makes the portrait indecipherable, what makes it a failed revelation, the work of a madman. 'To the conventional', Serres states, 'we also owe communication':

There must be a stereotype in every face. No doubt the old painter of the unknown masterpiece was said to be demented for having gone all the way with the singular qualities of the belle noiseuse. Right down to the most infinitesimal detail of what changes. Whoever is only himself is an autist. 167

It is not an archetype of beauty, the ideal form of beauty, it is not that which his beauty shares with all other beautiful things, not that which remains invariant within all instances of beauty. It is therefore not an object extracted from it particular personality but a descent into that very singularity.

Yet the portrait does not simply record the marks and features by which the figure is distinguishable from other figures, but the purely contingent features of happenstance, the infinitesimal details by which she changes from one moment to another, the unpredictable variables of posture and position: whatever, however, wherever she just so happens to be. The problem with the painting, as Serres sees it, is not simply an excess of infinitesimal detail. It is that these details are changeable and changing details. The length of the work's production has meant uncountable protean shifts in shape. The picture contains within it myriad details from myriad moments. Far from singling out one moment, one instant's set of variables, the painting gathers all possible variables together. Whatever qualities belong to her, or have belonged to her by pure chance, are found depicted there. Absent from the canvas is not only that which unites the beauty with other beauties but also that which unites the figure with herself through time: all that which remains stable and invariant, recognisable from one moment to the next. But the canvas holds these accidental details all together in their absolute heterogeneity, a still image of absolute change. The confusion of the painting is one of seeing the image in amongst, through, or behind a million alternatives images. The

¹⁶⁷ Michel Serres, *Genesis*, trans. Genevieve James and James Nielson (Michigan: Ann Arbour, 1995), p.28.

noise of the image is one that the figure creates around herself through time. In this way, the painting makes a claim on the universal; not the timeless essence, but the exact opposite: not a metaphysics of essence, but a metaphysics of multiple possibility.

In another of Serres' forays into fable, he invites us to imagine a field in which a herd of cattle are grazing. Each animal in the herd makes its own footprints in the ground. At the initial stage, these footprints can be identified easily with a particular animal. The markings still picture something coherent and identifiable, they still *mean* something, they still can be understood. Serres pictures the cattle at first yoked to a plough and made to trudge in formation. The markings that they leave begin to form into lines with specific sense and direction, clean cut and distinct tracks of coherence. They have *sens* and therefore have sense. Over time, the cattle are set free and left to wander over the field at their own will, trampling the ground wherever they go. The marking's *sens* and sense are slowly eroded by their own superfluity until there reaches a point where the entire field has been inscribed and reinscribed, a ground saturated with markings. Every conceivable space and every conceivable trajectory has been traced out.

At the initial stages, the field-picture still represents what Serres calls a scenography: it captures one particular short moment in time, held within one particular point of view. A scenography is a picture as you or I know it, one in which we can recognise objects. But over time, the field becomes what he calls an *ichnography*, the word coming from the Greek *ichnos* for footprint, a space where the multitude of meanings, in its sheer multiplicity, the sum total of possibilities have been inscribed: 'the ensemble of possible profiles, the sum of horizons...what is possible, or knowable, or producible, the phenomenological well-spring.' 168

¹⁶⁸ Serres, *Genesis*, p.18.

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The photographic plate or film is analogous to this field. Left to itself, staring with its eye open, the photographic image would become *ichnographic*: it would detail more than the stark empirical facts of its object. It would detail all the abundant possibilities of that object all at once. Bragaglia's unblinking vision has not quite reached this point; yet it *approaches* it. As the figure exceeds its own parameters, collecting a multiplicity of contingent details on the way, it traces a path of its own movement through time. But it is already on its way to destroying the vision of its trajectory as well as its singular form. It has already started to become an aggregate of many different possible trajectories interweaving and encircling each other in confusion. It becomes less a portrayal of any single progression through time, but of the prior state of possibilities that must exist before any such progression can take place.

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Bragaglia's photodynamist portraits and the Serresian ichnographic reality that they begin to move towards, reveal a certain obvious correspondence, but also, I would argue, a certain disjunction, with the most famous of all Modernist reflections on the nature of time: that of Henri Bergson. Bergson was, according to Wyndham Lewis, the single figure most responsible for what he called the 'time-cult' of the early twentieth century. ¹⁶⁹ Bragaglia's refusal to define and delimit separate stages in his figure's movement in the way that previous techniques had done was in keeping with the French philosopher's insistence on the absolute indivisibility of any temporal progression. Bergson hated the mechanical reproduction of vision that the other visual technologies had bestowed to the twentieth century. For Bergson, technologies like those of Muybridge, Marey, and especially the cinematograph, had replicated the ancient fallacy that had driven Zeno of Elea to paradox. By dividing time into a set of discrete successive instants these technologies reproduced the quandary at the heart of Zeno's paradox of the arrow. Zeno had, at the very dawn of

¹⁶⁹ Wyndham Lewis, *Time and Western Man* (Santa Rosa: Black Sparrow Press, 1993)

philosophy, concluded that time, change and movement where all in effect illusory and impossible. An arrow, in order to get from one position to another, must first go through a point in between. But in order to get to even that intermediate point, it would have to go by way of a point preceding that one. And so on *ad infinitum*. The arrow actually remains stuck where it is, unable to get to even the most proximate position to its own because any proximity inevitably breeds intervening proximities. It is impossible to find the absolute boundary, in space or in time, at which one point changes over to the next.

Bergson believed this to be a misunderstanding of the very nature of change and movement. Time, he stated, is not composed of a regular series of different immobilities. It is rather created through the penetration and mingling of the moment with its past. The lived experience of time that Bergson called *durée* was created by the mixing of the apparition of the present moment with the memory of its preceding moments. In this interpenetration of instants, he states, the whole idea that the moving object is exactly locatable at one single point in its course at one single moment is lost. 'The arrow never *is* at any point in its course' he states. 'The most we can say is that it might be there, in this sense, that it passes there and might stop there.'

Bergson posits here a kind of uncertainty principle. He replaces actuality with possibility; a 'must be' with a 'might be'. The object in motion becomes a scattered set of possibilities as to its 'true' position. Correspondingly, the object of change and transition becomes a scattered set of possibilities as to its true identity. One can only gain empirical knowledge of its position and identity by aborting this process; we only know for certain where it is when it stops. Such a set of possibilities is precisely what noise and blur convey. Noise *is* the phenomenal manifestation of the uncertainty that time necessarily involves.

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¹⁷⁰ Henri Bergson, *Creative Evolution*, trans. Arthur Mitchell (New York: Holt, 1911), pp.308-9.

We cannot say exactly where the object is at any given instant of its movement but this is not because of our subjective limitations. Its precise position is not kept from us by the interference in our sensation but is absolutely and objectively unreachable through any mode of sensation; the arrow in fact, has no precise position. There is in reality no atomic instant at which the object is in one place only. However finely we narrow its position down, we will always find within it the trace of another. An object in motion and transition is what we might call 'objectively blurred'. Only a blurred and noisy picture does justice to the object's *true* irreducible transition. Only in failing to see the object's precise position do we come to know of its real lack of one.

What we are confronted with here is what Serres would have told us all along: that noise, uncertainty, loss of information, is the very precondition of temporal movement. *It is not change and transition that produces noise, but rather noise that allows for the possibility of change.* Zeno's arrow is stuck because wherever it is, it is there and there only. A noisy picture of the arrow would reveal the arrow to be also, possibly, slightly somewhere else. The noise in the portrait is what lets its figure move. Noise, blur, ichnography, represents the liberating field of possibility that must precede all actual positions and any genuine movement from one to the other. Once a modicum of this noisy equivocation intervenes, the object is given scope to move.

However, Serres and Bergson disagree fundamentally over the role of the observer. What is significant about Serres' treatment of the polarity between the *ichnographic* and the *scenographic* is his counterintuitive designation of the former to the objective sphere, and the corresponding designation of the *scenographic* to the subjective. Frenhofer's portrait *was* objective in a way that a recognisable portrait would not be. There is a seemingly natural and unshakable bond in our way of thinking that associates *objectivity* with *clarity*. Obscurity, fuzziness, blur, all have an inescapable whiff of the subjective about them. But why? Serres

states that the scenographic, the singular, defined representation of the object in its coherent unity, is subjective because it always assumes the singular point in space and the singular point in time of subjective experience. If we could see an image of the object entirely in its true potential, as the object knows itself to be, as it radiates the sum of all its myriad changing contingencies in all directions over time, that image would be a blurred image... more than blurred, it would be a bright, white, blank, image; the picture of obscurity itself.

Scenography depends on a point of view, it marks the presence of a subject, it has to do with the observer, with his angle. The object itself encircles its flat projection. Objectivity is ichnographic. The subject has disappeared.¹⁷¹

Bergson would not see the mingling of the present image with its past as representing any disappearance of the subject. It is in the mixing together of the past with the present that the Bergsonian subject finds his true domain. The dynamic upsurge of the self comes about when we stop parsing and sectioning the changing world. Calculation, division, sorting, for Bergson were essentially passive, non-self-involving modes of awareness. The dynamic subject, the subject possessed of true *élan vital*, lived in the mingling of moments. Bergson would actually deny that any form of sight led to objective knowledge of the moving and changing object. Objective knowledge, for Bergson, was unavailable through any empirical medium and indeed unavailable to the intellect. Whereas the intellect could only operate through a tactic of 'petrify and peruse', true knowledge of motion could be gained through a quasi-mystical act of sympathetic intuition wherein the subject moved inside the moving object and began to move with it.

Yet dividing and sorting have an active component. They always imply at least the minimal activity of the break or the eye-blink. And it is the *abeyance* and *delay* of even this minimal activity that allows the eye to compound the totality of infinitesimal moments

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¹⁷¹Serres, Genesis, p.52.

together into their true noisy continuity. Bragaglia's technique, despite the name *photodynamism*, was notable not for being *more* active and dynamic than normal human vision or the normally delimited shutter-speeds of common photography, but by being less dynamic. His camera, in the unblinking nature of its gaze, pacified the agent of sight to the second degree; not just a mechanisation of vision, but a de-activation of that very mechanism.

It is this very deactivation that allows the camera to depict time in all its proliferating potential. Duration, far from being a uniquely human experience conditioned by and conditioning an energetic *élan vital*, is best experienced by the machine. Only the will-less, abulic eye of the camera can allow possibilities to proliferate without the human compulsion to delimit and to fix. It is only in losing track of time, standing back from it indifferently, that the true multiple and noisy uncertainty of motion can be experienced.

However, eventually, as the process of exposure continues, the visible experience of time begins to destroy itself. As the abulic stare breeds ever greater possibilities of position and identity, the very randomness in the picture destroys all notion of a single identity lying behind the change and motion. The picture moves towards a chaos where nothing can change, not because the object cannot be anywhere or anything other than where and what it is, but because it already occupies any and all possible positions and identities within sight. Zeno's arrow moves from a static single determination to an indeterminate turmoil in which its position is anyone's guess. And thus the camera's shutter must intervene once more and renew the possibility of movement. Time moves between redundancy and noise, between no alternative and too many.

Blurred Snapshot 3 - 1945

The laying to rest of the agent of sight was what photography always promised. The camera has always been held up as the ideal model for a conception of mechanical and essentially passive vision. A self that had become nothing but vision; a selfhood surrendered to the eye that opened it out onto the world; making no judgements, engaging in no active response. The camera's eye was the prototypical form of a mode of sight in which the seer had forced himself into abeyance, standing at a distance from that which he saw, taking it all in indiscriminately and giving nothing of himself back in return, a viewpoint purged of its viewer, unimpeded by the intervention of selfhood.

Comparisons of the eye with the camera are as old as the *camera obscura* itself, which is very old indeed. The very first observations of this kind were made around about the same time that the first *camera obscura* began to appear in the east by the mathematician and optician of the Tenth Century Ibn al-Haytham, or Alhazen, born in what is now Iraq. Alhazen is credited with the refutation of older, mostly Greek, theories of sight: the Empedoclean view that stressed the *activity* of vision. Empedocles, and many others after him including Plato, had seen the act of sight as the projection of a peculiarly human light sent out into the world; a 'fire within the eye' that was complimentary to external light and, through the mingling of the two, formed a bridge that connected self to world. For Alhazen, there was no such inner light. The eye was a darkened chamber.

Alhazen's optics performed the necessary correction of the old subject-centred theory of vision. He refuted the idea with the two inter-related arguments. Firstly, if we stare at the sun for a long time our eyes experience pain. How, therefore, could the act of sensation take place at the meeting point between the ray of vision that we send out from our eyes and the light reflected from the object if we feel the light's painful presence against our own visual

apparatus. Secondly, if one stares at bright lights for a prolonged period and then closes one's eyes, a replica image is retained with the same contours as the original but usually with colours reversed. Again, Alhazen saw this as evidence that the eye was affected from without rather than going out into the world that it depicted. The *camera obscura* was, for Alhazen, purely an allegory, an imaginative illustration; his science awaited the renaissance optics of Leonardo da Vinci before the exact scientific correlation between the mechanics of this apparatus and the mechanics of the eye could be asserted and described.

The model of eye-as-camera-obscura demonstrated, more than the essential passivity of visual selfhood, the tight restriction of light needed for any image to emerge. As one watches the dilation of the device's aperture, one can observe the visual picture passing beyond the point of coherence: an image undone by an excess of its very precondition.

Darkness, as much as light, is the fundamental precondition of the image. The image is under as much threat, in fact in some way under more threat, from light as it is from darkness. But in other ways, Alhazen's second argument was at odds with the *camera obscura* model. For what the example of after-images showed was that the motions of the eye did not match the motions of the world in exact one-to-one simultaneity as the *camera obscura*'s image did.

The eye was instead a recording device that retained its image, if in this case only momentarily, in the face of the endless change and passing away of the object. Optics would await the Nineteenth Century invention of the photographic plate and then the twentieth century development of photographic film before a true illustration of this conception of the eye could emerge.

As the period of Modernist experiment began to wane, novelists, particularly in Britain, reacted against the early twentieth century avant-garde's focus on purely subjective reality, and also what they saw as those movements' flamboyant self-advertisement. They

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¹⁷² Alhazen, Alhacen's Theory of Visual Perception: A Critical Edition with English Translation and Commentary, of the first three books of Alhacen's De Aspectibus the medieval Latin version of Ibn al-Haytham's Kitāb al-Manāzir (Philadelphia: American Philosophical Society, 2001).

looked to the aesthetics of photography for a mode of representation that had reduced the role of the observer, and the role of the artist, to an absolute minimum. But what this absolute passivity of vision brought about was not necessarily a vision of crystalline clarity. The pacification of the observer let the noisy work of time into the picture, and in this way it retained a perhaps unwitting connection and continuity with the modernist experiments with temporal depiction that we have just seen.

It is in this spirit that Christopher Isherwood made his aesthetically programmatic statement at the beginning of *Goodbye to Berlin*, as he stands on his balcony window taking in the street before him:

From my window, the deep solemn massive street. Cellar-shops where lamps burn all day, under the shadow of top-heavy balconied façades, dirty plaster frontages embossed with scroll-work and heraldic devices. The whole district is like this: street leading in to street of houses like shabby monumental safes crammed with the tarnished valuable and second-hand furniture of a bankrupt middle class. I am a camera... ¹⁷³

These last four words have become the most famous thing about the novel and have in some way come adrift from its context within it. They are often quoted on their own with an erroneous full-stop placed before the end-quotation mark. But it is not the end of the sentence. The camera whose mode of sight Isherwood aspires to is no ordinary camera. The full sentence reads: 'I am a camera *with its shutter open*, recording, not thinking.' The italics are mine: the addition is important. What picture, one finds oneself asking, does one ever hope to attain from a camera whose shutter has been left open? The paragraph goes on: 'Recording the man shaving at the window opposite and the woman in the kimono washing her hair. Some day all this will have to be developed, carefully printed fixed.' (p.3) Again, one asks, what process of development can ever hope to redeem an image made by a camera

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¹⁷³ Christopher Isherwood, *Goodbye to Berlin* (Oxford: Clio, 1985), p.3. All subsequent references to this edition with page numbers given in the text.

whose shutter has not already 'fixed' it? Isherwood's camera-eye, like Bragaglia's, represents a pacification of the visual subject to the second degree; not just a camera but a camera with its shutter open; not just a disregard for what he sees but a disregard for clarity of sight altogether.

For it is wrong to state that a *normally functioning* still-camera is entirely *indifferent* to what it sees. A camera is a machine whose sensitivity to light is such that it must avert its eye the very same instant that it opens. Only in doing so can it hope to represent anything at all. The only reason, we might say, why it can afford to be so indifferent to *what* it looks at is because it is always so very choosy about *when* it looks and for *how long*. It requires the immediate abortion of the process of exposure to allow it to depict any single and defined object. Isherwood posits the idea of some future point in time at which the crowd of accumulating images he receives will become meaningful. But for a camera left open, there can be no such deferral of comprehension. Comprehension is allowed only by an instantaneous moment of *apprehension*. One can give a photographic image fixity only by leaving it behind; shutting the door upon it, leaving it in the dark.

The room from which Isherwood is looking out is itself, like the open-eyed camera, the recipient of a gradual build-up of impressions. Isherwood recounts his eccentric landlady Fraulein Schroeder's extended commentary on the origins of the stains that previous occupiers of the apartment have left behind them. 'She is fond of pointing out to me the various marks and stains left by lodgers who have inhabited this room...' (p.7) The room becomes a kind of photographic plate, recording for posterity the activity of its tenants over an extended period of time; an entire history vouchsafed within the bounds of one small area. Yet the history that Isherwood gains from this accretion of stains is not a nicely comprehensible narrative but an inconceivable blur of accumulated vision.

Frl. Schroeder can go on like this, without repeating herself, by the hour. When I have been listening to her for sometime, I find myself relapsing into a curious trance-like state of depression. I begin to feel profoundly unhappy. Where are all those lodgers now? Where, in another ten years, will I be myself? Certainly not here. How many seas and frontiers shall I have to cross to reach that distant day; how far shall I have to travel, on foot, on horseback, by car, push-bike, aeroplane, steamer, train, lift, moving staircase and tram? How much money will I need for that enormous journey must I gradually wearily consume on my way? How many pairs of shoes will I wear out? How many thousand cigarettes shall I smoke? How many cups of tea shall I drink and how many glasses of beer? What an awful tasteless prospect! (p.9)

Isherwood feels for a moment overwhelmed by the fantasy of temporal aggregation that the room's accrual of unintended imprints offers. Quotidian artefacts accumulate to an uncountable sum and become vaguely threatening in their final enormity; the routine is magnified in an instantaneous apparition of all its countless repetitions. The 'distant day' when Isherwood reaches his unknown destination and all will be clear to him becomes unreachably remote when viewed in and through the entirety of prior experiences. The tiny aperture through which experience is drip-fed to us over time is dilated to the point of saturating over-exposure. Isherwood sees time in its totality and that's what scares him. His camera-eye fails him because it cannot close upon one momentary vision in the way a camera should.

Moreover, the jumbled history of locomotion contained in Isherwood's list, 'on foot, on horse-back, by car, push-bike, aeroplane', etc., opens the temporal span of his fantasy beyond that of merely his own life history; the expanse of time that he imagines for himself in one glance is the time of industrial history itself. The state of industrialised transport that had become available to the citizens of Isherwood's day is viewed in amongst and aggregated to those of the past generations. Technological innovation is seen not as the replacement of that which it innovates, but as an excessive appendix to it. Industrial transport history is a large congested pile-up of invention in which the new coexists with the old, not casting it to oblivion but super-imposing itself upon it. Through Isherwood's malfunctioning camera-eye

we see a vision of history as increase and accumulation, a history that breeds objects at exponential speed providing ever more to see, ever more for the eye to perceive, manage and accommodate.

The camera metaphor doesn't make any further appearance in the novel until the very end, but something of this sense of blurring visual saturation over time colours the rest of the narrative through all of its abrupt conclusions and hauntingly terminated relationships. Much later in the novel, Isherwood and his friend Otto bid farewell to Otto's mother, Frau Nowak, at a bus station near the Tuberculosis sanatorium where she and her companions are living out a sad coda to their lives, desperately staving off death with sham gaiety.

They all thronged round us for a moment in the little circle of light from the panting bus, their lit faces ghastly like ghosts against the black stems of the pines. This was the climax of my dream: the instant of nightmare in which it would end. I had an absurd pang of fear that they were going to attack us – a gang of terrifyingly soft muffled shapes – clawing dragging us hungrily down in dead silence. (p.190)

It is tempting to see this nightmarish description as a lapse in Isherwood's self-proclaimed passive, photographic aesthetic. After what seems to be a call for crystalline objectivity, a cold, mechanical, thoughtless, selfless sight, here at last is an image infused with the selfhood of its viewer, altered to reveal within it the ghostly stuff of the psyche. Tempting, that is, until one reflects on how long photographic super-imposition, the appearance of more than one moment's impression on a single plate or film, dominated our conception of what a ghost actually looked like. Isherwood's mental film of superimposed images, his impotent ability to see the two instants at once, creates for itself the blurred, muffled, ghostly optical effect. It is almost as if, in the double pacification, or double negation of the agent of sight that his wonky camera aesthetic articulates, the self re-emerges into the picture, this time not as a conscious agent but as subconscious interference. The image of Mrs Nowak and her friends outlives their objective presence as they have outlived their time; like Hugo's spectral railway

guard, like the damned that cling to Dickens' train through the underworld, their visual impression migrates from its object momentarily, muffling and obscuring its shape and contours, becoming a kind of Aristotelian dream: the impression that is the ghostly afterlife of the object.

But the moment passed. They drew back – harmless, after all, as mere ghosts – into the darkness, while our bus, with a great churning of our wheels, lurched forward towards the city, through the deep unseen snow. (p.191)

At last, Isherwood's camera-eye does its proper job of closing and concluding upon the image and delivering it to darkness. And the bus does its proper job of transporting the viewer from one scene to the next in smooth singular chronological sequence.

Ultimately however, his eye achieves no such simple temporal form and closure on the past. Not even in the face of the oblivion and destruction reaped upon the city as the presence of Nazism creeps slowly into the narrative. Nazism's program was a violent attempt to counteract the blank white space of the cosmopolis by murderously singling out one colour in its human spectrum; an attempt to give that blank white space depth and form by means of the awful shadow it cast across it. But a camera eye, an eye that records every moment continuously and unflinchingly, can keep hold of the past in the face of its destruction.

Towards the end of the novel, Isherwood describes the curious stare of his pupil Herr N., a police chief under the old Weimar regime and a clear candidate for Nazi purgation.

'Sometimes he will bend forward to the window and regard a building or a square with a mournful fixity as if to impress its image upon his memory and bid it goodbye.' (p.282)

In the final passage of the novel, set against the backdrop of the purges, the horrors of a city in homicidal turmoil, Isherwood finds an equanimity in the apparition of a sunlit street.

To-day the sun is brilliantly shining; it is quite mild and warm. I go out for my last morning walk, without an overcoat and hat. The sun shines, and Hitler is master of the city. The sun shines, and dozens of my friends... are in prison, possibly dead...

I catch sight of my face in the mirror of a shop, and am horrified to see that I am smiling. You can't help smiling, in such beautiful weather. The trams are going up and down the kleitstrasse, just as usual. They and the people on the pavement, and the tea cosy dome of the Nollendorfplatz station have an air of curious familiarity, of striking resemblance to something normal and pleasant in the past – like a good photograph.

No. Even now I can't altogether believe that any of this has really happened. (p.283-4)

Amongst this sun-drenched image, the details that he notices in particular are of the city's fixtures and continuities, all that which allows him the delusive sense of normalcy amongst a catastrophic series of changes. This could be seen as Isherwood finally closing his shutter for good, averting his eyes to all that is presently staring him in the face in favour of a stable picture of the past. But it could equally be the fixity and openness of his gaze that creates this false sense of continuity. The dark new features of the cityscape, all that is unfamiliar and threatening, are not lost to the darkness of a closed eye, but lost within the saturating brightness of an unremittingly open one. It is the sunlight itself, rather than anything it illuminates, that provides Isherwood's most sustained focus of attention. Isherwood's equanimity is the equanimity of someone who no longer sees any one image in and by itself, but an image in the midst of a saturating field of preceding and succeeding images, to the point where he cannot distinguish one from the other. The dark and horrendous novelty of his surroundings is swamped in their very superimposition upon one another and upon the still persistent images of the city's past. Isherwood has moved beyond contemplation of any identifiable singular images or even sequence of images, and contemplates instead a vision of the white light that is simultaneously their precondition and corruption.

A morally ugly equanimity perhaps. But a pacific and pacifistic attitude always has the potential to be so in the face of its opposite.

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Michel Serres was born in 1930 and came of age through the course of the Nazi atrocities that Isherwood saw with such blank indiscrimination. In the opening remarks of his conversations with Bruno Latour, he states that these experiences had a central determining influence on his subsequent philosophy.

Here is the vital environment of those who were born like me around 1930; at age six, the war of 1936 in Spain; at age nine the blitzkrieg of 1939, defeat and debacle; at twelve, the split between the resistance and the collaborators, the tragedy of the concentration camps, and deportations; at fourteen, the Liberation and the settling of scores it brought with it: at age fifteen. Hiroshima. 174

Serres makes an anecdotal case through the course of the conversation for seeing his metaphysic and his conception of time as born out of an abiding pacifism. I believe it is possible to see this as more than a set of fine sentiments to flavour his abstractions. If in Europe, since the events he describes, pacifism has divided itself into two different senses, the one everybody subscribes to and the one no-one subscribes to, Michel Serres is in the latter camp. For, as the quotation above makes clear, he does not just reject the war waged by Germany, but the war waged against that war. In the face of the noise and the fury of contestation, he calls for a quiet on the part of the subject that veers on quietism. He rejects all futile attempts to counter violence with violence, noise with more noise. Such catastrophic efforts, for Serres, lead not simply to the destruction of human populations, but to a deformation of the very nature of time and history. If time needs a certain amount of noise and contestation to let it move, the noise of war increases this indeterminacy until it reaches a climactic clot of images, a pile-up of visual rubble under which reality lies buried. He writes in Genesis:

The more they hate, the more they fight, the more they kill one another, the more they sink, immobilized, in illusion, the more they thicken the great wall of appearance.

¹⁷⁴ Michel Serres with Bruno Latour, Conversations on Science, Culture and Time, trans. Roxanne Lapidus (Michigan: The University of Michigan Press, 1995), p.2.

Marinetti thrived on the idea of a war that could bring the images of the past and future into one single radiant spectacle. Time propelled itself forward through the cataclysmic meeting of separate visual instants. But Serres feels time burdened under the weight of such a spectacle. Time is at risk from two equal threats of violence: the violence of the absolute substitution of the present for the past, which results in nothing but the repetition of the past by the present that has taken its place; and the violence of a present that superimposes itself upon the past and on the future, compounding them all together in a single simultaneous concatenation of appearances.

The war that he grew up with reached its climax with just such a spectacle. On August the 6th and 9th of 1945 Hiroshima became the ultimate *Ville Lumière*. The destruction that took place was no greater in terms of human lives than the incendiary bombing that had already destroyed cities like Dresden and Tokyo, yet the form that this mass assassination took was wholly new. This is true not simply in the sense that the nuclear technology itself was new; it was not simply that the means of destruction were unprecedented, but the experience of that destruction – an experience of destruction that was also a destruction of experience – took the form of an unprecedented intensity of *light*. At the point of impact, there appeared a flash that lasted for one 15 000 000th of second. This light was itself a culprit in the murder. It was a light that could kill, an image of annihilation and an annihilating image. Akira Lippit, in a study of the new forms of sight and blindness associated with the science of radiation, writes of this spectacle. It was, he suggests, 'the last form of light, perhaps, that anyone needed to see. The last light of history... or the light at the end of history.'176 The light has achieved a kind of ultimacy in its blankness; it contains the sum of

 ¹⁷⁵ Serres, Genesis, p.77.
 176 Akira Mizuta Lippit, Atomic Light (Shadow Optics) (Minneapolis: University of Minnesota, 2005), p.82.

every image that has preceded it and every image that could possibly succeed it, thus preempting and precluding succession. It refuses the possibility of a future by containing all possible futures and by refusing to cede its place to any succeeding image.

Everyone is touched, transformed, but no-one survives the force of an atomic metaphysics...a spectacle that changes the terms of specularity as such. A spectacle in excess of the capacity of any individual to recognise it as spectacle, or even see it... A phantom temporality that passes in an instant, in a flash; that leaves behind a historicity scarred and haunted... by an image, an image of time, torn from its place in history. A timeless image of timelessness. It inscribes an end of visuality, an aporia, a point after which visuality is scarred by the forces of an insurmountable avisuality. The atomic blast that... brought forth a spectacle of invisibility, a scene that vanishes at the instant of its appearance only to linger forever in the visual world as an irreducible trace of avisuality. ¹⁷⁷

Lippit's observations are drawn in large part from a remark made by Willem de Kooning in his essay 'What abstract Art Means to Me', where he writes of the impossibility of traditional representation in the wake of Hiroshima.

Today, some people think that the light of the atom bomb will change the concept of painting once and for all. The eyes that actually saw the light melted out of sheer ecstasy. For one instant, everybody was the same color. It made angels out of everybody. 178

The witness to this whiteness achieves her angelic status through her appearance: it is the vision *of* her rather than her subjective vision that is angelic. Yet the light of the atomic blast has the capacity to confound the distinction between the two. The blank whiteness that her image has become is indistinguishable from the blank whiteness that she sees; just as, in her whiteness, she has become indistinguishable from everyone else. The intensity of the flash makes no distinction between the outer appearance of her skin and the especially sensitive portion of that skin that is her retina. Her skin has become one all-encompassing retina: she sees with her whole body.

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¹⁷⁷ Lippit, *Atomic Light*, p.82.

Willem de Kooning, 'What abstract Art means to me', in *Collected Writings*, ed. George Scrivani (New York: Hanuman, 1980), p.60.

The single instant that contained the flash broke down the distinctions between you and I, between here and there and between now and then. It is not simply that the post war subject cannot outlive the memory of what she has seen. She is not compelled to repeat a traumatic memory because the eye perpetually remembers everything for her: she never stops seeing it. Like all dazzling images it outlives its instant.

Amid the war leading up to this moment, Walter Benjamin met his own catastrophic end. Having failed to escape across the border into Spain, he committed suicide before the Nazis could reach him. But before leaving, he had managed to vouchsafe his final work: the 'Theses on the Philosophy of History'. In what is now his best known of these theses, he describes another angelic witness to the violence of History, one that takes the name of History itself.

A Klee drawing named 'Angelus Novus' shows an angel looking as though he is about to move away from something he is fixedly contemplating. His eyes are staring, his mouth is open, his wings are spread. This is how one pictures the angel of history. His face is turned toward the past. Where we perceive a chain of events, he sees one single catastrophe that keeps piling ruin upon ruin and hurls it in front of his feet. The angel would like to stay, awaken the dead, and make whole what has been smashed. But a storm is blowing in from Paradise; it has got caught in his wings with such violence that the angel can no longer close them. The storm irresistibly propels him into the future to which his back is turned, while the pile of debris before him grows skyward. This storm is what we call progress. 179

Progression through history, for Benjamin, only made ever more remote the possibility of a redemption and fulfilment of the lost potentials of the past that was the true goal of revolution. Such a goal could not be reached through linear time; it did not appear as the end or the outcome of the historical process. It appeared as another separate possible time in parallel to our own, potentially available to it at every moment if only humanity could intervene in its own destructive course and, in a single messianic moment of revolutionary action, lift itself out of History and into a perfect state of perpetuity.

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¹⁷⁹ Walter Benjamin, *Illuminations: Essays and Reflections* (New York: Harcourt, Brace & World, 1968), p.257.

Yet, in some way, the angel of history has already become witness to an image of timelessness, or a timeless image. It is the very fixity of his stare, his inability to look away, that has created it for him. Such a passive fixity of vision has already effected an unchaining of linear history's chain of events; history has derailed itself. In the resulting pile-up of images, time continues to move; but each new image eventually adds nothing to the previous one and only heightens their mutual destruction. This is not an image of perfection, but the polar opposite; not the redemption and fulfilment of possibilities, not the becoming actual of the possible, but the becoming merely possible of the actual, the noisy perception of the real. It adds and keeps on adding unfulfilled possibilities to sight until it reaches the final saturation of the visual field. The staring eye of History, if left open long enough, will become witness to every possible vision all at once.

If that 15 000 000th of a second on August the 6th 1945 marked the beginning of our own geopolitical era, if history since the destructive liberation presented in that spectacle of state power has been an ever widening expansion of that power by that state, if history since then has done nothing but carry on ending, horribly, *endlessly*, then we might speak of our political predicament from now on as a state of *dazzle*. Unless of course we ever manage to wipe it clear from our retina: unless, that is, we ever blink and come to.

Conclusion

The moment of modernism has now passed but the noise has not stopped. Our environment in the contemporary city is as awash with straying and invasive sensations as ever. But the aesthetic exhilaration that we are capable of gaining from it has waned. Modernism has left us with a difficult legacy, a complicated sense of our own posterity to it. The Futurists were very clear about how their successors should deal with them. Futurism had a self-destruct programme built into it. From the first manifesto in 1909 they prophesised the coming of the day, ten years from then they said, when the next generation of 'younger stronger men' would 'throw us into the wastebasket like useless manuscripts – we want it to happen!' Ten years later they were still manifesting away, proclaiming their future and starting to get involved in some nasty politics. But in a way, even if they had been thrown away it would still be in accordance with their will and with their programme. We would still be carrying out their orders. Either way they win. Either way they are still with us. To get rid of Modernism is always to repeat it. All the descriptions of our own time as being in whatever way post-modern share, through the very declaration of their postality, Modernism's same essential structure.

If we look at Modernism as an essentially noisy category, if we look at it without trying to see the single discreet thing that it was and the single meaning that it had and pay attention to the way it scrambled its own message, the way that it equivocated itself, then it becomes equally present in its own post posterity. It contained its own future through its uncertainty. Through the very abundance of possibilities as to what it might be, Modernism made sure it would always be there, it would always already occupy whatever cultural space its successors happened to find themselves in. Modernism can be seen as that which is always and forever yet to be decoded. Its true moment of comprehension was always ahead of it.

We stand in the wake of Modernism like the viewer of Balla's painting 'The car has passed.' We are in its wake not in the sense that we have succeeded it but that it has succeeded us, will always have succeeded us. In its headlong rush to occupy the space ahead of it, it has left us behind.

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