‘Think global, act local’ is a phrase that carries a number of meanings for us in the twenty-first century. Its most common and overriding association, however, is probably with the causes of the socially and environmentally conscious political left wing. In that context, the phrase represents the world as an integrated whole, the improvement of which depends on an aggregate of small individual actions that may, on their own, not seem to amount to much. There are a number of different stories about where the phrase ‘think global, act local’ originates but there is one that suggests it was with the subject of my paper today: Patrick Geddes.

Geddes was a scientific polymath who began his career as a biologist and is often cited as the co-author of the first serious, scientific work on the evolution of sex – entitled *The Evolution of Sex*. When Geddes’ life is recalled now it tends to be for a few specific reasons relating to his activities in the twentieth century. The most common of these is his influence on British urban planning through his book *Cities in Evolution*. Arguing that people and places can only be understood together, Geddes promoted a way of thinking about cities that positioned them within the historical context of their region. He believed that by doing so, one could uncover the long-term trends that have changed society and consequently, Geddes argued, we can use that knowledge to create a better world. This was a vision he described as ‘Eutopia’, which differed from ‘utopia’ not just by being spelt with an ‘e’ but by being a real place. According to Geddes, ‘Eutopia… lies in the
city around us; and it must be planned and realised… by us as its citizens – each a citizen of both the actual and ideal city seen increasingly as one’ (CiE, p. xxvii).

Another common reason why Geddes’ career is recalled now is for his influence on a number of his students and disciples, including the British biologist and popular science writer J. Arthur Thomson. Geddes’ most devoted follower was the American social critic and philosopher of technology Lewis Mumford, whose work The City in History won the prestigious American National Book Award for non-fiction in 1962. What drew Mumford to Geddes’ work was the way he never lost sight of the big picture whilst tackling more specialised concerns. As Mumford put it in the 1940s, it was the ‘interpenetration of the general and the particular, the philosophical… and the scientific…, the universal and the regional. [Geddes’] world-enveloping mind was also deeply concerned with [improving] life at his own doorstep’ (Preface, Boardman, MofF, xi).

Although I have found nothing to substantiate the claim that Geddes coined the phrase ‘think global, act local’, it certainly captures the sense of purpose he derived from science. What I want to do today is explain how his desire to improve the world around him was grounded in what might seem an unlikely source: the evolutionary philosophy of Herbert Spencer. To do this I’m going to examine the early stages of Geddes’ career and show, firstly, how his specific biological ideas about the evolutionary process were shaped by Spencer’s work. Then I’ll show how Geddes’ social activities of the 1880s, during which time he devoted his time and money to the improvement of the slums of
Edinburgh, were also a consequence of Spencer’s influence on him. In doing this I want my argument to be situated with the recent work of scholars such as Thomas Dixon and Naomi Beck. They’ve demonstrated how Spencer was read by his contemporaries in a variety of ways that were often far from the image we have of a man who coined the phrase ‘survival of the fittest’. Indeed, what I want to show in the case of Geddes is that Spencer was an inspiration to social commitment rather than the barrier that many people would consider him to be.

2. Geddes the Biologist

So, I’ll begin with the start of Geddes’ scientific career, which was in 1874 at the London School of Mines – now Imperial College, of course – where he studied under T. H. Huxley [Slide]. Like so many of his contemporaries, Geddes was in complete awe of his teacher. Looking back later in his life, he described how: ‘never… had I heard such lectures; or indeed since. Nothing could be clearer than his demonstrations of his well-chosen specimens, always sufficient for his exposition and argument, yet never in redundance [sic]’. (Huxley as Teacher, p. 741). And Huxley was impressed by Geddes too. He supported his enthusiastic student by employing him as a demonstrator in his lab and secured him numerous grants and work-placements at some of the best laboratories around Europe. However, despite their mutual respect, a key aspect of the relationship between Huxley and Geddes was their profound disagreement on a number of crucial issues and none was more important than the work of Herbert Spencer. As a keen, young biologist, Geddes read widely and this included Spencer, who was then at the height of his popularity. Returning from a short placement studying embryology in Cambridge,
Geddes told Huxley that he had read Spencer’s *Principles of Biology* only to be told that would ‘have done far better to spend all [his] time on embryology!’ Famously, of course, Huxley believed, unlike his friend and fellow X-Club member Spencer, that evolutionary mechanisms had no explanatory power in society. Despite his teacher’s strong opinions, Geddes was very much taken with Spencer’s work and it is worthwhile explaining why.

Spencer’s reputation is mainly that of the arch-villain of Social Darwinism. He is seen as having crudely grafted Darwin’s ideas onto society in order to justify a social theory of might as right. This simply isn’t an accurate picture of Spencer’s work, though. Firstly, rather than seeing it as a purely biological concept that could be applied to other areas, evolution for Spencer was a universal process operating by general principles in every domain of life. It was that belief that led to the numerous volumes of his *Synthetic Philosophy* series, which attempted to encompass the whole of the natural and social sciences. Furthermore, like a great many people, including Huxley, Spencer wasn’t persuaded by Darwin’s argument for the power of natural selection in evolution. He did in fact think that there ‘is reason to believe that [natural selection] by no means explains all that has to be explained’. In his view, it simply couldn’t account for the positive, creative, seemingly progressive, aspects of life in which organisms appeared to better themselves and others. Accordingly, the Lamarckian inheritance of acquired characteristics – where the use of organs and body parts stimulates their growth and development – was a mechanism Spencer considered more important than natural selection. But he also placed a great deal of emphasis on a fundamental change in the character of evolution at higher levels. He believed that through organisms and individuals pursuing their self-interest, the ‘survival of the fittest’ is actually replaced by
altruistic and cooperative behaviour. In Spencer’s view, this process is an undoubtedly progressive force and a good thing because, through it, life becomes better. The *laissez-faire* social philosophy that he built around this, was a result of his belief that progression was inevitable when evolution was left to its own devices. If governments and states kept out of social affairs then altruism and cooperation would eventually supersede competition and, Spencer argued, human life would be transformed. Indeed, one of his conclusions that is not regularly remembered now is that the natural state for industrial society is pacifism.

The evidence for the impact that Spencer’s ideas had on Geddes in the early stages of his career are clear from the one significant, factual contribution he made to the biological sciences. On a research trip to the French coast in 1878, Geddes spent time studying a particular type of flatworm that’s coloured green by algae living in its tissues – as you can see on the slide now. According to the dominant biological wisdom, the algae were parasites, which, of course, meant that they were living at the expense of the host worm. What Geddes’ research showed, however, is that the relationship is, in fact, somewhat more complex than that explanation suggests. The algae do live off of the flatworm but they do so by using its waste carbon dioxide and, in return, the worm uses the algae’s waste oxygen. Clearly, Geddes argued, this relationship couldn’t be described as parasitic. It was reciprocal and all the organisms involved were strengthened by it. What had happened was that the algae and flatworm had developed a mutually beneficial association that is better understood as symbiotic. What this conclusion emphasises, unlike the parasitic analysis Geddes was challenging, is the evolved cooperation between
organisms. And I think that this shows, without a doubt, how Geddes had been influenced by Spencer’s ideas about the direction evolution takes. Indeed, I think that if one considers what a strict Darwinian reading of the same relationship would’ve looked like, the Spencerian effect becomes clear.

And this Spencerian reading of evolution was something that Geddes continued to promote for the rest of his career. As a biologist with a promising reputation, Geddes was invited to write entries for the new edition of the *Encyclopaedia Britannica* in the 1880s. In those articles Geddes showed the extent to which his ideas had been shaped by Spencer’s progressivist account of evolution. For example, Geddes wrote that it was clear from the natural world that ‘progress is definitely associated with an increased measure of subordination of… competition to co-operative adaptation’ (En, ‘Variation’, p. 85). Moreover, Geddes also wanted to be quite clear about what natural selection could and couldn’t explain. Indeed, James Mavor, a close associate of his, reported Geddes’ view as being that natural selection didn’t tell us anything about how life became better because it ‘accounted for our survival by explaining the death of our uncles and aunts, and that it was consequently rather a theory in necrology than in biology’ (Windows, p. 213-214).

Geddes’ reading of Spencer resulted in far more than him simply repeating the Spencerian view of evolution in biological articles. In the 1880s Geddes was increasingly concerned with the impact of evolution in the social sphere and how what he had learned as a biologist related to it. Indeed, the consequence of Geddes’ Spencerianism was a
series of social commitments in the 1880s that would later define his public reputation in urban planning. And it is this that I’ll now move to examine.


Geddes wrote on a wide array of subjects during the 1880s and throughout them he delivered the same message. This was how evolution showed us that ‘it is not hunger and struggle for existence, but love and association in existence, that mainly move and mould the living world’ (Coop Vs Socialism, p. 29). Geddes was inspired by the idea that evolution was a progressive, good thing but what he did not take from Spencer was a belief that humans had to be passive in the process. Instead, Geddes saw scientific understanding as giving society the power to help drive forward the processes by which it progressed. And it was this conviction that led him to emphasise how scientific knowledge had to be unified with social action. Whilst he considered it important for intellectuals to work ideas out, it was crucial that one never lost sight of the greater good to which such theorising could be put. As Geddes described it, this was because ‘it is only by thinking things out as one lives them, and living things out as one thinks them, that a man or a society can really be said to think or even live at all’ (Coop Vs Socialism, p. 22). What’s important about this idea is that, for Geddes, it didn’t clash with the Spencer’s argument that governments should keep out of social affairs. Geddes, too, believed that the state, no matter how good its intentions, would almost inevitably hinder social evolution and Geddes demonstrated by example what he thought was the correct
form of social action. In his adopted home of Edinburgh, he threw himself into a series of projects that were focused on making life better.

The living conditions of the working classes was one high profile contemporary political issue that Geddes thought he was particularly well-qualified to make a contribution to. As the squalid state of the slums and their associated problems of drink, disease, crime and perceived immorality became more and more apparent to Britain as a whole, a debate began that had at its heart one question: was it the people who made the slums or the slums that made the people? As a biologist, Geddes believed that his understanding of the relationship between organism and environment gave him an insight into this issue. The key, he argued, was to understand that change was bound up with the interaction of the two over time. However, it had to be recognised that, in the first instance, environments are crucial in producing particular types of organism. Geddes therefore believed that improving the slums themselves was the first step towards progress. Wanting to show how this was so, he was instrumental in forming the Edinburgh Social Union in 1885, which operated a socially conscious property management system, buying up housing, improving it, and then leasing it to the poor at a fair rate.

Geddes felt that he needed to do more than just help administrate a property management company, though. Boldly, he moved into the decaying slums of Edinburgh’s Old Town along with his wife of only a few months. Geddes believed that his scientific insights could help encourage the inhabitants of the slums to break the mutually destructive cycle of degeneration that had set in. Improvement couldn’t be imposed on the people but he
believed that those who lived in the slums had it within their power to alleviate their problems if they were shown and not told how to. Putting himself to work in the Old Town, Geddes and his supporters painted walls, fixed windows, and cleared the rubbish lining the streets. He thought that the other residents would join in if they could see what the area looked like beneath the layers of dirt and decay that were a result of years of neglect. If the negative impact that the slums’ physical appearance had on people could be changed, Geddes argued, then the way that people related to each other in them would alter as well. One of his favourite ideas in this respect was creating gardens in disused space. He saw them as important family places because they brought the natural world to the heart of the urban environment. More than this though, they helped to change the dynamics of the slums by providing an open social space that was, for many, one of the very few alternatives to the pub. The photo on the slide at the moment is an example of residents building one these gardens at the beginning of the twentieth century. It’s still there today and the steps that you can hopefully see are now officially named after Geddes.

Over the closing two decades of the nineteenth century, Geddes expanded his housing projects. He borrowed money, at huge personal cost, to buy up more property for renovation and embarked on educational projects as well – including a summer school and a museum. One of his lasting legacies, and one that I would have thought all of us here can identify with, is the university halls of residence. Concerned by the effects that terrible quality housing in badly run down areas had on the student population as a whole, Geddes converted some of the property he had acquired into Britain’s first self-governing
halls of residence. Beginning with just a handful of tenants, by 1900, University Hall, and its extension you can see on the screen now, had grown to accommodate over a hundred students. Geddes wanted the project to promote a vibrant intellectual atmosphere where students weren’t segregated by disciplinary boundaries. Indeed, he believed that bringing university learning of different fields together was one important step towards learning more about how evolution operated throughout life.

4. Concluding Remarks

On that note, I’d like to move to make some concluding remarks. Of the issues I’ve tried to tackle today there is, firstly, the question of how Patrick Geddes goes from being a biologist in 1879 to founding figure of modern urban planning in the twentieth century. Examining his career, it is clear that cities were one of his earliest interests and by no means were they a late add-on to his biological work. Indeed, it seems quite simple how the step was made from algae and flatworms to social housing projects, when one considers the biological interest in organism and environment as people and place. Thinking about the issue in those terms perhaps makes it seem too simple though because Geddes wasn’t just a biologist who wrote the odd pamphlet on improving housing. He was inspired by his scientific work to act on his findings about evolution in a way that can’t be said of everyone, either at the time or now. And the reason for this was Geddes’ particular reading of Spencer, which leads me to the other issues I’ve tried to deal with today.
With its emphasis on cooperation, Geddes’ biological work shows clear signs of Spencer’s influence. There were, of course, plenty of other thinkers of the period who tried to undermine the role of natural selection in evolution, so the issue is what made Geddes’ outlook distinctively Spencerian. The answer to this is the belief that evolution is a progressive progress, which, practically speaking, is the same thing as absolute improvement. Whilst the idea of progress is something that we can also find in the work of others during the period, Spencer was unambiguously committed to evolution as improvement. And it was this that contributed to Spencer’s wide spread popularity in the late-nineteenth century. But it was also this idea of progress that spurred Geddes on to actions that many people would consider to be profoundly un-Spencerian. Amongst historians, Spencer’s evolutionary philosophy, which is seen as the very essence of tough, laissez-faire thinking, is often seen as an obstacle to social commitment. What Geddes shows us is how this was not necessarily so. Devoted to progress, Geddes believed that rather than having to sit and passively wait for improvement, the self-awareness of evolution gives us the power to act on its principles. His grand aspiration of a better world resting on cooperation and citizenship was grounded, therefore, in a particular late-nineteenth century reading of a thinker who is commonly seen as the antithesis of the socially committed. It was Spencer, however, who inspired Geddes’ ideal that a better society is a direct consequence of the way in which we act towards each other and treat the world at our own doorsteps – a belief that still resonates in the concerns of our culture now.