

How Literature can help Environmental Accountants
by Nick Lyth

In the Western tradition of scholarship, we have spent several centuries observing a separation in process, variously described as the arts and the humanities, science and the arts, or even the Two Cultures (CP Snow). In the last thirty years, this polarisation has started to be questioned. In works like *The Tao of Physics*, and *Gödel, Escher, Bach*, our attention has been drawn to the similarities in the process of creation in these different spheres of scholarship, which suggests that both derive from a similar impulse. We have also learned how, in Eastern scholarship and philosophy, the separation of the subjects never took place. They were always understood to have interconnections which made their similarities much more important than their differences.

Although the conceptual barriers have been lowered as a result of this work, the habits of teaching and research die hard. Our schools are still dominated by a system which separates the sciences from the arts, and our Universities still organise themselves into faculties of specialisation which honour these distinct and polarised subjects. Research is still conducted along lines of demarcation, while too often the ideals of multi-disciplinary task teams remain just that – ideals. The reality of the breakthrough in the 70's, when the post-hippy culture discovered the traditions of the East, never got very much further than the passive acknowledgement that there is another way of life outside the inexorable streams that we adopt.

This paper is an attempt to build just such a bridge and draw a serious literary theme into a serious economic debate. It asks, at this time of enormous challenge to conventional thought concerning our economic relationship with the environment, can study of the literary canon help to illuminate the economic debate? As economists around the world wrestle with the issues raised by environmental accounting in a world which seems to be facing possibly terminal environmental threats, it might seem frivolous to suggest that literature has any place in the debate. However, literature has a general role to play in serious debates of all kinds; and it has a specific role to play in the economic debate. Perhaps it can help us to confront the possibility of a new era of economics capable of absorbing the threats we face. Perhaps it can help us to find meaning in a new economic framework.

This paper will suggest that there are lessons to be learned from the literature of the environment, waste and resources. It can reveal to us the significances of waste and resource, illuminating these polar opposites as energy or despair, from the desolate to the achieved, the isolated and excluded to the mainstream, and the poor to the rich. But this paper will conclude there is a more important axis of tension revealed by some of the best literature in recent times, in dealing with these subjects that concern us most. It is the connection between waste and money, or resource to money. This can inform the economic debate from an unexpected perspective. It sheds light on a connection that economics is seeking to make, but it does so in a way that sets the imagination free. It can provide a radical new context for analysis that has the potential to break the shackles that constrain environmental accounting.

The general significance of literature is simple to grasp, and easy to observe. It is in the poetic truths that our lives are fully revealed, not in the scientific truths. Our capacity for understanding ourselves in the context of our world comes from art, not science. This is because art allows us to identify ourselves in the created, or perceived, world of the creator. Science does not. It can only permit us to understand ourselves within the self-limiting world of the specific scientific observation. If it steps outside these boundaries, it ceases to be scientific.

The impact of literature on some of the most serious issues of social governance has been well recorded. The impact of Dickens, especially in *Hard Times*, upon the treatment of the working classes in Victorian Britain is one example; another is the heightened awareness of the injustices to women caused by Thomas Hardy's shocking novels, culminating in the tragic *Jude the Obscure*. In America, the effect of *The Grapes of Wrath* is hard to discount in the history of US labour relations. Whilst other subjects make us think things, literature makes us

feel things, because of the process of identification – we put ourselves in the position of the heroes and heroines whose narrative we read for pleasure, and, without knowing it, we find we have absorbed more about our world than any scholarly essay on the subject could have taught us.

The challenge of decoding literature, applying a process of analysis and research, is therefore more important than many. This paper is going to decode the literature of waste and resources in its application to the modern world, and ask what it might teach us about our world, and will apply the obvious trends and directions in literature to an economic argument. This link is the most important goal of what follows. The intention of the argument is to show a connection which illuminates not only our literary understanding, but also our economic understanding, in such a way that it provides a new context for our economic research. The argument will start by showing the sweep through British literature of the last 150 years of a theme relating to waste and resources, and how this has changed. It will suggest that, even in this broad development, the trend can be interpreted in a number of different ways, some even mutually exclusive. These foreshadow the way our world is changing. However, the most interesting conclusion for this paper is the linkage of the imaginative literary understanding to a direct economic framework, which encourages a belief that study of the two disciplines, if put together, could provide a fertile ground for new departures in theory and practice.

Perhaps the most obvious starting point in the literature of waste is the most famous of all. *The Waste Land*, written by TS Eliot, and published in 1922, is one of the defining achievements in modern literature. It deals directly with our theme, symbolically and literally.

What are the roots that clutch, what branches grow
Out of this stony rubbish? Son of man,
You cannot say, or guess, for you know only
A heap of broken images, where the sun beats,
And the dead tree gives no shelter, the cricket no relief,
And the dry stone no sound of water. Only
There is shadow under this red rock,
(Come in under the shadow of this red rock),
And I will show you something different from either
Your shadow at morning striding behind you
Or your shadow at evening rising to meet you;
I will show you fear in a handful of dust.

(*The Waste Land*, TS Eliot, lines 19-30)

Here we are dealing with a landscape of waste, a world that has been laid waste, it has been wasted in the sense of physical dearth, in the sense of opportunity gone to waste, and it has been converted into rubbish. Something does grow, but you cannot say what, nor can your Gods tell you, for it is too bleak to contemplate, it is the product of the waste itself. It is “*fear in a handful of dust.*”

The influence of this one poem was enormous. It broke new ground in poetic expression, which took time to seep through, but changed consciousness when it did. It sets a tone of despair that the great poets and novelists of the era were to follow. During the same period, one of the greatest novels of American literature treats with the imagery – also symbolic and literal within the world of the novel – in a manner that compares with the despair in *The Waste Land*.

About half way between West Egg and New York the motor road hastily joins the railroad and runs beside it for a quarter of a mile, so as to shrink away from a certain desolate area of land. This is a valley of ashes – a fantastic farm where ashes grow like wheat into ridges and hills and grotesque gardens; where ashes take the forms of houses and chimneys and rising smoke and, finally, with a transcendent effort, of ash-grey men who move dimly and already crumbling through the powdery air. Occasionally a line of grey cars crawls along an invisible track, gives out a ghastly creak, and comes to rest, and

immediately the ash-grey men swarm up with leaden spades and stir up an impenetrable cloud, which screens their obscure operations from your sight.

(*The Great Gatsby*, F Scott Fitzgerald, pub. 1925, Ch II)

This surely is a vision of hell. It has taken the symbolic values of TS Eliot's waste land and given them context and reality within an urban setting. In other words this is not a figurative world that is given to us through the medium of poetic truth, but a reality we can pass on a train or in a car, any day of the week. It is not only despairing in itself, a "*valley of ashes*", it is also a place where men are condemned to work, where they become transformed and take on the desolation as their own. They cease to be human. They are removed from our world and taken up by the "*impenetrable cloud*". In this idea of waste, the detritus of civilisation, there is nothing good, no way to come back from it, nor to deviate from what we have created. The idea of despair contained in the vision of both Eliot and Fitzgerald is inevitable, a consequence of what we have done and have become, for which we now have to pay, because it is with us always. Fitzgerald's precise physical placing is no accident.

I will come back to this later, to contrast its utter bleakness with a vision from the same part of the world three quarters of a century later.

This vision finds its logical conclusion in the work of an Irish playwright. In Samuel Beckett's plays, we find the despair taken to a level of nihilism that is still hard to bear, more than fifty years after he wrote these works.

In *Endgame* (1957), two of his characters, a married couple, both legless, live in rubbish bins. They are isolated in a world beyond civilisation, where everything has ended and cannot be recovered. The rubbish contained in the bins is no longer the discarded material of human beings, it is the human beings themselves. This then led to a further refinement of Beckett's vision, in *Happy Days* (1962), where the heroine is buried in a mound of earth, from which she cannot move, throughout the play. She is called Winnie, and the play – supposedly written at Beckett's wife's instigation, asking for something more cheerful after the terminal *Krapp's Last Tape* (1958) – follows her into an increasingly gloomy and forlorn isolation. Beckett's last word on waste and the human condition in dramatic form was contained in a short stage work ("play" hardly seems apt, as it lasts no more than 35 seconds). This can be seen as the final conclusive comment on the view opened up by Eliot.

1. Faint light on stage littered with miscellaneous rubbish. Hold about five seconds.
2. Faint brief cry and immediately inspiration and slow increase of light together reaching maximum together in about ten seconds. Silence and hold for about five seconds.
3. Expiration and slow decrease of light together reaching minimum together (light as in 1) in about ten seconds and immediately cry as before. Silence and hold about five seconds.

(*Breath*, Samuel Beckett, pub 1968)

The cry is a birth cry – the first noise made by an infant. As with much that Beckett wrote, it is a joke before it is anything else, not least funny because he was taken so seriously. But as with all good jokes in Beckett, it is a joke with an unpleasant point. This is all life amounts to, and all he requires to show us the world, in visual terms, is a heap of "*miscellaneous rubbish*".

These works propose an assumption, that waste is bad and that we seek to dispose of it in a way that hides and rejects it. It represents all that is hopeless in our civilisation. There is another strand of literature that makes sense of it, which accepts its existence, and places this in a social context. Waste represents poverty, not hopelessness, and deserves our respect and sympathy. It is no accident that in *To Kill a Mockingbird* (Harper Lee, pub 1960), we find the black victim living with his family beside the town dump.

A dirt road ran from the highway past the dump, down to a small Negro settlement some five hundred yards beyond...It was necessary either to back out to the highway or go the full length of the road and turn around; most people turned around in the Negroes' front yards.

(*To Kill a Mockingbird*, Harper Lee, pub 1960, Ch 17)

We are seeing a social statement made through the world of waste, that equates waste with poverty, and the converse, resource wealth, which produces waste, equated with prosperity.

A positive economic link to waste emerges from Victorian literature, which prefigures the attitudes we need to deal with now, and from which we might start to search for a new economic means of dealing with waste and resources. In *Our Mutual Friend* (pub 1865), Charles Dickens introduces us to the character of Boffin, or, as he is nicknamed, the Golden Dustman. Boffin is called the Golden Dustman because, he works for the owner of, and then himself becomes the owner of, piles of "dust", or collected rubbish, which, in 19th Century London, provided enormous wealth to the owner. The value of the dust heaps lay in their salvage materials, streams of which were consistently represented in Victorian rubbish collections. Hence, in acquiring the dust heaps, Boffin became overnight one of the wealthiest classes in London, a position for which he had neither been prepared nor to which he had aspired. Simple and rough in his tastes, he and his wife are not ready to take their place in the ranks of worldly sophistication represented by their new economic class, and their story is about how the two of them differ in their response to the unexpected challenge brought by their new-found wealth. Whilst his wife resists the effects and remains unchanged, Boffin succumbs to a new greed and miserliness, and his simple honesty is gradually corrupted in the course of the book.

In *Our Mutual Friend*, Dickens is dealing with waste as an economic activity, rather than a symbol of despair, or as a social statement. There is nothing perjorative about Dickens treatment of waste as a process of acquiring wealth. Whilst the dust heaps are not pleasant places, they are not inherently menacing or sinister. Their sinister quality comes from the motives and purposes of those who deal with them, the effect they have on the owners, or earners, from the dust heap, and the equally malevolent effect they have on those who think they can also benefit from them, especially the grasping Silas Wegg, who believes he can blackmail Boffin into giving up a share of his fortune. Dickens is exposing the corrupting effect of greed.

Resources equate to money. But this link is bad. It can be seen tantalisingly, and with horrible equivocation, in Joseph Conrad's *Heart of Darkness* (pub 1902), famously transposed to the Vietnam War in Francis Ford Coppola's imposing reading of the novella in *Apocalypse Now*. But the battlefield in the original is not a political landscape, it is for control of resources. Underpinning this famous meditation on corruption lies a profound truth about our relationship with resources, and what it might mean for the world.

Heart of Darkness undoubtedly deals with despair, but the despair is a consequence of something invoked, but not part of, the process of wealth creation. It is a consequence of what is within human nature. The story revolves around the Belgian trading posts in the Congo, where the company's representatives are sent to open up and maintain supply lines from deepest Africa, of – predominantly – ivory. The trade in ivory was guaranteed to make rich all those involved, and, most of all, it would fill the coffers of the company itself. But there is a price to be paid in time and life. What seems to be a noble sacrifice for the greater good in the comfortable salons of Brussels is, the more closely it is examined, seen to be a corrupting and destructive experience. Marlow is sent in search of the company's best producer, Kurtz, a symbolic citizen of Europe ("...all Europe contributed to the making of Kurtz" Ch II). By the time he finds him, Marlow has travelled through increasing layers of depravity as he journeys upstream, but even so, he is shocked by what he finds when he finally encounters Kurtz, but not as shocked as Kurtz himself. He has been shattered by the confrontation with forces that evoke what is deepest in his own nature, and his doomed attempt to fight them. "The horror! The horror!" (Ch III), famously later used by TS Eliot himself, are the last words to be uttered by the man who has been most completely exposed to the consequences of the white man's economic greed, and has been completely destroyed by them. This prefigures a problem that was to make itself real in the 20th century, the problem of a rapacious use of the world's resources. Conrad clearly saw the wrong done in the name of progress.

“This devoted band called itself the Eldorado Exploring Expedition, and I believe they were sworn to secrecy. Their talk, however, was the talk of sordid buccaneers: it was reckless without hardihood, greedy without audacity, and cruel without courage; there was not an atom of foresight or of serious intention in the whole batch of them, and they did not seem aware these things are wanted for the work of the world. To tear treasure out of the bowels of the land was their desire, with no more moral purpose at the back of it than there is in burglars breaking into a safe.”

(*Heart of Darkness*, Joseph Conrad, pub 1902, Ch I)

In Conrad's vision, there can be no justification for the exploitation of a vulnerable and poorly protected world. The punishments that await are deserved. There is an interesting sidelight on this issue, in *The Way We Live Now* (pub 1875), in which Anthony Trollope is equally scathing about the nature of speculation. Wealth based on presumed resources is treated as one of the defining characteristics of a corrupt and febrile aristocratic class, whose capacity to produce anything worthwhile or justifying their claim to wealth and position has become negligible. This is an important commentary on the economic system we use today, especially in 2008, when we see speculation in oil prices, energy prices and food prices running rampant. Resources evoke greed, because resources mean money. In Trollope, we can see a pure critique of the relationship of resources to money, and the uncomfortable truth that so much wealth is based on illusion. But Trollope is dealing only by implication with the reality of resources and waste. Explicitly, he concerns himself with the financial mechanisms that provide the levers by which such manipulation can take place, and so we will not dwell here on the twists and turns of *The Way We Live Now*, other than to recommend it for attention elsewhere.

In the course of the 20th Century, economic thought has moved a long way. The original insights of Adam Smith provided a model for some of the most aggressive economic development in recent years, but the first half of the century was dominated by the work of John Maynard Keynes, whose concept of Gross Domestic Product and Gross National Product seemed to rationalise the cycle of production and consumption, so that the progress towards the economics of the free market in the second half of the century had some basis in equity and efficiency. It is only now that we can see both economic theories to be flawed. Far from producing equity and efficiency, the last two or three decades of the last Millennium produced economic inequity and inefficiency on a frightening scale. Solutions are hard to find. They are provoking heated debate in political and academic circles. As hardship worsens in areas of Africa, Asia and Latin America, bitterness and conflict have resulted. Meanwhile, the same inequities are reflected within the developed world, where the issues of poverty and deprivation in the US itself, as well as Western Europe, have worsened rather than improved during this period.

In the art of the novel produced under these increasingly bewildering strains, there are many different reflections of our ability to grasp, imaginatively, the reality of what we are doing to our world. These tend to offer little hope. Charles Frazier's *Cold Mountain* (pub 1997) makes a powerful appeal for an imaginary past innocence, in which we lived without the curiosity even to explore into the next valley, and so were able to minimise the disruption caused by human life to a benign earth. If this might be a late 20th Century hymn to the new philosophy of sustainability, then Cormac McCarthy's *The Road* (pub 2006) is a scream of 21st Century agony in response to the threats of climate change. The world is no longer capable of supporting life of any kind. The remaining humans are struggling to live off the final remnants of food produced before the apocalyptic destruction of the biosphere. In *The Road*, there is no future. It is unremittingly bleak.

However, one modern novel stands out as an imaginative engagement with a possible new economy. *Underworld* (pub 1997), by Don DeLillo, tells the story of an executive in a waste management company in the United States. Here we have something as surprising as it is dazzling. The process of waste management is involved in the development of the story. It is presented as the peak of modern economic activity, the summit of achievement in commercial terms, an industry to be envied, so that the actual reality of waste management becomes glamorous. Instead of being the bottom of the pyramid, waste is at the top. It is presented as

the economic consummation of a process, it is the justification for the activities that cause it, and embodies the wealth that they imply.

“See, we have everything backwards,” he said.

Civilization did not rise and flourish as men hammered out hunting scenes on bronze gates and whispered philosophy under the stars, with garbage as a noisome offshoot, swept away and forgotten. No, garbage rose first, inciting people to build a civilization in response, in self-defense...Garbage pushed back. It mounted and spread. And it forced us to develop the logic and rigor that would lead to systematic investigations of reality, to science, art, music, mathematics.

(*Underworld*, Don DeLillo, pub 1997, Part 3, Ch 1)

These are the words of Jesse Detwiler, a “waste theorist” or “garbage guerrilla” who is introduced as “the visionary in our midst”. He articulates the most extreme expression of the theory. We are not a consumer society, so much as a waste society. But we have not yet realised this. It is hidden, even within the world of the novel. The hero’s visit to the Fresh Kills Landfill on Staten Island leads us into this revolution in the concept and status of waste.

Brian took a deep breath, he filled his lungs. This was the challenge he craved, the assault on his complacency and vague shame. To understand all this. To penetrate the secret. The mountain was here, unconcealed, but no-one saw it or thought about it, no-one knew it existed except the engineers and teamsters and local residents...no-one talked about it but the men and women who tried to manage it, and he saw himself for the first time as a member of an esoteric order, they were adepts and seers, crafting the future, the city planners, the waste managers, the compost technicians, the landscapers who would build hanging gardens here, make a park one day out of every kind of used and lost and eroded object of desire.

(*Underworld*, Don DeLillo, pub 1997, Part 2, Ch 3)

This suggests something very important to the concept of economic philosophy. The role and status of waste and resources in economics might be turned on its head. We might consider an economic argument that the driving force for economic life is the relationship between waste and resources, and that consumption and production are by-products of the major dynamic forces. What might this imaginative re-interpretation allow us to do to economic definitions, and economic models?

The immediacy of our experience in *Underworld* is teaching us something about our values. But what is the significance of our feelings as we read? How should we decode our reactions? These may contain the clue to where and how our economic intelligence should be moving. As we read the gathering intensity of descriptions of waste in *Underworld*, they increasingly dazzle. The pyrotechnics inspire awe. We are invited to gaze at an extreme manifestation of the civilisation that is our own.

Three thousand acres of mountained garbage, contoured and road-graded, with bulldozers pushing waves of refuse onto the active face...Barges unloading, sweeper boats poking through the kills to pick up stray waste...Other figures in masks and butylene suits were gathered at the base of the structure to inspect isolated material for toxic content. It was science fiction and prehistory, garbage arriving twenty-four hours a day, hundreds of workers, vehicles with metal rollers compacting the trash...He imagined he was watching the construction of the Great Pyramid at Giza – only this was twenty-five times bigger...The towers of the World Trade Center were visible in the distance and he sensed a poetic balance between that idea and this one...In a few years this would be the highest mountain on the Atlantic Coast between Boston and Miami.

(*Underworld*, Don DeLillo, pub 1997, Part 2, Ch 3)

This is not alien, this is ours, here and now. Awe is inspired by the power of what we are considering, and the scale of it. Geographically, we are very close to the “valley of ashes” in *The Great Gatsby*, written nearly 80 years before. Philosophically, we have travelled to the opposite pole. A society that has turned its back on waste and relegated it to the lowest form of life has become a society that treats it as the utmost pinnacle, an achievement to be

admired, visible, but reserved only for the most privileged. The Fresh Kills Landfill is not just enormous, it is a monument to achievement, it is an organic work in progress, a scene of privilege and technology, a place of expertise. Waste is, above all, important.

We cannot ignore it, our reactions tell us, we cannot pretend it isn't there. But should we be intimidated, or even frightened? No. As we read, we are not put off. We want more. We want to see how far this can go.

“Bring garbage into the open. Let people see it and respect it. Don't hide your waste facilities. Make an architecture of waste. Design gorgeous buildings to recycle waste and invite people to collect their own garbage and bring it with them to the press rams and conveyors...And the hot stuff, the chemical waste, the nuclear waste, this becomes a remote landscape of nostalgia. Bus tours and postcards, I guarantee it.”

(*Underworld*, Don DeLillo, pub 1997, Part 3, Ch 1)

The responses evoked by *Underworld* are extreme. They invite radical thinking. If resource flows and waste flows define economic activity, how should we measure these? How can we give them economic value? How do we deal with the stages of production and consumption that occupy the middle ground between resources and waste?

Of course, environmental accounting is a very good place to start. The work to re-assess the economic philosophy is already well under way within this school of thought. How to engage with this must be the subject of another paper.

In conclusion, our identification with art provides a door through which we can understand our world. The relationships, which the study of economics seeks to understand, are no exception to this. At this time of enormous challenge to conventional thought concerning our economic relationship with the environment, it is appropriate to seek help wherever we can. I asked the question, can the literary canon represented in the novel help? This paper offers an unequivocal answer to the question. It is only a start. This not only leads to a set of obvious economic questions, which environmental economists are best positioned to study and attempt to answer. It also leads to a much deeper scrutiny of the artistic question it raises. How can we seek useful meaning in art concerning waste and resources? If we can study this more, we may emerge from the process with a considerable contribution to the study of sustainable human life on the planet.