

THE UNCOMMONALITY OF THE COMMONS

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So as Emma said I want to talk a bit about the complexities and contradictions of the commons and I'm also going to focus a bit more on specific historical commons in Scotland. To some extent the various definitions of the commons that we've heard today already to me suggest a problem in the concept. It's become so broad as to include everything and I would argue it's becoming almost like a constitutional equivalent of organic food or fair-trade coffee. It seems to be a good thing but yet it's so ... has little substance to it and to an extent a lot of the discourse around the commons is in danger of undermining what might be the actual possibilities for alternative or transformative politics that might come from that. And there's a real danger of this just becoming an empty talking point rather than any actual movement as such.

Part of my interest comes, and part of my more critical take on it, comes from the fact that I am a programmer as well as an artist. I've been involved in what's called Free/Libre Open Source Software¹ ... which is a kind of movement ... not really a movement at all ... a form of programming practice that emerged in the 80s, as a ... initially as a critical stand towards the commercialization of programming but which has become a widespread norm within software production and spreading towards other forms such as social media. There have been interesting developments in how that's evolved

¹Free/Libre Open Source Software is normally abbreviated as FLOSS. In the late 1990's and early 2000's there was significant interest in FLOSS as a model for radical artistic practice often referring back to the strategies and practices of Situationism, Neoism, Conceptual Art and Mail Art. The emphasis within FLOSS upon programmers building their own tools and infrastructures, such as the GNU/Linux operating system, aligned well with the ideas of autonomous structure and self-institution within artist-run practice. Early examples of the overlap between FLOSS forms of production and artist-run practice include the Festival of Plagiarism events in London and Glasgow, 1989-1990 (Home 1989, Photostatic 1989 and Bloch 2008), the Copenhagen Free University, 2001-2007 (Heise and Jakobsen 2007), and the University of Openess, 2002-2006 (Albert 2007). These developed alongside the emerging hacklab scene which grew out of the conjoining of anarchist and Autonomist social centres with free public computing labs running on salvaged recycled equipment. As FLOSS became increasingly incorporated into mainstream computing business and the hacker ethos was appropriated as a means of branding various forms of exploitative volunteerism, the potential of FLOSS as a form of technologically enabled radical praxis largely evaporated. Essays on FLOSS and artist-run practice include Albert 1999 and Cramer 2000 - Cramer was also a participant in the Festival of Plagiarism. The political tensions and contradictions within FLOSS are discussed, by way of comparison with the politically informed Free Improvisation music ensembles of the late 1960's such as the Scratch Orchestra, in Yuill 2008. For a critique of exploitative volunteerism in digital culture as a form of 'free labour' see Terranova

and the contradictions within the politics of that arena. And it's been one of the main things that has stimulated my interest in this discourse of the commons.

The other thing is a long-standing interest in self-organisation and self-organised structures, particularly self-organised forms of production and that partly comes from as a teenager I was involved with anarchist groups in Edinburgh and was exposed to that form of politics from quite a young age and that informs some of my interests and to some extent is the starting point for projects I did recently looking into different forms of commons and different forms of self-organisation. These were three projects which exist as a kind of trilogy and some of them ... or material from them was shown at an exhibition at the CCA back in 2010 called *Fields, Factories and Workshops*² which title comes from a work by Peter Kropotkin a 19th century anarchist philosopher. I tend to work quite slowly over a long period of time and show my work as it evolves, so that show back in 2010 was some of that material. One of the main parts of that project were interviews with different people which had been transcribed and published online and in the exhibition some of the transcriptions were shown in printed form.³

The three projects were Stackwalker which started off looking into the idea of self-organised rural production in Scotland. I ended up focusing from that broader topic particularly on crofting communities and migrant worker groups within the fishing industry in Scotland partly because these were two areas where, on the one hand, with crofting you had this long history of self-organisation and commoning, and then within migrant, contemporary migrant worker groups in fishing there was an interesting parallel in that historically the fishing industry in Scotland has always relied on large amounts of migrant labour and originally this was largely migrants from Ireland and Gaelic-speaking communities in the Western Isles. This internal migration was the basis of the fishing industry in Scotland and now that kind of migration is ... or at the time I was doing the work which began in 2008, this was mostly migrant workers who were from Poland, Lithuania and Latvia.4 And what I found were people who had set up groups to represent themselves because it's an area where unionisation is quite difficult. The interesting parallels are that historically with ... how ... not the crofting community as such, but how Gaelic-speaking Scots as an internal migrant labour force within Scotland in the 19th century had constituted themselves in, for example, cities like Glasgow where you've got smaller organisations who represented initially people in terms of their birthplace and home affini-

²Centre for Contemporary Arts, Glasgow, 7th August to 18th September 2010.

³The websites for the three projects discussed here are: http://www.stackwalker.org, http://www.newcommon.org and http://www.giventothepeople.org.

⁴Members from some of the contemporary migrant worker groups in Banff, Fraserburgh and Peterhead are interviewed in Yuill 2012.

ties, so you get associations based around people from Lewis, which evolved into more class-based organisations and ones that formed the basis of early 20th century and late 19th century workers movements led by figures like John Maclean, Ed McHugh.⁵ So that project I interviewed ... from the crofting areas I particularly looked at areas that had been sites of struggle. The interesting thing about crofting is not so much that it represents a timeless form of farming but rather that it was a site of struggle for land and political action around land in the late 19th century and I went to areas where there'd been various forms of struggle such as land raids and riots and stuff and spoke with people ... in certain cases direct descendents of people who were involved in this. And these actions went right up to the 1950s. The contemporary follow-on from that has been the idea of the community buyout in areas like Eigg and Assynt where they've bought out the land from private landowners. So that was that project. It touched on other issues such as land, law and language and where linguistic and ethnic differences were often used to normalise class differences and these are some of the legacies of the way crofting is a form that's been used to naturalise what are really artificial forms of class construction in Scotland ... rather than an indigenous farming system.

The second project is called *New Common*. It's pulling together interviews from different smaller projects which had been both in England and in Scotland that cover areas like commons and the Common Good in Scotland as well. It includes Andrew Wightman's interview. It also includes interviews from communities around the outskirts of Bournemouth which were all built around ... which were council estates built around common land. There is a connection between the commons as a kind of historical infrastructure with the idea of Estovers that Emma has touched upon, and then the Welfare State as a form of public provision which has to a certain extent replaced and absorbed aspects of the historical use of the commons. These included a place, one called West Howe, which is built next to a common called Turbary Common and Turbary is one of the rights of commoning similar to Estovers. A Turbary ... the rights of Turbage are the rights to gather wood and heathland materials to use for fire and Turbary Common cites the idea of these rights into its name. There's also an interesting literary relationship there ... this particular part of the country is where Thomas Hardy is from and Thomas Hardy's fictitious Egdon Heath maps across the same area so these are communities living in the same area as Thomas Hardy talks about in works such as Return of the Native. So the themes of class transformation that exist in

⁵For a study of the Gaelic-speaking organisations in 19th century Glasgow see Withers 1998 as well as Charlie Withers' interview in Yuill 2012. The relation of John Maclean and Ed McHugh to the struggles in the crofting areas is discussed in the interview with Allan Armstrong in Yuill 2012 and in Armstrong 2012.

Thomas Hardy's work are mapped to the contemporary experiences in these areas.

The project also included work in Hulme in Manchester where you have a contemporary example of the revival of the common idea. Hulme is most famous ... it was built as an area of 1960s tower block housing that became derelict in the 1980s and became a large scale squat and it was famous for Manchester bands like Joy Division and Happy Mondays. In Hulme the tower blocks were destroyed in the 1990s but many people that were part of the squatting movement in Hulme stayed on in the area and have run different projects. The house I was staying in is a place called Redbricks which was a set of council houses in Hulme that are run like a kind of unofficial housing cooperative, so the residents themselves set up a cooperative system within the council housing system as a form of self-representation. There was also efforts there to turn some of the land that had been designated for property development into a commons in order to block the property development on that area of land so that was an interesting contemporary variant on the commoning idea.

Woman in audience Can I interject at this point and ask what's happening with the field in Maryhill?

Sorry?

Woman The field in Maryhill in that similar situation.

Do you mean the Children's Wood field?

Woman Yes

That's ... you shouldn't ask me (audience laughter), this person's more involved than I am. As far as I know that piece of land doesn't form any kind of Common Good designation because it was ... I'll talk more on the detail later. At the moment that is, as far as I understand it, in bureaucratic limbo basically.

Woman Cos I think the government ... the Scottish Government said to the developers "you shouldn't really be pursuing this" basically but I haven't heard much since.

No ... my basic understanding is it's in bureaucratic limbo which will last until either the campaign loses strength and the council can push ahead with the building or the council give up and the land stays as it is.⁷

⁶For a history of Hulme and the squats see http://exhulme.co.uk.

^{&#}x27;The Children's Wood is part of North Kelvin Meadow, an area of abandoned council land in Glasgow that was originally a sports area but has since become overgrown as a wild space. The local community have adopted the land as a public resource providing numerous events and establishing outdoor schooling and nursery projects. The council have sought to offer planning permission to developers to build private housing on the land, which to date the community have been successful in delaying. They have two websites, one for the main campaign, http://northkelvinmeadow.com, and one for the Children's Wood http://thechildrenswood.com.

There have been examples ... There have been examples of where Common Good Law has been used as a way of preventing commercial planning in Scotland. Perhaps best known is the Botanics where there were plans to build a nightclub a few years ago and by identifying that land as Common Good land the local campaigners were able to prevent that. Similarly the project to build a commercial adventure play park in Pollok was also stopped through invoking Common Good Law.

The third project that covered these issues was called *Given To The People* which is about a thing called Pollok Free State and Pollok Free State was originally established as a local protest camp on a section of Pollok Park to prevent the M77 motorway being cut through that area. This was in the mid 90s ... early to mid 90s. It was distinctive in that whilst many of the road protests of the 90s often connected with more liberal, middle class environmentalist politics, the Pollok Free State connected itself with working class politics and the issues of the Pollok housing estate itself and there's a strong correlation between the idea of self-determination and class politics over the use of ground in that area. And ... it called itself the Free State, issued its own passports, it had its own constitution, set up its own university, established itself as a kind of autonomous republic.

One of the things I'm continuing to look at following from that project is some other forms of radical republicanism in Scotland which is quite an interesting ... groups like the Army of Provisional Government who attempted to create an equivalent of the IRA in Scotland in the 1970s. 10 They were most famous for being linked to the bombing the Clyde Tunnel in 1975 and they were kind of a, if you like ... they were portrayed as a kind of failed terrorist organisation and slightly as a sort of comical organisation but they're interesting in that ... what I'm interested in is this idea in republicanism of the the equivalence of the citizen, the body of the citizen and the body of the state, and how this relates to the politics of the body as a kind of public politics. 11

The last thing I started to look into are *Sioll Nan Gaidheal*, the Seed of the Gael, who are Gaelic nationalists, a republican organisation with ... quite an interesting complex history. Began in the mid 70s as well and veered towards a form of neo-fascist politics. They were involved in a lot of the so-called 'anti white settler' demonstrations and actions in the 70s and have

 $[\]rm s^{s}$ Old land law may thwart nightclub in the Botanics", $\it Glasgow\, Herald$, Tuesday 20th November 2007, http://www.scottishcommons.org/docs/herald_20071120.pdf.

^{9*}Omission of park in Common Good Fund may cost council dear", *Glasgow Herald*, Thursday 29th October 2009, http://www.heraldscotland.com/news/home-news/exclusive-omission-of-park-in-common-good-fund-may-cost-council-dear-1.929148.

¹⁰Scottish Republican Socialist Movement 2015.

¹¹Agamben 1998 discusses the longer history of this idea. For a history of Scottish militant republicanism see Young 1996.

moved towards situating themselves as a green socialist group nowadays.¹² And this slide towards fascism within republicanism is, the danger of this is something I'm interested in exploring and I think it's also part of the spectrum of values of the commons as well. By fascism I'm not saying an idea of totalitarianism but rather a slide towards a politics that's based on mythology, spiritualism and a politics based on things that you cannot question.¹³ And this generalisation of the commons has a danger to it that it becomes this principle that you cannot question. So it has a kind of ... what I would call a quasi-fascist dimension to it which is something we have to be aware of and wary of. Also there are different politics of the commons so we have ... again this is an area where if we have a tendency to homogenise things under this one label it leads to a blurring of distinctions which is problematic. It tends to create an homogenisation of quite distinct and arguably antagonistic political viewpoints. In that way I'm reminded of Stewart Home's critique of integralist anarchism where he argued that the different strands of anarchism seeking to integrate one another could never work because, as he put it, if you tolerate each other you'll tolerate anything (audience laughter).14 It has an inbuilt failure within it ...

Some of the distinctive strands of identifying the politics that claims the commons or makes a claim upon the commons. I think there are four in particular who have interesting historical significance. One is the idea of primitive communism and this very much relates to the early ... so, for example, Peter Linebaugh's work. 15 He's looking into the Charter of the Forest located in historical forms of the commons that Emma was talking about earlier. And this relates to the idea of primitive communism ... Commons and communism are from the same etymological roots. 16 They basically both refer back to a form of settlements and a management of the land based around the communes, the community. And this idea of commons as a primitive form of communism is found in the work of Marx. One of his first writings

¹²The distinction can be made between a militant republicanism that responds to the existing violence of the state and a 'fascist' republicanism that constructs a mythic violence of ethnic differentiation, see Scott and Macleay 1990. The 'fascism' of Sioll Nan Gaidheal should, of course, be understod in relation to the more everyday and insidious fascisms of the Orange Order, British Unionism, BNP, Scottish Defence League, and mainstream parliamentary counterparts, but the question remains as to how we define the commonality under which different collective politics are defined. For a discussion of the 'white settler' issue in Scotland see Jedrej and Nuttall 1996.

¹³A comparison to this is the relation between fascist political theory and environmental issues that emerges in 19th century movements celebrating folk culture and forms of nature-based spiritualism such as the *Völkische Bewegung*, see Mosse 1998, and has been mirrored in aspects of contemporary Deep Ecology and Primitivist Anarchism, see Biehl and Staudenmaier 1995. For the wider political-philosophical debate discussing this in relation to opposing politics of rationalism and irrationalism see Balibar 1978.

¹⁴Home 1997.

¹⁵Linebaugh 2008.

¹⁶Linebaugh 2010.

as a journalist was to write about woodsmen in the Rhineland who had been fined for gathering wood as their common rights to harvest wood from the forest had been withdrawn.¹⁷ Similarly Engels discusses primitive communism in his book *The Origin of the Family, Private Property and the State* where he cites the forms of communal organisation that existed within German rural communities up until the 19th century.¹⁸ In many respects crofting is seen as related to this idea of primitive communism.

And another strand, quite closely related, is that of anarchism and by anarchism I mean classical 19th century anarchism as defined principally by Peter Kropotkin. Kropotkin identified ... who was also an anthropologist and who'd studied various forms of agricultural structure within areas around Russia and across Europe ... identified this as a kind of model ... as not only a prior form of property and labour organisation but also potentially the model for future organisation. In a sense the distinction between a communist take on the commons and the anarchist take is that 20th century communism in the form of state communism looks towards the construction of the state as the centralisation of all common property, the state becomes the guardian of the commons, whereas anarchism from the Kropotkin tradition looks at decentralised forms of commune as an actual political structure in its own right and seeks to build a new politics around that.¹⁹

Two other political strands very different from this are those of liberalism and use of the commons within liberal politics and this dates to the 17th and 18th century of thinkers like William Petty and Daniel Dafoe who talk about the need to create publicly funded infrastructures through which private enterprise could be supported and the modern equivalent of that is probably Lawrence Lessig who coined the phrase 'Creative Commons' and Lessig's take on the internet is very much similar to William Petty and Defoe's concepts of the common.²⁰ The example of liberal commons is something like the rail network when an infrastructure is built that would be too expensive and too risky for individual private enterprise and which would be prone to the market. So by making this a public commons structure the risks of private enterprise are shifted onto the shoulders of society, so it's a way of socializing risk. This is a key form of the commons that has emerged within

 $^{^{17}}$ The article is "Debate on the Thefts of Timber", *Rheinische Zeitung*, 1842, the significance of the article in relation to the formation of Marx's later ideas is discussed in McLellan 1980, pp. 95–99.

¹⁸Engels 1909, a digital version is available at https://archive.org/details/originoffamilypr00enge.

¹⁹It is worth noting however that Kropotkin was critical of experiments in Utopian communities that sought to set themselves apart from existing society, see his *Proposed Communist Settlement: A New Colony for Tyneside or Wearside* first published in The Newcastle Daily Chronicle, 20th February 1985, available online at http://theanarchistlibrary.org/library/petr-kropotkin-proposed-communist-settlement-a-new-colony-for-tyneside-or-wearside.

²⁰Lessig 1999.

liberalism. A distinctive aspect of it is that whilst it is often defined as a public good and placed under the jurisdiction of public bodies such as the state, those who gain access to it and benefit from it are often quite unevenly distributed. So you'll see the creation of a public good but in terms of the benefits that come back from it they are unevenly distributed, so the rail companies benefit at the expense of passengers rather than a people's rail service that is based on an idea of the distribution of the means of travel. And to one extent that's demonstrated in the preference for the use of the word 'public' rather than 'common', which has a more institutional history behind it in terms of it's etymology in Roman law.²¹

A more recent development related to the liberal concept of the commons is a neo-Hayekian concept of commons which is related also to the neoliberal form. Havek was an economic theorist of the 20th century who rejected what he saw as any form of socialist or collective economics, who believed in highly individualised economics. He even rejected the word 'economy' because the word economy in its origins means 'how to manage a household', as being too collective.22 He believed in a highly individualised economic structure. Hayek was one of the key influences on the emergence of neoliberal thinking. What have been called neo-Hayekian elements of thinking that are represented by figures such as Elinor Ostrom whose Governing the Commons²³ draws upon Hayek's theories for explaining how commons-based systems worked. In particular she evokes Hayek's idea of an ad-hoc economy, the idea of individuals finding common needs and addressing them through a localized market system. Ostrom's concept of the commons interestingly, like Kropotkin, draws upon actual existing examples and even some of the same examples as Kropotkin, particularly the Swiss mountain farming systems are both invoked in Kropotkin's work The Conquest of Bread²⁴ and Ostrom's work Governing the Commons. The conclusions they draw are quite different.

One of the aspects that I think is quite distinctively different is that this idea of the commons within a kind of neoliberal and Hayekian tradition relates to a form of what's called domestic economy. The domestic economy is the ... we come back to the idea of the economy of the household, it's a small-scale sphere of circulation that may be separate form the mainstream markets but which enables, for example, the way in which a family might provide food for itself through a process such as crofting. And that, rather

²¹For the longer history of this see Arendt 1998.

²²Hayek preferred the term 'catallaxy' emphasizing the principle of exchange rather than that of collective responsibility suggested in the origins of the term 'economics'. For a concise history of the development of neoliberal ideas from Hayek and their application in current economic policy see Mirowski 2014.

²³Ostrom 1990.

²⁴Kropotkin 2008.

than being a removal from the market, it is a form of safety valve for the market. It's exploited by the markets as a form of safety valve. So, for example, domestic economy models can be used to justify the reduction of wages because the family provides it's own food and therefore it doesn't require to be paid this amount of wages.²⁵

It's these different political strands or different political claims on the idea of the common, that we can identify and have to be brought into focus when discussing ideas of the common and not simply to take the common as an inherent good in its own right, but to question what the political trajectories cutting through it are.

So discussing in more detail some forms of the ... forms of what might be called the actual existing commons within Scotland. There's crofting, the Common Good, and community buyouts and they each demonstrate some of the complexities and contradictions within the idea of the common and how it might be realised as a form of political activity, how they might support that.

Firstly, crofting. Crofting is often seen as a kind of timeless ancient indigenous farming method that's spread across the Highlands and Islands of Scotland. It's often portrayed like that, for example, in tourism and Scottish cultural production. This is not the case however. Crofting is really a product of the industrialisation of rural areas which came into being in the late 18th century and early 19th century. One meaning for the word 'croft' in Gaelic is 'allotment' and there's actually parallels between crofting in rural areas and allotments as they first emerged within urban centres as well. Crofting carries on certain aspects of the earlier pre-industrial farming systems which are known as the township system but introduces certain forms of structure and particular dependency upon ... upon the need to sell one's labour that were not there ... that were not present in townships as such.

The relationship of the township system to the idea of primitive communism is actually interestingly put forward by Alexander Carmichael who was a 19th century folklorist and an amateur anthropologist who was most famous for gathering Gaelic songs and hymns from the islands.²⁷ Carmichael himself was not a proponent of communism but he was brought forward to

^{25°}Capitalist accumulation is structurally dependent on the free appropriation of immense quantities of labour and resources that must appear as externalities to the market, like the unpaid domestic work that women have provided, upon which employers have relied for the reproduction of the workforce," Federici 2010. See also Dalla Costa and James 1972. Meillassoux 1981 applies the concept in relation to the division between rural and urban, indigenous and colonial labour.

²⁶The term refers to the idea of a strip of land that was *allotted* to someone, see Hunter 2000. The Gaelic *lot* (plural *lotaichean*) can refer both to an allotment or to a croft. For a history of the politics of urban allotments see Ward and Crouch 1997.

²⁷Carmichael's most famous work is Carmina Gadelica (1900) a collection of Gaelic hymns, folk song and poetical forms. For accounts of Carmichael's work in the Hebrides see Stiùbhart 2008

the Napier Commission which was a government body set up in the 1880s to investigate the civil unrest within the Highlands and areas where crofting was established. In the opening words of his statement to the Napier Commission he writes ... he spoke: "the word commune has unpleasant associations but being descriptive of the social economy of the Highlands I shall use it here." And he goes on to explain how the township systems govern themselves and at the end argues that even though he is in no way a proponent of communism that these systems should be reintroduced and it's interesting that the conclusions of the Napier Commission were broadly in favour of that. The actual Crofting Act which came out in 1886, which is the legislation that applies to crofters to this day, rejected this idea and instead chose to maintain the new crofting system."

The aspects of primitive communism that Carmichael identified included various forms of local governance and the use of common grazings and the idea of a kind of rotation of power within the community so rather than being ... having a head of the community who ... who remained in power from one year to the next there was a regular change - a bit like the Transmission Gallery committee in some ways (audience laughter). There was a conscious rotation of power within the community and also deliberate deferral of power. So he describes these events where people decided who'd be the head of the community for that year and usually these involved forms of random selection and a process where the first person would reject the offer until eventually no one was left to reject it and eventually the role was taken on. So there was a conscious deferral of power rather than an idea of acquiescing of power.³⁰ To an extent this represented a vestige of the hybrid nature of governance and jurisdiction that existed in Highland areas up until the 19th century, but to many extents crofting was one of the methods that actually brought that to an end rather than continuing it.

In the 18th century we had figures such Henry Home Lord Kames who was a Scottish legal theorist and mentor to figures such as Adam Smith, David Hume and John Millar who ... one of his main contributions to Scottish law was to revise Scottish law in line with ... what's called the institutional model which is to move away from a common law basis towards the idea of defined statue law following the model of Roman law developed in the Netherlands, towards a rationalistic logical model of law.³¹ Kames ...

 $^{^{28}} Carmichael's$ testimonies to the Napier Commission are available at: http://www.alastairmcintosh.com/general/resources/2010-Carmichael.pdf.

²⁹The proper title for the act is *Crofters' Holdings (Scotland) Act 1886.* The current version is available online: http://www.legislation.gov.uk/ukpga/Vict/49-50/29. For an outline of current crofting law see Agnew of Lochnaw Bt QC 2000.

 $^{^{30}\!\}text{The}$ idea of deferral of power is discussed by an
archist anthropologist Harold Barclay, Barclay 1997.

³¹The relation of Scots law to Roman and Dutch law is analysed in Gordon 2007. For a more

whilst claiming to represent a universal abstract system of law nevertheless took the principles of mercantile capitalism as the basis for that and that relates to the stadial theory that Kames and Smith and Millar popularised in the 18th century.³² This was the idea that society passed through stages of maturation from early nomadic cultures to early agricultural cultures to peasant communes to the mercantile society. Kames sought to make the mercantile society the basis of Scottish law.

Part of that was to reject feudal law. He was very much against the idea of lineal land ownership and existing feudal inheritance but for Kames this also meant doing away with common law and doing away with various forms of local law that existed in the areas that formed ... that allowed forms of self-organised legal representation.³³ And he actively implemented these ideas. He was what's known as a 'circuit judge' and travelled around rural areas of Scotland arbitrating on disputes over land. He was well known for being incredibly severe with punishments towards people accused of stealing sheep or going on someone else's land.³⁴ So we had this movement towards a homogenization of law in Scotland happening in the 18th century which did away with much of what might have been existing forms of localised commons. So in the sense that it's different from what Peter Linebaugh describes in England where you have the Magna Carta and the Charter of the Forest which took some of these existing forms of common and gave them an institutional form.³⁵

It was in that context that crofting came into being. Crofting is really a re-organisation of the land to maximise it for economic profit. One of the key distinctions between the crofting system and township system is that people are given fixed plots of land, so the allotment concept in the main. Whereas previously many township systems would rotate land ownership within the community in the crofting system people are given a regulated piece of land with a fixed size. This was introduced to enable taxation and to value ... to see the community as a financial resource that could be tapped for

political reading see Caffentzis 1994.

³²The most detailed presentation of this was Millar's *The Origin of the Distinction of Ranks*, 1771.
For an historical analysis of the influence of Scottish Enlightenment thinking on the development of modern capitalism see Perelman 1984.

³³It is notable that whilst the various localised forms of law and land rights which supported collective ownership were almost eradicated by the end of the 19th century, feudal law relating to private ownership continued in Scotland up to 2004. Commonty, the Scottish equivalent of the English commons land, had almost entirely disappeared by the end of the 19th century, so much so that the 1927 edition of the *Encyclopaedia of the Laws of Scotland* defines commonty as "a peculiar form of common property in land, of great antiquity, but now, by force of private arrangements or by stress of statute, nearly obsolete."

³⁴For accounts of Kames as a judge see Walker 1985 and Ross 1972.

 $^{^{35}}$ Even if Magna Carta has had a more symbolic rather than practical legal influence in England it nevertheless provided a legal reference point from which opposition to the enclosure of common land could be substantiated.

land taxes or water taxes, building taxes and such. And the size of the land that was given to people was often deliberately restricted so a family could only feed itself from what it could produce on that land and not produce any excess produce and this compelled people ... in order to pay the taxes it compelled them to take up labour which was set by the landowners so this would be things like the kelping industry or going into fishing and such like. 36 So it's a mechanism to force scarcity upon the communities and force people into waged labour. When the Crofting Act came into being towards the end of the 19th century rather than representing the emancipation of the Highland communities it's effect for them was as a kind of entrapment within a problematic system, a kind of legalistic gilded cage. The historian Allan Macinnes made an interesting point that whilst the Crofting Act is often celebrated as a being this emancipation or recognition of rights for Gaelic Scotland it actually brought about an exclusion of rights for many sections of the Gaelic community.³⁷ Many aspects of Gaelic life actually died as a result of the Crofting Act because they weren't given any kind of legal recognition at all. Issues such as communal squatting for example which ... nowadays when you think of squatting you think of 'illegal' occupation of housing but up to the 19th century squatting was a way in which people who did not have access to property could be supported by their communities, a form of welfare ... the way that housing was given to widows and such like this.³⁸ And this was illegalized by the Crofting Act so there's a ... how squatting developed in the 20th century was very much affected by laws such as those for crofting.

What is interesting in the crofting communities however is the kind of growing rebellion against the system that emerged in the mid to late 19th century. So it's not the fact that crofting in itself which was significant, but rather the way the different communities rebelled against the system. This became, around the 1880s with the riots of Bearnaraidh and riots on Skye ... this led to actions of large scale land grabs where people went back onto the land they'd been evicted from and claimed it back and this process went right up until the 1950s. It was this ongoing process of protest and land grabs which led to recognition and set up ... which actually led to the Crofting Act. The Crofting Act was introduced by the Conservative government and very much followed the principle that had been applied to Ireland, peasant proprietorship as a way of tying people into property ownership so that

³⁶The history of this process is charted in Hunter 2000.

³⁷ Macinnes 1987.

³⁸In this way squatting relates to commoning rights such as Estovers as in Magna Carta, in which it states that the widow "shall have meanwhile her reasonable estovers of common," quoted in Linebaugh 2008, p. 52. Ward 2002 presents an historical study of the role of squatting in this sense.

they may be made to feel ... so that they are forced into having debts and dependencies. They will therefore be less likely to rebel in the future.

What the Crofting Act did ... what crofting did continue were one of those aspects of commoning, the common grazings, so this was one aspect that did carry on through that. The space still exists where the common farming systems are still at play ... this is very much, if you like, a kind of restricted part of the common.

So that's one history of commons in Scotland and you can see the ... the picture's not quite as simple as you might think. There are complexities and contradictions within it. And interestingly, to some extent, crofting is often invoked as a model for how farming could develop and what might be a basis for a future commons-based farming system. Yet crofting itself is perhaps more symptomatic of the problems rather than the possible solution.³⁹

Another historical example is the idea of the Common Good. Emma's already introduced the term at the beginning in the more general sense but it has a very particular history in Scotland. There is a law called Common Good Law in Scotland and this is a set of statutes that place particular goods into public ownership of a kind. 40 And it doesn't just mean land. There's a tendency to think of the commons as being land and everyone has the idea of the rural commons but Common Good is something that emerged within cities and it's any kind of asset or resource that might have a common benefit. So it includes land like Glasgow Green, that's part of Glasgow's Common Good. It also includes things like all the paintings in Kelvingrove Museum. It includes the city council buildings. It includes many of the public buildings in Glasgow and many of the cities across Scotland and it includes artefacts like the robes of the mayor, stuff like this. This is all Common Good. Common Good has an interesting history. It's origins lie within feudalism and the allocation of the commons as a feudal charter, but Common Good Law as it exists in Scotland now relates far more to the development of the burghs, so it comes from the urbanisation of Scotland. Also it is due to this tied in with the emergence of bourgeois culture in Scotland. Burghs ... The French bourge ... from which we have bourgeois is the French equivalent of burgh in Scots and we have the word 'burgess' in Scots which is the *bourgeoisie*. The Common Good is first defined in charters that were written up to define the powers of free trade centres ... Glasgow, Edinburgh ... Aberdeen is one and such. To some extent they're early forms of liberal commons. They provide an infrastructure for the towns people who do not have access to resources

³⁹As Hunter 1991 discusses, what did lead to material improvement in the crofting communities was the establishment of the Scottish Crofters Union and organisation around collective community co-operatives, see also the interview with Kenny MacLennan of the Lewis Crofters Co-operative in Yuill 2012.

⁴⁰A contemporary outline of Common Good Law is presented in Ferguson 2006.

so it enabled the concentration of power within the city.⁴¹ Bob was talking about Glasgow Green earlier, that it was given over as a commons because the housing for workers in the city did not give adequate space for people to dry their clothing so a field was set aside for people to dry their clothing and do their washing and that's Glasgow Green. So it's this 'commoning' of living resources for the workers, which is used to justify lower wages again, but as in the case of Glasgow Green we can also see it as a resource claimed by the workers.⁴²

Another aspect of the Common Good which very much relates to bourgeois principles of culture is also tied up in philanthropy. One of the key criteria for something to be Common Good is simply that ... one criteria is that it is used as a public resource but the other is a gift given to the city and it very much was about the idea of philanthropy to generate the city and civic virtue. Some of the Common Good campaigners around today ... see the need to preserve the Common Good as being far more about this idea of respecting philanthropy and respecting this idea of the rich people gifting to the city rather than it being the infrastructure for the common people. So there's this angle to it which has to be born in mind.

The interesting thing about the Common Good is arguably not the intrinsic nature of it in itself but rather the fact that it can be exploited in order to ... as a kind of legal anachronism really, to bring about arguably to seek to transfer some power from councils back into communities. To that extent it has been effective in some of the campaigns that are going on which Bob has been involved in. So the Common Good is ... figures like Andy Wightman have been championing it to some extent and I think Andy Wightman actually has a more nuanced take on it. One of the key things he puts forward is that Common Good Law needs to be radically transformed and that we have to see this as a kind of legacy that can be reinvented as something genuine rather than something that's just a quirk of our heritage.

Lastly, one of the more modern forms of what might be called a form of commoning in Scotland is the idea of community buyouts which relate both to crofting and to the Common Good in many ways. So when I was doing *Stackwalker* I went to the Isle of Eigg which was one of the first islands to be bought out by it's local community. I also went to an area on Lewis called Parc which in the 1890s was the site of major crofting rebellion. There was an incident known as the Parc Deer Raid where the crofters stormed the laird's deer forest and slaughtered his deer and it was staged as a media event. ⁴⁵ This

⁴¹Dennison 1998.

⁴²Taylor Caldwell 1988.

 $^{^{\}rm 43}See~http://citystrolls.com~and~https://commgood.wordpress.com.$

⁴⁴Wightman 2011.

⁴⁵The raid is described in Buchanan 1996. The raiders arranged for journalists to accompany them as 'embedded' reporters on the event ensuring it received detailed coverage, reproductions

will give you an idea of the kind of militancy of the crofting community in the 19th century. They were not people doing community petitions. There were often quite violent forms of protest. ⁴⁶ That was the extent to which they were seen as a threat. Anyway, more recently Parc has been involved in what is known as an 'aggressive buyout' and they're attempting to buy back the common land, the grazing lands, of Parc for the community from the owner.

We also see a similar idea of proposing community buyouts in urban contexts so Govanhill Baths is a good example in Glasgow where it's been proposed that the building will be bought by the community and similarly it's been proposed that Kinning Park Complex buy back the building. 47 This however highlights what I regard as some of the problematic aspects of the community buyouts. Some of the community buyouts I'm very sympathetic to. The Eigg one was a case where you had a negligent landowner who deliberately treated the island basically as a kind of toy and ... people had restricted access to ... people were basically living in houses that had no central heating, with damp and such and the landowner ... the landowner was deliberately restricting ... preventing people from upgrading houses and such because he liked the quaint look of ... this heritage feel of these damp houses with no heating and such and no toilets. So the community buyout, which happened at a very early stage of the introduction of the laws, was argued as a necessary means to address these issues and there were larger economic problems on Eigg as well.⁴⁸ And that led to the creation of a selfrun island there.

What has become ... as the community buyout idea has spread and become more commonplace is a pattern where rather than it being based upon the idea of the community becoming the governors of their own land it's more about the idea of the community becoming partners in a business and it's about turning the communities into business operations. The community buyout laws and the governance of how community buyouts are actually given to communities demand business plans that demonstrate the way in which the community generate profit from the process. And this in turn leads to communities often commodifying themselves and to come back to Parc ... this is the kind of process you're seeing there where the community buyout is driven not so much by the desire to produce local governance or a

of some of the articles are included in Buchanan's account.

⁴⁶Grigor 2000

⁴⁷In The case of Govanhill Baths the buyout was imposed on the campaigners as the only option Glasgow City Council would accept whereas the buyout at Kinning Park Complex has been promoted by members of management within the building who wish it to develop into a more commercial venture.

^{*}See the interviews with Maggie Fyffe and Neil Robertson in Yuill 2012. The Assynt buyout was also related to housing issues and to a very deliberate claim to social and historical justice, see MacPhail 1999.

decentralization of politics but rather the idea of an economic venture that commodifies the community. It is also interestingly tied into the fact that this part of Lewis is where the major land connection for renewable energy from Lewis to distribute back to the mainland is going to be sited. So potentially the community will become the owners of ... or the controllers of the gateway for this energy source going back to the mainland. ⁴⁹ So really it's a business plan. It's got less to do with the idea of decentralization of politics, of empowerment of the community, and more to do with a business venture and this is very much the way the community buyout system has gone.

Within the urban context it creates a somewhat ... in regard to places like Govanhill Baths or Kinning Park, the rather contradictory fact that you have ... this is one of the key distinctions of rural and urban ones ... whereas rural buyouts largely are based within communities buying land that is privately owned and bringing it to a form of public ownership, urban buyouts are usually based around buying property that is publicly owned already but putting it into non-council management. And that, for example, is what's proposed at Govanhill Baths and it's been proposed at Kinning Park. There's a contradiction because basically you have the public raising public funds to buy a public building to put it into public ownership and yet the building is public in the first place. So rather than being a solution to the problems of poor governance within councils or solution to problems of the mismanagement of finances ... they're really symptomatic of it ... and community buyouts in a sense are complicit with the privatisation of public resources. And in a way they come to epitomise that kind of neo-Hayekian model. It's a move towards privatisation, to a fragmentation of resources rather than providing a collective governance of resources.

We can see therefore that there's a need to be far more sceptical about the idea of the commons. Broadly there's many aspects of it that I support and am sympathetic to. My interest in looking into these things came from being attracted to many of these ideas ... but there is a need not to take these things on superficial value, but to question the underlying structures and political trajectories that are running through them. Another aspect of this, which comes back to the idea of domestic economy, is the ... socialization of risk and the exploitation of volunteerism which I think are also problems that haunt the idea of the commons.

I think there's several misconceptions in some of the ways people look at the common. One is to think of it in terms of assets rather than labour and I would argue that the commons should not be a thing that's thought of in terms of common assets but rather in terms of the labour that is used

⁴⁹Community ownership is arguably preferable to private ownership under a landowner or corporate interest but it still follows a neoliberal model of marketization as the principle of governance rather than a commoning of power infrastructure for example.

to produce them, what the relation of labour and governance of assets is. Assets themselves are not the issue. This is something that Peter Linebaugh does talk about, the commons of activity: "To speak of the commons as if it were a natural resource is misleading at best and dangerous at worst — the commons is an activity and, if anything, it expresses relationships in society that are inseparable from relations to nature." I think we need to be much more explicit about that. It's really about how the commons are produced and how they are reproduced from one day to the next and one year to the next, what sustains the commons. It's labour that sustains the commons. It's about the people. It's not about the fact that it's some kind of naturally given gift.

The other thing often related to it is that the commons is often seen ... there was a picture up about the idea of alternative economies in relationship with things like barter economies and gift economies and this is a kind of rhetoric around the commons that has been quite strongly promoted within the Open Source sector. Open Source ... a guy called Eric Raymond who is one of the definers of Open Source talks about it as a kind of gift economy, a gifting of code between programmers.⁵¹ This is often presented as a kind of intrinsically altruistic act, as though somehow a gift economy itself is inherently not a form of capitalism and somehow it's inherently anticapitalist. And yet the analysis of gift economies and work on economies that people like Marcel Mauss and his book The Gift, which is often cited as a source for this kind of idea, actually present gift economies not as a kind of emancipative form of free exchange but rather as a means through which hierarchies are structured and maintained. 52 Gift economies do not necessarily of themselves create a more equal society as such, they can be mechanisms of hierarchisation. Similarly, feminist anthropologists such as Marilyn Strathern and Lisette Josephides have talked about when there is a distinction between those who make the gifts and those who exchange them and in the studies they have conducted they looked at how women make the gifts or are the gifts and men benefit from the process of exchange. This creates an unevenness within the economy, a dependency which is very similar

⁵⁰Linebaugh 2008, p. 279.

⁵¹Raymond 2000.

⁵²Mary Douglas in her introduction to Mauss writes: "There are no free gifts; gift cycles engage persons in permanent commitments that articulate the dominant institutions." (Mauss 2002, p. xii) It is notable that Douglas goes on to present the gift not as the negation but rather the necessary complement to the market: "The gift echoes Adam Smith's invisible hand: gift complements market where the latter is absent. Like the market it supplies each individual with personal incentives for collaborating in the pattern of exchanges." (Mauss 2002, p. xviii) It is on this basis that Raymond relates Open Source programming to a gift economy model. The concept of the gift economy perfectly embodies the neoliberal project of extending market-like systems into every area of life, even where no money changes hands we are nevertheless inculcated to pursue every social interaction or deed as though it were a market transaction.

to that between the proletariat and the capitalist. So the gift economy is not intrinsically altruistic at all. 53

The problem with a lot of the rhetoric of alternative economies is that it tends to confuse the mechanisms of exchange with the politics of exchange. So the belief is that money is inherently capitalistic, if we don't use money we've got rid of capitalism. But capitalism is not simply money, capitalism is a set of power relations around processes of exchange and those power relations can be structured around any process of exchange. Barter was the main means through which Western merchants spread capitalism to the world, as they began to colonize the Americas and such. So ... again what we see here is the use of what seems like a superficially good idea (alternative economies) but one that hides the deeper political problems and you've got to bring these to the surface.⁵⁴

And lastly, related to this is the fact that even though you may have spheres of circulation which internally seek to escape forms of capitalisation it does not mean that they're necessarily excluded from processes of capital. So where you have, for example, an idea of mutual help in order to create an alternative economy. This often defines the characteristic of the Open Source movement and also artist-run practice. Artists help one another freely to create a bit of work and to create the infrastructures to produce their work. This in itself does not necessarily mean exclusion from the problems of capital but rather it's maybe seen as a kind of resource that is exploited for capital, and it's a means through which risk is offset from the capitalisation itself. So within Open Source software one of the problematic points is that Open Source software frees the companies that use it from liability. There's no ... the licensing of Open Source software means there's no liability for any problems within the software. The risk therefore of the software failing is projected ... not taken by the company that is necessarily marketing it, as Apple have done in quite complex ways, but rather in

⁵³Strathern argues that the concept of the gift is the construct of "a culture dominated by ideas about property ownership [which] can only imagine the absence of such ideas in specific ways ... [and] sets up its own internal contrasts," Strathern 1988, p. 18. For Josephides the concept of the gift is a mystification that, rather than transcending relations of capital, merely hides actual existing forms of production: "... the egalitarianism of exchange is false, precisely because of its unacknowledged relationship to production; and the interdependence in production really supports hierarchical domestic relations," quoted in Strathern 1988, p. 147. Each gift given incurs a debt upon both the recipient and the producer, whilst those who perform the exchange accrue value

⁵⁴What benefits capital is the way in which money acts as an abstraction of value away from the processes that create it. Capitalist economic theory has consistently sought to deny the role of money within economics, and through the development of credit and financialisation, transcend money as a material store of value and transform it into a pure relation of power. This early insight of Marx (Marx 1975) has become all the more evident since the abolition of the gold standard in the Bretton Woods system in 1976, the growth of electronic commerce and the fallout of the 2007 economic crisis. See Lazzarato 2012.

the developer community who are a mix of paid and unpaid people volunteering their time to a project.⁵⁵ Similarly, within artist-run practice this is most endemic in situations like ... well things like the Glasgow International and the way in which artist-run practice is used as a kind of fringe event to the main festival which creates this platform of activity that is capitalised as marketing for the city.⁵⁶ As such it represents a ... is also used as a kind of talent pool to pick artists from. So artist-run practice, rather than being an alternative to a market-driven practice or to institutionally-driven arts practice, which is historically how it emerged in the early 70s, is nowadays often used as a pool, to pool talent, and for the risk of early development to be born by the artists themselves, rather than it being a distinct practice in its own right, rather than being a critical action against other forms of market-driven or state-driven art.⁵⁷

This in a sense is an issue where the promotion of the idea of the commons within artistic practice needs to engage with the commons as a politics but often it does not. It often projects this idea of commons as an inherent good ... of the creativity of the artists. It expresses itself as a selfless community but fails to recognise the ways in which that energy of creativity is tapped and exploited as a resource at other levels. Similarly because a resource in itself may be free or may be free of cost ... presented as free, does not necessarily mean that it's free of capitalisation if the means to access it are controlled and capitalised. Now it's something we've seen both in the emergence of free resources on the internet and I would argue is also endemic to the nature of artist-run practice today.⁵⁸

⁵⁵For the individual programmer, working on a voluntary basis upon a Free Software project, the waiving of liability was a necessary precaution in protecting that programmer from aggressive legal action such as the US fondness for litigation encourages, however, when control over, or marketing of an Open Source project is undertaken by a major corporation, the balance of power changes and the benefits of off-setting risk are reaped by the company whilst the moral pressure to put right faulty code becomes a social obligation on the developer community. Whilst the issue of liability is perhaps not the most significant of complexities within the politics of FLOSS practice it is one which highlights the ways in which such practices come not only to normalise transfer of risk away from companies onto individuals but to even seemingly make a virtue of this.

⁵⁶Whilst the Gi Festival was initially framed as a platform for artist-run practice nominally steered by a committee of artist-run groups it quickly transformed into a conventional curatorially-led biennale subsuming artist-run practice into the economic and managerial forms of the creative industries model, see Gordon-Nesbitt 2009.

⁵⁷Artist-run practice becomes an equivalent of the unpaid internships and apprenticeships through which people enter into fields such as architecture and the media. The need for individuals to have a background resource of private capital, such as family wealth, on which they can draw to support themselves, or as a fallback against risk, limits those who can enter into these thereby turning such practices into vehicles to reinforce and extend existing class privilege.

⁵⁸ The distinction lies between a commons as collectivisation that can reduce necessary social labour and a commons as social investment underwriting self-enterprise. The emphasis upon a cultural commons in the absence of more substantive commonings will inevitably tend towards the latter.

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THE BICONDITIONALITY OF CRAFT AND KRAFT

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Translation

The etymology of *craft*, as given in the Oxford English Dictionary, charts its derivation from Old Frisian and Germanic *kraft*, with cognates found in other Germanic languages such as Dutch, Swedish and Icelandic (*kracht*, *kraft*, *kraftur*). The English word, however, departs from these neighbours and acquires new significations.¹

This departure may in part be due to a change in the language of governance following the Norman conquest and the expansion of Carolingian political and cultural forms across the British mainland from the 10th century onwards. Hence the modern day German *kraft* translates not into the English cognate *craft* but to a set of displacements mostly of Old French and Latin derivation: force (Old French *force*, Late Latin *fortia*), power (Old French *poer*, Medieval Latin *potere*), virtue (Middle French *vertu*, Latin *virtus*). Similarly, German departs from English in using *handwerk* where English would use *craft* or *handcraft* — the English *handiwork* is closer to the German although with connotations of an inferior or dishonest form of making.

Whereas *craft* in English has evolved towards a meaning of skilled manual work, *kraft* in German has come to acquire meanings related to philosophy and physics. Aristotle's concepts of potential and actual energy (δύναμις – *potentia* and ἐντελέχεια – *entelechy*) are variously translated as *kraft*.³ In Middle High German translations, deriving via the Latin *vis*, the term describes both an emotive force and an intellectual faculty: the *vis sermonis* (powerful speech) of Quintillian's rhetoric, and the faculties of reason, memory and will. For later writers, such as Johann Gottfried von Herder

[&]quot;The original meaning preserved in the other languages is 'strength, force, power, virtue'. The transference to 'skill, art, skilled occupation', appears to be exclusively English ..." — Oxford English Dictionary 2012.

²See Bartlett 1993.

³This summary of the various uses of kraft in German is based on Clark 1942 and Nisbet 1970.

(1744-1803), it is more the notion of ἐντελέχεια, actual energy, which is expressed and expanded to concepts of cultural and linguistic transmission. In scientific writings, the term is used to translate ideas from Bacon, Descartes and Newton expressing a force that creates movement as well as forms of physical energy and power, as in the later development of electricity — *kraftwerk*, for example, being a power station, literally an 'energy works' a place where natural energy is made into electrical power. In the 20th century the word also comes to have importance within various artistic theories, such as those of Wasily Kandinsky (1866-1944) and Joseph Beuys (1921-1986) wherein the bifurcated cognates (*craft/kraft*) re-cross one another along the conflictual tensions of Romanticism and Modernist avant-gardes.

In 17th century English, terms such as craft, art and industry were more or less interchangeable, all connoting forms of making.⁴ As the forms and structures of production became reshaped with the emergence of industrial capitalism in the late 18th and early 19th centuries this loose synonymity becomes increasingly differentiated. As markedly distinct forms of production become defined, so too did they acquire more distinct names. *Industry* becomes associated with the mechanisation of labour and the creation of the new concentrated settlement of workers, the factory town and industrial city. Art wrests itself free of association with manual labour through an appeal to bourgeois vanity and the establishment of 'respectable' institutions, such as the Society of Dilettanti (founded circa 1734), an elite private members club, and the Royal Academy of Arts (founded 1768) following the French académie model.⁵ These supplant the artisanal guilds and divert affiliations from the newly emerging labour unions. Craft, it appears, is that which trails behind, the residue of forms of making which cannot be mechanized and become the means of income to an increasingly precarious artisanal class or left to stagnate in the rural backwaters that neither the Industrialists nor the Agricultural Improvers could profit from.⁶ Indeed, the notion of craft as a specifically rural form of manufacture begins here with the factory as its necessary 'other' rather than within the timeless essence of a place, or the organic expression of deep rooted ties between labour and nature.

Prior to industrialisation, the workers producing what might later be called 'craft' were more closely identified with the towns in which their guilds were established. Manufacture in the countryside instead took place largely *outside* of the guild system and, as such, would often be exploited by mercantile investors as a means of circumventing the regulation of costs

⁴Braudel 1983, p. 177.

⁵For a history and analysis of the Society of Dilettanti see Kelly 2009. The development of the academy system in Europe is outlined in Wick 2000.

⁶This transformation is charted in Braudel 1983 whilst the actual working conditions of 18th and 19th century artisans are discussed in Rancière 1983.

and labour that the guilds maintained. Isolated from the urban markets, rural workers were dependent upon merchants for both the supply of raw materials and for the sale of their produce. Merchants could thereby both control the costs of labour to their own benefit and extract additional value in the exchange of materials and produce with those who worked for them.⁷ This "putting-out" system as it was called, was one basis from which Adam Smith (1723-1790) developed the principle of division of labour in *An Inquiry* into the Nature and Causes of the Wealth of Nations (1776). Through his analvsis of the putting-out system, Smith proposed new work structures derived from his observations of a small pin manufacturer where each component of the pin was assigned to a different worker.8 This division of labour extended the breaking of the guilds that the merchants had achieved through a further breaking apart of the process of production itself.9 In the 19th century John Ruskin (1819-1900) challenged Smith's theories and the consequences of their application, arguing, in works such as The Stones of Venice (1851-1853) and various lectures and articles of the 1860s, that the division of labour extended directly into the psyche of each individual worker:

It is not, truly speaking, the labour that is divided; but the men: divided into mere segments of men — broken into small fragments and crumbs of life; so that all the little piece of intelligence that is left in a man is not enough to make a pin, or a nail, but exhausts itself in making the point of a pin, or the head of a nail. 10

Division of labour debilitated the worker. Despite his advocacy of the system even Smith had acknowledged that workers faced with the endless repetition of the same tasks would "generally becomes as stupid and ignorant as it is possible for a human creature to become."

As Ruskin observed, and the reports of numerous government inspectors and Victorian reformers attested, with the expansion of capitalist forms of industrial production the reality of these consequences grew, as did the ev-

⁷Braudel 1983, pp. 310-319.

⁸Smith 1976, pp. 14-15.

⁹A worker who produced only part of a good was even more dependent on the manufacturer who brought all parts together for market, than the worker who had previously made a whole good that they could potentially sell direct or negotiate a better price for with the merchant.

¹⁰Ruskin 1898, pp. 162-163.

¹¹Smith even argues in favour of government intervention to remedy this: "... in every improved and civilized society, this is the state into which the labouring poor, that is, the great body of the people, must necessarily fall, unless government takes some pains to prevent it." Smith 1976, p. 782.

ident inability of *laissez-faire* market forces to prevent or ameliorate them.¹² Ruskin countered Smith's structuring of labour under principles of *political economy* with his own structuring of labour under a form of *aesthetic economy* derived through his analyses of Gothic art and architecture. Ruskin conceived of the craftsmen of the Gothic cathedrals as working under conditions of an ideal mutual independence in which their labour was a self-fulfilling pleasure. He distinguished the Gothic from the Classic, claiming that the Classic emphasized a mechanical symmetry and repetition of forms dependent upon an "enslaved" form of production, whereas the Gothic prized irregularity and an endless individual variation of "free" production. Industrialisation presented a new form of enslaved production implementing extensive physical mechanisation and thereby separating the creative intellect from manual realisation. The cure, for Ruskin, was that hand and mind should be unified in a "healthy and ennobling labour" that does not merely produce goods but also re-makes the worker:

... we manufacture everything there except men; we blanch cotton, and strengthen steel, and refine sugar, and shape pottery; but to brighten, to strengthen, to refine, or to form a single living spirit, never enters into our estimate of advantages.¹³

The fragmented labour of industry would be replaced, in Ruskin's vision, by the organic wholeness of craft, and craft would be a two-way process that created both material objects and working subjects. For Ruskin, craft would be rescued from a position of impending obsolescence to one of societal redemption. Ruskin cast this mission as the reclamation of a prior existing practice of craft. His claims and descriptions for what this constituted however were entirely of his own making, bearing little resemblance to historical evidence. Craft was not so much *restored* by Ruskin, but rather, as Latour would put it, *translated*, relating a new ideological project to a set of past buildings and artefacts: "... the creation of a link that did not exist before and that to some degree modifies the original two." 15

In connecting 'craft' to the 'Gothic', Ruskin modified these two terms in ways that inform much of our current understanding of them. In the arguments through which he forged this link, however, he also mobilized another translation, that of the continual translation between nature and humankind

¹²These included James Phillips Kay The Moral and Physical Conditions of the Working Classes Employed in the Cotton Manufacture in Manchester (1832), Friedrich Engels The Condition of the Working Class in England (1845), and the reports of the Children's Employment Commission, and Inspectors of Factories.

¹³Ruskin 1898, p. 163.

¹⁴For a critique of Ruskin's vision of the Gothic craftsman see Unrau 1981.

¹⁵Latour 1999, p. 179.

brought about by labour. Craft, in this vector of translation, moves across a diagram that brings into play the derivatives of its distant cognate kraft. We can conceive of such a diagram as marking different relations of words, objects and processes, like that of Charles Sanders Peirce's existential graphs, whose structure and constituents change in different contexts and periods.¹⁶ To translate craft/kraft across these different diagrammatic versions is not so much to map the evolution of a singular, cohering concept, or paths of influence and dissemination between different authors or institutions, but rather to investigate the different overlappings, inclusions and exclusions that appear between these. To explore the relation of craft/kraft in terms of translation, therefore, is not to present an indexical relation between the meaning of a word in one language and another language, but rather to pursue the movements of each word and see where these cross one-another, depart and collide. Following Peirce, the diagram offers a form of speculative enquiry, a "putting of questions" to the structures marked out upon it.¹⁷ As such, we are putting forth a question as to the biconditionality of craft and kraft, under what conditions, and in what network of relations, does one, necessarily, depend upon or modify the other?

Forces

For Herder, *kraft* is a word around which, and through which, numerous concepts are structured, almost as though the entire past history and contemporary unfoldings of the word were laid out in different combinations across his writings.¹⁸ The word is of particular importance to Herder's theories of language. In identifying the primary characteristics of the different arts, Herder states that the visual is perceived in terms of space, music in terms of time, whilst poetry and language achieve their effects through *kraft*:

[&]quot;These were a form of notational logics, akin to those such as Venn diagrams, through which a problem in relational logic could be mapped out as a diagram on paper so that its components and their relations may be experimented upon through observing different variations in its structure: "... [we] begin a deduction by writing down all the premises. Those different premises are then brought into one field of assertion ... Thereupon, we proceed attentively to observe the graph. ... This observation leads us to make an *experiment* upon the graph. Namely, we first duplicate portions of it; and then we erase portions of it, that is, we put out of sight part of the assertion in order to see what the rest of it is. We observe the result of the experiment, and that is our deductive conclusion." Peirce 1998, p. 45.

¹⁷See Peirce 2010.

¹⁸For a survey of the use of kraft in Herder see Nisbet 1970 and Norton 1991.

Through *force* [*kraft*], which inhabits words, which, though it goes through the ear, has its effect directly upon the soul. This *force* is the essence of poetry, not coexistence or succession.¹⁹

As Nisbet argues, this notion of language as kraft combines a tripartite metaphysical schema of Herder's tutor Kant, that of Raum, Zeit, Kraft (space, time, motivating force) with Leibniz's theory of monads, the elemental perceiving forces which form the basis of matter as ἐντελέχεια (entelechy).²⁰ For Herder, one sense of kraft is that of a materiality of mind, or materiality of cognitive behaviour. Language operates through the motivity of cognitive energy, transferring between bodies. This relation between kraft, language and cognition is developed at length in his Treatise on the Origins of Language (1772). Distinctively, Herder does not argue that the capacity for language in itself distinguishes humans from animals: "Already as an animal, the human being has language."²¹ Rather he argues that because humans lack innate instinctive abilities for complex activities, such as those that enable a bee to build a hive or a spider to spin a web, they are compelled to consciously reflect on their engagement with the world around them and through that, of necessity, produce language. This lack is not a limitation but rather the very condition through which humanity transcends the limited existential sphere of the bee that appears to have no choice but to make a hive, or the spider that can only spin a web and not conceive of any other form. It is through language that humanity works upon itself.22

Animals, for Herder, posses the potential ($\delta \acute{\nu} \nu \alpha \mu \varsigma$) for language but operate within a circumscribed actuality ($\acute{\nu} \nu \epsilon \lambda \acute{\epsilon} \chi \epsilon \iota \alpha$) of forces like that of a machine and therefore cannot realise the fully integrated being of humankind that is exposed to a multiplicity of forces unfolding and interacting in different ways. ²³ Language emerges as a dialectical transformation in encountering these energies. ²⁴ It is both the product and medium of self-awareness in response to external forces, and it is that through which this awareness develops and expands as a force entering and altering the world it encounters. ²⁵ In Herder's account, thinking and naming are the means through which hu-

¹⁹Quoted in Norton 1991, p. 141.

²⁰Nisbet 1970, pp. 8-9

²¹Herder 2002, p. 65

 $^{^{22\}text{\'e}}$ No longer an infallible machine in the hands of nature, he becomes his own end and goal of refinement." — Herder 2002, p. 82.

 $^{^{23}}$ "... the whole ocean of sensations which floods the soul through all the senses..." — Herder 2002, p. 87.

²⁴Herder's dialectic is far looser than that of Hegel and Marx, based more on a metaphor of Newtonian gravitational forces (*Kräfte*) bringing disparate concepts into tension with one another, Nisbet 1970, p. 73.

²⁵"... the first moment of taking-awareness was also the moment of the inward emergence of language." Herder 2002, p. 128.

manity transforms and takes possession of the world mixing the energy of (cognitive and cultural) labour into nature:

And if we now ask the first human being, Who has given you the right to these plants?, then what can he answer but: Nature, which gave me the taking of awareness! I have come to know these plants with effort! With effort I have taught my wife and my son to know them! We all live from them! I have more right than the bee that hums on them and the cattle that grazes on them, for these have not had all the effort of coming to know and teaching to know! Thus every thought that I have designed on them is a seal of my property, and whoever drives me away from them takes away from me not only my life, if I do not find this means of subsistence again, but really also the value of my lived years, my sweat, my effort, my thoughts, my language. I have earned them for myself! And should not such a signature of the soul on something through coming to know, through characteristic mark, through language, constitute for the first among humanity more of a right of property than a stamp on a coin?26

Herder does not elaborate on the concept of labour implied here, which conflates physical and cognitive expenditure with a legislative concept of *title* evoking the Lockean principle of property rights.²⁷ The diagram we may sketch from this places *kraft* within a nexus that includes language, labour and ownership, set in relation to trajectories between animal and human (innate intuition versus conscious awareness), nature and culture (pre-given materiality versus self-reflective material production).

The particular unfolding of forces and the formations (political, social and cultural) which arise from this are, in Herder's theory, determined by the contextual factors of history and environment. This structure informs and evolves through his comparative studies of literature (including *On the Resemblance of Medieval English and German Poetry* 1777) and the collation and study of what he would term 'folk' culture (*Volk*) beginning with his transcriptions of folksongs from the Baltic region (*Volkslieder*, 1778-79).

²⁶Herder 2002, pp. 144-145

²⁷Norton discusses Locke in relation to Herder's theory of language, Norton 1991, pp. 143-146.

Circulation

Written nearly 100 years later, Marx's (1818-1883) theory of labour as outlined in the opening sections of *The Production of Absolute Surplus-Value*, part III of *Capital: A Critique of Political Economy* (1867), echoes several of the elements and structures that Herder draws upon in constructing his theory of language:

Labour is, first of all, a process between man and nature, a process by which man, through his own actions, mediates, regulates and controls the metabolism between himself and nature. He confronts the materials of nature as a *force of nature* [Naturmacht]. He sets in motion the natural forces [Naturkräfte] which belong to his own body, his arms, legs, head and hands, in order to appropriate the materials of nature in a form adapted to his own needs. Through this movement he acts upon external nature and changes it, and in this way he simultaneously changes his own nature. He develops the potentialities slumbering within nature, and subjects the play of its forces [Kräfte] to his own sovereign power.²⁸

Marx also makes a similar distinction between the animal as instinctive versus the human as self-reflective, drawing on the same examples of the bee and the spider, and forming a similar conclusion to that of Herder. It is the ability of the human to plan and reflect upon a *process* of making, the idea of its potential, that is separate from the *act* of making that sets humanity apart. It is through translating the potential idea into an actual thing that the human maker "realizes his own purpose" as a particular kind of being who can transform the external physical world to mirror its internal conceptual forms.²⁹ This idea of labour as self-realisation reflects the Hegelian, idealist, aspect of Marx's writing based upon a notion of the human as separate from and superior to nature. As Marx elaborates upon the process through which labour as *kraft* mediates between humanity and nature this Hegelian 'spiritual' understanding of production (spiritual in the sense of *Geist* as the realisation of the ideal within the real) comes into tension with a 'materialist'

²⁸Marx 1976, p. 283.

²⁹⁶A spider conducts operations which resemble those of the weaver, and a bee would put many a human architect to shame by the construction of its honeycomb cells. But what distinguishes the worst architect from the best of bees is that the architect builds the cell in his mind before he constructs it in wax. At the end of every labour process, a result emerges which had already been conceived by the worker at the beginning, hence already existed ideally. Man not only effects a change of form in the materials of nature; he also realizes his own purpose in those materials." Marx 1976, p. 284.

one (developed through his engagement with Feuerbach's writing): production not as self-realisation but as metabolism. Here, the distinction between humanity and nature is less clear cut. The human maker does not impart a superior *spiritual* energy upon the world, thereby animating it and giving it meaning as in the Hegelian model, but rather there is a continuity of *physical* energy that circulates between maker and material, humanity and nature. Whereas the spiritual as idea is constant and eternal, the material as metabolic is variable and temporal, changing through cycles of movement and rest. This was a process in which the maker is physically remade, as outlined in Ludwig Büchner's *Stoff und Kraft* ("Matter and Energy," 1855), a text by one of the contemporary scientific materialists with whom Marx was in correspondence:

Which each breath that passes from our lips we exhale part of the food we eat and the water we drink. These change so quickly that ... we may well say that in a space from four to six weeks we are materially quite different and new beings.³⁰

The tension between these different forms of making arises not so much from their inherent opposition, for in Marx the two often co-exist (as in the passage quoted above), but rather due to the way capital, and the capitalist conception of labour, intervenes within and translates these into its forms specific to its own historical development.

This happens in two ways. Firstly, through the division of labour which, for Marx, separates those self-realising forms of making from those which merely drain energies and consume time with no inherent reward. Marx expresses this through the concept of alienation, deriving from Hegel, in which the worker no longer creates something that is of intrinsic value to themselves but, instead, is constantly confronted by arbitrary things that the worker is compelled to make and whose value is withheld from them to be realised elsewhere by someone else. Secondly, in a process that is related to this division of labour, the particularities of different practices of making are abstracted into a general concept of labour expressed as Arbeitskraft, labour-power, the potential productive energy that a person can sell to then be put to whatever use the buyer determines. Making, as a circulation between maker and material, humanity and nature, becomes incorporated and re-routed through the circulation of capital and capital determines the conditions under which craft and kraft are brought into relation. This is realised (following the Aristotlean dimensions of kraft) in the translation of labour from potential to actual:

³⁰Cited in Wendling 2009, p. 64. Büchner (1824–1899) was one of the left-wing scientists of his day who fought in the German revolutions of 1848. The relationship between Büchner's work and Marx's thinking is discussed in Wendling 2009.

The use of labour-power [Arbeitskraft] is labour itself. The purchaser of labour-power consumes it by setting the seller of it to work. By working, the latter becomes in actuality [ἐντελέχεια] what previously he only was potentially [δύναμις], namely labour-power in action, a worker.³¹

As language is for Herder, Arbeitskraft is a fully dialectical concept in Marx. It presents an understanding of labour that can only arise as a consequence of capital, in part due to the way capital abstracts labour, but, as Marx contends, it is also necessary to grasp and appropriate this understanding in order to move beyond it, precisely because it encapsulates both the materiality of labour itself and labour's relation to nature as part of a continuous materiality. The term entered into Marx's writing in the 1850s following his interest in the developing concepts of physical energy (kraft) that would later consolidate into the theory of thermodynamics. Whilst the term is most consistently used in Marx, Arbeitskraft was originally coined by Hermann von Helmholtz in his discussion of how energy is stored and released within the muscles of the body through metabolic processes, *Uber die Erhaltung der* Kraft ("On the Conservation of Force", 1847). From the metabolic concept of energy arose an understanding of the effects of fatigue, induced through over-work and lack of sufficient replenishment, which gave a scientific basis to calls for a reduction in working hours.32

Economic theorists, such as Smith and Ricardo, had rated the cost of labour on the basis of the costs of the worker feeding themselves. This assumed that wages were set by the market value of food and that such costs were sufficient for the employer to cover in return for labour (known as the *subsistence theory of wages*). Marx argued instead that under capitalism, the employer purchased the worker's capacity to work, *Arbeitskraft*, with the capitalist constantly seeking to widen the difference between costs paid for potential labour and the capital realised from the sale of the products of actual labour. This leads to the intensification of labour with the worker receiving less and less of the value acquired from the products, a process hidden in the earlier economic theorists' emphasis upon the cost of food as the arbiter of wages.

It is as *Arbeitskraft* that labour and nature enter into the diagrammatic structure of capital, the circuit of capital as Marx calls it:

Whatever the social form of production, workers and means of production always remain its factors. But if they are in a state

³¹Marx 1976, p. 283

³²Wendling 2009, pp. 77-81.

of mutual separation, they are only potentially factors of production. For any production to take place, they must be connected. The particular form and mode in which this connection is effected is what distinguishes the various economic epochs of the social structure.³³

In Smith, labour is conceived of as a substance, a 'vital fluid', that can be extracted from the worker and 'fixed' in another entity just as certain gasses, such as oxygen, could be extracted from the air and fixed in substances such as blood or water.34 Labour is then an ingredient added to a commodity and sold on to the buyer, value being attributed on the basis of this mix of substances. This conception of labour emerges from Smith's earlier work on sympathy (as part of his Theory of Moral Sentiments, 1759) which likewise was understood as a 'subtle' fluid that communicated feelings between the organs of the body and between people. As Schabas argues, Smith's ideas extended those of contemporary Scottish physicians, some of whom, such as Joseph Black, were his personal friends, and who were conceiving the body as a system of subtle fluids that transferred elements and sensations within the body itself and between the internal and external realms. Defining labour as a substance relates it to other physical commodities thereby underpinning the argument that labour can be measured in its exchange for food. Early Marx develops upon this Smithian concept of labour and value as substance, and, it is notable that in the Grundrisse "labour power" is rendered not as Arbeitskraft but as Arbeitsvermögen, vermögen expressing the idea of a volumetric capacity like that of a jar — and also used to describe the value of cash in a bank account.

In the shift from *vermögen* to *kraft* however, Marx rejects the notion of labour as a substance and instead begins to understand it as a *relation*. In regard to wages, there is no quantity of labour in itself, only the time in which the worker is under the control of the employer and the relation between that time and the market value of the goods produced which the capitalist seeks to maximise in their own favour. More deeply, however, *Arbeitskraft* also expresses a relation between humanity and nature in terms of both the resources consumed within production and the ways in which different social and technological forms of production change our relationship to the material world.³⁵

³³Marx 1978, p. 120.

 $^{^{34}} See$ Schabas 2005. Marx discusses the absence or misunderstanding of Arbeitskraft in Smith's work in Marx 1978, p. 285.

³⁵Marx argues, for example, that hunger is experienced differently depending on how food is produced and consumed, contrasting a hunter-gatherer society to a contemporary Western one. For a discussion of the relation between labour and nature in Marx see Schmidt 1971.

There is perhaps some notion of Arbeitskraft in Ruskin's discussion of what he calls "mechanical powers" which he divides into three kinds: the "vital" muscular power of the worker, natural power such as wind, and artificial power such as produced by steam engines. But whereas Marx argues that labour-power consumed in production should be reduced to a minimum in order to free up energies for our own disposition outside of labour, Ruskin argues that society should seek to utilise the vital power of humanity to its full potential before drawing on natural or artificial means, that it would, for example, be better for a human to pull a barge along a canal than a horse or an engine.³⁶ Indeed, in Ruskin's time barges often were pulled by people, mostly by women who, as Marx noted, were often compelled to do so because, whereas a horse or machine would incur a necessary investment of capital, "that required to maintain the women of the surplus-population is below all calculation."³⁷ For Marx, the figure of the unpaid female barge hauler demonstrates how capital undermines the potential of technological and social developments to reduce exploitative labour. For Ruskin it epitomises the proper relation of human labour to nature. Even though Ruskin may have challenged the impacts of factory work he was nevertheless willing to endorse forms of enforced toil where they would be integral to his moral structuring of society through labour, a factor evident in his belief that even the elderly and infirm should be expected to work.³⁸

The question is not only what means should be employed to fulfil a task, but also how we decide who does this. Whilst Ruskin proposed that workers should own their own tools and found some common ground with the labour movements of his day, he did not wish to give workers control over production as a whole. Nor did he wish for workers to have a say in determining what forms of production were most useful in relation to society's needs or to see the dissolution of distinctions between workers and those who, like himself, placed themselves above them.³⁹ Indeed, Ruskin reduces the worker to an animal-like status akin to that of the bee in Herder and Marx's accounts, who builds from instinct rather than design.⁴⁰

In this sense *craft* and *kraft* entail opposing tendencies. The Marxian

 $^{^{36}\}mathrm{These}$ ideas are specifically outlined in Ruskin 1905a but run through works such as Ruskin 1905d.

³⁷Marx, quoted in Wendling 2009, p. 175.

³⁸See Ruskin 1905d and Ruskin 1905a.

³⁹Like that of his mentor Thomas Carlyle (1795–1881), Ruskin's vision was resolutely anti-democratic and based on the principle that society be led by a privileged elite. See Cockram 2007 and Lippincott 1938.

^{40°}[The bridge-builder] may be merely what Mr. Carlyle rightly calls the human beaver after all; and there may be nothing in all that ingenuity of his greater than a complication of animal faculties, an intricate bestiality – nest or hive building in its highest development." – Ruskin, appendix on "Divisions of Humanity" in *The Stones of Venice I, Works*, vol. IX, p. 67, quoted in Hanson 2003, p. 172.

concept of *kraft* proposes that the worker can be the conductor of a force that moves through the individual and across society and nature, labour is a relation between humans within society and between society and nature that evolves and changes over time. Ruskinian craft reductively constitutes the worker themselves as a substance formed by labour even whilst seeking to shape that substance as a whole coherent form in opposition to the fragmentation of industrial labour. The relation between craft and *kraft* is therefore denied in Ruskin, a denial that follows from Ruskin's more fundamental rejection of process in favour of form.

Formation

If the machinic, industrial world formed one flank of attack against which Ruskin assailed, there was another equally dangerous foe against whom he summoned his intellectual forces, one that may surprise us: nature. Nature in itself, understood for itself, or rather an emerging conception of nature that challenged Ruskin's ideas of its aesthetic and spiritual value. That challenge came from someone whose attention to nature was as assiduous as Ruskin's own: Charles Darwin (1809–1882). The danger of the industrial, in Ruskin's view, was that it de-naturalised culture and labour replacing the instinctive and organic with engineered artificiality. Darwinian evolutionary theory however, postulated a continuity between the human and animal that erased the distinctions upon which Ruskin based the moral and spiritual superiority that brought man closer to God, and suggested that the capacity for intelligence and emotion that we attribute to humans may not be uniquely ours in the ways that Herder and Marx assumed.

Evolution, in the sense Darwin described, did not exist for Ruskin. In contrast to the transmutation of one species into another shaped by forces (*kräfte*), whether vital, environmental or energetic, as proposed by evolutionary theory, he stated that species were simply and eternally distinct from one another, static forms that symbolised specific moral qualities. ⁴¹ For Ruskin, language was a distinctly human ability, not a capacity inherent in animals, as Darwin and Herder had proposed, and he supported his friend, the linguist Max Müller, in his denouncement of Darwin's language theories. ⁴² A greater challenge, however, lay in Darwin's analysis of the role of colour and form in plants and animals. For Ruskin these existed for the

⁴¹See, for example the arguments in Ruskin 1905b, p. 342 and Ruskin 1905c, pp. 353-56.

⁴²Max Müller (1823–1900) was a German linguist who specialised in the historical evolution of languages and in particular the development of Aryan Indo-European. In a lecture series called "On Darwin's Philosophy of Language" (1870) he disputed Darwin's proposals that language might be innate in animals, arguing instead that it was a uniquely human attribute.

benefit of mankind, that we might read the words of God inscribed in nature for our moral betterment and to take pleasure in His Creation. For Darwin, the value of a beautiful flower or impressive plumage was intrinsic to the species itself, having evolved not for human delight but through processes of sexual selection: to encourage pollination by insects in the case of plants, and, for bird plumage and constructions such as bowers, in response to the choices made by females in determining with whom they would mate. As with language, Darwin proposed that the aesthetic sense was not unique to humankind but part of our common animality and that nature's beauty was not given by God or shaped by man, but driven in many respects by female control over reproduction.⁴³

It was formation rather than evolution that mattered to Ruskin. In *The Queen of the Air* (1869) Ruskin dismisses Darwinian evolution and metabolic theories and argues instead that life arises from the spirit breathed into matter. This spirit shapes that matter in an outward expression of its moral character. Our physical substance is given spiritual form through understanding and adhering to the moral forms given in nature. The worker takes shape as a moral form like the decorative elements of a Gothic cathedral. This is not a dynamic, responsive process, however, but rather the realisation of a pre-determined ideal state, more akin to the Aristotlean notion of *telos*. One which we may ascend towards or fall from.

In one of his Fors Clavigera, a series of published letters addressed to the "workmen and labourers of Great Britain," Ruskin describes an outing to the ruins of Furness Abbey during which he encounters a group of workmen relaxing after work. The letter begins with a discussion of language and of what kind of language it might be expected that such a working man could understand.

Ruskin criticises those who believe the working classes are incapable of understanding educated language and should be spoken down to as though they are "the flat-foreheaded creatures of another race, unredeemable by any Darwinism." ⁴⁴ Nevertheless, Ruskin describes the "navvies of Furness" who, dressed in brown rags, stumble drunkenly out of a pub to squeeze themselves into the crowded third class carriage of a train, as nothing more than "a Fallen Race, every way incapable, as I acutely felt, of appreciating the beauty of *Modern Painters*, or fathoming the significance of *Fors Clavigera*." ⁴⁵

Whilst, on the one hand, Ruskin defends the working class from being seen as inferior, he nevertheless claims that they are "fallen" — a choice of phrase that might be compared to his description of the people of India as

⁴³For a detailed account of the debates between Ruskin and Darwin in terms of aesthetics see Smith 2006. For the emphasis upon female, rather than male, selection see Cronin Smith 2006.

⁴⁴Ruskin 1907, p. 182.

⁴⁵Ruskin 1907, p. 182.

"degraded races."46 In seeking to uncover what they had done to "deserve their fall," Ruskin points to what he saw as the upsetting of a previously just social order in which the "peasant paymaster" exchanged the food he produced in return for the benefits brought to society by the educated classes (amongst whom Ruskin placed himself). One illustration of such a subject is given in this letter: that of the Tyrolean peasant working hard within nature and obedient to moral governance.⁴⁷ He closes his argument in admonishing the drunkenness of the navvies of Furness, stating, to his working men readers, that: "Only by quiet and decent exaltation of your own habits can you qualify yourselves to discern what is just, or to define even what is possible."

The unjustness of the current social order and its political economy can only be reversed, in Ruskin's account, by the working man redeeming and re-forming himself as a moral and spiritual subject, a subject given form by labour:

Labour considered as a discipline has hitherto been thought of only for criminal; but the real and noblest function of labour is to prevent crime, and not to be *Re*formatory but Formatory.⁴⁹

Going beyond his pedagogical pursuits, Ruskin would seek to establish an environment in which this could be put into practice. In a *Fors Clavigera* letter of 1871, a year after the Furness letter, Ruskin announced the setting up of the Saint George's Fund to raise money for the purchase of land to establish what would become the Guild of Saint George, ⁵⁰ an agricultural community in which, as a later letter describes, its members would be:

... entirely devoted, according to their power, first to the manual labour of cultivating pure land, and guiding of pure streams and rain to places where they are needed: and secondly, together with this manual labour, and much by its means, they are to carry on the thoughtful labour of true education, in themselves, and of others. And they are not to be monks nor nuns; but are to learn, and teach all fair arts, and sweet order and obedience of life; and to educate the children entrusted to their schools in such practical arts and patient obedience; but not at all, necessarily, in either arithmetic, writing, or reading.⁵¹

⁴⁶Ruskin 1905c, p. 364.

⁴⁷Ruskin 1907, p. 194.

⁴⁸Ruskin 1907, p. 190.

⁴⁹Ruskin 1905a, p. 544.

 $^{^{50} \}mbox{The Guild was originally called Saint George's Company but could not maintain that name for legal reasons, see Atwood 2011, p. 152.$

⁵¹Ruskin 1872, pp. 8-9

The Guild was established as an organisation and continues to this day. Land was purchased in Wales, Worcestershire and Yorkshire, and a number of projects were realised by Ruskin and his followers. ⁵² In most cases, however, the projects were short-lived failures and the community Ruskin envisioned never fully came to be. The Guild of Saint George was perhaps more effective as a fictional archetype in which Ruskin conceived of his ideal society.

In relation to what might be termed our Ruskinian diagram, the Guild acted as a physical formation that constituted its structure in terms of social and political translations. Not of labour into capital but of labour into fidelity, labour as obedience, and labour as creative servitude. Whilst the subjectivity of the worker is to be fashioned through labour, the worker is not an active, political, subject in his or her own right, but rather a substance within whom that moral order could be fixed, and which would translate into the forms they created. The worker not only creates artefacts but becomes an artefact themselves, immobilized in the very stone that they carve. A static symbol rather than a creative, social or even material force, their potential only realised in so far as the gentlemanly guild masters of Saint George would permit — and for women this would be an even more circumscribed life. Craft may give the fullness of a particular form of labour, a skill, to the worker, but it does not necessarily make that worker a full human being for and in themselves, one free "to hunt in the morning, fish in the afternoon, rear cattle in the evening, criticise after dinner."53 One free to explore mathematics, read poetry or pursue other interests outside of the 'noble life' of labour. Or, indeed, to enjoy the beauty of a meadow through the haze of a drunken Summer afternoon.54

⁵² These included the Saint George's Museum in Walkley, a weaving mill in Laxlay on the Isle of Man and another mill in Huddersfield, see Anthony 1983, pp. 183–184. The most successful of these was perhaps the printers set up by George Allen (now George Allen and Unwin) which published much of Ruskin's writings.

⁵³Marx and Engels 1970, p. 54.

⁵⁴In this respect Marx is also guilty of tending towards a certain bourgeois prurience, particularly in regard to working-class women who he describes "become rough, foul-mouthed boys before Nature has taught them that they are women. ... they learn to treat all feelings of decency and shame with contempt. During mealtimes they lie at full length in the fields, or watch the boys bathing in a neighbouring canal. Their heavy day's work at length completed, they put on better clothes, and accompany men to the public houses." — Marx, *Capital*, p. 437, quoted in Wendling 2009, p. 155 who discusses this passage in greater detail.

In a letter to the *Pall Mall Gazette* in 1872, Ruskin reflected on the influence of his ideas. The revival of Gothic styles, to which he had contributed, had become a characteristic of 19th Century design, yet he was dismayed that this so often took the form of pastiche ornament appliquéd to the shells of steel-frame industrial halls, structures that he described as "accursed Frankenstein monsters of, *indirectly*, my own making." ⁵⁵

His analogy invokes another face of 19th Century Gothic, one very different from that of Ruskin's vision. By the time of Ruskin's letter, Mary Shelley's novel, a key work in Gothic fiction, had become a popular moral tale warning against the dangers of modern scientific progress. Ruskin refers to it in this regard but this was not how the tale had originally been told. Faced with supporting a child on her own, following the death of her husband, Percy Shelley, in 1822, Mary Shelley (1797–1851) had revised her best known work so as to avoid censure and appeal to the mores of a middle-class audience. This edition of *Frankenstein* from 1831 is the version most widely known today, adapted into numerous plays and films in which the ambitious doctor has come to epitomise the hubris of a mad scientist playing at God. The figure of Victor Frankenstein in the original version of 1818 is, however, far closer to Ruskin then he might imagine.

The germ of the story famously originated through a game to invent the best horror story between Shelley, her husband and their friends Lord Byron and John Polidori whilst travelling on the Continent in 1814. As the narrative developed into a novel it became a medium through which to reflect upon debates within the wider intellectual and political circles in which Shelley engaged. Amongst the Shelley's close friends was the surgeon William Lawrence (1783-1867), who had been a friend of Mary Shelley's father during her childhood and, in 1815, was personal physician to Percy. Lawrence was a pioneering but also highly controversial figure in his day. His Lectures on physiology, zoology and the natural history of man, published in 1819, which openly questioned the Biblical account of Genesis, was banned by the Lord Chancery on grounds of blasphemy. An earlier series of lectures, published in 1816, had challenged the work of his tutor and mentor John Abernethy (1764-1831) who had sought to harmonize Christian and scientific belief on the origins of life. The development of many of Lawrence's most controversial ideas coincides with the germination of Frankenstein and many of the debates in which he was involved are echoed in the book. Those familiar

⁵⁵Ruskin, letter to the *Pall Mall Gazette*, March 1872, author's own emphasis. Quoted in Cockram 2007, p. 25

⁵⁶See Marilyn Butler's introduction to Shelley 1994.

with later interpretations of the book may assume that Lawrence was the basis for the character of Victor Frankenstein. Yet it was not Lawrence's ideas that are espoused by Shelley's character but those of Abernethy.

As part of lectures on anatomy given in 1814, Abernethy proposed that a "subtile substance" was necessary to impart life to the organs of a body and that this was akin to electricity:

The phænomemna of electricity and of life correspond. Electricity may be attached to, or inhere, in a wire ... So life inheres in vegetables and animals ... ⁵⁷

Abernethy drew these ideas from the work of John Hunter.⁵⁸ They combine elements of Luigi Galvani's famous experiment of 1780, applying electricity to the limbs of a dead frog with the notion, developed in the work of Joseph Black that had influenced Adam Smith, of certain intangible capacities, such as emotions and sympathy, being expressed as 'subtle fluids' or substances that could be transferred between and fixed within different bodies.⁵⁹ Life, in Abernethy's view, derived from an external source that was applied to inert material forms from outside.

Lawrence argued conversely that life emerged as a consequence of the combination of elements within a body. It could not be reduced to these components (as those of a strictly mechanist viewpoint might claim) but was, nevertheless, integral to the biological organization of each creature. The only externally deriving factors coming from that creature's parents and what it drew from its environment — pre-empting aspects of later theories of evolution and metabolism. Lawrence was particularly interested in the ability of simpler lifeforms, such as the hair-worm *gordius* and *vorticella rotatoria* protists, to self-generate and noted that these were often far more robust than higher life forms such as humans. For Lawrence, mankind was not the pinnacle of God's creation, an ideal type to whom all other creatures should be compared, but rather a demonstration that greater biological complexity came at the cost of greater susceptibility to illness and break down.⁶⁰

The Lawrence-Abernethy debate is often characterised as one between materialism and vitalism yet this is misleading. Both protagonists supported

 $^{^{57}\}mbox{Abernethy 1814},$ p. 42, quoted in Morton 2002, pp. 18–19.

⁵⁸John Hunter (1728–1793) was a leading surgeon and anatomist of his time. His theory of life was an inspiration to the poet Coleridge.

^{59**}... a subtile substance of a quickly and powerfully mobile nature, seems to pervade everything, and appears to be the life of the world; and therefore it is probable that a similar substance pervades organized bodies, and produces similar effects in them." — Abernethy 1814, p. 51, quoted in Morton 2002, p. 19.

 $^{^{60}\}mbox{For a more}$ in-depth analysis of Lawrence's work and debates with Abernethy, see Ruston 2005, pp. 46–48 and Harkup 2018.

their own versions of these theories. Abernethy's were dualistic, proposing that vitality derived from an external, spiritual source. Lawrence's were monistic, arguing that vitality was emergent within organic matter and that there was no unique human soul or superior life force. Abernethy's dualism gave scientific legitimacy not only to God as creator but also to a conservative social order in which an external governing class (the aristocracy) ruled over the majority, just as the the Queen of the Air breathed her spirit into Ruskin's view of the world. Lawrence's work was seen as giving support to atheism (of which Percy Shelley was one prominent proponent) and to the kinds of radical democratic politics that had torn down aristocratic rule in France and in which power emerged from the masses. Indeed the argument between Lawrence and Abernethy might better be described as a divergence between theocracy and autonomy.

Whilst the creature is given life through the application of Abernethy's theories, much of the novel's drama arises through the creatures attempts to assert its own autonomy. It is as though, as soon as life has arrived, the need and the demand for autonomy will follow. This is linked to a demand for recognition and love. The creature wants recognition from its creator as an autonomous being whom he should love for its own sake and not for its reflection of his own creative powers, yet this is precisely what Victor Frankenstein cannot give. His greatest fear is the creature's autonomy, its self-will, which he cannot imagine in any terms other than the dangerous and horrific. Many interpretations and allegorical readings of the novel have been made: an indictment of modern science, a meditation on Shelley's childhood and the loss of her own child, a parable on the status of women and a prefiguration of Queer theory. 61 One of the most common interpretations from the 19th century onwards has been that which relates the creature to the working classes. A cartoon published by *Punch* magazine in 1866 titled "The Brummagem Frankenstein" (Brummagem being the local name and dialect of Birmingham) depicts a working class man as the monster, waiting to be given the vote. In another *Punch* cartoon, from 1882, it is the Irish Fenian movement who are portrayed as the monster. In both cases the analogy alludes to supposedly unnatural and dangerous consequences of giving political power to a hitherto excluded section of the population. 62 In a more recent analysis, Franco Moretti compares the monster to the emergence of the industrial proletariat as a body, both physical and social: "a collective and artificial creature. He is not found in nature, but built [from] ... the limbs

⁶¹See Morton 2002 for different examples of such analyses.

⁶²The cartoons are reproduced in Morton 2002, p. 50. In each cartoon the role of Victor Frankenstein is given to a prominent political figure supporting the cause that the monster represents, John Bright in the first and Charles Stewart Parnell, suggesting that each may regret the consequences of their actions.

of those — the 'poor' — whom the breakdown of feudal relations had forced into brigandage, poverty and death." 63

Debates of how life comes to be are also those of how life is to be lived. Just as biological autonomy is realised through the ability to selfgenerate it may be that political autonomy could be achieved through the self-regulation of a nation by its own people. The revolutions in America and France had shown how this might be possible but also the threats this might pose to incumbent power. In Britain, the political establishment feared the consequences of such developments. Frankenstein was born in an era of an oppressive Tory government who in 1817 suspended the right of Habeus Corpus (the right that the accused must be present at their own trial) and passed the Seditious Meetings Act. This act restricted people's ability to hold large meetings, create organisations or discuss issues that the government considered unlawful, such as advocating common ownership of land.64 Whilst initially sympathetic to the new America as an extension of the English model of liberty, in Reflections on the Revolution in France (1790), Edmund Burke wrote against the French revolution and in favour of the restoration of monarchy and continuity of traditional values. In response to Burke, Shelley's mother, Mary Wollstonecraft (1759-1797), had defended and promoted the ideas of the revolution. In her Vindication of the Rights of Men (1790) she rejects Burke's call for the continuity of tradition to ensure social stability, which she states would justify slavery on the basis of tradition, arguing instead in favour of ensuring the rational autonomy of the individual as the basis of a just society. She would extend this as the basis for female emancipation in Vindication of the Rights of Woman (1792), laying the foundations for modern feminist theory.65

In contrast to Burke's society based on rank and tradition, Wollstonecraft outlines her model for an ideal life in which each family has its own farm, sufficient for their needs. 66 This ideal is echoed by the De Lacey characters, an educated middle-class family who, having fled from injustice, have settled on a small-holding in the Swiss countryside. It is here that the creature seeks solace, at first hiding in their wood-barn adjacent to the house. By quietly observing their life, listening to their conversations and book readings, he learns to speak human language and to learn of "the strange system of human society" and its history: "I heard of the division of property, of immense

⁶³Moretti 1983, pp. 83-90.

 $^{^{64}}See\ Ruston\ 2005,\ p.\ 57,\ for\ details\ of\ the\ act\ see: \ https://en.wikipedia.org/wiki/Seditious_Meetings_Act_1817.$

⁶⁵For the background to these writings and debate with Burke see Janet Todd's introduction to Wollstonecraft 1994.

⁶⁶Wollstonecraft developed this across various writings including the *Vindications* and also *Letters Written in Sweden, Norway, and Denmark* (1796).

wealth and squalid poverty; of rank, of descent, and noble blood."67

This is the Herderian phase of the creature's life. Just as electricity had flowed through the body in order to give it motion, now the "force [kraft], which inhabits words ... has its effect directly upon the soul." The creature's linguistic ability, which starts not as a human but as an animal sound, emerges in relation to its environment and through a growing consciousness of its own limitations. The creature works to acquire language so as to overcome prejudice at its deformity. Fet, the creature's dreams of acceptance are shattered when he reveals himself to the family. Whilst the elder De Lacey, who is blind, is initially sympathetic, when the grand-children encounter the creature they react with horror at his appearance and chase him from the farm. Even within this idyll of middle-class enlightenment, the creature is rejected.

The creature not only relates to his environment as a Herderian linguisticanimal, he is also a metabolic force. Despite the demonic nature ascribed to him, the creature does not devour flesh but prefers a diet of nuts and herbs.⁶⁹ This vegetarianism sets him apart from the normal habits of humans. Shelley's husband was an early advocate of vegetarianism in Europe and in 1813 had published A Vindication of Natural Diet. The pamphlet was, in part, a challenge to the ideas of Thomas Malthus (1766-1834) who, in An Essay on the Principle of Population (1798), had argued that famine and malnourishment amongst the poor was nature's response to the inability of the lower classes to regulate child-birth and manage their resources. In contrast, Percy Shelley argued that social and political factors were the main elements determining the situation of the poor and working classes: the poor starved whilst the rich ate in excess. The rich monopolised access to the land in ways that inflated costs and prevented a more just system of food production. If workers were indeed paid in food this payment was a meagre recompense for their labour.70 The Natural Diet was one practical response to this, demonstrating how a more nutritious diet could be based on foods with less intensive production needs.⁷¹

⁶⁷Shelley 1994, p. 96.

⁶⁸Shelley 1994, pp. 90-92.

 $^{^{69\}text{\'e}}\text{My}$ food is not that of man; I do not destroy the lamb and the kid, to glut my appetite; acorns and berries afford me sufficient nourishment" — Shelley 1994, p. 120.

⁷⁰In this respect, A Vindication of Natural Diet can be seen as a contribution to the same political movements that the Seditious Meetings Act sought to suppress.

⁷¹For an in-depth discussion of Percy Shelley's vegetarianism and its relation to the literary work of both Shelleys see Morton 1994. William Godwin was also an opponent of Malthusian theory which he responded to in his *Of Population: An Enquiry Concerning the Power of Increase in the Numbers of Mankind, Being an Answer to Mr. Malthus's Essay on That Subject*, published in 1820. Notably, Edmund Burke was opposed to state subsidy to prevent the poor from starving, see Neocleous 2004, p. 81.

The diet, it was believed, would enable the lower classes to become healthier, stronger and more able to assert themselves. As we see in the creature, he far exceeds the physical strength and capacity of ordinary humans in part due to his ability to survive on a "coarser diet" than that of his bourgeois creator. Somewhere between primitive myth and technological dream he is both a modern version of the *Grugach*, working in secret for the De Lacey family gathering fire wood for them, and a prefiguration of the Soviet *Udarnik*, the super-productive 'shock worker'. It is this fear of the creature's potential to over-reach ordinary human production that haunts Frankenstein and leads him to refuse the creature's plea for a female companion, lest they should procreate and breed some new super-race.

Like the glacial landscapes of the high Alps and Arctic in which the creature finds a home, his scale and strength are evocations of a central aesthetic of the Gothic and Romantic genres: that of the sublime. It was Edmund Burke who had most inspired interest in the sublime and for all their opposition to his moral and political views, many in Shelley's circle embraced the sublime as an expressive medium for their own ideas. In his *Philosophical Enquiry into the Origin of our Ideas of the Sublime and Beautiful* (1757) Burke defined the sublime as that which gave aesthetic pleasure in ways that were contrary to the beautiful. Whilst our sense of the beautiful arose from an experience of harmony and order that could be appreciated in terms of our faculties of rational comprehension, the sublime was that which exceeded and overwhelmed these. We respond to the beautiful in reposed contemplation from which we derive pleasure, yet the pleasure of the sublime begins in fervour, astonishment and terror. The very emotions through which Victor Frankenstein responds to his own creation.

Burke's response to the French Revolution evokes the sublime whilst simultaneously opening up a deep fissure between his political and aesthetic philosophies. For here were events that inspired the very reactions that he had accorded to the sublime, and that many around him were embracing as such, yet which were born in the politics of a future society that he could not endorse. In his *Reflections on the Revolution in France* he sought to heal this fissure by translating these events from the order of the sublime into a new aesthetic category. The sublime resolved from terror into pleasure by the fact of our remaining distant from it, like a glacial mountain that towers on the horizon but which we do not dare to climb. When such distance

^{72*}... I was not even of the same nature as man. I was more agile than they, and could subsist upon a coarser diet; I bore the extremes of heat and cold with less injury to my frame, my stature far exceeded theirs." — Shelley 1994, p. 96.

⁷³The Grugach is a figure in Scottish folklore and fairy culture, a kind of benign giant who would watch over a community in secret and perform extraordinary tasks for them. The shock workers were a movement in the Stalinist-era Soviet states championing highly-productive workers, the most famous of these being Alexey Stakhanov.

collapses, however, that which at first may have appeared sublime became *monstrous*. In Burke's eyes, this is what became of those who joined the spirit of the revolution. Burke decries the constitution of the new republic as "a monstrous medley of all conditions, tongues, and nations," an unnatural assemblage like "the Hieroglyphick Monsters of Aegypt. Dog in Head and Man in Body ..."⁷⁴ Only true royalty could be sublime, the revolutionaries were merely an unruly, barbaric mob.⁷⁵

Ruskin drew from and admired Burke's writings, yet had initially rejected the notion of the sublime as a distinct aesthetic feeling. Contrary to the position put forward by Burke in which the sublime and beautiful stood apart as separate qualities, for Ruskin everything was subordinate to the beautiful through which the moral value of the good was imparted to Creation. Yet, as he sought to demonstrate the significance of Turner's painting and those wilder natural landscapes that were the most removed from those of the industrial, he increasingly accepted and gave prominence to the sublime in itself.

For both Ruskin and Burke the sublime was an experience only accessible to those with sufficient education and refinement. The educated and ruling classes could perceive the sublime precisely because they could withdraw and distance themselves from the contingencies of life. Only a painter, such as Turner, trained in the Academy could capture the sublime, whilst the work of a self-trained lower-class engraver, such as Thomas Bewick, whilst admirable, could be no more than a picturesque outgrowth of his environment.⁷⁶ With nothing to separate them from nature or the materials on which they worked, the lower classes could be led to aspire towards 'higher' models but could not achieve the necessary distance that aesthetic awareness required.77 Indeed, Burke had argued that it was only in the pain and physical stress of labour that the lower classes could glimpse some awareness of the true sublime that lay in the power and terror instilled by a royal authority that they would never possess.⁷⁸ What Burke offers the worker is not sublime but merely exhaustion, fatigue, a metabolic rift that drains the soul. Nothing noble here.

 $^{^{74}} From \, \textit{Reflections on the Revolution in France}$ and letters by Burke, quoted in Neocleous 2004, pp. 71, 77.

⁷⁵For a detailed discussion of these themes in Burke see Neocleous 2004.

⁷⁶See Ariadne Florentina, Works XXII, discussed in Smith 2006, p. 127.

⁷⁷⁴Now, in the make and nature of every man, however rude or simple, whom we employ in manual labour, there are some powers for better things; some tardy imagination, torpid capacity of emotion, tottering steps of thought... But they cannot be strengthened, unless we are content to take them in their feebleness, and unless we prize and honour them in their imperfection.... And this is what we have to do with all our labourers." — Ruskin (10.191) quoted in Unrau 1981, p. 43.

⁷⁸"As common labour, which is a mode of pain, is the exercise of the grosser, a mode of terror is the exercise of the finer parts of the system." – Burke 1987, p. 136.

The craftsman is a creation of Ruskin's, an expression of his desire "to form a single living spirit" sewn together from the fragmented bodies of industrial workers and his personal reveries upon the remains of Gothic Venice. Whilst differing deeply in their approaches, Ruskin is not so different from Frankenstein, for both ultimately do not love their creations in themselves. Ruskin may pity the industrial worker, like the navvies of Furness, and wish to redeem their labour as craft but, like Frankenstein, he does not believe his creation capable of discovering its own truth or realising its own potential and he does not wish to give it autonomy. Ruskin's craftsman is every bit as artificial as Frankenstein's creature and Smith's factory worker and every bit as alienated from its own work and society.

The moment of intercession between factory and cathedral that Ruskin once envisioned has passed. The conditions that previously brought craft and kraft into co-determination are bifurcating and the distance between man and nature upon which they were predicated are collapsing in various indeterminate ways. We appear now to be caught between two seemingly opposed conceptions of a post-industrial sublime. Each follows from a particular trajectory that we can trace through the figurations of Frankenstein and Ruskin. At one extreme the notion of a re-making of the human within the unbridled energies of a techno-capitalist sublime heralded in certain forms of Trans-humanism and in the Dark Enlightenment of Nick Land. At the other, the dream of re-forming our inner subjectivities into perfectly crafted souls at one with nature as espoused in certain Primitivist ecologies and the Golden Dawn of John Michael Greer. One looking forwards the other back, but each the political child of Edmund Burke. 79 These trajectories offer us a choice between a letting-free of productive forces that ultimately envelops and contains us versus an enforced ennoblement that is ultimately as constraining and reductive as the industrial world it was called upon to oppose. Neither is the hard realism nor authentic tradition it claims to be, for all the challenge they claim to pose each is merely a politics of consolation.

There is no consoling denouement in Shelley's original telling of *Frankenstein*. The point of the story, after all, is that the creature is neither accepted nor vanquished. It must instead seek its own space outside of human society. In this sense the creature is an emblem of rejection. It is itself rejected by its creator and all whom it encounters but it also rejects the worlds to which they belong and seeks some other trajectory that shatters the horizon of possibilities within which those worlds were constructed.

⁷⁹Burke is a key reference in much of Land's recent writings on the Dark Enlightenment and Neoreaction. Greer describes his relation to Burke in https://archdruidmirror.blogspot.co.uk/2017/06/a-few-notes-on-burkean-conservatism.html. A meeting point between Land and Greer's ideas might be found in concepts from Nick Steves that Land has called *Deep Heritage* and which have strong parallels to both Ruskinian and Primitivist cultural politics: https://nickbsteves.wordpress.com/2013/05/14/reactionary-consensus-ii-deep-heritage/

Where does this rejection come from? It does not come from claims upon an identity denied within the norms of existing society, nor does it come from an appeal to an imagined future or past, nor from the position of an exclusively human political subject. This is a rejection from sensate, selfdirecting matter and the play of its potential forces. Able to understand and respond to human society yet neither admitted into the realms of the human or social, the creature becomes a kind of nature-after-man, nature that has lived through science, a science that is no longer a knowledge exclusive to humanity. The creature reveals a nature that Frankenstein and his world cannot accept. One that undermines the distinction between the human and the bee but does not seek to reduce that which is less 'cultivated' to mere animality.80 Which refigures the relations of making and matter, craft and kraft, in ways that question what is necessary and not merely consoling to us. This is what Shelley's tale points towards. In this sense it is perhaps better that we do refer to the creature as the 'monster' for it is that which is de-monstrative, that which is exceptional to our ordinary perceptions and representations.81 That which shows the opening of potential for things to be other than they are now. That the future possibility may come from unexpected sources. That it may take a form that we struggle to recognize and comprehend and yet which we must love in order to let it live.

 $^{^{\}rm so}{\rm Tim}$ Ingold's writing has done much to challenge this distinction, see the various essays in Ingold 2000.

⁸¹ This is what Donna Haraway describes as the "promise of monsters," see Haraway 2004.

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ON A PROLETARIAN SOIL

PART I: STONES

SIMON YUILL LUMSDEN, 6TH NOVEMBER 2015

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There is a small, narrow track that runs along the buildings at the back of the Sculpture Workshops, between the bothy kitchen and the first of the farm fields. Walk up the left-hand side of the bothy next to the washing lines, or between the bits of discarded metal and stone behind the sheds. Go onto this track, turn left and walk to the road that comes up the left-hand side of the workshops and heads into the hills. Turn right and walk ahead.

You will cross a cattle-grid. There are fields on either side. Sheep in the fields to the right and cows in those to the left. Further up you will come across one or two horses on the left and some farm buildings. Keep going.

Coming into view on the left you will see a modern house and some woods with a smaller asphalt roadway leading up to them. These are Coreen Cottage and Coreen Woods.¹ When I first came here I climbed up the embankment into the woods. According to Ordnance Survey maps the roadway leads directly onto a path that passes through them. The path is no longer visible. It has long since been covered by fallen logs blanketed in slippery moss and molds. I left the woods and headed back to the road, continuing up the hill past the Lumsden Water Treatment Works on the right. Not long up from here the road ends and becomes a dirt track, heavily overgrown with tall grasses, reeds and gorse. Parallel lines of tractor trails cut through them. Keep going. You will cross a wet, muddy section where a small run of water spills out below the gate of a field that adjoins the Coreen Woods. The bars on the right of the gate have been bent apart. You can climb over the gate or bend down and step through the gap. Do this and continue up the field keeping to the left-hand side near the woods.

This is a hay field and I have come here at different times when it has been grown with crops, harvested, or turned over to a thick clay earth. On this visit, in late Autumn, the field was in harvest, dotted with round hay bales. We saw two young fallow deer grazing on the straw stubble. They left footprints and fresh droppings, clumps of pellets the size of brazil nuts.

¹As older residents can recall this area was once a golf course, the woods are comparatively recent.

Not long after entering the field, we came across long extruded excrement containing small seeds and fibres deposited into holes in the ground. Badgers leave droppings in this manner around their setts and at the perimeter of their home territory.² Nearby we came across a footprint which could have been that of a badger. Perhaps there are badgers here. I don't really know.

Continue upwards keeping near the woods to your left as the ground curves gently round and goes over a brow. Ahead, in the far left corner of the field, you will see a low pile of stones where a young birch tree grows in amongst them. When you reach the stones you are here.

When I first came across these I, quite wrongly, assumed they were the remains of a collapsed shepherd's bothy or fank and I had in my mind the misread recollection of an old dwelling marked on the map. But I walked without a map and this was not the dwelling which in fact lies on the other side of the Coreen Woods to the north and is the remains of an Iron Age structure. Old maps of this area show stone walls surrounding the field and I assume that in this pile are stones from those dismantled walls which have since been replaced by wire fences. Older rusted fence wire coils in amongst the stones. This is the kind of agricultural detritus that some, seeking recreational escape within the countryside, may wish edited out of their consumption of nature. But these are evidence of a worked, active farm just like the turned-over earth. As much evidence of labour as the "pattern under the plough." They are part of the ongoing circulation of matter between 'nature' and 'culture' that undermines the very duality such words create.

Stand up and look around you. Every inch of land in all directions demonstrates as much intervention by humanity as every inch of city-space. Every inch of city-space demonstrates as much the presence of nature as the hills and fields you see around you. What differs are the forms, varieties and dynamics in each context. This does not mean that we should absolve or blindly accept all forms of materiality that we have created or intervened within but it does ask that we not make assumptions about what is authentic and what is not. There are many contexts and conditions of 'nature' each with specific histories and politics, and each at a particular moment in a longer evolution. When we oppose the urban and the rural, and project opposing moral values onto them, we fail to understand the histories and conditions of what we call

²"The badger has special latrines, where the droppings are deposited in small, oblong holes about 10 cm deep, scraped in the earth by the badger using its front paws. The holes are not covered after use, and may be used several times. They are often found near the sett or in particular areas right next to a track. They can be more isolated, but are nearly always by a well-used track." — Bang and Dahlstrøm 2001, pp. 188–189

³Evans 2013

[&]quot;There are a growing number studies of urban wildlife and the ecology of urban spaces, notable examples include Fitter 1984, Gilbert 1991, Wheater 1999, Goode 2014 and, in literary form, Woolfson 2013.

nature and our relation to this. Nor should we assume that we are dominant in all these. Humanity may have become ubiquitous but this is not our era. For some lifeforms humanity is intrusive and destructive whilst for others perhaps the only care they know.⁵ For many lifeforms, however, humanity is simply a pervasive background condition like viruses, bacteria or worms.

Looking back the way you came you will see an empty farm house over to the left. Evidence, in some small way, of the decline in populations previously required for and sustained by agricultural work. Other empty farm houses dot the land to the west of the Clova Estate. Over to the right, to the north-west of Rhynie, in the distance, you will see a large conical peak, the Tap o'North. The remains of an Iron-Age fort sits upon its summit. Below you will see that Lumsden lies within a gentle valley. This was once an area of boggy moorland between the watersheds of the Bogie and Don rivers. The town of Lumsden dates from around 1825 but as the Iron Age fort to the north and the souterrains to the south demonstrate, the area has been inhabited far longer.

Lumsden forms part of a geological area known as the Dalradian Assemblage, a complex mix of land and rock types created through the folding and metamorphoses of structures and sediments laid down in the Pre-Cambrian to Lower Cambrian period. The Cambrian period dates from around 541 million years ago during which the single supercontinent of Pannotia began to break up into smaller land masses. This was a process accompanied by, and possibly catalysing, the rapid evolution of oceanic lifeforms from simple cellular structures to those which form the basis of all animal types today. The northern boundary of the Assemblage lies along the Great Glen Fault, running through Appin and Inverness in the north. The southern boundary along the Highland Boundary Fault, running through Aberfoyle, Dunkeld and Edzell.⁶ To the east of Lumsden, around Inverurie, is a highly arable area, known as the Garioch, that has been farmed since Neolithic times.⁷

The soils of the Garioch are fed with calcium, phosphorous and iron minerals from the gabbroid rocks (formed from molten magma) which are less acidic than the granite that dominates the land around Bennachie and between Alford and the Highland Boundary Fault. The acidic, boggy nature of this granite bedded area meant that for a long time it lay less developed. With the expansion of quarrying and rail systems in the eighteenth and nine-

⁵Arne Næss, a theorist in one branch of Deep Ecology, has argued that the ability to care for other species is one of the most significant and hopeful aspects of the human condition, see Næss 1984. What constitutes 'care' of animals by humans is itself a complex question however, one which entails considerations of issues such farming, conservation, and pet rearing. For some discussion on these see, among others, Haraway 2008 and Wilkie 2010.

⁶For a detailed outline of the geology see Johnson 1991.

⁷Whittow 1977, p. 157, The Gazetteer for Scotland http://www.scottish-places.info/towns/townfirst4083.html#sthash.FPZBOx3f.dpuf

teenth centuries the rich limestone deposits of Banffshire in the north were transported down and mixed into the ground to neutralize the soil. A network of drainage systems reclaimed land around the marches. Areas of bog and moorland became agriculture.8 This soil is an industrial soil, its condition dependent as much upon human labour and various industrially produced supplements as upon existing environmental factors. We might also say, extending Richard Lowentin's analysis of the economics of agriculture, that it is a *proletarian* soil, positioned as much within circuits of capital as within the cycles of precipitation that regularly drench the land.9 The low-lying crofts and farms of Lumsden, Chapeltown and Clova are all typical of such arrangements. A crisis in the markets or a rise in the water table may one day claim them back. The unpredictability of markets does not make them analogous to weather systems or other 'natural' phenomena, but neither are they entirely distinct from one another. Our weather is increasingly subject to market forces. Through insurance, housing and speculative finance, the flow of water becomes confluent with the liquidity of capital.

Turning the opposite way and looking ahead you will see the brown bracken of the Coreen Hills cut across in diamond shapes by tracks. Sections lying between these have been blackened by muir burning. This is where the deer come from. The pair we had spotted before had run this way and a trail of prints ran through the mud along one edge of the stone pile.

Now look to the stones themselves. A mix of grey silicates with a few white and orange quartzes. Many are already substantially submerged into the soil, and they appear to be sinking back into the land from which they were once excavated. This is the work of worms, who through the process of digesting and excreting soil gradually turn the land over, pushing lower soils up to the surface in worm casts and slowly covering and drawing down heavier elements which lie upon it. For Darwin, who studied them for much of his life, earth-worms were intrinsic to the formation of the earth on both the smallest and largest of scales in a manner that outweighed that of human influence:

When we behold a wide, turf-covered expanse, we should remember that its smoothness, on which so much of its beauty depends, is mainly due to all the inequalities having been slowly levelled by worms. It is a marvellous reflection that the whole of the superficial mould over any such expanse has passed, and will again pass, every few years through the bodies of worms. The plough is one of the most ancient and most valuable of man's inventions; but long before he existed the land was in fact

⁸A process recalled in names such as Boghead Farm which we passed on the road.
Plewontin 1998

regularly ploughed, and still continues to be thus ploughed by earth-worms. It may be doubted whether there are many other animals which have played so important a part in the history of the world, as have these lowly organized creatures.¹⁰

Look more closely at the stones. They are covered in a profusion of different colours and textures that are the thick life of mosses, lichens and molds. Mosses are more prevalent along the northern side of the stones, giving a thick furry covering over the stone. It may well have spread from the woods that they face towards. Requiring more moisture they tend to grow away from the drier south-facing sunlight areas where the more colourful lichens can be spotted. These become more intense in colour with more sun exposure. In deeper, more moist crevices which rarely get any sun however, a bright green mold or algae can be seen.¹¹

Sprouting up in amongst many of these moss patches are small green cuplike structures on stalks. We called them "faery cups." They are not part of the moss but rather a lichen growing alongside it. The small brown dots around the rim of each cup mark where the lichen spores are produced. Many of the rocks are covered in large circular areas of white. The black spots rising up in the centre of each area being where this species produces spores. The bright orange and yellow over many of the stones may have been due to colouration in lichens caused by variations in sunlight, minerals from the stones themselves or reactions to fertilisers blown from the fields. Spreading across the stones and up onto the trunk of the birch is a leafy crottle lichen used to make dyes. Soaked in water these create yellow-browns, crimsons and purples whose colours are fastened by a mordant of urine.

The small flat crusts of green and dark brown lichens may be a species known as a 'map lichen' due to the dark line that forms around the edges, separating one from the other like borders on a map. Map lichens generally grow at a rate of no more than 1mm a year and so the average radius of the patches found here can be taken as an indicator of how long the stones have been present.¹² On my last visit, the average radius varied around 10mm to 13mm suggesting the stones have been here little more than a decade. A related but rare variety found on acidic rocks in Scotland is described by one guide as "the oldest of all living things." The oldest known fossilized lichen, *Winfrenatia reticulata*, was discovered near the Tap o'North, in a seam of red sandstone deposit called the Rhynie chert. The fossils of the Rhynie chert

¹⁰Darwin 1972, p. 313.

¹¹The growth patterns of lichen and moss can be used as a navigation guide, see the chapter on "Mosses, Algae, Fungi and Lichens" in Gooley 2014.

¹²Rhizocarpon geographicum, seeGooley 2014, p. 116.

¹³Rhizocarpon alpicola, see Laundon 1980, p. 5.

¹⁴http://www.abdn.ac.uk/rhynie/lichen.htm

date from the early Devonian period, following the Cambrian, when Northern Europe was joined with Greenland and North America as part of the Laurussia land mass. The chert appears to have once been an environment not unlike that of the hot springs in Yellowstone National Park where a profusion of distinctly coloured algae, lichens and slime molds grow upon the shallow edges of sulphurous water pools. ¹⁵ Standing here, we are not so far from that landscape, as alien as it might seem to imagine it here.

The First Established Beings

Lichens are not plants but rather the product of a symbiotic partnership between fungi and algae. The algae are generally capable of living freely whereas the fungi are dependent on the algae for extracting nitrogen from the air and synthesizing carbohydrate nutrients. The fungal structures, in turn however, can provide more stable environments for the algae, helping maintain moisture and protecting them from the weather. Their metabolic processes synthesize new compounds and can transform an inhospitable environment into one favourable to other lifeforms. Gradually dissolving down rocks, feeding minerals into the soils and creating surfaces that plants can take root on. In this way the arid landscapes of the Cambrian era were gradually transformed into those capable of sustaining plant life, creating the more complex habitats of the Devonian. Some of the earliest evidence of this is preserved in the Rhynie chert including the earliest insect uncovered in 1919 by a local minister and amateur naturalist, the Reverend William Cran. The landscape you see around you was at first made possible by the actions of lichens and they are all around us, still slowly transforming it.

It has been argued that it is through symbiosis that life first emerged and continues to evolve providing one of the mechanisms through which variation and adaptation are introduced into species. Lynn Margulis (1938–2011) identified a process through which simple bacteria combine into more complex forms capable of reproduction, movement and metabolism, producing energy from sources such as light, nitrogen and oxygen. The bright green in the crevices between the stones that we are standing by is provided by photosynthetic bacteria in plants, *chloroplasts*, and various species of *cyanobacteria* in molds and scum. *Mitochondria* process oxygen and are present in all animals, plants and fungi. *Spirochetes* are moving bacteria who swim and wriggle through all kinds of substances: mud, slime, mucus and living tissue, within the intestines of tiny insects, or in the deer pellets and

¹⁵http://www.abdn.ac.uk/rhynie/analogues.htm

¹⁶ Margulis 1998.

badger droppings we passed on our way here. These are the protists, the "first established beings." Ernst Haeckel (1834–1919) added protists to the taxonomy of life under the new kingdom of Monera and mapped many different species in obsessive, crystalline drawings. 18 Herbert F. Copeland (1902– 1968) revised and divided Haeckel's scheme into two groups: Monera for those bacteria with no nuclei and Protoctista for those with nuclei, the latter term coined by Scottish naturalist John Hogg (1800-1869) to define that which lay between plant and animal. 19 Within the fossils of the Rhynie chert protists have been found inside algae that are inside plants.²⁰ We depend upon various bacteria within our own bodies, such as the microbiome in our guts, but even the composition of our organs and tissues may be the product of prior syntheses of different bacterial compounds.²¹ The nerves cells in our brains are composed of tubulin protein found in centriole-kinetosomes protists and Margulis argues that the hair-like structures, cilia, in our throats and on women's fallopian tubes are derived from originally free-living spirochetes that integrated with other ancestral bacteria.²²

In an era before microscopes, when we could not see into plants and soil, stone, saliva and tissue, Aristotle described those creatures that crawl and swim and fly from mud and slime as *autochthones*, born from the earth directly.²³ He could not see or analyse the tiny eggs and larvae from which they developed. In Greek thought, the autochthones are not only restricted to such basic creatures however. Cecrops, the mythical founder of Athens, a creature half-human half-fish was also of the autochthones.²⁴ The political classes of Athens would claim a similar genealogy. Drawing upon an etymological play that linked *laoi*, people, to *laes*, stones, they mythologised themselves as a "hard people" born from the stones that lay within the very soil they took dominion over.²⁵ The trope of the autochthone naturalized

¹⁷Both the term *protist* and the related *Protoctista* have been subject to changing historical definitions and their identification often poses a problem for taxonomies that has resulted in a varying and sometimes conflicting use of the term. I use it here in a broader more inclusive sense closest to that used in Margulis, Corliss, Melkonian, and Chapman 1989.

¹⁸See the collection, for example, in Haeckel 2000.

¹⁹Margulis 1998, p. 60–61. John Hogg, On the distinction between a plant and an animal, and on a fourth kingdom of nature. *The Edinburgh new Philosophical Journal* (new series) 12, 216–225 (1861).

²⁰ Margulis 1998, p. 62.

²¹https://en.wikipedia.org/wiki/Microbiota

²²Margulis 1998, pp. 47–49.

²³"Of mobile animals the hermit-crab is said to arise spontaneously from soil and slime, and various insects from dew falling on leaves in the spring; in decaying mud or dung; in timber; in the hair of animals; in flesh, and within the intestine of animals ..." — *Historia Animalium* 548a, 551a, 547b. See French 1994, pp. 66–67.

²⁴Another name given to Cecrops was *Erichthonius* deriving directly from auto-chthonos, Bambach 2003, pp. 52, 197.

²⁵Aristotle 1984b, p. 39, Loraux 2000, pp. 11-12.

both the inclusive and exclusive dimensions of Athenian democracy. The political equality of Athenian citizens derived from their equality of origin, all were born the same of the same source. Equality was given by nature to those "first established beings." For all who were not born in this way however, such equality was not given. Because true Athenian men were born from the soil and not from a human mother, women could not truly be citizens for their origins differed even when married into or descended from one of the elite families. Similarly, those born elsewhere could not share in the decisions that shaped a land that did not, literally, course through their veins.²⁶ In ancient Greece the femininity of Gaia was not based in a notion of matriarchal power but rather that the soil and woman were seen as resources from which man replenishes himself - marriage laws echoed and derived from agricultural laws. 27 The autochthone is invoked to provide an answer to questions that are placed beyond investigation. In nature, it served to explain the source of creatures whose originating forms were too small for the unaided human eye to see, and in politics, to justify why some were more equal than others.

In classical Greek thought, and in Aristotle especially, nature and politics do not stand in opposition to one another. There is no realm of nature separate from that of human affairs. Nature, *physis*, is spoken of by Aristotle purely in terms of what is characteristic, the nature of a thing as we might say. ²⁸ That which is natural is, according to Aristotle, that which is necessary to something achieving its purpose - its *telos*. In his defence of slavery Aristotle claims that it is the physical differences between the freeman and the slave, one walking upright whilst the other is bent towards the ground, that determine their place in society, rather than their postures deriving from the differing demands society placed upon them. ²⁹ Nature and politics are inherently intertwined in Aristotle for only that which is natural, in this sense, can be necessary to the existence of the *polis* (the state) and, retroactively, that which has become necessary to the governance of the *polis* must have arisen from its nature. And just as that which is determined by nature justifies that which is politically and socially determined for Aristotle, so too

²⁶"We and our kind, all brothers of the same mother, believe ourselves to be neither masters nor slaves of each other; rather equality of origin (*isogonia*) established by nature obliges us to seek political equality (*isonomia*) established by law." — *Menexenus* 238e–239a, quoted in Loraux 2000, p. 22.

²⁷See Blundell 1995 and Loraux 2000.

²⁸See the discussion in French 1994, pp. 16–21.

²⁹"But it is nature's intention also to erect a physical difference between the body of the freeman and that of the slave, giving the latter strength for the menial duties of life, but making the former upright in carriage and (though useless for physical labour) useful for the various purposes of civic life ... It is thus clear that, just as some are by nature free, so others are by nature slaves, and for these latter the condition of slavery is both beneficial and just." — Aristotle, *Politics* 1254b—1255a, Aristotle 1958, pp. 13–14.

does that which mirrors contemporary political structure determine what is most natural for animals:

... the animal must be conceived after the similitude of a well-governed commonwealth. When order is once established in a city there is no more need of a separate monarch to preside over each several task. The individuals each play their assigned part as it is ordered, and one thing follows another because of habit. So in animals the same things happens because of nature, each part naturally doing its own work as nature has composed it.³⁰

Physis and *politeia* are integrated in relation to their constitution, how each is composed so as to act together.³¹ Not only are they conceptually parallel for Aristotle but they were also investigated through parallel methodologies. Just as his studies of animal life were based on collections of empirical examples gathered within the library of the Lyceum so too did Aristotle and his students gather examples of existing political systems in order to subject them to comparative and taxonomic analysis.

The majority of these documents are lost or known only in fragments. The most substantial and best known to us is the *Athenaion Politeia* (translated as *Athenian Constitution*), commonly attributed to Aristotle but now largely considered to be the work of one of his students.³² The surviving text describes the institutions and procedures of Athenian political life focusing around the rise and fall of Solon, the ruler who introduced substantial democratic reforms into Athens in the 5th century BC.

The original Greek term *politeia* was first translated as 'constitution' only in the 19th century by Benjamin Jowett in his 1885 version of Aristotle's *Politics* and later adopted by Frederic G. Kenyon's translation of *Athenaion Politeia*. Translations of the word in the 16th century rendered *politeia* as 'Commonweale'.' Our modern understanding of a political constitution is one of a document that defines a set of principles upon which the state draws a contract with its citizens, as first implemented in the constitutions of France or the United States. These principles are both foundational and

³⁰Aristotle, Movement of Animals 703a, Aristotle 1984a, p. 1095.

³¹*In *all* cases where there is a compound, constituted of more than one part but forming one common entity — whether the parts be continuous [as in the body of a man] or discrete [as in the relation of master and slave] — a ruling element and a ruled can always be traced." — Aristotle, *Politics* 1254a, Aristotle 1958, p. 12.

 $^{^{32}}$ See P.J. Rhodes introduction to Aristotle 1984b. There are records listing at least 158 different political systems studies by Aristotle and his students.

³³For a historical outline of these translations and their relation to changing political debates see Stourzh 1988, pp. 35–36. The surviving fragments of the *Athenian Constitution* were first discovered in 1879.

final. The *Athenaion Politeia* however describes neither a set of 'first principles' nor a contract between citizens and their state but rather more of an empirical record. It provides no account of a constitution of Athens in the modern sense but rather as a processes of continual change that it calls the *metabole politeion*.

In contrast to the modern concept of political constitution defined in terms of structure and principles, the term *politeia* relates more to the conduct of those who act within such structures. For writers such as Herodotus and Xenophon to speak of the *politeia* was not to speak in terms of an abstract system of governance but rather to describe the daily life of those governing citizens, those property-owning male citizens, in whom the power of the *polis* was embodied. The *politeia* is that which puts the state in motion, gives it *physis*. This motion is itself within a process of transformation, *metabole politeion*, of growth and decay driven by responses to contingent events, such as famine or war, or internal corruption and stagnation.³⁴

When Aristotle seeks to define what the most appropriate arrangement of all things can be, what is both "the good and the best," it is not the state to which he draws reference, nor its most disciplined structures such as the army, but the household, the *oikos*. The stability of the *polis* depends upon, and is mirrored through, the stability of the *oikos*. The *oikos* is the basic organ from which the living body of the *polis* is constituted. Through which legitimacy is defined in terms of property ownership conferred by descent, and in which the members do not conduct themselves as equals, as in the forums, but as part of a strict hierarchy.³⁵

The oikos represents an ideal model, for Aristotle, of the balance between social structure and the management of natural resources. The Athenian oikos was a landholding property, closer to the Clova Estate than the ordinary homes of Lumsden High Street. The management of such estates is most famously outlined in Xenophon's Oikonomikos ("The Estate Manager"), a text which has been a recurrent reference point for Western theories of politics and economics and, indeed, from where the very word 'economics' itself derives. Whilst the analogy between nature and politics, physis and polis, is one based on the relation between structure and command in which each component has its given role, that between nature and 'housekeeping', physis and oikonomia, is based on the relation between structure and

³⁴Liddel 2010 discusses the broader development of metabole politeion in Greek political and historical writing and gives the contrasting example from Darius where the decline of a state is seen as related to its tendency towards stasis.

 $^{^{35}}$ See Cox 1998 and Loraux 2000. The passage is in Aristotle's *Metaphysics*, book 12. For an analysis of this passage in relation to notions of ecology in Aristotle see Marie Leroi 2014, pp. 318–327

 $^{^{36}}$ For an outline of the significance of Xenophon to thinkers such as Machiavelli, Adam Smith and Marx see Mitropoulos 2012, pp. 53–59.

utility in which resources are made best use of. There is an engendering to this in that, whilst the husband governs the polis, his wife manages the oikos.³⁷ Just as Aristotle's understandings of nature and politics support one another through a set of self-reinforcing metaphors, so too are nature and housekeeping brought into self-reinforcing relations throughout his writings: "Like a good housekeeper, nature is not in the habit of throwing away anything from which anything useful can be made," and most frequently in the refrain "nature does nothing in vain." This judicious utilisation of resources is integral to Aristotle's teleological principle. In accordance with this, nature always moves towards that which is necessary. The nature of any given entity is evident in how it fulfils this goal, whether this be the growth of horns or the necessity (as Athenians might see it) of slavery. Whilst this involved constant transformation, through growth, generation and corruption, this is not an evolutionary principle. The final goal, the telos towards which every being strives is an eternal, predetermined form, its eidos. It is through shaping matter in the form of an eternal idea that, for Aristotle, life approaches the divine and becomes 'good'.

Polis and oikos where distinct realms traversed only by those free men who were masters in both. In the development of the modern concept of the state as a political body these two spheres become increasingly infused within one another. The city state and then the nation state are conceived of as one grand household in which economic necessities increasingly take precedence over and determine the extent of political freedoms, whilst domestic space is increasingly reconfigured in terms of political structure and legislative order.³⁹ As colonial exploration and new methods of scientific observation expanded our awareness of nature, the relation of physis and oikos becomes integrated into the structure and conception of different national economies. The vast taxonomic projects of Linnaeus were orientated towards enabling the global productivity of nature to be reconstructed at home, transforming Sweden into a self-contained economic ecosystem. In works such as *The Oeconomy of Nature* (1749) and *The Polity of Nature* (1760) Linnaeus begins to interpret nature in terms of interlinked systems of exchange. 40 Adam Smith abstracts the allocation of roles within Xenophon's Oikonomikos into the principle of division of labour whilst seeking to apply the knowledge of the new natural sciences to philosophy and economics.⁴¹ Marx satirised Darwin for rediscovering "amongst the beasts and plants, the

 $^{^{37}} For an analysis of the formation and significance of gender politics within this, and their relation to the development of Western law and economic governance, see Cox 1998 and Mitropoulos 2012.$

³⁸An overview of the use of these themes can be found in Marie Leroi 2014, pp. 146-150.

³⁹This follows Hannah Arendt's analysis in Section II: The Public and Private Realm of Arendt 1998.

⁴⁰Schabas 2005, p. 31.

⁴¹Smith's theories of moral sentiment and of the value of labour reflect the ideas of his col-

society of England with its division of labour, competition, opening up of new markets ..." even whilst drawing on elements of Darwin's theories and at one point sending him a copy of Das Kapital as a mark of respect. 42 Other advocates of Darwinism were less nuanced and not only embraced but extended the conflation of evolutionary theory and capitalist economics. In England, Thomas Huxley, Henry Galton and Herbert Spencer, in France, Clémence Auguste Royer and, in Germany, Ernst Heackel. 43 Heackel projected Adam Smith's division of labour directly onto evolutionary process, ranking not only different species but also distinct human races and, in this way, informing his promotion of eugenics as a means of maintaining the 'purity' of breeds and abilities. 44 Just as for Aristotle, nature was understood in a mirrored relation to the polis and oikos, so too did emerging capitalist theory fashion itself as the realisation of a supposed set of natural laws within human commerce and re-conceived of nature in terms of a competitive yet self-balancing network of exchange. A new integrated conception of "nature's household" was born. The nomos (law) of the household became the logos (discourse) of nature and Haeckel gave it a name: ecology. 45 It is the advent of ecology as a particular thinking of nature, as a self-balancing system of interacting agents, that folds nature fully into capital.

Natural histories are political writings. Nature defines the limits and possibilities of the political. Nature is interrogated in order to understand what the political might 'properly' be, structuring the limits and possibilities of power, whilst our understanding of the limits and possibilities of nature are themselves constrained by the politics we already have or lie within their existing desires.

In the mytho-political constitution of ancient Athens stone marks both the origins and limits of power. Not only in the birth of the ruling *autochthones* but in the structure of power as marked on the land. It was this that the reforms introduced by Solon in the 5th century BCE sought to address. In an autobiographical poem justifying his actions he describes this

leagues the physicians William Cullen and Joseph Black. In their new Physicks intangible entities as distinct as oxygen or emotions could be conceived alike as 'subtle fluids' transmuted through the air and through the nervous system to be 'fixed' into the blood through respiration or in the soul as affect or empathy. Labour, understood this way, could be fixed into the object of production thereby conceiving of its value like a substance that could be stored, transferred, measured and exchanged. See Mitropoulos 2012, pp. 53–54, Schabas 2005, pp. 80-89.

⁴²Beck 2009, pp. 310-311.

⁴³Darwin rejected many of these interpretations even whilst trying to acknowledge the proposals that different followers of his work made. He rejected Galton's concept of eugenics as being based on a gross misunderstanding of how evolution worked and of Spencer he wrote: "His conclusions never convince me ..." See Beck 2009.

⁴⁴For an account of Heackel's work and its political impacts see Gasman 1971.

⁴⁵Stauffer 1957. Whilst Haeckel is widely regarded as the first to use the term in 1866, it has also been attributed to Eugenius Warming.

as a moving of the boundary markers, the *stelai*, transforming the status not of people but of the earth itself:

... from whom I removed The markers that were fixed in many places, The Earth which once was enslaved but now is free.⁴⁶

Solon's reforms were far-reaching, he freed slaves, cancelled debts, allowed exiles to return and restructured the institutions of the *politeia*. These brought harsh criticism upon him from both sides of Athenian society. The landowners feared their power would diminish too far whilst for those in indentured servitude the changes were insufficient. Setting himself up "in the ground between them, Like a stele,"47 Solon substitutes himself as the sole marker of power in place of those he removed. His poetry interprets the *polis* not terms of its eidos, of the autochthone as the enduring form in its mythic origin, but in terms of its physis. The metabole politeion becomes a transformation in matter, a moving of the stones, that re-aligns the relation between those who work on the land and those who are born from it. Yet, whilst Solon is credited as laying the foundations of Athenian democracy, his changes were short-lived. The Athenaion Politeia charts a movement from democracy to tyranny in successive waves of 'political metabolism'. For Aristotle this was its inevitable, natural fate. He did not support democratic government believing that it lacked sufficient hierarchy and, being too unstable to last, it could never be 'good'.

And these stones here at our feet? These too are a boundary that has fallen and been replaced. The markers of our modern liberal democracy that carve up the land in its relation to capital. On one side a farm field, on the other a commercial wood plantation. Nearby, hills kept deliberately barren through muir burning for commercial grouse shoots. And, in between, a small patch of boggy waste ground, sustained perhaps through tax rebates. Every inch of land is accounted for and, just as for the water table in the valley below, capital and law determine the nature of this land. How do we stand, then, in relation to something that is growing in this way?

⁴⁶Aristotle 1984b, p. 52.

⁴⁷Aristotle 1984b, p. 53.

⁴⁸There is often an association between common land and waste land. This stems from the reconceptualism of land by 18th century economists as 'productive' and 'unproductive', a distinction which does not derive from the ability of a given piece of land to support life but rather from its potential to produce profit, see Perelman 1984 and Harvey 2006.

Oikos - Mythos

This rephrases a question that Martin Heidegger (1889–1976) put to his students in a seminar given on 17th November 1933 in which he asks them to imagine a flower growing beside a fence. He asks them to think upon the distinction between that which is natural and that which is manmade and, thereby lead them to his own understanding of nature as *physis* as that which has created itself, that which "... without human intervention, coming from itself, streams around human beings, gives them rest or unrest, calms or threatens them"⁴⁹

What guides the way in which each entity creates itself from within is, according to Heidegger, its particular kind of Being – what it is for something to-be-in-itself. For Heidegger, the way of growing that we see around ourselves and amidst the stones here could never be true *physis* for it arises not from a 'letting-be' of the flower unto itself but from 'production', an understanding of the world in terms of what can be made from it rather than for itself. In this way, Heidegger distinguished between a making in which things are unconcealed in their true Being, as the bud reveals the flower within, and that in which things are produced in accordance with humanity's needs. These needs act upon nature as a "standing reserve" to be taken from as desired.⁵⁰

Whilst this is a perception that resonates with many critiques of modern technology and industrialisation, such as that of Ruskin in the 19th century and many different ecologists today, for Heidegger this was not the consequence of the Enlightenment, the Industrial Revolution, or what we now call the Anthropocene. These, rather, were the culmination of a process that had begun much earlier and were first fully articulated in the *Metaphysics* of Aristotle. Heidegger argued that whilst Aristotle asked the right questions as to the nature of Being, he was mistaken in his attempt to answer these by presenting Being as arising from the substance of things. Being, for Aristotle, was defined in terms of eternal forms (*eidos*) expressed in the physical structure and constitution of each type of thing from which their nature (*physis*) and way of acting upon the world was derived. For the freeman and the slave their distinct forms of Being are expressed in the shape and posture of their bodies and it these that determine the kinds of activities

⁴⁹Heidegger 2013, p. 24.

⁵⁰The classic exposition of this is Heidegger 1977. The term 'Being' with a capital B is the standard translation of the German word *Dasein* use by Heidegger and is given this spelling to denote its use as a specific conceptual category.

⁵¹The relationship of Heidegger's ideas to those of his contemporaries is discussed in Zimmerman 1990. The relationship of Heidegger's philosophy to ecological thinking, and especially to post-war radical ecological movements, is examined in Zimmerman 1994.

their nature is suited to. Similarly, in Aristotle, there is a hierarchy of being. From those who raise themselves up from the land, the most superior being man, down to those who are closer to the ground, the deer, the badger, the worm, each being successively inferior. Heidegger argued conversely that Being followed from the *way of doing* that distinguished one kind of entity from another, what he called *Dasein*, a 'being-there' which, in a reversal of Aristotle, is temporal and contextual. It is Being that shapes the physical qualities of each form of life.

These stones, then, are not merely detritus, abandoned as their value in sustaining a boundary fell apart through weathering and subsidence, nor are they merely a reserve to be called upon when a new need arises. It could be said that they have a form of 'Being' of their own, a 'being-there' which we gather into our world as we come upon them, unconcealed beyond the brow of the hill. And so too the deer, which are not a stock to be maintained, or the badger, which is not a pest to be controlled. Each unconceals itself to us as a 'being-there' with the stones. As do the lichen who weather their surface and the worms who burrow and unsettle their ground. We can think this way with Heidegger, it seems, merely by letting things be and gathering our senses. From this formulation Heidegger challenged those who saw the animal as an 'inferior' form of human or the human as a 'superior' kind of animal. Animal and human simply possessed different kinds of 'being-there' with the world. So it may seem, but there are limits to Heidegger's world.

In a seminar series prior to that of 1933, Heidegger illustrated his conception of Being as a way-of-doing through a comparison of three kinds of entity that, he argued, had clearly distinct forms of interaction with the world and therefore distinct kinds of Being: the stone, the animal and the human. The stone he described as "worldless" for it was merely present in the world but had no awareness of its own interaction with other entities, no sense of a world to which it belonged and, therefore, no actual sense of Being in Heidegger's terms. The animal he described as "poor in the world" for whilst it was conscious of interacting with others and had some sense of a world to which it belonged, it could not reflect upon or communicate this sense to others or refashion the manner in which this sense was revealed. It therefore had only a partial sense of Being. Full Being could only be achieved by those given language or, as Heidegger put it, by those who dwelt within language and thereby could be described as "world-forming." For Heidegger, this was a 'way' that lay open only to humankind.⁵²

These kinds of 'being-there' were irredeemably distinct, separated by what Heidegger called an "abyss." Whilst humans might not be superior to animals, the kind of interspecies companionship or trans-species politics such as Donna Haraway proposes would, in Heidegger's account, be a

⁵²Heidegger 2008.

fallacy.⁵³ Elsewhere Heidegger reinforces this in claiming that the animal is unable to order actions in time and therefore has no sense of time and or history.⁵⁴ The animal cannot, in Heidegger's account, enter into the political for in order to be political one must be able to make decisions that have historical consequences. A stone, even less so.

This structure of Being is significant to Heidegger's seminars on the state. indeed he recounts it using a piece of blackboard chalk in place of the stone. not because he wishes, like Haraway, to discuss the possibility of including animals and stones within our concept of the political but rather to emphasize the conditions under which certain peoples must form a state and from which others must, in his view, be excluded. For Heidegger political capacity derives from the relation between Being and state. A state is constituted not in the agreement of its laws or in terms of a contract with its citizens but in the historical Being of its people. A people cannot have a history without a place in which one's Being is "rooted." Those who are rootless therefore (explicitly, for Heidegger, the nomad and the Jew) are without a true consciousness of their own history and cannot have a politics or be part of a state.⁵⁵ This builds upon a more fundamental argument that Heidegger makes, following from his discussion of chalk and animals, in which he relates human consciousness of Being to a people's commitment to the state, and that those who lack true consciousness "of their Being in the whole of the world" are not only less than human but less than the animal or the stone, merely nothing.⁵⁶ Heidegger's world is, therefore, not so much one of gathering and enfolding but of limits and exclusions.

Through this notion of rootedness Heidegger reasserts the principle of autochthony in a new form. Whilst drawing from Greek sources this does not define autochthony in strictly genealogical terms, but rather through the

⁵³See Haraway 2003 and Haraway 2008. The relation of Heidegger's analysis of animal-being to later philosophies of the animal and human is explored in Calarco 2008.

⁵⁴Heidegger 2013, pp. 33, 37.

^{55°}History teaches us that nomads have not only been made nomadic by the desolation of wastelands and steppes, but they have also often left wastelands behind them where they found fruitful and cultivated land — and that human beings who are rooted in the soil have known how to make a home for themselves even in the wilderness. Relatedness to space, that is, the mastering of space and becoming marked by space, belong together with the essence of the kind of Being of a people. ... From the specific knowledge of a people about the nature of its space, we first experience how nature is revealed in this people. For a Slavic people, the nature of our German space would definitely be revealed differently from the way it is revealed to us; to Semitic nomads, it will perhaps never be revealed at all." — Heidegger 2013, pp. 55, 56.

⁵⁶A people that turns down a state, that is stateless, has just not found the gathering of its essence yet; it still lacks the composure and force to be committed to its fate as a people." — Heidegger 2013, p. 46. "Without consciousness, the knowing and caring about the height and depth, greatness and powerlessness of their Being in the whole of the world, they are no longer human beings, and since they cannot be animals or plants or objects, at bottom they are nothing at all. With the loss of consciousness, human being becomes null." — Heidegger 2013, p. 48.

claim of a privileged ontological relation between a people and their environment, expressed in German as *Bodenständigkeit* (literally a 'permanence of the ground'). In defining this as how "nature works on the human being, roots him in the soil, only when nature belongs as an environment," 57 it could be argued that there is an ecological dimension to Heidegger's thought, making it the philosophical counterpart to Haeckel's science as some would later claim. Yet in his lectures of the 1930s Heidegger dismisses ecology as failing to address questions in a "fundamental way about locale." 58 Heidegger rejected the *logos* of modern science as false reason, one that verified facts but did not reveal the truth as *aletheia*. Nothing could be gained from knowing the origins of life, if a people could not experience the archaic origins of its own Being. 59 *Bodenständigkeit* could only be revealed as myth, as *oikos-mythos*.

This is expressed in a poetic mythology that Heidegger weaves around the Black Forest landscape of his home. In a memorial address to celebrate the anniversary of the First World War hero Leo Schlageter, Heidegger locates Schlageter's bravery as deriving from the *Urgesteine* ('primitive stone') of Black Forest mountains where he was born, echoing the originary myth of the ancient Athenians.⁶⁰ In a speech for public radio entitled "Creative Landscape: Why Do I Stay in the Provinces?" Heidegger locates his own philosophic work within the same landscape, embedded within the "gravity of the mountainside and the hardness of their primeval rock, the slow and deliberate growth of the fir tress, the brilliant, simple splendour of the meadows in bloom ...". This self-created mythology seeks to confer an archaic privilege upon those who are rooted in the homeland and the political project to which he believes they must commit themselves.

This project collapsed with the defeat of Nazism in the Second World War and a darkness fell over Heidegger's mountain. Rejecting the explicitly political language of his earlier work, Heidegger withdrew into a contemplative quietude and, following Holderlin's evocation of the river Isther, reformulated his ideas in a poetic vocabulary of 'dwelling', 'gathering' and 'care'. Proposing a philosophical stance of letting-be rather than one seeking to shape the futural destiny of his people, he deepened his critique of how our experience of the world was increasingly enframed by modern technology. It was this post-war writing that was to have a huge influence on certain

⁵⁷Heidegger 2013, p. 55.

⁵⁸This occurs in the midst of his discussion of what he claims to be the inabilty of Semitic and nomadic peoples to understand Being, see Heidegger 2013, p. 54.

⁵⁹"In excavating the "essential" sources of Greek *aletheia*, Heidegger will conflate Pre-Socratic *arche* with Athenian autochthony. The term "archaic" will now designate an experience rather than an epoch." – Bambach 2003, p. 215.

⁶⁰Bambach 2003, p. 59.

⁶¹Heidegger, Bambach 2003, p. 64.

⁶²Heidegger 1996. See also Nichols 2009.

forms of ecological politics and their cultural expressions, to the extent that George Steiner would state that: "If there is a metaphysic of the ecological movement, it is Heidegger's."63 Heidegger spoke to those disillusioned with the modern world who sought a more 'authentic' life, yet, perhaps not unsurprisingly, the flow of Heideggerian thought into the ecological movement has mostly led to the emergence of a form of cultural ecologism that only loosely relates to, and sometimes opposes, the scientific discipline from which it takes its name and in some forms seems more concerned with projecting personal subjectivities onto the world rather than learning from it.64 Murray Bookchin rejected Heidegger's influence as encouraging a selfindulgent mysticism, particularly within the North American Deep Ecology movement where it was most prevalent.⁶⁵ Arne Næss, a key figure within the European branch of Deep Ecology, whilst acknowledging there may be "interesting similarities" between his Ecosophy and the concept of 'care' in Heidegger's later writings nevertheless remained sceptical of too strong a relation between Heidegger and himself.66

At a time in which much of Heidegger's earlier writing and private note-books were unknown, his quietude was often interpreted as a rejection of the regime he had once supported. The recent publication of this material has shown this was not the case. As Charles Bambach demonstrates, the change in Heidegger's later writings did not reflect a departure from these commitments, but rather an encoding of his earlier ideas in a new form.⁶⁷ The critique of technology in terms of its uprooting of humanity and of scientific language as being rootless operates according to, and thereby continues, the same logic that structures the anti-Semitism of his 1930s lectures. It is within the language of 'dwelling' and 'gathering' and letting-be that the principle of *Bodenständigkeit* resurfaces as he calls for in a Memorial Address given in the 1950s:

... releasement toward things and an openness to mystery gives us the prospect of a new autochthony. This could one day even

⁶³Steiner 1981.

⁶⁴This is one of Val Plumwood's key criticisms of Deep Ecology in which the 'ecological' self echoes the expansive Being of Heidegger: "The other side of the self-contained master identity then is the incorporating, totalising, or colonising self, which recognises the other only as part of the empire of the same, as colonised or as assimilated to self. Such a self cannot recognise unassimilated otherness; it presses everywhere against the boundaries of the other, having no recognition of its own limits or of the other as a source of resistance, and is driven by an expansionary and aggrandising dynamic." — Plumwood 1993, pp. 157–158.

⁶⁵See Bookchin 1991 and the discussion in Zimmerman 1994, pp. 162-164.

⁶⁶See Næss 1997. This is not surprising for a philosopher such as Næss who worked within the analytic tradition that Heidegger had opposed and whose main contribution outside of Ecosophy was a theory of meaning in language based upon mathematical set-theory.

⁶⁷Bambach 2003.

be appropriate for calling back the old, now rapidly vanishing autochthony in a changed form.⁶⁸

It is this prospect of a "new autochthony" that attracts a new generation of right-wing thinkers to Heidegger, most notably Aleksandr Dugin in Russia, but there are others who see this as integral to a ecological approach. Describing the alt-right as "a philosophical descendent of Deep Ecology," Brett Stevens explicitly seeks to revive and promote the right-wing dimensions of Heideggerian thought through their connection to the aims of the ecology movement. "He expresses this unity through the concept of what he calls an "organic society" that will be "something like an ecosystem," and will favour "hierarchy, aristocracy, culture-driven standards and transcendental goals." Similar ideals are mirrored in the European *Nouvelle Droite* ('New Right') and *Génération Identitaire* which embeds ecological values and calls for greater biodiversity within principles of 'ethnic differentialism' (a form of nationalist separatism based on perceived racial and cultural difference) and the reassertion of 'native' white cultures."

Whilst not explicitly Heideggerian, the principle of autochthony permeates aspects of US conservationist culture. Sarah Jaquette Ray describes how the concept of 'wilderness' emerged out of a process of internalising the frontiersman ideology of colonial expansion, enabling the construction of a myth of new ethnic origins in the figure of the rugged, lone male shaped by their encounter with a 'raw' nature whilst simultaneously excluding those indigenous peoples who had originally lived there.⁷³

Dave Foreman, who was a founder member of Earth First! and developed the initial principles of rewilding, maintains that conservationism properly belongs within conservative politics and the ideals of the Republican Party of which he is a member.⁷⁴ For Foreman, rewilding builds upon the practice of maintaining reserved wilderness spaces through the re-introduction of lost

⁶⁸Quoted in Bambach 2003, p. 331.

^{6°}Stevens 2017. Stevens celebrated Anders Breivik's murder of teenagers in Norway at the Worker's Youth Camp in 2011. In 2016, he was a co-organiser of the conference of Neoreactionary speakers at the LD50 gallery in London, see LD50's Fascist Conference in Hackney, Secrecy, and the Attempt to Introduce Racist Ideology into the London Artworld: A Brief Overview and Chronology available at https://shutdownld50.tumblr.com/.

⁷⁰Stevens 2016.

⁷¹Stevens 2017.

 $^{^{72} \}rm{For}$ a detailed analysis and history of how these groups evolved and their involvement in the ecology movement see Ross 2017.

^{73*}Without being overtly racist, and backed by the authority of the new science of ecology, environmental views distinguished between those who belonged within America's privileged boundaries and those who threatened its superior nature — understood both as physical wilderness and as the essential identity of the national body politic." — Ray 2013, p. 15.

⁷⁴Lloyd 2005. Foreman and Earth First! have long since parted ways, with many in the movement now rejecting his approach.

predator species. The most basic principles of rewilding, those of the reintroduction of such species and development of potentially self-sustaining ecosystems have gained wide support among conservation biologists.⁷⁵ Yet, even some of its earliest proponents within the science community, such as Michael Soulé, acknowledge that Foreman's original conception was "mostly aesthetic and moral" and that the emphasis upon large predators could only be appropriate in certain contexts.⁷⁶ In Foreman's model the conservation of wilderness is directly linked to the control of human populations. Foreman, and the Rewilding Institute that he founded, promote restrictions on population growth and migration that reductively measure environmental impact in terms of a simple equation with population numbers that does not consider social and economic factors.⁷⁷ Foreman and the Rewilding Institute claim that population control must be applied across all humanity, yet it is always those who are not quite white enough who are portrayed as the most problematic and the most expendable.⁷⁸ It is those who are most adversely affected who become null:

... the worst thing we could do in Ethiopia is to give aid — the best thing would be to just let nature seek its own balance, to let the people there just starve ... 79

Rewilding, as formulated by Foreman, operates as a process of exclusion based upon a static concept of nature that is curated by man. Foreman's rhetoric is echoed in Finnish environmentalist Pentti Linkola's demand that we need to be "cruel" in order to save nature from mankind, going beyond Foreman's stance to advocate terrorist acts as a means of population reduction. In the context of the Great Warming that accompanies the current Great Extinction migration due to climate change is already increasing and may well reach scales never previously experienced. This is not only a rootlessness of humans but of other life as well. An autochthonic model of national enclosure is no response to this. The danger is that the challenges

 $^{^{75}\}mbox{For an overview of different approaches see Lorimer, Sandom, Jepson, Doughty, Barua, and Kirby 2015.$

⁷⁶Soulé and Noss 1998.

⁷⁷See Institute 2012, and Foreman 2013.

 $^{^{78}}$ Foreman has also been active in supporting closure of the US-Mexican border through the campaign group Apply The Brakes linked with far-right funder Don Weeden, see Ross 2017.

⁷⁹Dave Foreman, quoted in Zimmerman 1994, p. 167.

⁵⁰Rewilding as a concept and a practice, however, does not exclusively belong to Foreman. There are those, for example, who link it to Ivan Illich's notion of de-schooling and explore tactics such as rewilding urban spaces. In this form rewilding may become not an enclosure but a commoning of nature through which it may indeed become 'self-willed' — the etymological origins of the word 'wilderness' that Foreman likes to recall.

⁸¹Linkola 1989.

⁸²See Parenti 2011.

of current environmental developments become coalesced around a politics that, if anything, will exacerbate rather than alleviate the situation, promoting a kind of species-centric nationalism (as we see in right-wing adoptions of bioregionalism) and catalysing the apocalyptic fantasies of Guillaume Faye. ⁸³ It is not myth-making we should look to but rather something more akin to what Karen Barad calls *mattering*, the process through which "matter comes to matter," ⁸⁴ and of a conception of life that does not see the *chthonic* in terms of the extended self or a hierarchy of being.

What nourishes the plant

Before the protist comes the proton. The hydrogen nucleus extracted from a split atom of nitrogen was named 'proton' as the first (*proton* in Greek) fundamental particle.⁸⁵ The basic building block from which, it was then thought, all other nuclei were built. Each physical element is uniquely defined by the number of protons within its nucleus. Hydrogen, the waterforming, has one. Helium, the sun, has two. Lithium, the stone, has three. Then Beryllium four, Boron five, Carbon six, Nitrogen seven, and so on. Energy at a cellular level arises from the back and forth movement of protons across the cell's outer membrane. The protists have this, the bacteria and archaea have this, and we have this too.

From cracks in the sea floor, warm alkaline waters surge up and into the cold acidic oceans. Chemicals react and precipitate into minerals and salts forming tunnel vents in the meeting of the two solutions. The proton-rich resources of the seawater cascade into the proton-poor alkaline creating energy along the gradient of their flow. It was in this thermodynamic transformation, arising spontaneously from geological movements, that the first cellular forms capable of extracting energy from their environment may have emerged. First as leaky pockets of proteins dependent upon the action of the vent waters, then gradually accruing more substantial proteins and molecules that enabled them to move beyond the vents and to spread, replicate and evolve — rootless and ungrounded.⁸⁶

Under the heat of the sun, the large surfaces of the oceans evaporate and are carried up into the air. If the water was pure H_20 it might remain here

^{*3}Faye's writing predicts a series of ecological and political catastrophes that will destroy modern civilization and give birth a new spiritualistic, neo-medieval society. He was part of *Nouvelle Droite* and is influential among right-wing adherents of both Primitivism and Accelerationism.

⁸⁴See Barad 2003 and Barad 2007.

⁸⁵Named by Ernest Rutherford (1871-1937) who split the atom in 1917.

⁸⁶What Wächtershäuser 1990 calls the "evolution of the first metabolic cycles." For a detailed presentation of this theory see Lane 2016.

as a vaporous mist forever expanding gas-like across the horizon. But the proteins, minerals and bacteria caught within the mist create discrepancies in mass causing small gravitational attractions that pull fine droplets back towards one another. Clouds form. Carried by air currents they pass over dry land where differences in temperature and air pressure cause further coalescence. The mass increases within the cooling vapour, the droplets grow in size, succumb to earth's gravity and fall from the sky.

Where the rains fall the droplets trickle over the stones, run down between their cracks and soak into the soil where they gather. As the gathering beneath ground increases, it breaks the surface in small ponds, puddles and runlets and these in turn gather volume and speed and move, first slow and then gushing, pouring, running beneath the fence and down the path we climbed upon the hill.

As it runs over stones and through soil, water is transformed. Absorbing the chemicals set free by lichen and decomposed in the excretia of worms: phosphorus, nitrogen, sulphur. These in turn feed other microbial forms: bacteria, fungi, algae, are absorbed into plants and digested by animals.

Not far from the stones, 52 metres beneath the soil, groundwater gathers in a borehole. From here it is extracted and processed in the Treatment Works below the field and stored in the reservoir that supplies Lumsden's water. When we drink a glass of that water we pour the stones into our bodies. Within our guts a host of other bacteria break this down releasing nutrients that are absorbed into our blood. We sweat and salts exude through our pores. We bleed. We cry. We piss and shit our bodies back into the sea.

But this is no narrative of blood and soil or rootedness in the land. Such mythic stories are only possible because of their blindness and withdrawal, because of what they conceal or choose not to see. Deflating such narratives, the 19th century physiologist Jacob Moleschott (1822-1893) stated that "we are all similarly dependent on air and soil, on men and animals, on plants and stones."

Moleschott was one of a disparate groups of chemists, physicists and physicians, some inspired by the philosophy of Feuerbach, who were exploring how energy transfers from one medium to another within biological processes.⁸⁸ From this arose the notion of the metabolic cycle, through which matter was constantly broken down and built up to release and retain energy. Echoing the pre-Socratic philosophers, physical bodies were

⁸⁷ Moleschott, Die Lehre der Nahrungsmittel: Für das Volk, 1850, p. 221, quoted in Gregory 1977, p. 88

⁸⁸Others in this group included Justus von Liebig, Ludwig Büchner and Karl Vogt. For an historical analysis of this see Gregory 1977.

no longer viewed as stable, static entities but as the result of constant, temporal change. 89

For Moleschott this takes on quasi-religious dimensions that conflate global capital with prefigurations of the Gaia hypothesis: "For just as trade is the soul of commerce, the eternal circulation of material is the soul of the world." For Karl Vogt this inspired a commitment to libertarian free-market principles whilst Ludwig Büchner linked metabolic theory to the struggles of the working class, offering the analysis of fatigue and need for recuperation in support of shortening the working day. 91

A keen follower of the developments in science, in personal correspondence with Büchner and others, Karl Marx (1818-1883) began to incorporate metabolic concepts into his theory of capital, adapting Hermann von Helmholtz's notion of *Arbeitskraft* (labour-power). Through this, Marx equates the labour-power of the worker to the fertility of the soil as jointly subject to the intensification of production under capital, noting that:

...all progress in capitalist agriculture is a progress in the art, not only of robbing the worker, but of robbing the soil; all progress in increasing the fertility of the soil for a given time is a progress towards ruining the more long-lasting sources of that fertility. The more a country proceeds from large-scale industry as the background of its development, as in the case of the United States, the more rapid is this process of destruction. Capitalist production, therefore, develops technology, and the combining together of various processes into a social whole, only by sapping the original sources of all wealth — the soil and the worker.⁹³

Seeking a name for the worker who was no longer a peasant farmer or an artisan, Marx adopted the term *proletariat* from Roman constitutional law. The *proletarii* were those of lowest status in Roman society who owned no property and were valued only for their ability to produce children — $pr\bar{o}l\bar{e}s$ being Latin for 'offspring'.

Whilst the clock and the steam engine enabled the abstraction of labour that creates the proletarian worker, it was the plantation that created the

^{89°}With each breath that passes from our lips we exhale part of the food we eat and of the water we drink. These change so quickly that we may well say that in a space of from four to six weeks we are materially quite different and new beings ..." — Ludwig Büchner, *Kraft und Stoff*, 1855 (1920 English), p.16, quoted in Wendling 2009, p. 64.

⁹⁰ Jacob Moleschott, Der Kreislauf des Lebens (1857) p.40, quoted in Schmidt 1971, p. 87.

 $^{^{91}\}mbox{For Vogt see}$ Gregory 1977, pp. 195, 199-201, 204, for Büchner see Wendling 2009, pp. 77–81. $^{92}\mbox{See}$ Wendling 2009, p. 83.

⁹³Marx 1976, p. 638. The translation of the last sentence has been taken from a different source that is more direct than Fowkes's version.

proletarian soil. Donna Haraway underlines this in arguing that it is the plantation that inaugurates the new relation between economy and nature, from which the need for an ecology, a study of nature in terms of the *oikos* arises. A plantation creates a controlled environment in which the extraction of resources can be maximised. Initially, the plantation was established within a colonial or dis-located space and dependent on imported labour (at first through slavery then later migrant workers) so as to abstract it from its immediate geographical and social context and thereby enable it to be managed as a self-contained ecosystem, as an *oikos* that is located not within the terrain of a nation or state but in terms of capital. ⁹⁴ As the restructuring of land-ownership through enclosure displaced peasant communities and created a larger body of potential abstract labour the plantation was internalised as a space-out-of-nature that became the model for both the industrial farm and the factory. ⁹⁵

Just as machinery enabled the intensification of production in labour, the intensification of production in soil was implemented through the importation of artificial fertilizers and minerals to control the acidity and nutrient balance of the soil. The constant depletion of resources from an external area, such as limestone from Banffshire, disrupted the normal flow of the metabolic cycle within the land resulting in what Marx called a "metabolic rift."

Steam power connected the linear process of burning coal, resulting in the physical exhaustion of a resource, to the cyclical turn of the wheel that drove the transfer belt bringing factory machines to life. This linking of linear entropic processes to the *perpetuum mobile* of production is the spiral dance through which capital seeks to evade and keep ahead of its collapse. But the machine not only replaced, or transformed, the hand of the worker, it also transformed and replaced the processes through which the fertility of soil is maintained. This was particularly evident with nitrogen for which easily extractable naturally occurring resources were scarce. Nitrogen is extracted from the air by symbiotic bacteria from whom it is absorbed by plants. Grazing animals absorb that nutrition and return it through urine and excrement. Various pre-industrial farming systems maintained nitrogen levels by adding human waste to the fields.⁹⁷ Early Improvement farming methods relied on nitre deposits, from bat guano, imported over colonial trade routes.

⁹⁴See the discussion in Haraway, Ishikawa, Gilbert, Olwig, Tsing, and Bubandt 1991.

⁹⁵ The crofting system in Scotland can be seen as a transitional part of this process. The Duke of Argyll, one of the first crofting lairds, based his crofting settlements on the layouts of his plantations in Jamaica.

⁹⁶For a summary of this see Saito 2014.

⁹⁷For a history of such practices and their eventual suppression see Laporte 2002.

In 1828 Friedrich Wöhler discovered a process through which *urea*, the chief chemical component of urine which helps release nitrogen, could be artificially synthesized. Justus von Liebig's work on organic chemistry led to the first artificial fertilizers in the mid-19th century and in 1910 the development of the Haber-Bosch process enabled large-scale industrial production of chemical fertilizers. The rift opened ever wider, with problems arising now more from over-use of nitrogen than from depletion. Relying on extreme heat, the Haber-Bosch draws heavily on fossil-fuel consumption. The spiral dance continues and those who wish to keep the wheel spinning place their hopes in the harvest of Rutherford's split atom.

Marx described *Das Kapital* as a natural history of capitalism's development. As such this was limited by the conceptions that the natural sciences of his day might offer. These were dominated by a notion of the organism as a discrete individual entity struggling against its environment which, to a large extent, Marx inherited. Metabolic theory began to break this down, conceiving of labour as a "process between man and nature," through which the worker "acts upon external nature and changes it, and in this way he simultaneously changes his own nature." But early Marx retains the sovereignty of man over nature of liberal philosophy. This would shape the state socialist programs of the 20th century in their attempt to compete with and surpass capitalist development. Only in his later unpublished writings was he able to address the more-than-human dimensions of capital in detail."

The proletariat composes a political collectivity in terms of a common subjectivization. To reconceive the proletariat as both "the soil and the labourer" means realising a common subjectivization that is not wholly human. This also involves a rejection of the workers' state as *telos* which merely enfolds the conditions of capital into a permanent form. ¹⁰⁰ A proletariat arises so as to nullify the very conditions that have created it and in doing so to erase the necessity of its own coming-to-be. In this sense, its relation to power is metabolic, it forms so as to transfer energy and in doing so dissipates itself into the newly emerging entity. The proletariat only truly comes into being through and during such transformation. ¹⁰¹

In rejecting the organicism of liberal ecology how do we form such a collectivity? In responding to this, Haraway calls upon the idea of *sympoiesis*,

⁹⁸Marx 1976, p. 283.

⁹⁹See, for example, Saito 2016 and Rosemont 2009.

¹⁰⁰This was a key point of contention from Marx towards other labour movements of his day, as set out in the *Critique of the Gotha Programme* (1875).

¹⁰¹Perhaps only in the experiments of the early soviets, in the radical dissenters from the International such as the anarchist Piotr Kropotkin, or in the *tektology* of Alexander Bogdanov do we see glimpses of what a proletarian transformation of humanity and nature could be. For Kropotkin see Kina 1995, for Bogdanov see Wark 2016.

a term she adopts from M. Beth Dempster who describes it as a process in which collectively-produced systems evolve with no "self-defined spatial or temporal boundaries." This builds upon the symbiotic processes identified by Margulis in relation to lichen and protists. Recent work in this field has begun to unravel how all animals "are composites of many species living, developing, and evolving together." 103 Symbiotically, there is no such thing as an organic individual but rather assemblages of "interspecies communication."104 Sympoiesis extends this across the social and biological without collapsing one into the other — following from Haraway's earlier figuration of the cyborg. There is no purely biological determinant of social being nor a purely social construction of material being but rather a co-creation of what Haraway calls "natural/social embodiment." This is neither orderly nor coherent in the sense of an organism but rather, "monstrous, nonholistic and dislocated" in the sense that Catriona Mortimer-Sandilands and Timothy Morton call a Queer Ecology. 106 Alex Johnson describes this as the principle of and also.¹⁰⁷ This and also expands through the most basic relations.

Just as shit marks the boundaries of a badger's habitat but is also the passage of the world as it flows through us, excretia marks both the boundaries and continuum of care and of our "natural/social embodiment." As parents and children we are obsessed with shit. We anxiously examine the changing colourations of our child's first excrements. What my child excretes nourishes my soul. This materiality of care is the gut relation. As the child enters the world it quickly acquires bacteria, first from the mother but then also from its environment, from its other relations and co-habitants. This expands as the child enters nursery and acquires bacteria from the care workers and other children. But the child is also a conduit, and the parents acquire bacteria and microbial enrichment from the child. Illnesses are transmitted from the nursery to the home, our immune systems synchronise. The parents' digestive cycles and microbial constitution are altered. The smell and texture of our faeces echo one another. It is not simply that the parents produce a child but also that the child creates the parents. Not only that "the

¹⁰²Haraway 2016, p. 61.

¹⁰³Gilbert, Sapp, and Tauber 2012, p. 326.

¹⁰⁴Gilbert, Sapp, and Tauber 2012, p. 328.

¹⁰⁵ Haraway 2004, p. 85.

¹⁰⁶Morton 2010.

 $^{^{107}}$ Johnson 2011. "... if straight identity means $I\ am$, and gay identity means $I\ am\ not$, then queer can mean $I\ am\ also$." — Alex Johnson, Johnson and Hoffner 2011.

¹⁰⁸Elizabeth Wilson proposes that it is through the gut even whilst in embryo that we first gain a sense of the relation between self and others: "... the infant is in intensive relations to external objects — to parts of the world, parts of its body, parts of other people that have been taken in through the gut. Right from the beginning, other things are a core part of me. Right from the beginning, I am impurely, relationally, enterically constituted." — Wilson 2015, p. 39 (enteric: of the intestine).

child is father of the man" in a spiritual or emotional sense, as Wordsworth put it, but that biologically, at a certain level, I am my daughter's offspring. I am the offspring of her nursery workers and of her friends and their families but also of their pets and other creatures we live among. I am the offspring of the soil in our gardens and the fields where our food comes from. We are all the offspring of the excretia of worms.

In this sense my daughter also unmakes me, unravels me from the genetic filiations of patrimony and from the organicist filiations of family, nation or tribe. Whilst a child is often the epitome of the kind of heteronormative relations that are reinforced in ideologies of an "organic society," when seen from the perspective of a sympoiesis of bacterial kinships, the child can also become a questioning and queering of such relations. Like the gay and lesbian geese that Johnson describes, there are other ways of being parents. And like the wolf-girl in Angela Carter's version of Peter and the Wolf there are other ways of being children, between families, between kinships and between species. When the wolf-girl returns, momentarily, to her human family she marks her filiation by shitting on the floor. 109

As Badiou remarks in his discussion of 'democratic materialism' (his term for the underlying philosophy of Western liberalism), such an ontology of and also risks constructing a cosmos of endless possibilities with no way forward, no possibility making anything other than endless difference: "a democracy without a (political) subject, [that will] deliver individuals over to the serial organization of identities ... [and] ... the desolation of their enjoyment."110

For Badiou the political subject is that which forces a truth into being, which, despite Badiou's Platonism, is not an eternal eidos but rather the condition of an 'except-that', something that forces the exception to current conditions. He expresses this in saying that: "There are only bodies and languages, except that there are truths."111 Badiou proposes that this requires a "subjectivizable body" to produce the exception, a body that is rarely ever "an organism endowed with biological identity," not an organic individual therefore but rather a collectivity or concentration, the examples he gives being "the army of Spartacus, the semantics of a poem, the historical state of an algebraic problem."112

For all the distance between the conceptions of the subject in Badiou and Haraway, and the tensions between them, Badiou suggests how the sympoiesis of and also may create the 'except-that', the necessity for life in a specific historical and material context. For Johnson this concentration of

¹⁰⁹ Carter 1986, for an analysis of this story see Moss 2001.

¹¹⁰Badiou 2009, p. 50.

¹¹¹ Badiou 2009, p. 4.

¹¹²Badiou 2009, p. 68.

I am also coalesces around the tar sands of Alberta.¹¹³ Haraway identifies this in the concentration created through Chico Mendes between workers' unions, indigenous peoples and the Amazonian rainforest.¹¹⁴

As Badiou acknowledges, such a truth as an 'except-that' may not be defined in terms of "the limits of the human species, our 'consciousness', our 'finitude', our 'faculties',"¹¹⁵ and that we us humans may not be able to experience or imagine what this might be.¹¹⁶ Yet we may have an attentiveness towards this that does not lie within an inner-subjectivity projected onto nature.¹¹⁷ In discussing a new artwork or aesthetic as a "subjectivizable body" Badiou suggests that its force arises from our confrontation with, and attention to, a materiality that demands we make with it in exception to that which we made before and how we made before. This suggests the possibility of an aesthetic as a way of knowing, not the privileged aesthetic of the artist but rather that of a sensitivity towards everyday being as it changes, produces and is produced. Yet, as the tensions and oppositions between Badiou and Morton's thinking suggest, this opens up many questions that may have no simple resolution.¹¹⁸

In conceiving of the world as in a state of disproportion that must be brought back into harmony, existing ecologism tends to conceive of the world in terms of a classical aesthetic that mirrors that of capital's conception of the market as a self-regulating flow.¹¹⁹ This is reflected in the privileging of the "nature's measure" in terms of an able-bodied ideal that is whole, balanced and integral.¹²⁰ But we have neither a perfect, holistic

¹¹³The campaign against Exxon's oil extraction project, Johnson and Hoffner 2011.

¹¹⁴"... a constitutive social relationality in which the forest is an integral partner, part of natural/social embodiment. In their claims for authority over the fate of the forest, the resident peoples are articulating a social collective entity among humans, other organisms, and other kinds of nonhuman actors." — Haraway 2004, p. 85.

¹¹⁵Badiou 2009, p. 71.

¹¹⁶"... we cannot know if the types of truths that we experience are the only possible ones. Either other species, unknown to us, or even our own species, in another phase of its history (for instance, as transformed by genetic engineering), could perhaps have access to types of truths of which we have no idea, and not even an image." — Badiou 2009, p. 71.

¹¹⁷As Rosi Braidotti argues, the internal subjectivity of self-as-nature endemic to various ecologisms of both the 19th and 20th centuries are ultimately a projection of liberal individualism onto nature: "... Næss's deep ecology does not question the structures of possessive egoism and self-interest, but merely expands them to include non-human interests. What we end of up with, therefore, is a quantitative expansion of liberal individualism, but individualism nevertheless." — Braidotti 2006, p. 116.

¹¹⁸Badiou is dismissive of ecological movements which he sees as part of the wider problem of 'democratic materialism' in general whilst Morton has challenged the mathematical framing within which Badiou's philosophy sits, see: http://ecologywithoutnature.blogspot.co.uk/2011/09/ objects-consistency-badiou.html.

¹¹⁹This notion of capital as a self-regulating flow was appropriated from thermodynamic theory by neo-classical economists but in a way that radically misread and misrepresented the physics, see Mirowski 1989.

¹²⁰ The concept of nature's measure forms a key part of the mission statement of the Founda-

planet nor a perfect able body but more of a sympoeisis of leaky disequilibria propping each other up: a "gay matter," that "degrades and relieves at the same time." ¹²¹ There is no myth in which to ground ourselves, no archaic origins, no futural destiny, just shit and bacteria. It is here then, perhaps, in a closeness to our most basic materiality that we should be attentive and seek the point of exception to that which now confronts us.

Called by nature, I stumble across stones, wire fence and boggy moss to the edge of the woods. Here I find a point where I may relieve myself of some metabolic allowance. But the winds blow strong here and my downward trickle becomes horizontal. Caught in the eddy of a higher power, it splatters against my leg, dampening my trousers with its mordant acridity and scattering translucent yellow dimples of scent upon the grass and pines. Scant pheremonal signs that no human, unaided, could ever discern but which a ruminative badger may chance upon, breathe in the full aromatic language of its constitution, and know, for definite, that I was here, passing through the richness of its world. Unconcealed in my being, standing on the edge of a forest, fumbling in my pants and pissing down my trousers. A small, warm pond gathers by my foot, nourishing the plants.

Worldless in my own, innate ignorance of badgers, I return to the stones, waiting as they dissolve slowly under the gestations of lichen. They will be here longer than I will, but they will not be here forever, for at a certain temporality nothing is so liquid as stone.

tion for Deep Ecology (http://www.deepecology.org/mission.htm) which ends with the words: "... Nature provides the ultimate measure by which to judge human endeavours." Yet how do we understand or even perceive this measure, what 'Nature' do we look to? Ironically, such a statement, whilst seeming to confer authority to a standard independent of human politics only embroils us deeper within its disputes. For an analysis of the reliance of environmental and ecologist culture's reliance on the idealised able-body metaphor see Ray 2013.

¹²¹Bakhtin 1968, p. 335.

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On a Proletarian Soil

PART II: TREE

SIMON YUILL
LUMSDEN 7TH NOVEMBER 2015

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Leave the Sculpture Workshops by the front entrance or main gate. Cross the road. Turn right and walk to the first turning on your left. Go down this road. Keep going. Past the small houses and on to where the trees begin. On your right is a wood, largely coniferous. It is a dark wood with acidic soil, Fly Agaric grow there. On your left is a wood of mainly birch, thickly coated in a light green lichen giving them a shaggy appearance, *Usnea subfloridana*, beard-moss. At the start of this wood, as you pass on the road there is a small hut and old caravan that seem semi-derelict, possibly used as storage. Within the woods are a various small pathways and a trail of painted stones and cairns created by local school-children. Keep to the road and go through the gates of the Clova Estate.

Keep going. The wood on the left will become thicker, greener. On the right will be harvested woodland and recently erected high fences. You will pass a green wooden park bench, placed at an angle, on a small slope higher than the road where a path passes by it. Do not turn down this path, continue down the road. Another 20 yards or so on you will come to point where the main road continues and another curves off to the right. Opposite this curving road, in the woods on the left you will see a track that has become heavily grown over. Leave the road, enter the woods and follow this track.

Walking down this track it is noticeable that on the right there are many mature beech trees and some oaks whilst on the left are mostly younger birch. The Ordnance Survey from 1901 shows that the track previously marked a boundary between the developed grasslands of the Clova Estate to the right and the undeveloped boggy heath of Cushnie Moss to the left. Not far down this track we came across the remains of a pheasant that had been got by a fox. Today, as in 1901, the Clova Estate breeds game birds for sport. 2

¹The 1901 map can be viewed online at http://maps.nls.uk/view/82859874

²A "Pheasantry" is marked on the 1901 map.

Just beyond the birch trees the ground is covered in thick mosses which form small hillocks topped by bright green usnea moss. Tiny flies with long wings hover over them. Meaty bracket fungi and beefsteak mushrooms grow upon fallen branches. Patches of cup lichen surround them. A number of path-ways run through the moss, each scattered with deer droppings and notable for the plants that grow within them. The fragile mosses being trampled down under-hoof whilst more succulent liverworts thrive upon the added nutrients of the excrement. The paths turn to rivulets of bracken water running between a second area of trees tangential to the road, interspersed with large hillocks of moss sprouting heavy over-hanging fringes. As the trees thin out again, the land abruptly drops a foot or so along the sharp geometric edge of old peat cuttings.

Back on the track running alongside Cushnie Moss, we pass a thicket of Rhododendron. Here also accompanied by a Small White butterfly, *Pieris rapae*. Not long after this we encountered a tree that had fallen across the path. Enough roots remained in the ground to keep the tree alive, the thickness of these suggesting that it had adapted to its current position. We clambered underneath the trunk near its base.

Some yards on from the fallen tree, the birch trees give way to mostly beech and rowan and the land to the left changes from bog-heath to firmer meadow. This marks the end of the Cushnie Moss. Pheasants can be heard amongst the trees. Duck calls in the distance. This stretch of land ends where the track meets a more substantial road coming down from the estate. We will follow this road later but first cross over and continue the route of the track. This will take you into an area of high grass surrounding a small reservoir with an island just off-centre. This does not appear on the 1901 map. It is home to ducks, moorhen, swans and water vole. A local small-holder dumps his excess barley and potatoes in the water here as food for them. This is a human-made and maintained 'wildness' in the midst of an agriculturally determined 'nature'. The reservoir is part of the water engineering that restrains the bog and has enabled fields to be raised upon its flushes. The water that springs from Coreen Woods ends up here.

On the far side of the reservoir are trees. Behind you an area of farm fields. There are some buildings not far from where the path comes from the road. You will have passed these on your right as you came towards the reservoir. The 1901 map shows far more than there are today. Whereas the fields of today are large and open, the map shows a series of small strips labelled the *Cloak Crofts.*³ Built for workers on the estate, their fires would have burned the peats cut from Cushnie Moss, a practice that only stopped in Lumsden some time in the 1990s.

³On other maps these are labelled Clova Crofts.

Go back down to the crossroads, turn right and follow the road. Both sides of this are lined with beech and sycamore. Whereas the path along Cushnie Moss had the feel of a liminal journey, along the border between two realms, here we are given a sense of procession. This was once the main entrance to the Clova Estate. Here too there are trees fallen across the road, some with enough roots still in the ground to live. Here there are pot holes and puddles all across the road, some black with rotten leaves. The road leads past Birkbower, a farm with buildings and fields to the right of the route.

Birkbower Mill was established as a permanent mill for the Clova Estate, powered by the constant water supply of a small river. Other smaller, seasonal mills existed across the various crofts and small-holdings, interposed along drainage systems that helped dry-off the land for cultivation. When the rains came, water coursed through their channels, powering the grinding wheels for an hour or two. As the mills have fallen out of use the drainage systems have also declined and the reservoir has taken their place.

Moving past the farm buildings the route crosses a bridge that goes over a main road leading back into Lumsden. On my previous visits this bridge had been derelict and uncrossable. Now you can cross. You could continue on this route, walking between the two tall lines of beech towards a stone gateway that marks the original entrance to the estate. We are not going there. Leave the road and clamber down the slope to your right. Be careful as you go because the slope is full of holes. Further down, excavated tree roots have been stripped of their bark. A complex of warrens stretches beneath the trees from the road to the field on the far side.

Stand at the bottom of the slope with the road behind you, the bridge to your right and the farm fields in front. Over to your left is a burn running between the slope and the field. Ahead of you are mostly pine trees. Branches growing low to the ground. Crouch down to the ground and go under, bending low or on hands and knees. When you get through stand up again. You are in a kind of clearing with an oak tree not quite in centre. We are here.

This is not the grand oak of Druidical legend. There is no wide-girthed trunk rising stately from the earth. There is, instead, a chaotic splay of trunks and branches breaking off in different directions from the root.

Like the Cushnie Moss and the stones by Coreen Woods, the tree here is home to many different species of fungi, lichen, insect and plant. There are creatures that feed upon the leaves of the oak and others from the bark and from the wood. Patches of damp white fungi spew across its trunk. The ground is covered in a thick layer of leaves, twigs and pine cones, rotting, mulching and being broken down by worms into a rich vegetable mold. Sprouting from this are large oily black mushrooms. Smaller, brown caps sprouting over stalks trace the pattern of roots radiating out from the tree

deep within the fabric of the soil. Woven with strands and knots of stringy rhizomes, patterned with dusty spores, and layered with thin, moist viscous films. The ground holds these trees into the air and feels solid beneath our feet yet it moves — constantly, imperceptibly, voraciously:

For most of its life, a myxomycete exists as a thin, free-living mass of protoplasm. Sometimes this mass is several centimetres across and, as the name slime mold suggests, viscous and slimy to the touch. The mass of protoplasm, which is called a plasmodium (plural: plasmodia), can change form and creep slowly over the substrate upon which it occurs, much like a giant amoeba. As it moves, it feeds by engulfing bacteria and tiny bits of organic matter, another animal-like feature.⁴

Slime molds, the myxomycetes, were first collected and identified by the Reverend William Cran, the same Reverend Cran who explored the Rhynie chert. Cran collected his mold samples from the barks of local trees.⁵

There are various reasons why an oak may grow in this splayed manner. This is commonly caused by fungal or insect colonies harboured in the roots or branches. Oak apples, or bud galls as they are also known, are created by the larvae of gall-wasps, *Biorhiza pallida*, who lay their eggs within the bark.⁶

One of the first recorded accounts of such parasitic species was that made by John Turbeville Needham (1713–1781) who, in 1743, observed crushed "smutty Wheat" under a microscope. He describes extracting a dry white fibrous substance from within a grain that he had moistened with water:

... to my great Surprise, these imaginary fibres, as it were, separated from each other, took Life, moved irregularly, not with a progressive, but twisting Motion, and continued to do so for the Space of Nine or Ten Hours ...⁷

Needham was exploring a world that had been opened up by the advances in modern microscopes produced by the cloth merchant and and self-taught scientist Antonie van Leeuwenhoek (1632–1723). Van Leeuwenhoek was fascinated with the life that crawled among the dust and fibres of his wares and in the saliva of his own and other people's mouths. The drawings

⁴Stephenson and Stempen 1994, p. 14.

⁵Stephenson and Stempen 1994, p. 55. Lister 1938 - Lister G., 1938 The Rev. William Cran and his scientific work. Journal of Botany 76:319-327).See: http://www.mycologia.org/content/95/4/565 full

 $^{^6 \}rm The$ whole life cycle of the of gall-wasp is explained and illustrated in Darlington 1972. $^7 \rm Quoted$ in Flegg 1985, p. 7.

van Leeuwenhoek made from this obsession were amongst our first visual records of microbial and single-cell lifeforms, and numerous species can be identified within them. The living, twisting fibres that Needham describes were a species of nematode, commonly known as roundworm. Needham's work remained largely marginal, and was eventually discredited. The extent and significance of nematode lifeforms only became fully accounted for by Nathan Cobb, a researcher with the United States Department of Agriculture in the 1910's studying causes of blight and pestilence. As a species, Cobb found the nematode spread across all ranges of life, from smutty wheat to animal and human intestines, adapting itself to any crevice or pocket of being:

... if all the matter in the universe except the nematodes were swept away, our world would still be dimly recognizable, and if, as disembodied spirits, we could then investigate it, we should find its mountains, hills, vales, rivers, lakes, and oceans represented by a film of nematodes. The location of towns would be decipherable, since for every massing of human beings there would be a corresponding massing of certain nematodes. Trees would still stand in ghostly rows representing our streets and highways. The location of the various plants and animals would still be decipherable, and, had we sufficient knowledge, in many cases even their species could be determined by an examination of their erstwhile nematode parasites.⁸

Touching the Spring of the Air

Needham argued that the creatures he had seen were evidence of spontaneous generation, of life creating itself from nothing. His discoveries were controversial and, as a Catholic priest whose work challenged Christian teaching, he was forced to retract his findings by the Church. In a certain sense, however, his work was also a challenge to established scientific orthodoxy. For, following from his Catholic teaching, his experiment sought to reassert the importance of Aristotle at a time when the new experimental systems of scientific method had supplanted this tradition. Spontaneous generation was a process that Aristotle attributed to the autochthonic creatures, such as worms, maggots and crabs, that he believed were born from

⁸Cobb 1914, p. 472.

⁹Flegg 1985, p. 7.

mixtures of earth and water or from flesh decomposing back into these constituents. 10

Aristotelian method largely based its findings on observation and comparison, deriving knowledge in terms of how ideal processes and forms are represented within the material world as it is found. In the 17th century a new approach initiated by Francis Bacon and consolidated by Robert Boyle began to replace this. Boyle, who described Aristotle as "a dark and dubious writer," 11 sought to derive knowledge through intervening in that material world. 12 Devices such as the air pump, designed by Boyle's assistant Richard Hooke, enabled someone to control a small physical environment and change its material conditions at will. By adding or removing specific elements from the environment, we can understand these in ways that are not possible from ordinary observation. In removing air from a glass bulb, and thereby attempting to create a vacuum, the air pump could be used to determine the constitution of the air itself.

Nature abhors a vacuum in the Aristotelian account, which argued that as the vacuum was created in the glass bulb, other elements would move in to fill it, either through an innate sensitivity within these elements, that they 'knew' there was a vacuum to fill, or due to external sentient forces ordering them, a theory known as hylozoism. Boyle was satisfied with neither theory. From his experiments with the air pump, Boyle came to develop what we now call the Boyle's Law, that the pressure and volume of a gas are inversely proportional to one another, the greater the pressure the smaller the area a gas will occupy. For Boyle, air was not a vital substance, possessing its own animate sensibility nor were the elements guided by some occult force. The air was rather a material, composed of what Boyle called "corpuscles" that responded mechanically to their surrounding conditions, air under pressure being like a "heap of little bodies, lying upon one another, as may be resembled to a fleece of wool." 13

Boyle's method sought to establish knowledge through an objective, impartial process. The air pump was central to his method because it enabled a practical demonstration to be repeated in front of different people who

^{10 &}quot;Animals and plants come into being in earth and in liquid because there is water in earth, and air in water, and in all air is vital heat so that in a sense all things are full of soul. Therefore living things form quickly whenever this air and vital heat are enclosed in anything. When they are so enclosed, the corporeal liquids being heated, there arises as it were a frothy bubble." — Aristotle, On the Generation of Animals, Book III, Part 11. It was ultimately the work of Louis Pasteur in the 19th century that disproved the theory of spontaneous generation. Pasteur demonstrated that such lifeforms grew from spores carried in the air and whose growth could be stopped through the treatment of heat.

¹¹Quoted in Shapin and Schaffer 2011, p. 322.

 $^{^{12} \}rm{For}$ a comparison of the two approaches — observation versus intervention — and the deeper philosophical issues they raise see Hacking 1983.

¹³Quoted in Potter 2001, p. 30.

may witness and thereby verify his findings. Yet, despite, or perhaps indeed directly because of this, the new experimental method was highly political. Boyle was a founding member of The Royal Society established in 1660, the same year in which he published his account of the new method: New Experiments Physico-Mechanicall, Touching the Spring of the Air, and its Effects, (Made, for the Most Part, in a New Pneumatical Engine). The Society was one of the first new institutions appointed by the restored monarchy under Charles II in the wake of the Civil War and Interregnum.

Following the Civil War the established order of Church and Crown had been overthrown. A multiplicity of radical religious movements had arisen advocating free religion, the commonality of all humankind under God, and direct communion with the divine as a World Spirit imminent in all Creation. Referred to variously as Anabaptists, enthusiasts and sectaries by their detractors, these groups included the Ouakers, Levellers, Diggers, Ranters, Muggletonians, and Fifth Monarchists.¹⁴ These gained influence through the appointment of commoners as officers in the New Model Army shaping an egalitarian republicanism more radical than that of Cromwell and the Rump Parliament. Levellers and Diggers claimed land for the people and challenged existing notions of property. 15 Women, who found greater equality with men in groups such as the Quakers, rose up to demand a political voice, petitioning and rioting on parliament. 16 A new "Free State and Commonwealth" was proclaimed in broadsheet sermons and the constitutional articles of the republican army.¹⁷ Yet this promise of a New England did not last long. As dissatisfaction with Cromwell's rule rose and the Commonwealth fell, monarchy was restored.

Whereas his father, Charles I, was beheaded by the republican government, Charles II had escaped the revolution and returned to the throne by hiding in an oak tree in Boscobel woods. The event is celebrated as Oak Apple Day on which supporters of the Restoration adorn themselves in oak apples. In the new parliamentary monarchy led by a king scraped from the bark of a tree it became essential that the state regain control over knowledge and nature.

Boyle's method and its acceptance by the Crown was important in this context for it offered a new practice of knowledge in which, it could be claimed, authority lay within the consensus of men rather than tradition or institution. It promised a more democratic concept of knowledge. Just as the post-revolutionary Parliament claimed to keep the King to account and validate his rule, so too did the impartial observers of Boyle's experiment

¹⁴ See Hutton 1990, pp. 30-44.

¹⁵The classic work on this is Hill 1975.

¹⁶See accounts in Potter 2001, pp. 54-60 and Hutton 1990, p. 44.

¹⁷Examples of the new constitutional articles included the *Heads of Proposals* and *Instrument of Government*. See Hutton 1990, p. 62 and Bostridge 1997, p. 273.

account for and validate his findings. Yet, like the Restoration Parliament, Boyle's method was only partly democratic. Women, children, and workers were all excluded as reliable witnesses for they had, in Boyle's view, insufficient emotional modesty.¹⁸

Boyle's new science integrated a complex set of conflicting perspectives and legacies. In positing a mechanical basis to the movement of air, Boyle's hypothesis was, for its time, dangerously materialistic. Boyle, who was both a Royalist and devout Christian, had to ensure that his theory did not confirm the atheistic views that were gaining ground amongst younger intellectual circles. In rejecting Aristotelian physics, which at that time had the support of the Church, Boyle had looked to the methods of the alchemists and the work of Paracelsus, Campanela and Helmost. The philosophical and spiritual framework within which these figures worked, however, shared much common ground with the animistic and vitalist tendencies within the religious sects that had led the populist revolt against the Crown.¹⁹

The strongest political challenge to Boyle did not, however, come from the insurgent populist movements but from the philosopher Thomas Hobbes. Just as Hobbes rejected both an independent clergy and the various populist sects who held authority separate from the head of state, so too did he reject the notion of an independent scientific community that could establish its own authority over knowledge. Furthermore, for the new experimental science, knowledge of nature was built not on absolute facts but on probable inferences that only held authority through the common beliefs of a body of people who shared common practices. Under Hobbes' political theory, society could only be kept in order if there was one, absolute ruler to hold authority over all — the Leviathan. If society was to be prevented from falling into the chaos of nature that, for Hobbes, characterised the Civil War and Republic, it must be based on rule-following rather than belief.

In response to these tensions, Boyle developed a form of practical philosophy that sought to be rigorously factual and materially-based in its account of the world yet which derived coherence through God's divine providence. His findings on the behaviour of air under pressure were presented within the framework of his corpuscular theory of matter. This drew on the atom-

¹⁸The role that attitudes towards class and gender had in shaping Boyle's scientific practice is examined in Potter 2001. For its relation to the political context see Shapin and Schaffer 2011.

¹⁹In an unpublished manuscript written in the form of a dialogue, Boyle discusses using the philosopher's stone to conjure spirits, arguing that they can be found in air and water. See Potter 2001, p. 101.

²⁰ Boyle proposed that matters of fact be established by the aggregation of individuals' beliefs. Members of an intellectual collective had mutually to assure themselves and others that belief in an empirical experience was warranted. Matters of fact were the outcome of the process of having an empirical experience, warranting it to oneself, and assuring others that grounds for their belief were adequate." – Shapin and Schaffer 2011, p. 25.

ism of Epicurean philosophy, arguing that all matter was composed of small 'bodies' that moved together. The character of that motion derived form the physical form of these bodies and how they interacted in a purely mechanical manner rather than through an inherent spirit or soul within matter, such as animists and proponents of hylozoism argued. The composition of these mechanisms was, however, determined by God who put them into motion yet left them to pursue their own course except where providence required intervention. This excluded a notion of animistic vitalism within matter whilst at the same time rejecting the pure randomness of existence proposed by sceptics and atheists, for Boyle only providence from God gave meaning to the contingency of life's experiences.²¹

What gave Boyle's concept of providence particular significance was that he gave it an empirical basis. Just as the apparatus of the air pump let us examine the workings of the air, Boyle believed that phenomena from folk culture and superstition, such as second sight, gave us evidence of the spiritual acting in the world as material presence rather than occult force and from which proof of God's intervention could be shown. Placing such phenomena within his own philosophical framework would both challenge the atheists whilst also denying the authority of mystic groups in determining their meaning.

Of the Lychnobius People

Boyle was the seventh son of the Earl of Cork who acquired estates in Ireland as part of the Tudor plantations under which land was confiscated by the English Crown. Boyle was a supporter of Gaelic education, and it was through his funding of an Irish Gaelic Bible that his story would cross with that of another seventh son, a minister from Aberfoyle named Robert Kirk. Kirk produced the first translation of the psalms into Scots Gaelic and contributed to the *Dictionariolum Trilingue* of John Ray. Ray was both a parson and naturalist who in 1667 was elected a fellow of the Royal Society. In 1989–90 Kirk came to London to oversee the printing of Boyle's Bible and whilst there began work on a collection of supernatural beliefs and experiences he had gathered from his parishioners in Balquhidder and Aberfoyle. He completed the collection after returning to Aberfoyle but died shortly afterwards in 1692, his body found on Doon Hill, Aberfoyle, dressed in his

²¹The importance of divine providence as a concept in 16th century English life is explored in Bostridge 1997. Boyle believed that his recovery from childhood illness had been guided by providence, Bostridge 1997, p. 38.

night shirt.²² The work lay unpublished until Walter Scott brought out an edition in 1815 under the title: *The Secret Commonwealth or an Essay on the Nature and Actions of the Subterranean (and for the most part) Invisible People heretofore going under the names of Fauns and Fairies, or the like, among the Low Country Scots as described by those who have second sight, 1691.* This was one of the first and most extensive collections of such material and in it Kirk coined a new term: the 'fairy tale'.

The descriptions that Kirk gives of fairies are notable in that they foreground the physical, material qualities of fairies, as though he were a naturalist describing a newly found species whom he calls the *lychnobius* (night dwelling) people.²³ For Kirk, fairies do not occupy a magical or spiritual realm, but one congruent with own. Whilst separate in a material sense, like that of fish in water, they are able to move between their domain and ours, just as otters and seals move between the sea and the land. In this sense, Kirk's fairies were no less fanciful than Needham's "imaginary fibres" which took life and moved. Just as van Leeuwenhoek's microscope had revealed a hitherto unknown domain of life, Kirk had argued that such new optical devices would reveal the world of the Invisible People not as ancient superstition but as contemporary, empirical fact.²⁴ Prior to Needham and Pasteur's discoveries, it was the fairy who was blamed for blighting crops²⁵ and, prefiguring Cobb's description of the nematode, the fairy occupies every crevice of being:

Their bodies of congealed air are sometimes carried aloft, other-whiles grovel in different shapes, and enter in any canny or cleft of the earth (where air enters) to their ordinary dwellings, the earth being full of cavities and cells and there being no place or creature but is supposed to have other animals (greater or lesser) living in or upon it as inhabitants and no such thing as a pure wilderness in the whole universe.²⁶

In a sermon from 1672, he speculates that fairies are a species of the air who can operate on, what Boyle might call, the corpuscular properties of matter:

They are Creatures, that have not so much of a body as *flesh* is, as *froth* is, as a *vapor* is, as a *sigh* is, and yet with a touch

 $^{^{22}\}mbox{There}$ are accounts of Kirk's life in Kirk 2007, Henderson and Cowan 2001, Henderson 2016 and Hunter 2001.

²³Kirk 2007, p. 62.

²⁴Kirk 2007, p. xix, 50.

²⁵"... they of times occasion great ricks of corn not to bleed so well (as they call it) or prove so copious by very far as was expected by the owner." — Kirk 2007, p. 6.

²⁶Kirk 2007, p. 6-7.

they shall molder a rocke into lesse Atomes, then the sand that it stands upon \dots^{27}

Boyle's interest in second sight drew directly from Scottish folk sources like those of Kirk. This was a living phenomena through which current events were experienced. In 1678 Boyle met with Lord Tarbat of Cromarty. Tarbat provided the account of a Highlander out cutting peat who experienced a vision of English cavalry riding down on him from the hills. Several months later the English did indeed appear as Cromwell's army entered into Scotland.²⁸ Similarly, Kirk's collection includes episodes in which people met or spoke directly with relatives who had been taken to the new colonies and of a "Scottish seer banished to America."²⁹

The theme of colonial expansion and conquest shapes accounts of the fairies who, in a number of texts, are described as an ancient people driven underground by a newer race – mirroring the process of plantation through which Ireland and the Americas were colonised.³⁰ Kirk describes how the landscape shows signs of "tillage" where the fairy folk had once ploughed the land that we now inhabit. Whilst displaced the fairies nevertheless find ways to benefit from the work that humans do.³¹ The new colonial order is not so absolute.

It is in this sense that one of the most unique aspects of Kirk's text gains significance. For whereas fairies are normally described as inhabiting a kingdom and possessing a form of aristocracy, as in Shakespeare and Spenser, Kirk describes the fairy folk as "having a Commonwealth, Laws and Oeconomy," and of having no discernable religion, love or devotione towards God." To an extent, the Secret Commonwealth can be read as both a natural history and political text or, like the Athenaion Politica, a natural history of a particular political species, the fairy as zōon politikon. For Aristotle, ants and bees were zōon politikon as were humans. Whilst the term

²⁷Kirk 2007, p. xvii.

²⁸Hunter 2001, p. 51-53.

²⁹Kirk 2007, p. 42

³⁰Examples include Bishop Corbet in the 17th century and Archibald Maclaren *The Fairy Family, a series of Ballads and Metrical tales illustrating The Fairy Faith of Europe* (1856), Folklore society: David MacRitchie *The Testimony of Tradition* (1890) and *Fians, Fairies and Picts* (1893). See Gere 1997, p. 68.

³¹"We then (the more terrestrial kind), having now so numerously planted all countries, do labour for that abstruse people as well as for ourselves. Albeit when several countries were uninhabited by us, these had their easy tillage above ground as we now, the print of whose furrows do yet remain to be seen on the shoulders of very high hills, which was done when the champaign ground was wood and forest." — Kirk 2007, p. 7.

³² From Kirk's diary, Kirk 2007, p. xv.

³³ A similar argument would be made by a later folklorist, Donald A MacKenzie in his *Scottish Folk-Lore and Folk-Life* (1935), claiming that in Scottish tradition the fairies had no king or queen. See Henderson and Cowan 2001, pp. 65–66.

commonwealth did not exclusively denote a republic, under Cromwell's rule the term replaced that of Kingdom and, as attested by Lord Tarbat's Highlander, Scotland and Ireland became, by way of Cromwell's army, part of the Commonwealth of England. In the era of the Restoration, the notion of a fairy commonwealth might therefore suggest a conflation of a colonised people, the Gael, with a 'failed' political order, republicanism.

Such a relation between the supernatural and insurgent politics was common in the 16th century. Meric Casaubon in *Of Credulity and Incredulity in things Natural, Civil, and Divine* (1668) and Joseph Glanvill in *Sadacusimus Triumphatus* (1681) both made direct comparison between the people's religious movements and witchcraft.³⁴ For them, the demand that society be reconstituted through a new social contract, as made by groups such as the Levellers, was directly related to the contract with the Devil through which one became a witch.³⁵ Within the witch trials, under both Puritan and Royalist rule, it was the evidence of a contract, of a voluntary pact with the Devil, that was the key condemning factor.

Kirk himself supported the witchcraft laws and in the *Secret Commonwealth* he does not seek to elicit either direct sympathy nor condemnation of the fairy whose moral or political character was at best ambiguous. What the text does do, however, is to suggest that there can be both good and bad forms of supernatural power. Those abilities that one could be born with, such as second sight, were 'good' whereas those that were acquired through artifice, such as witchcraft or those deliberately sought from the fairies, were 'bad'.³⁶

Like the dispute between Royalists and Republicans, the decisive point was that between a body empowered by nature versus a body empowered by contract.

In this regard, however, the *Secret Commonwealth* does not resolve into a simple political reading. The needs and concerns of those who were Kirk's sources, which may well have conflicted with his own aims, filter through. On the one hand, Kirk's account of the lychnobius people reinforced a reactionary political system within the human realm, yet within that account the fairies, and those who witnessed and interacted with them, especially those who were women, children and workers, constituted a contrary *politeia* that transversed species and matter.

Mutual Affinities of Organic and Inorganic Beings

³⁴For Casaubon see Bostridge 1997, pp. 55, 59 and for Glanvill see Bostridge 1997, p. 74–75.

³⁵ Potter 2001, p. 67.

³⁶Henderson 2016, pp. 232, 243.

In 1451 a group declaring themselves as "servants of the Queen of the Fairies" raided the Duke of Buckingham's deer park at Penshurst. Their faces blackened with coal dust, they carried off deer to feed their families.³⁷ This was one act in a long history of such protests in which impoverished peasantry and workers claimed land and resources taking back what had once been theirs and demanding a just distribution of nature's welfare.³⁸ Often these were highly theatrical events, accompanied with banners and music and in later years deliberately publicised to the media.³⁹

By aligning themselves with the Queen of the Fairies the protesters invoked an authority contrary to that of the Duke. Such protests were not the only context in which the fairy might be invoked as a form of counterauthority. Women charged with witchcraft might include tales of their encounters with fairies as part of their testimonies. This may have been done in order to satisfy the demands of those who forced confessions from the women. Having no option other than to give some account of supernatural occurrences, fragments of local folktales may have been woven into accounts of actual incidents.40 Diane Purkiss proposes that this may also have been a way in which a woman might use the court as a means of making public that which could not normally be said, in which narratives other than those of the case in hand might be given a hearing.⁴¹ Placed within a fairy tale these could be given a hypothetical quality that might protect the teller whilst, at the same time, the controlled environment of the court gave a procedural legitimacy to its telling. The tale became a hypothesis demonstrated to a public who could witness its evidence but which, unlike one of Boyle's experiments, would necessarily seek validation elsewhere. We might say that, like the air pump in Boyle's experiment, within this tale the fairy operates as an *apparatus* that gives authority to its performance.

Within Foucault's conception the apparatus is a formation that arises within a specific situation between different elements that can be physical — as in particular kinds of building structure such as the prison — performative — as in particular behaviours or legal enactments — and discursive — such as statements within scientific texts. As a mechanical instrument the air pump is an apparatus in the conventional sense but it also operates as part of a formation linking debates about the physical characteristics of the

³⁷Purkiss 2000, pp. 66-7.

³⁸ Hobsbawm 1998.

³⁹The crofters who organised the deer raid on the Pairc estate on Lewis in 1887, for example, sent journalists alongside their raiders, see Buchanan 1996, pp. 48–53.

⁴⁰ Purkiss 2001.

⁴¹ "I want to argue here that Scottish witches told stories about fairies not out of any straightforward belief in fairies ... but because the court settings allowed these women to talk about feelings, experiences, and desires that could never normally be given a hearing within their cultures." — Purkiss 2001, p. 81.

air to the changing relationship between science, the church and the state. This formation became manifest through the establishment of the Royal Society and through the public demonstration of experiments in which the ability to validate knowledge was related to privileges of gender and class. Within the texts and discourses of Boyle, Kirk, Casaubon and Glanvill, it is the fairy that operates within similar debates about science, nature and the existence of the spiritual, and how these inform the moral and political structure of society. In the Penshurst raid, the fairy operates within a formation that relates competing forms of authority — the folk, supernatural authority of the Queen of the Fairies versus the feudal authority of the Duke of Buckingham — to the ownership of land, class structures, and food. Within a court case, the fairy might operate between the institutional procedures of judgement under the law, the performance of 'truth' within a testimony and the unspoken knowledge of a community.

For Agamben, who expands and generalizes upon Foucault's model, there is a constant, and often conflictual, relation between the living being (the organic) and the non-living apparatus (the inorganic) through which we mediate our relation to the world and perform processes of subjectivization and desubjectivization.⁴² The air-pump creates the modern scientist as a privileged subject, but in doing so also desubjectivizes women, children and workers. The fairy could produce subjects that were transgressive, such as the deer raiders of Penshurst and the witch as enunciator of unspoken truths, but it may also operate to restore normative order, depending upon the particular formation it operated within. Indeed, in order to understand how the fairy may operate as a form of counter-authority, we need to understand this normative dimension, for the fairy was not purely a figure of transgressive freedoms, it also served a more restrictive, controlling role in human affairs. One area in which this applied was in control over reproduction, and the life and death of young children.

A child born out of wedlock was said to be a fairy child. A child who died soon after birth was said to have been stolen by the fairies. A child who was poorly, 'abnormal' or uncontrollable, was said to be a changeling who had been swapped in place of the mother's true child. Such narratives might act as a form of consolation in the wake of an unavoidable loss or euphemistic ways of concealing illicit love or rape. But these stories have consequences. In the case of fairy children and changelings, the mother may be advised to return the child to its people by leaving it on a hillside or at an incoming tide. By assigning the child to a non-human species the fairy tale provides a cultural framework in which to normalize infanticide. Here, the fairy is part of an apparatus through which the community (often the

⁴² Agamben 2009.

⁴³See accounts in Jones 1994, pp. 173-174, 181-182 and Purkiss 2000, pp. 73-6.

male elders of a community) decide which child shall live and which shall not, who shall be a mother and who shall not.⁴⁴ In this way women's sexuality and autonomy over sexual reproduction could be controlled and the fate of children who did not conform to physical or cognitive norms could be 'resolved'. The Down's Syndrome child, the intersex child, the autistic child might all be fairies and changelings.⁴⁵ This creates new supernatural subjects, the fairy and the changeling, through which the actual mother and child are desubjectivized.

Whereas the judgement of a court case, or the verification of experiment, operate as *formalized* functions, through which the outcome is, or appears to be, determined by socially agreed sets of rules and protocols, the fairy narrative appears to operate conversely as though part of *nature's way*. The child is 'returned' so as to restore the balance between humanity and nature that the encounter with a fairy has disturbed.

The restoration enabled by the fairy apparatus is that of the balance between the internal relations of sex and external relations of kinship structures, to which a new child is always potentially problematic as a new indeterminate component. The fairy apparatus enables authority over life and death and it is from here that its power can be appropriated to challenge the authority of a duke or a court. For those who choose to keep affinity with the fairy, rather than withdrawing back into the 'balance' of nature, this formation draws power from its normative role whilst, at the same time, transgressing and breaking the normativization processes of the Foucauldian apparatus. Here a new territory is formed, a new commonwealth created

Affinity with the fairy offers ontological alterity that is not so much outside of social norms but which resonates across them differently. This arises from the spatial and temporal dimensions of the fairy which are on the boundaries: between land and water, settlement and wilderness, during

⁴⁴In several of the tales Jones 1994 recounts, taken from Alexander Carmichael's collections, it is an "old man" who, offering what is presented as kindly guidance, advises on what to do with the child. As Purkiss explains however the situation for unmarried mothers was often stark: "Infanticide was much more common than now, with no social security for unmarried mothers and plenty of social opprobrium. Forced to give birth in privies, and in out-of-the-way places, by the dung-heap, roadsides, woods, the mothers simply left their unwanted infants in them. Changelings too, though, similarly unwanted, were left in privies, on the dung-hill, by the side of the road." — Purkiss 2000, p. 57.

⁴⁵Jody Norton traces the fairy changeling theme within the context of Trans experience and histories, Norton 2002. This has also been adopted by queer activist groups such as the Radical Fairies, see https://en.wikipedia.org/wiki/Radical_Faeries and http://www.rfdmag.org, and the Reclaiming movement initiated by Starhawk, see Salomonsen 2002.

⁴⁶ As Purkis explains this was particularly the case in Medieval Scottish society where the child might not be automatically accepted as kin until it was approved by the father, see Purkiss 2001, p. 86–87.

dawn and dusk and in the turning of the year at Yuletide.⁴⁷

In one case Purkiss analyzes, that of Elspeth Reoch, a young Orkney woman tried for witchcraft in 1616, Elspeth recounts meeting two men at the lochside. One dressed in black who later transpires to be a dead kinsman who had been killed at dusk, and another dressed in plaids and green, the common garb of the fairy in Scottish culture as also described in Kirk's collection. The fairy offers Elspeth a gift through which she could learn of anything that her heart desires. To do this she must make an ointment from the sweat of a roast egg and rub it into her eyes with unwashed hands. She then becomes witness to knowledge of a young girl, aged 12, made pregnant by a married man who is also a relative. The girl asks Elspeth to help her get an abortion but is refused by the man who can do this. Two years later Elspeth herself, at age 14, becomes pregnant outside of marriage and, following the birth of her child, is visited at night by the man in black who forces her to lie with him.⁴⁸ After this she falls dumb and is unable to speak until interrogated for trial. As Purkiss explains, the story contains numerous liminal spaces, boundaries and transgressions: the lochside meeting, puberty, a death at sunset, the perspirated water from inside an egg, touching food with unwashed hands. It is not that Elspeth finds freedom in these zones but rather that these are the space and time she must inhabit in order to make her truth known.

Boyle's apparatus of the air pump sought to stabilize competing theories in a definitive, empirical fact. Accused of witchcraft and, as an unmarried teenage mother, the epitome of an immodest and unreliable witness, Elspeth relies upon the fictive nature of the fairy in order to give presence to the evidence she wants her community to know but of which she could not speak:

... the essence of fairy beliefs is ambivalence, a play between belief and disbelief. The early modern populace did not 'believe' in fairies and they did not disbelief. This ontological instability or oscillation is not an accident, and it is not a reflection of the demise of fairy beliefs. ... The ontological dubiety of fairies is precisely what makes them natural and even inevitable symbols for other things that cannot be said, or cannot be acknowledged, or cannot be believed.⁴⁹

Within the scientific demonstration and the court case, Boyle and Elspeth each seek an alignment between knowledge and nature that relies upon the

 $^{^{47} \}rm Purkiss~2001, p.~83.$ A child born on Christmas Eve may have a particularly auspicious relationship to the fairy.

⁴⁸Purkiss 2001, pp. 84–7. I am following Purkiss in referring to Elspeth Reoch by her first

⁴⁹Purkiss 2001, p. 83.

mediation of an apparatus to bring that into being. Agamben outlines an etymological and conceptual chain of descent that traces the Foucauldian apparatus, back through Foucault's tutors Canguilhem and Hyppolite, to the distinction between natural and positive religion in Hegel. Natural religion being the immanent, experiential relation between human reason and the divine and *positive religion* being that based in rules and rituals — just as Hobbes proposed in regard to government. Agamben places the emergence of positive religion within the Christian tradition as arising from the debates in early Christianity over the being of God as either singular or as the Trinity. As a means to integrate and reconcile these competing ontologies, the Church Fathers invoked the notion of oikonomia, that in substance God was one but in his management (oikonomia) over Creation, he was threefold: the Father, the Son and the Holy Ghost, with his Son responsible for the oikonomia of man. The world, and affairs of man, are therefore ordered in terms of God's economy and providence.⁵⁰ In the 17th century, this notion is invoked in the defence of God's "Invisible Oeconomy" from the forces of the Devil, "a Body Politick" that encompassed witches, enthusiasts and insurrectionaries.⁵¹ Those who claimed affinity with fairies were expelled from God's economy and thereby outside of society and nature. That, by the end of the 17th century, they should be conceived of as constituting a secret commonwealth may in a large part be due to the need to locate them in a distinct political realm separate from, and less legitimate than, the emerging sphere within which modern rational liberalism would evolve. The consequence of this however, perhaps conversely, has not been that we have stopped believing in fairies but rather that they are now here, amongst us.

Where once the fairy changeling child was left upon a hillside to die, now we fairy children walk amongst you: the child born out of wedlock, the abnormal or uncontrollable child, the Down's Syndrome child, the intersex child, the autistic child, and many others. Contrary to what me might assume, this has itself been enabled by the materialist view of the body that developed in the wake of Boyle and Descartes and that enabled the separation of physical conditions and bodily capacities from moral values. Each step of this has been conflicted and contested and the forms it has taken have often been contradictory, seeking to eradicate that which it has made possible, but this does not mean that the power of the fairy as political subject has diminished, consigned to the esoteric formulations that Victorian culture and New Age Gardnerian Wicca have bequeathed us or those of Walt

⁵⁰Agamben 2009, pp. 8-12.

 ⁵¹ Quoted from Matthew Hale and and Joseph Glanvill in Bostridge 1997, p. 83 and p. 74.
 52 Eugenics can be seen as a return to the attribution of value to different kinds of bodies

but this time measured in terms of nationalist aesthetics and capitalist productivity. See McRuer 2006 and Snyder and Mitchell 2006.

Disney.⁵³ As the Penshurst raiders and Elspeth Reoch knew, to be fairy is to demand a life that others would deny. This is not the demand merely for representation and recognition within the limits of liberal identity politics. This is the demand for existence itself, a demand that reaches beyond the realms of human need and yet that we, of all species, may be the least able to realise.

⁵³Purkiss 1996 and Salomonsen 2002 both provide critiques of Gardnerian Wicca from a perspective which acknowledges the ways in which more recent Wicca-inspired feminist movements, such as those of Starhawk, have critically appropriated and re-constructed this. Similarly there are various configurations of the fairy as political subject in different Queer, Crip and neuro-atypical activisms which move beyond this. For an interesting counter-reading of Pixar and Disney animations in this regard see Halberstam 2011.

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