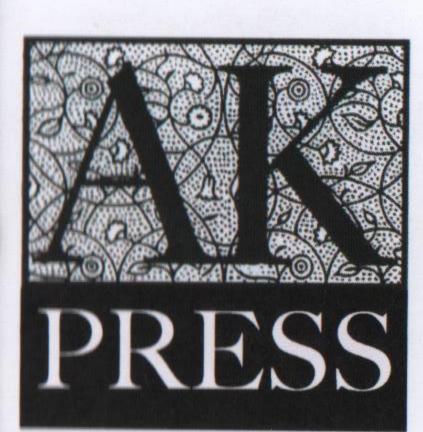
Based on research done for his introduction to the new Freedom Press edition of Kropotkin's *Mutual Aid* this longer essay from Iain McKay expounds not only on Kropotkin's work but on science writing in general, encompassing Richard Dawkins, Stephen Jay Gould and Matt Ridley among many others.

Iain McKay is the creator of the Anarchist FAQ, a vast resource of anarchist thought available online at www.anarchistfaq.org, or from AK Press - volume one is in print and available at all good bookshops (ISBN 9781902593906).

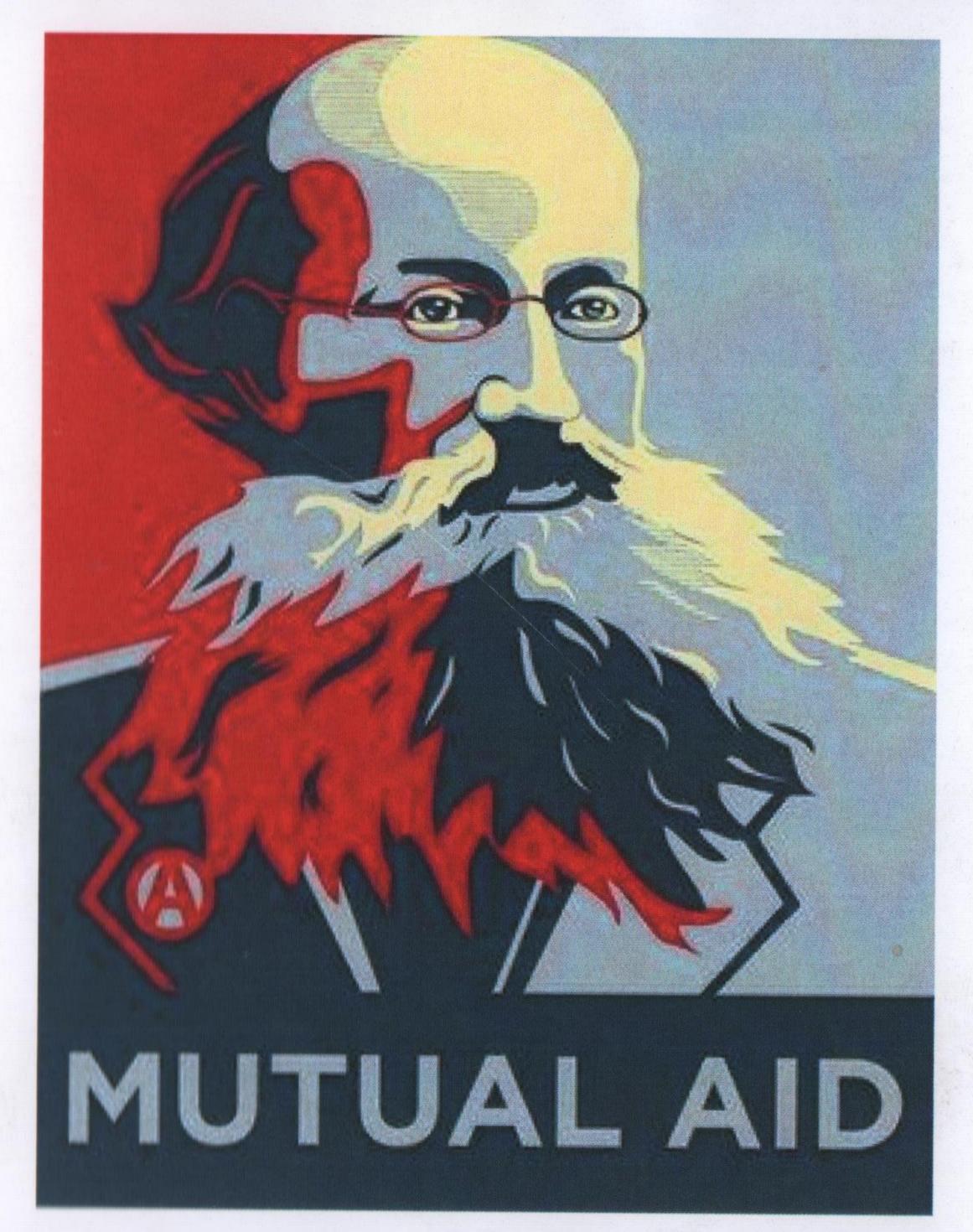
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Mutual Aid



An Introduction and Evaluation Iain McKay

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Mutual Aid: An Introduction and Evaluation

Kropotkin's *Mutual Aid* is usually, and rightly, called his masterpiece. While the high quality of all his work makes it hard to say whether this classic can be considered his best, it is fair to say that it is probably his most famous and one of his most widely read. Suffice to say, that it is rarely out of print testifies to its importance as well as the quality and timelessness of its message.

It is often called an anarchist classic. This is not entirely accurate. Yes, it is a classic and it was written by an anarchist, indeed the leading anarchist thinker of the time. However, it is not a book about anarchism. It is, first and foremost, a work of popular science, a "best-selling work", which made co-operation "well known in lay society" while ensuring it would "be discussed among biologists in the following decades." It was aimed at rebutting the misuse of evolutionary theory to justify the status quo, but its synthesis of zoological, anthropological, historical and sociological data achieved far more and, consequently, its influence is great. "It is arguable that of all the books on cooperation written by biologists," suggests Lee Alan Dugatkin Professor of Evolutionary Biology at the University of Louisville, "Kropotkin's Mutual Aid had the most profound affect on

¹ Douglas H. Boucher, Sam James and Kathleen H. Keller, 'The Ecology of Mutualism', pp.315-347, *Annual Review of Ecology and Systematics*, Vol. 13, 1982, pp.318-9

biologists, social scientists, and laymen alike."² Anthropologist Ashley Montagu dedicated his book Darwin, Competition and Cooperation, to Kropotkin, stating it was a "classic" and "no book in the whole realm of evolutionary theories is more readable or more important, for it is *Mutual Aid* which provides the first thoroughly documented demonstration of the importance of cooperation as a factor in evolution."³

This is not to say that anarchism plays no part in it nor that it holds nothing of interest for anarchists or anarchist theory. Far from it! The very mode of analysis, the looking into mutual aid tendencies of everyday life is inherently libertarian. It flows from the 'bottom-up' and is rooted in popular history. More than that, it is documented with the skill of a talented scientist and, in this, it is somewhat unusual. It is often noted that Proudhon, the founding father of anarchism, was unique in being a socialist thinker who was also working class. In the case of Kropotkin, he was one of the few socialist thinkers who was a trained scientist, an extremely gifted one according to his peers. This education in the scientific method can be seen from all his work, but most obviously in *Mutual Aid*.

Given that this work is probably the best known by non-anarchists, it is useful to place it into the context of his revolutionary ideas as well as evaluating how well it has survived advances in science. In the process, Kropotkin's life will be touched upon, as well as the life of his book, its origins and influences. Finally, the various myths which have arisen about *Mutual Aid* will be discussed and debunked. By so doing, it will become clear why this book is considered so important by both anarchists and non-anarchists alike.

The Anarchist Formerly Known As Prince

Peter Kropotkin was born in Moscow in 1842 within a royal family that could trace its origins to the founders of the Tsarist regime. At the age of fifteen, he entered the Corps of Pages in St. Petersburg, an elite Court institution attached to the imperial household. Kropotkin, like Bakunin before him, became interested in politics and social issues as well as science.

In 1862 he was promoted to the army and, utilising the

privilege that members of the Corps could choose their regiment, he decided to join a Siberian Cossack regiment in the recently annexed Amur district. Two years later, Kropotkin accepted charge of a geographical survey expedition, crossing North Manchuria from Transbaikalia to the Amur, and shortly afterwards was attached to another expedition which proceeded up the Sungari River into the heart of Manchuria. Kropotkin used both expeditions to pursue his scientific interests, yielding valuable geographical results. This, combined with the impossibility of obtaining any real reforms in Siberia, induced him to devote himself almost entirely to this highly successful scientific exploration. Leaving the army in 1867, he returned to St. Petersburg to begin university and, at the same time, became the secretary of the physical geography section of the Russian Geographical Society. In 1873 he published a paper in which he proved that the existing maps of Asia misrepresented the physical formation of the country, the main structural lines being in fact from south-west to north-east, not from north to south, or from east to west as had been previously supposed.

In 1871, while exploring glacial deposits in Finland and Sweden for the Russian Geographical Society, he was asked to be its secretary. However, his growing social consciousness made him refuse the offer, instead becoming a revolutionary socialist and agitator for social change. Using the privileges of his scientific position, he visited Switzerland in 1872 and joined the International Workingmen's Association (IWMA). Visiting the libertarian Jura federation, he quickly concluded that "my views upon socialism were settled. I was an anarchist."

On returning to Russia, he took an active part in spreading revolutionary propaganda through the Circle of Tchaikovsky, being arrested in 1874 for his activities. He escaped two years later, went into exile in Western Europe and became a, if not the, leading exponent of the communist-anarchism which was replacing Bakunin's collectivist-anarchism as the dominant theory in the libertarian movement (a position it holds to this day). 5 As

² Cooperation Among Animals: An Evolutionary Perspective (Oxford University Press, 1997), p.8

³ Darwin, Competition and Co-operation (Schuman, 1952), p.42

⁴ Memoirs of a Revolutionist (Black Rose, 1989), p.267. Kropotkin, rightly, always considered anarchism to be "the no-government system of socialism" and that anarchists "constitute the left wing" of the socialist movement (Anarchism:

A Collection of Revolutionary Writings (Dover Press, 2002), p.46 and p.281).

⁵ Communist-anarchism can be seen as a natural evolution from Bakunin's ideas, the fundamental difference being on how quickly distribution according to need could be achieved after a revolution. While some communist-anarchists, unlike

well as editing the anarchist newspaper *Le Révolté*, he wrote numerous articles and revolutionary pamphlets. Due to pressure from the Russian ambassador, he was expelled from Switzerland in 1881 after attending the International Anarchist conference in London. Eventually Kropotkin settled in France and was soon arrested as part of a general crackdown on the anarchist movement. After a trial in Lyons in 1883, which was utilised by the 53 defendants to expound their anarchist ideas, he was given a five-year prison sentence. The Police Correctional Court ostensibly claimed this was for being a member of an illegal organisation, the IWMA (which had been outlawed after the brutal repression of the Paris Commune).

After repeated international campaigns, he was released in 1886 and settled in England where he helped found the anarchist newspaper *Freedom*, contributing to the anarchist and non-anarchist press, writing books (such as *Mutual Aid* and *The Great French Revolution*), producing anarchist pamphlets and speaking at socialist and trade union events across Britain and elsewhere. He returned to Russia in the summer of 1917, after the February revolution and the subsequent fall of the Tsar. Critical of Lenin's regime, he spent his final years working on his unfinished *Ethics* and warning the workers of the world not to follow the mistakes being made in Russia. He died in February, 1921, and his funeral was used by the Russian anarchist movement as a final public protest against Bolshevik tyranny.

His contributions to anarchism were significant. As his fellow leading anarchist and friend Errico Malatesta put it, Kropotkin was "without doubt one of those who have contributed most... to the elaboration and propagation of anarchist ideas" and has "well deserved the recognition and the admiration that all anarchists feel for him." However, he was also well known as a scientist and was "a naturalist of some renown, with specialised interest in geology." This can be seen from the fact that as well as his justly

famous entry on Anarchism, he also contributed most of the Russian geographical articles to the eleventh edition of the *Encyclopaedia Britannica*. His obituary in *The Geographical Journal* expressed regret that Kropotkin's "absorption" in his political views "seriously diminished the services which otherwise he might have rendered to Geography." He "was a keen observer, with a well-trained intellect, familiar with all the sciences bearing on his subject" and his "contributions to geographical science are of the highest value." Kropotkin "had a singularly attractive personality, sympathetic nature, a warm but perhaps too tender heart, and a wide knowledge in literature, science, and art."⁸

Science's loss was anarchism's gain.

Darwin's Bulldog and Mutual Aid

As Kropotkin explained in *Mutual Aid*, the articles the book was based on were written in response to Thomas Henry Huxley's 'The Struggle for Existence in Human Society' written in 1888. Both Huxley's original article and Kropotkin's replies appeared in the journal *The Nineteenth Century*. The series of replies appeared between 1890 and 1896 and were expanded to form *Mutual Aid* in 1902.

While Huxley's article is often portrayed as presenting a 'Social Darwinist' position, this is not true. In fact, he advocated numerous state interventions which would horrify any one actually holding that position as well as any self-respecting classical liberal of the time (or now). That state action to help those worse affected by laissez-faire was "not only desirable from a philanthropic point of view, but an essential condition of safe industrial development, appears to me to be indisputable," Huxley argued. A nation that pursued a 'Social Darwinist' position would soon self-destruct and what was needed was state intervention to ensure "a population the labour of which is sufficiently remunerated" so it may be "physically and morally healthy and socially stable." Within reason, of course, as "a moderate price of labour" was "essential to our success as competitors in the markets of the world."

However, Huxley drew these conclusions from an argument that human society was maintained against our natural instincts,

^{5 (}cont) Bakunin, were hostile to reforms and working within the labour movement, this is not a fundamental communist-anarchist position as can be seen from Kropotkin's support for militant unionism and sympathies with anarcho-syndicalism. Caroline Cahm covers this period well in her book Kropotkin and the Rise of Revolutionary Anarchism, 1872-1886 (Cambridge University Press, 1989).

⁶ Errico Malatesta: His Life and Ideas (Freedom Press, 1993), p.257

⁷ David Roger Oldroyd, Darwinian Impacts: An Introduction to the Darwinian Revolution (Open University Press, 1983), p.237

⁸ The Geographical Journal, Vol. 57, No. 4, (Apr., 1921), pp. 316-319

⁹ Ironically, Kropotkin replaced Huxley as the editor of the section 'Recent Science' in the journal *Nineteenth Century* when the latter retired in 1892.

which was 'Social Darwinist' at its core:

"From the point of view of the moralist the animal world is on about the same level as a gladiator's show. The creatures are fairly well treated, and set to fight – whereby the strongest, the swiftest, and the cunningest live to fight another day. The spectator has no need to turn his thumbs down, as no quarter is given."

This also applied to human society and "so among primitive men, the weakest and stupidest went to the wall, while the toughest and shrewdest, those who were best fitted to cope with their circumstances, but not the best in any other sense, survived. Life was a continual free fight, and beyond the limited and temporary relations of the family, the Hobbesian war of each against all was the normal state of existence." Ethics were an artificial creation, which are in contradiction to "the deep-seated organic impulses which impel the natural man to follow his non-moral course." This suggested that civilisation was a fragile creation, built against the natural state of humanity and animal life:

"The history of civilisation – that is, of society – on the other hand, is the record of the attempts which the human race has made to escape from this position. The first men who substituted the state of mutual peace for that of mutual war, whatever the motive which impelled them to take that step, created society."

Kropotkin considered Huxley's speculation as "atrocious"¹⁰, in direct contradiction to the facts of both nature and history. He would also have taken umbrage at claims that the State was merely "the people in their corporate capacity" and the Malthusian assertion that so long as "unlimited multiplication goes on, no social organisation which has ever been devised... no fiddle-faddling with the distribution of wealth, will deliver society from the tendency to be destroyed by the reproduction within itself." As well as its crudely inaccurate assumptions on 'nature', particularly of early human life, there is also its obvious statist implication. After all, if 'civilisation' requires the denial of 'natural man' then how is this to be achieved, unless by coercion by the state? And if our social problems are at root biological, what need is there for social transformation?

As Kropotkin explained in an anarchist essay written after Mutual Aid, Huxley's position like "all our religious, historical,

juridical, and social education is imbued with the idea that human beings, if left to themselves, would revert to savagery; that without authority men would eat one another; for nothing, they say, can be expected from the 'multitude' but brutishness and the warring of each against all. Men would perish if above them soared not the elect... These saviours prevent, we are told, the battle of all against all." This, he argued, was nonsense as "a scientific study of societies and institutions brings us to quite different views. It proves that usages and customs created by mankind for the sake of mutual aid, mutual defence, and peace in general, were precisely elaborated by the 'nameless multitude.' And it was these customs that enabled man to survive in his struggle for existence in the midst of extremely hard natural conditions." The notion that the state was merely the instrument of the people is hardly supported by history nor current practice, for what the state and its laws have done is to "fix, or rather to crystallise in a permanent form, such customs as already were in existence" and adding to them "some new rules - rules of inequality and servile submission of the masses in the interest of the armed rich and the warlike minorities."11

Huxley's position, needless to say, was somewhat selfcontradictory. If, as he suggests, 'natural' man is inherently aggressive and needs the state to keep him in check then why are our rulers, those in charge of the state, exceptions to this 'human nature'? As Kropotkin argued elsewhere, "while our opponents seem to admit there is a kind of salt of the earth - the rulers, the employers, the leaders - who, happily enough, prevent those bad men - the ruled, the exploited, the led - from becoming still worse than they are" we anarchists "maintain that both rulers and ruled are spoiled by authority" and "both exploiters and exploited are spoiled by exploitation." So "there is [a] difference, and a very important one. We admit the imperfections of human nature, but we make no exception for the rulers. They make it, although sometimes unconsciously, and because we make no such exception, they say that we are dreamers."12 Moreover, Kropotkin argued, if "the only lesson Nature gives to man is one of evil, then [Huxley] necessarily has to admit the existence of some other, extra-natural... influence

^{11 &#}x27;Modern Science and Anarchism', Evolution and Environment (Black Rose, 1995), p.48, p.49

¹² Act for Yourselves (Freedom Press, 1988), p.83

which inspires man with conceptions of 'supreme good'" which "nullifies his own attempt at explaining evolution by the action of natural forces only."¹³ In other words, Huxley limits the power of evolutionary theory by excluding humans and their cultural and social evolution from it.¹⁴

If human nature is so bad, then giving some people power over others and hoping this will lead to justice and freedom is hopelessly utopian. Indeed, the so-called 'civilised' nations have usually been far more 'savage' and 'barbaric', both internally and externally, than those societies they have arrogantly labelled so. And, as Kropotkin noted in *Mutual Aid*, a so-called 'savage' would have been shocked by how the rich treated the poor¹⁵ – assuming that they survived the often genocidal imperialism inflicted on them by the 'civilised'.

So Kropotkin could only view Huxley's essay as little more than unsubstantiated assertion ("a very incorrect representation of the facts of Nature"¹⁶), misusing science to justify an oppressive and unjust social system and simply reflecting the (reformist-end of the) dominant political and economic culture. His own research and experience indicated as much. Being a trained scientist, he went out to prove it – and so what was to become *Mutual Aid* was written. It became an instant success and a major contribution to evolutionary and anthropological thought.

Science and the Dominant Culture

Given that *Mutual Aid* was written in response to distortions of Darwin, it is somewhat ironic that Darwin was inspired to develop his theory of natural selection after reading Malthus's infamous

'An Essay on the Principles of Population' (it was, Darwin noted, "the doctrine of Malthus applied with manifold forces to the whole animal and vegetable kingdoms")¹⁷. This is because Malthus inflicted his "law of population" onto the world in response to the ideas of anarchist William Godwin and other social reformers.¹⁸ That is, anarchism, indirectly, inspired the theory of evolution which, in turn, was used by Kropotkin to enrich anarchist theory.

Malthus's essay was an explicit attempt to prove that social stratification, and so the status quo, was a 'law of nature' and that poverty was the fault of the poor themselves, not the fault of an unjust and authoritarian socio-economic system. As such, the 'theory' was created with political goals in mind and as a weapon in the class struggle. As Kropotkin summarised, it was "pernicious" in its influence. It "summed up ideas already current in the minds of the wealth-possessing minority" and arose to combat the "ideas of equality and liberty" awakened by the French and American revolutions. Malthus asserted against Godwin "that no equality is possible; that the poverty of the many is not due to institutions, but is a natural law." This meant he "thus gave the rich a kind of scientific argument against the ideas of equality." However, it was simply "a pseudo-scientific" assertion which reflected "the secret desires of the wealthpossessing classes" and not a scientific hypothesis. This was obvious as technology has ensured that Malthus's fears are "groundless" while they are continually repeated. 19

Significantly, starting with Malthus, all the 'doomsday' prophets of the 'population bomb' have been proved wrong time and time again. That the theory was fundamentally ideological in nature can be seen from Malthus himself. In contrast, and in direct contradiction to his population 'theory', as an economist Malthus was worried about the danger of over-production within a

¹³ Quoted by Ruth Kinna, 'Kropotkin's theory of Mutual Aid in Historical Context', pp. 259-283, International Review of Social History, No. 40, p.276

¹⁴ Kropotkin's recognition of this was echoed decades later by primatologist Frans de Waal, who noted that Huxley "proposed ethics as humanity's cultural victory over the evolutionary process" and so "was in effect saying that what makes us human is too big for the evolutionary framework." This meant "that people are fit for society only by education, not nature." Huxley, though, "offered no hint whatsoever where humanity could possibly have unearthed the will and strength to go against its own nature." The Ape and the Sushi Master: Cultural Reflections by a Primatologist (Basic Books, 2001), p.344

^{15 &}quot;I remember how vainly I tried to make some of my Tungus friends understand our civilization of individualism: they could not, and they resorted to the most fantastical suggestions." (Mutual Aid (Freedom Press, 2009), p.100) 16 Mutual Aid, p24

¹⁷ On the Origin of Species (Harvard University Press, 1964), p.63
18 As can be seen from the full title of the original, 1798, edition: 'An Essay on the Principle of Population as it Effects the Future Improvement of Society; with Remarks on the Speculations of Mr. Godwin, M. Condorcet and Other Writers.'
Later editions included attacks on such radicals as Thomas Paine, Robert Owen and the followers of Thomas Spence.

¹⁹ Fields, Factories and Workshops Tomorrow (Freedom Press, 1985), p.77, p.78, p.79. Proudhon, it should be noted, had also attacked Malthus and his arguments in a classic essay entitled 'The Malthusians' (*Le Représentant du Peuple*, August 10, 1848). Benjamin Tucker translated the essay for the May 31, 1884 issue of *Liberty*.

capitalist economy. This was driven by a desire to justify the existence of the aristocratic landlord class, which had been subject to much scorn by Adam Smith, David Ricardo and their followers as little more than parasitic consumers of the products of the industrious classes (capitalists and workers). For Malthus, the landlord class provided the great public service of maintaining aggregate demand in the face of any deficits caused by capitalist savings (which may not immediately translate into investment buying). So, ironically, his economics was completely at odds with his arguments about population, in one the danger is underproduction while in the other it is overproduction. Anticipating certain themes of Keynes, Malthus argued that effective demand had to be bolstered and even went so far as to argue for the poor to be employed in building roads and public works! No mention of 'excess' population there, which indicates well the ideological nature of his over-population theory. It comes as no surprise that his economics writings fell into obscurity.20

So it is easy to explain the support Malthus and his assertions got in spite of the lack of empirical evidence²¹ and the self-contradictory utterances of its inventor. Its utility in providing a justification for the inhuman miseries inflicted upon the British working class by 'its' ruling class of aristocrats and industrialists was the only reason why it was given the time of day ("it provided the British ruling class with an argument against social reform."²²). That the population myth, like 'genetic' justifications for race-, class- and gender-based oppression, keeps appearing over and over again, even after extensive evidence has disproved it, indicates its usefulness to the ideological guardians of the

establishment.

Perhaps unsurprisingly, given its roots, 'natural selection', particularly in the form of what became known as Social Darwinism, was also seized upon to use against working class people and social reform as well as to justify elite rule. Thus 19th century capitalist John D. Rockefeller asserted that the "growth of large business is merely a survival of the fittest... It is merely the working-out of a law of nature and a law of God." Another, Andrew Carnegie, proclaimed that while the law of natural selection "may be sometimes hard for the individual, it is best for the race, because it insures the survival of the fittest in every department. We accept and welcome, therefore, as conditions to which we must accommodate ourselves, great inequality of environment, the concentration of wealth, business, industrial and commercial, in the hands of a few, and the law of competition between these, as being not only beneficial, but essential for the future progress of the race."23

And who can protest against God's law or rebel against Nature?

Noted scientist Stephen Jay Gould was right to "criticise the myth that science is itself an objective enterprise, done properly only when scientists can shuck the constraints of their culture and view the world as it really is... Scientists needn't become explicit apologists for their class or culture in order to reflect these pervasive aspects of life." Recognising this obvious fact suggests that science "must be understood as a social phenomenon, a gutsy, human enterprise, not the work of robots programmed to collect pure information" and so science, "since people must do it, is a socially embedded activity." Even facts are "not pure and unsullied bits of information" as "culture also influences what we see and how we see it. Theories, moreover, are not inexorable inductions from facts. The most creative theories are often imaginative visions imposed upon facts; the source of imagination is also strongly cultural." Science "cannot escape its curious dialectic. Embedded in surrounding culture, it can, nonetheless, be a powerful agent for questioning and even overturning assumptions that nurture it... Scientists can struggle to identify the cultural assumptions of their trade and to ask how answers might be formulated under different assertions.

²⁰ David McNally's Against the Market: Political Economy, Market Socialism and the Marxist Critique (Verso, 1993) contains a good summary of the class nature and contradictions of the writings of Malthus (pages 75-91). Sadly, his discussion of Proudhon in the same work is marred with standard Marxist confusions and ignorance of the subject.

Ireland, for example, was exporting food during the Great Famine as the landlords found it more profitable to do that than feed their starving working class neighbours. How Malthus's essay must have eased their conscious by arguing that the hunger around them was caused by 'natural' forces rather than, say, their monopolisation of the land and its products. See *Late Victorian Holocausts* (Verso, 2001) by Mike Davis on how Victorian attitudes, economics and policies helped cause famines across the world. The same process is still at work, with famines coexisting with the export of food.

²² Daniel P. Todes, Darwin Without Malthus: The Struggle for Existence in Russian Evolutionary Thought (Oxford University Press, 1989), p.15

²³ Quoted by Stephen Jay Gould, The Richness of Life: The Essential Stephen Jay Gould (Vintage Books, 2007), p.553-4

Scientists can propose creative theories that force startled colleagues to confront unquestioned procedures."24

Kropotkin's work must be seen in this light, as an attempt to refute, with hard evidence, the cultural assumptions at the heart of the Darwinism of his day. In its most extreme form, this became 'Social Darwinism' which (like much of sociobiology today) proceeds by first projecting the dominant ideas of current society onto nature (often unconsciously, so that scientists mistakenly consider the ideas in question as both 'normal' and 'natural').25 Anarchist Murray Bookchin referred to this as "the subtle projection of historically conditioned human values" onto nature rather than 'scientific objectivity'. Then the theories of nature produced in this manner are transferred back onto society and history, being used to 'prove' that the principles of capitalism (hierarchy, authority, competition, etc.) are eternal laws, which are then appealed to as a justification for the status quo! "What this procedure does accomplish," noted Bookchin, "is to reinforce human social hierarchies by justifying the command of men and women as innate features of the 'natural order'. Human domination is thereby transcribed into the genetic code as biologically immutable."26

Amazingly, there are many supposedly intelligent people who take this sleight-of-hand seriously. Kropotkin was not one of them and, significantly, he was not alone in this. He was representing the commonplace evolutionary ideas of Russian science.

Darwin Without Malthus

While *Mutual Aid* was provoked by Huxley's 1888 article, Kropotkin's interest in evolutionary theory pre-dated both it and, significantly, his anarchism by decades. He recounts in his memoirs how Darwin's work had "revolutionised all biological sciences" when it was published and how "a thorough knowledge of the natural sciences and familiarity with their methods must lie at the foundation" of any studies undertaken.²⁷

As an anarchist, Kropotkin first wrote about Darwin to mark his death in 1882. In the anarchist weekly *Le Révolté*, Darwin

was praised for showing that species were mutable and evolution resulted from the struggle for existence, so making a profound contribution to the spirit of 'criticism and demolition' that promised to explode the religious and social fallacies of the age. While the bourgeoisie had attempted to use this theory against socialism, the opposite was the case as others "applying his methods and developing his ideas" had shown that it were the "sociable species" that "prosper, develop and reproduce... Solidarity and joint labour – this is what supports species in the struggle to maintain their existence against the hostile forces of nature." Thus Darwinism comprises "an excellent argument to the effect that animal societies are best organised in the communistanarchist manner."²⁸

The unnamed others in this article were the Russian naturalists, for, as historian of science Daniel P. Todes has shown, in the nineteenth century "mutual aid remained an uncontroversial element in Russian evolutionary thought". In the 1860s, for example, Nikolai D. Nozhin "argued that intraspecific relations were normally characterised, not by competition, but by mutual aid". Leading Russian Zoologist, K.F. Kessler, in a lecture given in 1879, "transformed a widespread sentiment into a coherent intellectual tradition". Significantly, "his theory of mutual aid was not based on a benign vision of natural relations in general or of intraspecific relations in particular." Kropotkin was simply "the most famous heir to Kessler's legacy" and "brought a Russian intellectual tradition into contact with a quite different English one", simply elaborating "what for many Russians was commonsensical".²⁹

Todes shows how Darwin's ideas on natural selection found a welcome home in Russian intellectual and scientific circles but his Malthusian assumptions were seen for what they were, a product of his society and "the unsurprising fact that he shared the ideological outlook of his class, circle, and family. This outlook was not universal, and a reader... who did not share it... might easily identify the author's ideological preconceptions as bourgeois, Malthusian, or, perhaps, typically British."³⁰ In other words, these Russian scientists and commentators (both radical and conservative) quickly perceived what it has taken modern

²⁴ The Mismeasure of Man (Penguin, 1981), pp.21-2, p.23

²⁵ It should not be forgotten that, as Stephen Jay Gould notes, "Darwin developed his theory as a conscious analog to the laissez-faire economics of Adam Smith" (*The Richness Of Life*, p.224)

²⁶ The Ecology of Freedom (AK Press, 2005), p.95, p.92

²⁷ Memoirs of a Revolutionist, p. 107

²⁸ quoted by Todes, pp.130-1

²⁹ Todes, p.31, p.122, p.104, p.109, p.122, p.123

³⁰ Todes, p.13

historians so long to recognise, namely that notwithstanding his important scientific claims and evidence, Darwin's metaphors and language reflected the social values of his time. That is, much of what passed for 'objective science' was little more than transferring the characteristics of 19th century British capitalism onto nature.³¹

Stephen Jay Gould indicates the impact of Todes original 1987 article on him.³² Before reading it, he "viewed Kropotkin as daftly idiosyncratic, if undeniably well meaning. He is always so presented in standard courses on evolutionary biology – as one of those soft and woolly thinkers who let hope and sentimentality get in the way of analytic toughness and a willingness to accept nature as she is, warts and all." However, he discovered that "the parochiality had been mine in my ignorance of Russian evolutionary thought, not Kropotkin's in his isolation in England." Kropotkin "was part of a mainstream flowing in an unfamiliar direction, not an isolated little arroyo." His work, in fact, represented "a standard, well-developed Russian critique of Darwin, based on interesting reasons and coherent national traditions." Gould noted that decades after *Mutual Aid* was published, the "ideas of this school are unknown to us."³³

Kropotkin, like the others in this tradition, pointed to ideas and arguments that Darwin himself had developed, particularly in his later work. So as well as providing substantial empirical evidence, Kropotkin "quite rightly [also] referred... to evidence

provided by Darwin in *The Descent of Man...* in further support of his doctrine."³⁴ For example, Darwin argued that co-operation conferred an advantage on individuals and, therefore, on a group as a whole.³⁵ This means that a Darwinism without Malthus could be found in Darwin's work, building upon such insights as "[t]hose communities, which included the greatest number of the most sympathetic members, would flourish best and rear the greatest number of offspring."³⁶

So Kropotkin was correct when he explained to fellow anarchist and biologist Marie Goldsmith that he sought to demonstrate "that Mutual Aid does not contradict Darwinism, if natural selection is understood in the proper manner." Thus, Todes argues, Kropotkin's suggestion that the sixth edition of Darwin's Origin and his correspondence showed that Darwin had been approaching a theoretical position much like his "will not strike modern historians of biology as entirely fraudulent."

In summary, then, Kropotkin's views "were but one expression of a broad current in Russian evolutionary thought that pre-dated, indeed encouraged, his work on the subject and was no means confined to leftist thinkers." Significantly, he "first questioned Darwin's approach to the struggle for existence while exploring Siberia as a youth and was an accomplished and celebrated naturalist before his political views crystallised. Furthermore... his ideas about co-operation in nature were quite common among Russian naturalists of varying political perspectives." Given this, Kropotkin's work "cannot be dismissed as the idiosyncratic product of an anarchist dabbling in biology." 39

³¹ Sadly, even today we see the strange coincidence of many 'objective' scientists explaining the actions of animals and other cultures using the assumptions and terminology from our own capitalistic and statist societies. Equally, it is considered 'non-political' to stress the role of competition, but discussing cooperation in nature is usually dismissed as attempts to politicise (at best) or to romanticise (at worse) 'science' or 'nature' in the interests of ideology. As one group of scientists note, there was a "lack of interest in mutualism among ecologists for most of the 20th century, and the involvement of many of those who did study it with what at the time were left-wing causes. We suggest as a hypothesis for historians of science that mutualism has been avoided... because of its association with left-wing politics (perhaps especially with Kropotkin)." (Douglas H. Boucher, Sam James and Kathleen H. Keller, *The Ecology of Mutualism*, p.318)

³² Daniel P. Todes, *Darwin's Malthusian Metaphor and Russian Evolutionary Thought, 1859-1917*, Isis, vol. 78, No. 294, pp.537-51. This essential essay was reprinted under the title *The Scientific Background of Kropotkin's Mutual Aid* in the anarchist journal *The Raven* (Vol. 6, No. 4)

^{33 &}quot;Kropotkin Was No Crackpot", pp.325-39, Bully For Brontosaurus (Penguin, 1991), pp.331-2

³⁴ Oldroyd, Darwinian Impacts, p.238. Oldroyd was inclined to the view that "Kropotkin's emphasis on mutual aid" forms "the 'best' of the analogies that are to be drawn" from nature as regards human society, as "man is, quite obviously, a social animal." (p.353)

^{35 &}quot;For with those animals which were benefited by living in close association, the individuals which took the greatest pleasure in society would best escape various dangers; whilst those that cared least for their comrades and lived solitary would perish in greater numbers. With respect to the origin of the parental and filial affections, which apparently lie at the basis of the social affections, it is hopeless to speculate; but we may infer that they have been to a large extent gained through natural selection." (Charles Darwin, *The Descent of Man, and Selection in Relation to Sex* (Princeton University Press, 1981), pp. 80-1)

³⁶ Darwin, The Descent of Man, p.82

³⁷ quoted by Todes, Darwin Without Malthus, p.136

³⁸ Todes, p.104, p.123

³⁹ Todes, p.104, p.123

Rather, they were the product of a trained scientist using his considerable skills to refute the cultural assumptions which marred an otherwise ground-breaking contribution to science and human knowledge. In this he was extremely successful as will be seen.

Modern Science and Mutual Aid

Kropotkin was always keen to situate anarchism within the trends of science (one of his best essays was called 'Modern Science and Anarchism'). As such, it is only fitting to see how the themes and ideas in *Mutual Aid* have fared. If done, it will be quickly concluded that (terminology aside) they have stood the test of time and are now standard positions in evolutionary theory, biology and anthropology. There is overwhelming evidence to corroborate Kropotkin's thesis, so much so it is near impossible to document it. Sadly, it is likely that, in spite of his evidence-free assertions and speculations being refuted, Huxley will still be considered the 'hard-headed scientist' while Kropotkin's well-documented critique will be dismissed as 'politically driven wishful-thinking'.

As regards evolutionary theory, Stephen Jay Gould concluded that "Kropotkin's basic argument is correct. Struggle does occur in many modes, and some lead to co-operation among members of a species as the best pathway to advantage for individuals."⁴⁰ Lee Alan Dugatkin has documented in great detail such behaviour in his work, including his book *Cooperation Among Animals: An Evolutionary Perspective*. Dugatkin has also traced the history of evolutionary explanations of co-operation and altruism, including Kropotkin's, in his book The Altruism Equation.⁴¹ Leading primatologist Frans de Waal writes that Kropotkin "rightly noted that many animals survive not through struggle, but through mutual aid"⁴² and documents such activity in his book *Good Natured*.⁴³ With Jessica C. Flack, he argues that Kropotkin is part of a wider tradition "in which the view has been that animals assist each other precisely because by doing so they achieve long

term, collective benefits of greater value than the short term benefits derived from straightforward competition. Kropotkin specifically adhered to a view in which organisms struggle not necessarily against each other, but collectively against their environments." They summarise that the "basic tenet of [Kropotkin's] ideas was on the mark. Almost seventy years later, in an article entitled 'The Evolution of Reciprocal Altruism', Trivers refined the concepts Kropotkin advanced and explained how cooperation and, more importantly, a system of reciprocity (called 'reciprocal altruism' by Trivers) could have evolved."⁴⁴ Thus, as one biologist notes, "Kropotkin's ideas, though unorthodox, were scientifically respectable, and indeed the contention that mutual aid can be a means of increasing fitness had become a standard part of modern sociobiology."⁴⁵

Robert Trivers original 1971 paper showed that "under certain conditions natural selection favours these altruistic behaviours because in the long run they benefit the organism performing them." This applied as much to humans as to other animals, with Trivers suggesting that while there was "no direct evidence regarding the degree of reciprocal altruism practised during human evolution nor its genetic basis today, but given the universal and nearly daily practice of reciprocal altruism among humans today, it is reasonable to assume that it has been an important factor in recent human evolution and that the underlying emotional dispositions affecting altruistic behaviour have important genetic components."⁴⁶

Trivers did not mention Kropotkin, but he later recounted that he learned from exchanges with Soviet bloc scientists that "in their literature, Peter Kropotkin was an early pioneer whom they would have expected me to cite." However, he seemed to have developed his theory independently for, in a 1992 interview, he mentioned that people "keep asking about Kropotkin. You know, I have never read the anthropologists who write about reciprocity,

^{40 &#}x27;Kropotkin Was No Crackpot, p.338

⁴¹ The Altruism Equation: Seven Scientists Search for the Origins of Goodness (Princeton University Press, 2006)

⁴² The Ape And The Sushi Master, p.122.

⁴³ Good Natured: The Origins Of Right And Wrong In Humans And Other Animals (Harvard University Press, 1996)

^{44 &#}x27;Any Animal Whatever: Darwinian Building Blocks of Morality in Monkeys and Apes', pp.1–29, *Journal of Consciousness Studies*, Vol. 7, No. 1–2, 2000, p.4 45 Douglas H. Boucher, 'The Idea of Mutualism, Past and Future', pp.1-28, *The Biology of Mutualism: Biology and Evolution* (Croom Helm, 1985), Douglas H. Boucher (ed.), p.17

^{46 &#}x27;The Evolution of Reciprocal Altruism' pp.35-57, The Quarterly Review of Biology, No. 46, p.35, p.48

⁴⁷ Natural Selection And Social Theory: Selected Papers Of Robert Trivers (Oxford University Press, 2002) p.16,

and I never read Kropotkin."⁴⁸ He also notes that a "very agreeable feature of my reciprocal altruism, which I had not anticipated in advance, was that a sense of justice or fairness seemed a natural consequence of selection for reciprocal altruism. That is, you could easily imagine that sense of fairness would evolve as a way of regulating reciprocal tendencies."⁴⁹ If Trivers had consulted Kropotkin, he would have discovered that his unanticipated feature had been anticipated in Mutual Aid decades previously:

"Moreover, it is evident that life in societies would be utterly impossible without a corresponding development of social feelings, and, especially, of a certain collective sense of justice growing to become a habit... And feelings of justice develop, more or less, with all gregarious animals." 50

As de Waal argues, the "fairness principle" in humans has evolved and is "part of our background as co-operative primates." It has reached the point of "declaring inequity a bad thing in general... If the goal is to maintain co-operative relationships by ensuring payoffs for everybody, hence a widespread motivation to participate in joint efforts, the evolution of the fairness principle is really not that hard to explain. The parallels between human and animal responses to inequity seem to tell this story."⁵¹

Richard Dawkins, in his much discussed introduction to modern biology, *The Selfish Gene*, presents arguments why cooperation serves an evolutionary purpose. In the 30th anniversary edition, he acknowledged that the title could be misleading and argued that "if anything, it devotes more attention to altruism" than selfishness. This is because "gene selfishness can translate itself into individual altruism." As Dawkins stresses, the selfish gene does not exclude, and in fact can encourage, what he calls "mutualistic co-operation" or the "evolution of associations of mutual benefit"52

This hopeful conclusion is based on Trivers' work, which Dawkins summarises in chapter 10 of that book. He later expanded on this in a chapter added to the book's second edition (entitled 'Nice Guys Finish First'). Theoretically, it is based on game theory and the Prisoners' Dilemma where two people are arrested for a crime that they did commit but there is not enough evidence to convict them. They are separated, then asked to inform on the other person in exchange for no sentence and are given no chance to communicate. If both inform, then they implicate each other. If both remain silent then they are released. In this situation, the 'selfish' action (inform on your partner) is actually the worse one. If you assume this dilemma is repeated with the knowledge of what the other person did last time, then an interesting thing develops - co-operation becomes the most sensible action. Political scientist Robert Axelrod conducted research by creating computer simulations to investigate which evolutionary strategies were best, co-operative or competitive.53 Dawkins notes that this work took "the idea of reciprocal altruism on in exciting new directions."54 The results support Kropotkin's position that co-operation is beneficial.

The first tournament Axelrod organised attracted 15 strategies, of which 8 were co-operative (or nice). The winning strategy was named 'Tit for Tat' and worked by co-operating by default and subsequently repeat (reciprocate) what the other player did on the previous move (i.e., it will never be the first to defect and will retaliate against selfish behaviour). Significantly, the 8 co-operative strategies were also the top ones, with the 7 selfish (or nasty) ones trailing well behind. Axelrod published the results of the first tournament and organised another one. This attracted 63 strategies and, again, 'Tit for Tat' won. Again, co-operative strategies did significantly better than the selfish ones (all but one of the top 15 strategies were nice and all but one of the bottom 15 nasty). Finally, Axelrod conducted another (more ecological) tournament using the same strategies submitted for

⁴⁸ quoted by Frans de Waal, Good Natured, p.25

⁴⁹ Natural Selection and Social Theory, pp.16-7. Elsewhere, he noted "that just pursuing this scratch-my-back argument would generate rather quickly a reason for justice and fairness was very gratifying, because it was on the other side of the fence of that awful tradition in biology of the right of the strongest." (quoted by Frans de Waal, Good Natured, p.25)

⁵⁰ Mutual Aid, pp.68-9

Frans B. M. de Waal, 'Joint Ventures Require Joint Payoffs: Fairness Among Primates', pp.349-64, *Social Research*, Vol. 73, No. 2, p.363

⁵² The Selfish Gene (Oxford University Press, 2006), p.viii, p.233, p.183.

^{52 (}cont) He suggests an alternative title could have been "The Co-operative Gene" (p.ix). This raises the question whether it would have been so successful and whether, like *Mutual Aid*, it would have been referenced as the work of a (to quote Matt Ridley's description of Kropotkin) "dreamy" scholar at odds with grim reality.

Trivers praised this research, noting it "isolated a simple rule of action, tit-fortat, which was evolutionarily stable" (Natural Selection and Social Theory, p.18)

54 The Selfish Gene, p.202

the second one but instead of points the strategies received 'offspring' (i.e., the prevalence of each type of strategy in each round was determined by that strategy's success in the previous round). Yet again, 'nice' strategies quickly flourished and came to dominate (and while a few selfish strategies initially flourished, they all eventually became extinct). This last generational tournament was run six times, with 'Tit for Tat' winning five of them. Five other co-operative strategies ended up nearly as successful and one of them won the sixth run. In summary, 'Tit for Tat' (along with other co-operative strategies) was superior to competitive strategies.

Dawkins suggests that 'Tit for Tat' ensures animals "prosper from mutual co-operation"⁵⁵ and does so by rewarding co-operative behaviour and punishing those who do not reciprocate. This echoes Kropotkin, who when discussing ants argued that uncooperative individuals would be penalised, that "selfish" ants would be "treated as an enemy, or worse." For bees "anti-social instincts continue to exist" but "natural selection continually must eliminate them" as those with "predatory inclinations" would be "eliminated in favour of those who understand the advantages of sociable life and mutual support." He generalised this to other species, such as birds and mammals. ⁵⁶ So, to use Dawkins' terminology, Kropotkin does not assume mutual aid implies that individuals are "indiscriminate altruists" (or "suckers") but rather are "grudgers", individuals who co-operate but "if any individual cheats them, they remember the incident and bear a grudge."⁵⁷

This means that *Mutual Aid* is not in contradiction with modern, gene based evolutionary theory and, in fact, prefigures many of its arguments and conclusions. Sadly, Dawkins does not discuss or mention Kropotkin's work anywhere in the book.⁵⁸ He

does, however, mention Kropotkin in passing in his *Unweaving* the Rainbow, in a chapter entitled 'The Selfish Cooperator', but there seems no evidence that he is familiar with Kropotkin's work beyond simply its title and stereotypes. Dawkins places Kropotkin ("the Russian anarchist and author of *Mutual Aid*") on one end of a "continuum" along with the "gullible" Margaret Mead and "a spate of authors reacting indignantly to the idea that nature is genetically selfish". At the other end are those like Darwin, Huxley and "today's advocates of 'the selfish gene'" who "emphasise that nature really is red in tooth and claw." But this, he suggests, is "a false opposition" and then goes on to argue along lines it is doubtful that Kropotkin would have objected to:

"The position I have always adopted is that much of animal nature is indeed altruistic, co-operative and even attended by benevolent subjective emotions, but that this follows from, rather than contradicts, selfishness at the genetic level. Animals are sometimes nice and sometimes nasty, since either can suit the self-interest of genes at different times. That is precisely the reason for speaking of 'the selfish gene' rather than, say, 'the selfish chimpanzee."

"It is now widely understood," Dawkins continues, "that altruism at the level of the individual organism can be a means by which the underlying genes maximise their self-interest." 59

⁵⁵ The Selfish Gene, p.219. Moreover, this applies to competition between groups as well, with Dawkins noting that internally competitive groups "will be more likely subsequently to go extinct. There can therefore be a kind of higher-level... selection in favour of reciprocal altruism." (p.321)

⁵⁶ Mutual Aid, p.38, p.41. He explicitly pointed to birds (p.69) and marmots. For the latter, he noted that "the same remark... made when speaking of the bees" could be made, and so while they "have maintained their fighting instincts... in their big associations... the unsociable instincts have no opportunity to develop, and the general result is peace and harmony." (p.59)

⁵⁷ The Selfish Gene, pp.184-5

⁵⁸ This confirms Brian Morris: "It is quite ironic how many recent sociobiologists can write texts on the evolution of cooperation... without even mentioning

^{58 (}cont) Kropotkin." (Kropotkin: The Politics of Community (Humanity Books, 2004), p.148). Dawkins subsequently managed to write a book about Atheism, The God Delusion, without mentioning Bakunin's God and the State or Emma Goldman.

⁵⁹ Unweaving the Rainbow: Science, Delusion and the Appetite for Wonder (Allan Lane, 1998), pp.211-2. Unfortunately, Dawkins, unlike Kropotkin and others, often fails to integrate this aspect of evolutionary theory into his writings, sometimes proclaiming that he seeks to construct a society which is as un-Darwinian as possible. In 2005, for example, he stated that "we should not derive our values from Darwinism, unless it is with a negative sign." (The Selfish Gene, p.xiv) Frans de Waal, rightly, criticises Dawkins for this, quoting him thusly: "What I am saying, along with many other people, among them T. H. Huxley, is that in our political and social life we are entitled to throw out Darwinism, to say we don't want to live in a Darwinian world." However, cooperation and altruism are as "Darwinian" as competition and selfishness, as Dawkins himself has shown. That suggests, de Waal argues, "that calls to reject Darwinism in our daily lives so as to build a moral society are based on a profound misreading of Darwin. Since Darwin saw morality as an evolutionary product, he envisioned an eminently more liveable world than the one proposed by Huxley and his followers, who believe in a culturally imposed, artificial morality that receives no helping hand from human nature. Huxley's world is by

That was precisely Kropotkin's argument, although he based it on individual animals rather than genes. So biologists have acknowledged that animals, including humans, evolved cooperative behaviour within groups to increase their chances of survival (and so increase their chances to pass on their genes to subsequent generations). In fact, the Hobbesian assumptions of Huxley have been proven as bankrupt as Kropotkin argued, as de Waal summarises: "For the biologist, this imaginary history is as wide of the mark as can be. We descend from a long line of group-living primates, meaning that we are naturally equipped with a strong desire to fit in and find partners to live and work with."

59 (cont) far the colder, more terrifying place." Thus Trivers and Kropotkin "pondered the origins of a cooperative, and ultimately moral, society without invoking false pretence, Freudian denial schemes, or cultural indoctrination. In this they proved the true followers of Darwin." (Primates and Philosophers: How Morality Evolved (Princeton University Press, 2006), p.9, pp.16-7, p.12) The God Delusion (Bantum Press, 2006) has a useful discussion of 'Does our moral sense have a Darwinian Origin? (pp.215-22) in which Dawkins presents a summary of how our ethics could be produced by natural selection rather than being imposed by an external being. Yet echoes of Huxley's position can be seen in Dawkins comments that while our ethics do have an evolutionary base, our wonderful "urge to kindness" is the result of a "misfiring" of our evolved need for reciprocal altruism, "the misfired consequence of ancestral village life." That he does not mean anything negative by the term "misfiring" is beside the point as it, at root, suggests that there is no evolutionary value in kindness and cooperation once a society reaches a certain level of complexity, that 'selfish' behaviour rather than co-operation is in our best interests. Again, this seems more an assumption driven by the surrounding capitalist environment than a serious evaluation of the evidence. Anarchists reply that there is no misfiring at all but rather co-operation is in our best interests (both as individuals and as a society) regardless of the size of society we live in.

Ultimately, our ethical standards, our ability to be horrified by the worse aspects of competition in the natural and human worlds, have their roots in that very Darwinian struggle for existence and, as Kropotkin stressed, the co-operation (mutual aid) needed to survive and flourish. To place a "negative sign" in front of "Darwinism" means, ironically, to place it in front of our (evolved) sense of fairness, to imply that ethics do not have an evolutionary basis and that co-operation is a paradox as individualistic competition is 'natural'. Such a position, needless to say, involves projecting the cultural assumptions of a capitalist society onto nature.

60 Not that Kropotkin could have known about genes as this knowledge came later. Interestingly, though, he wrote to Marie Goldsmith in 1911 that "anatomy, histology and changes occurring in the cells – always in the sense of adaptation: this is most interesting and in it lies the key to evolution." quoted by Todes, p138 61 de Waal, Joint Ventures Require Joint Payoffs: Fairness Among Primates p.350

So, regardless of the assertions of Hobbes and Huxley, there was never a point at which we decided to become social. We are descended from highly social ancestors and, as with most other creatures, our ancestors lived in groups. This was not an option but an essential survival strategy and from this mutual aid ethics arose. Simply put, humans are not born as loners – our bodies and minds only flourish in social life and the absence of others results in depression and deteriorating health. Thus notions of social contracts (i.e., "the underlying assumption of a rational decision by inherently asocial creatures") are "untenable in light of what we know about the evolution of our species." In fact, "[o]ur social makeup is so obvious that there would be no need to belabour this point were it not for its conspicuous absence from origin stories within the disciplines of law, economics, and political science."

Unsurprisingly, work in anthropology has also confirmed Kropotkin's refutation of Huxley's assertions, although his classification of early human societies ("savages" and "barbarians"), like most writings of that period, would make modern anthropologists cringe. So while the terminology has dated, the evidence and conclusions have not. Indeed, as anarchist anthropologist Brian Morris summarises, "Kropotkin's essential observations have been more than confirmed by recent anthropological research." Modern anthropology has confirmed Kropotkin's basic insight that life in society is the normal situation for humanity, that Huxley's assertion of individualistic competition had no basis in fact.

Thus, notes Christopher Boehm, "foragers often co-operate with non-kin spontaneously and with a spirit of generosity" and "people in bands tend to co-operate intensively, with apparent good will and with great benefit to group members in general." Moreover, such groups of egalitarian foragers "uniformly eschew

⁶² de Waal, Primates and Philosophers, p.4, p.5

⁶³ Morris, Kropotkin, p.177

Radcliffe-Brown, father of modern social anthropology and one of the founders of British social anthropology, earning the nickname "Anarchy Brown" for his close association with Kropotkin, whose argument on selection for skills that allowed humans to thrive by working together laid the groundwork for Radcliffe-Brown's later emphasis on social anthropology. (Richard J. Perry, 'Radcliffe-Brown and Kropotkin: The Heritage of Anarchism in British Social Anthropology', *Kroeber Anthropological Society Papers*, vol. 51/52 (1974), pp.61-65)

strong, authoritative leadership. Yet they do not give up on making decisions at the band level. Consensus-seeking is a strong feature of all egalitarian societies." This suggests that egalitarian co-operation in hunter-gatherers can lead to the "robust selection of genes for altruism."65 This is, surely, unsurprising as it is doubtful humanity would have survived if it had not lived in societies and practised mutual aid. Thus the words of another anarchist and anthropologist, David Graeber: "The basic principles of anarchism - self-organisation, voluntary association, mutual aid – are as old as humanity."66

Confirming Kropotkin, both anthropologists and archaeologists have found widespread co-operation within tribal societies so repeatedly confirming that there is nothing inherent in 'human nature' which precludes egalitarian, co-operative, societies. As Graeber points out, "what we see in the more recent ethnographic records is endless variety. There were huntergatherer societies with nobles and slaves, there are agrarian societies that are fiercely egalitarian. Even in... Amazonia, one finds some groups who can justly be described as anarchists, like the Piaroa, living alongside others (say, the warlike Sherentre) who are clearly anything but."67 Harold Barclay, another libertarian anthropologist, has documented the more anarchistic tribes in his People without Government.68

Melanie Killen and Marina Cords, in an aptly titled piece 'Prince Kropotkin's Ghost,' suggest that recent research in developmental psychology and primatology indicates "that human aggressive inclinations are balanced by equally strong tendencies to co-operate with one another - an argument Prince Piotr Kropotkin made a century ago in Mutual Aid." They note that "counter to prevailing ideas" that aggression is the norm, "there

is now a large body of work on the psychological development of children that suggests otherwise. This research demonstrates that children do not automatically resort to aggression when conflicts arise between them. Instead, they often use an array of strategies to prevent, mitigate and resolve discord and to minimise its effects on their social relations." Children, for example, "sometimes promoted their own interests, they also worked very hard to make things work out for the group." These "results have come as no surprise to primatologists, who already have abandoned their simplistic preconceptions about the sorts of aggressive 'instincts'" "Observations from the natural world," they summarise "suggest that there is, in fact, a biological basis for our social predispositions."69

So humanity, as Morris stresses, is "no exception to the principles of sociability... All humans, throughout history and without exception, thus live in societies." This means that we have "always existed in society, in the sense of a community of people bound together for common purposes - as anthropologists have demonstrated." Those who stress "that humans were social beings - co-operative, compassionate, with an innate sense of fairness, and were actively engaged in mutual aid and reciprocal altruism" and consider this as being "recently discovered by neo-Darwinian scholars and evolutionary psychologists" in fact "completely forget to mention that Kropotkin had advanced these same ideas a hundred years ago."70

In terms of popular introductions to the benefits of cooperation for humans, Alfie Kohn's No Contest⁷¹ presents a well documented critique of the notion that competition is inherently the best option. He notes how Kropotkin "is still recognised as being on the right track" and draws on substantial evidence to support his conclusion "that competition is an inherently undesirable arrangement."72 He shows how competition has negative effects on those subject to it. James C. Scott, in Seeing

72 Kohn, p.22, p.9

⁶⁵ Hierarchy in the Forest (Harvard University Press, 1999), p.203, p.208, p.254. As an interesting aside, Boehm speculates that an "egalitarian society" is one "taken over...by rebellious subordinates... It came into being because the rank and file began to act on their anti-authoritarian tendencies" and so the "collective power of resentful subordinates is at the base of human egalitarian society" (p.238). It would be interesting to see what Bakunin would have made of this, given that he had argued in God and the State that it was mankind's ability to rebel that made us human.

⁶⁶ Possibilities: Essays on Hierarchy, Rebellion and Desire (AK Press, 2007)p.303 67 Fragments of an Anarchist Anthropology (Prickly Paradigm Press, 2004), pp.53-4

⁶⁸ People Without Government: An Anthropology of Anarchy, rev. ed., (Left Bank Books, 1990)

⁶⁹ American Scientist, vol. 90, no. 3, p.208. Kropotkin would not have been surprised to discover that "when we observed the very same children playing with a teacher present, the amount of give and take decreased dramatically. Instead of negotiating their differences, the children appealed to the adult to intervene, threatened that the adult would intervene or just let the issue drop." 70 Morris, p.174, pp.148-9

⁷¹ No Contest: The Case Against Competition (Houghton Mifflin Company, 1992)

Like a State⁷³, discusses why centralised, top-down, schemes to improve the human condition in the 20th century failed so badly. Acknowledging his debt to anarchist thinkers like Kropotkin ("who consistently emphasise the role of mutuality as opposed to imperative, hierarchical co-ordination in the creation of social order"⁷⁴) he stresses the importance of local knowledge, of participation and decentralisation in social activity and institutions, all factors which are expressed in the kinds of popular organisations Kropotkin documented. He provides an update on (to quote *Mutual Aid*) "the crushing powers of the centralised State" verses "the need of mutual aid and support" found in the village, the union and other popular organisations.⁷⁵

Useful insights on the advantages of mutual aid in securing individual survival can be found in recent research in the effects of inequalities of wealth and power, effects which are widereaching. For example, health is affected significantly by inequality. Poor people are more likely to be sick and die at an earlier age, compared to rich people. Indeed, the sustained economic hardship associated with a low place in the social hierarchy leads to poorer physical, psychological and cognitive functioning. Moreover, the degree of inequality is important, the gap between the rich and the poor - for the larger the gap, the sicker the society. Inequality, in short, is bad for our health. According to an editorial in the British Medical Journal "what matters in determining mortality and health in a society is less the overall wealth of that society and more how evenly wealth is distributed. The more equally wealth is distributed the better the health of that society."76 As the gap grows between rich and poor, the health of a people deteriorates and the social fabric unravels. The psychological hardship of being low down on the social ladder has detrimental effects on people, beyond whatever effects are produced by the substandard housing, nutrition, recreational opportunities, air quality, and medical care enjoyed by the poor. 77

This is not all. As well as inequalities in wealth, inequalities in freedom also play a large role in overall human well-being.

According to Michael Marmot's *The Status Syndrome*⁷⁸, as you move up any kind of hierarchy your health status improves. Autonomy and position in a hierarchy are related (i.e. the higher you are in a hierarchy, the more autonomy you have). Thus the implication of this empirical work is that autonomy is a source of good health, that the more control you have over your work environment and your life in general, the less likely you are to suffer the classic stress-related illnesses, such as heart disease. Needless to say, the potential to control your own environment is related to your class and position in the social hierarchy.

So the inequality of autonomy and social participation produced by hierarchy is itself a cause of poor health. There would be positive feedback on the total amount of health - and thus of social welfare - if social inequality were reduced, not only in terms of wealth but also, crucially, in power. This is strong evidence in support of anarchist visions of egalitarianism. Some social structures give more people more autonomy than others and acting to promote social justice along these lines is a key step toward improving our health. This means that promoting libertarian, i.e. self-managed, social organisations would increase not only liberty but also people's well-being, both physical and mental. Precisely the kind of social organisations Kropotkin documented in Mutual Aid. All this is to be expected as hierarchy (by its very nature) impacts negatively on those subject to it. Kropotkin would, of course, have not been surprised by this research.79

This suggests that in terms of evolutionary advantage, practising mutual aid within self-managed organisations allows individuals to flourish and so confirms Kropotkin's basic argument that association rather than conflict gives an evolutionary edge. Nor would Kropotkin have been surprised that those at the top of the social hierarchy (i.e. those who benefit from it) would seek to dismiss and destroy such popular institutions. He was well aware

⁷³ Seeing Like a State: How Certain Schemes To Improve The Human Condition Have Failed (Yale University Press, 1998)

⁷⁴ Scott, p.7

⁷⁵ Mutual Aid, p.227

⁷⁶ British Medical Journal, vol. 312, April 20, 1996, p.985

⁷⁷ George Davey Smith, 'Income Inequality and Mortality: why are they related?', British Medical Journal, Vol. 312, April 20, 1996, pp. 987-988

⁷⁸ The Status Syndrome: How Social Standing Affects Our Health and Longevity (Bloomsbury, 2004). The Spirit Level: Why More Equal Societies Almost Always Do Better by Richard Wilkinson and Kate Pickett (Allen Lane, 2009) presents similar evidence, noting that on almost every index of quality of life or wellness there is a strong correlation between a country's level of economic inequality and its social outcomes. Significantly, it is not just the poor that are adversely affected by inequality, but society as a whole.

⁷⁹ Although he would have been critical of the conclusion we need to reform the system which produces them rather than overthrow it.

of classes and hierarchies – and the need for those subject to them to abolish them!

Myths About Mutual Aid

Anarchists have long been subjected to somewhat bizarre interpretations and assertions about our ideas. Kropotkin's classic is no exception. It often seems to be the case that those who discuss *Mutual Aid* get no further than the title! Richard Dawkins' words on his own misunderstood classic seem appropriate: "I can see how the title *The Selfish Gene* could be misunderstood, especially by those philosophers who prefer to read a book by title only, omitting the rather extensive footnote which is the book itself." With Kropotkin's masterpiece, there is even less excuse for it, for if its critics had bothered to consult the sub-title (*A Factor of Evolution*) then the most obviously wrong claims would have been averted.

Given the multitude of inaccurate interpretations of Kropotkin's work, it is sadly necessary to discuss them and indicate their inaccuracies.

Mutual Aid and Competition

One of the strangest claims about Kropotkin's work is that it ignores competition within species, between individuals. This flows into the similar claim that *Mutual Aid* showed that Kropotkin was blind to the 'nasty' side of human nature. Yet this hardly makes much sense, given that he became an anarchist, forsaking a promising scientific career, precisely because he saw the horrors and evils of class society: "Science is an excellent thing. I knew its joys and valued them – perhaps more than many of my colleagues did... But what right had I to these highest joys, when all around me was nothing but misery and struggle."⁸¹ If he were 'blind' to the 'bad' side of 'human nature', he would have remained a member of the Russian aristocracy and pursued his scientific work.

Moreover, even a glance at *Mutual Aid* shows that he did not deny the role of struggle, in fact the opposite as he stressed that the book's examples concentrated on mutual aid simply because mutual struggle (between individuals of the same species) had "already been analysed, described, and glorified from time

immemorial" and, as such, he felt no need to illustrate it. He did note that it "was necessary to show, first of all, the immense part which this factor [mutual aid] plays in the evolution of both the animal world and human societies. Only after this has been fully recognised will it be possible to proceed to a comparison between the two factors." As he repeatedly stressed, it was "a book on the law of Mutual Aid, viewed at as one of the chief factors of evolution – not of all factors of evolution and their respective values."82

Kropotkin, summarised Stephen Jay Gould, "did not deny the competitive form of struggle, but he argued that the co-operative style had been under emphasised and must balance or even predominate over competition in considering nature as a whole."83 Todes echoes this, arguing that for Kropotkin, intraspecific relations "contained elements of both competition and co-operation, the relative importance of which varied according to circumstances... Although the relative importance of competition and co-operation fluctuated by season and circumstance, natural selection generated a historical tendency toward co-operation... Species that co-operated had a better chance of survival in the struggle for life than did less sociable ones." This applied to humans too, as history "testified to a constant struggle between tendencies toward competition and cooperation".84 Thus Kropotkin was "interested in showing that cooperation as well as competitiveness can help organisms to survive and reproduce, and thus be favoured in evolution."85

This can be seen when Kropotkin stressed that (to use the book's subtitle) mutual aid was "a factor of evolution". As he put it, mutual aid "represent[s] one of the factors of evolution", another being "the self-assertion of the individual, not only to attain personal or caste superiority, economical, political, and spiritual, but also in its much more important although less evident function of breaking through the bonds, always prone to become crystallised, which the tribe, the village community, the city, and the State impose upon the individual." Thus Kropotkin recognised that there is social struggle within society as well as "the self-assertion of the individual taken as a progressive

⁸⁰ The Selfish Gene, p.viii

⁸¹ Memoirs Of A Revolutionist, pp.223-4

⁸² Mutual Aid, pp.230-1, p.26

^{83 &#}x27;Kropotkin Was No Crackpot', pp.335-6

⁸⁴ Todes, p.134, p.135

⁸⁵ Douglas H. Boucher, The Idea Of Mutualism, Past And Future p.17

element" (i.e., struggle against forms of social association which now hinder individual freedom and development).86 In other words, Kropotkin's research traced the evolution of mutual aid through history, indicating when (and how) it was overwhelmed by mutual struggle (another key factor of evolution), and showed how it provided the foundation for continual efforts at cooperative self-emancipation from various forms of domination (the state, feudalism, institutional religion and capitalism).

Mutual Aid also presents some insights on the question of social progress which indicate that he did not think that only "cooperation rather than conflict lay at the root of the historical process," as Paul Avrich claimed.87 The reality is more complex than that. For example, Kropotkin noted that "[w]hen Mutual Aid institutions... began... to lose their primitive character, to be invaded by parasitic growths, and thus to become hindrances to progress, the revolt of individuals against these institutions took always two different aspects. Part of those who rose up strove to purify the old institutions, or to work out a higher form of commonwealth." But at the same time, others "endeavoured to break down the protective institutions of mutual support, with no other intention but to increase their own wealth and their own powers." In this conflict "lies the real tragedy of history."88

At best, it could be argued that, for Kropotkin, the mutual aid tendency produced what was best in the historical progression of humanity. As he put it, "whenever mankind had to work out a new social organisation, adapted to a new phasis of development, its constructive genius always drew the elements and the inspiration for the new departure from that same ever-living tendency." Insofar as these new economic and social institutions "were a creation of the masses" they were based on mutual aid, as were "new ethical systems" and so "the ethical progress of our race... appears as a gradual extension of the mutual aid principles."89 However, this is not identical with arguing that cooperation was at the heart of social progress. Kropotkin was well aware of the role of conflict between classes, between rulers and ruled, in history and modern capitalist society and this is reflected in Mutual Aid.

So, to state the obvious, there is no need to ponder why we have the state and capitalism if we are 'naturally' co-operative. Both have arisen precisely because we are also 'naturally' competitive and, as a result, people exploit and oppress others as long as the others let them. Anarchists have no illusions about 'human nature' - if we did, we would not be anarchists - and argue that we cannot appeal to the better nature of our masters to be less oppressive; we need to organise to limit their powers until such time as we can get rid of them!

Given that Kropotkin did not deny the role of competition, it does seem ironic that the supporters of competition often make (obviously ideological driven) exceptions to their peons to it. For example, while 'competition' is generally praised within the economy it is almost always limited to competition within classes, not between them. Thus the competition between companies or between workers is lauded but struggle between classes, between workers and bosses, is condemned in the strongest terms. Equally, the most extreme 'market advocates' are often those most opposed to anti-monopoly laws and actions while, at the same time, the most opposed to unions. Thatcher and Reagan, for example, were unconcerned about corporate oligopoly and 'collusion' (co-operation) between companies while, at the same time, using state power to regulate, hinder, crush and generally undermine unions.

The result of this state imposed neo-liberal 'co-operation' between classes was predictable - rising inequality as workers were unable to keep the wealth they produced in their own hands. This is unsurprising, given that the only form of 'cooperation' between boss and wage slave, like master and slave, is that of obedience of the latter to the former. By strange coincidence, the 'market advocates' who argue against class competition do so because, they claim, it is against the long term interests of the subject class - which is exactly what every set of

rulers say.

All of which explains Kropotkin's statement that "the origin of the anarchist conception of society" lies in "the criticism...of the hierarchical organisations and the authoritarian conceptions of society".90 For anarchists, genuine mutual aid is based on the recognition of equality between the participants - which is precisely why Kropotkin pointed to unions and co-operatives as

⁸⁶ Mutual Aid, p.230

^{87 &#}x27;Kropotkin's Ethical Anarchism', Anarchist Portraits (Princeton University Press, 2005), p.60

⁸⁸ Mutual Aid, pp.26-7

⁸⁹ Mutual Aid, p.181

examples of mutual aid, as means for working class people to improve their conditions within the hostile environment of an oppressive and exploitative social system, capitalism.

Mutual Aid And Class Struggle

A related myth is the notion that *Mutual Aid* denies the class struggle. Even a normally well informed libertarian socialist like Maurice Brinton fell into this stereotype of Kropotkin's argument. Too influenced by his Leninist background, he asserted that the Russian anarchist's "aim is to convince and reason with (rather than to overthrow) those who oppress the masses" and that he stood for "a co-operation that clearly transcended the barriers of class." ⁹¹

Yet a study of Kropotkin's anarchist writings (such as *Words* of a Rebel, Conquest of Bread and, more recently, Act for Yourselves) would soon show they are clearly revolutionary and based on class struggle and only someone who had never read them could claim otherwise. To quote Kropotkin from the 1880s: "What solidarity can exist between the capitalist and the worker he exploits? Between the head of an army and the soldier? Between the governing and the governed?" He makes the same point after Mutual Aid in his essay 'Anarchist Morality':

"Equality in mutual relations with the solidarity arising from it, this is the most powerful weapon of the animal world in the struggle for existence. And equality is equity.

"By proclaiming ourselves anarchists, we proclaim beforehand that we disavow any way of treating others in which we should not like them to treat us; that we will no longer tolerate the inequality that has allowed some among us to use their strength, their cunning or their ability after a fashion in which it would annoy us to have such qualities used against ourselves... We declare war against their way of acting, against their way of thinking. The governed, the deceived, the exploited, the prostitute, wound above all else our sense of equality. It is in the name of equality that we are determined to have no more prostituted, exploited, deceived and governed men and women."93

Kropotkin was well aware that co-operation could not be applied between classes. This awareness is reflected in *Mutual Aid* as well, which is hardly silent on the importance of social struggle highlighting as it did trade unions and strikes (both of which developed in the face of extensive state repression). These are hardly the perspectives of someone who ignored class conflict and its role in society! Indeed, a major theme of the book is the evolution of mutual aid institutions in response to social change and class conflict.

A similar assertion to Brinton's was made more recently by Pat Stack, a leading member of the British Socialist Workers Party, in a staggeringly inaccurate rant against anarchism. 94 His summary of Kropotkin's ideas left a lot to be desired:

"And the anarchist Peter Kropotkin, far from seeing class conflict as the dynamic for social change as Marx did, saw cooperation being at the root of the social process. He believed the co-operation of what he termed 'mutual aid' was the natural order, which was disrupted by centralised states. Indeed in everything from public walkways and libraries through to the Red Cross, Kropotkin felt he was witnessing confirmation that society was moving towards his mutual aid, prevented only from completing the journey by the state. It follows that if class conflict is not the motor of change, the working class is not the agent and collective struggle not the means."

There are three issues with Stack's summary. Firstly, Kropotkin did not, in fact, reject class conflict as the "dynamic of social change" nor reject the working class as its "agent". Secondly, all of Stack's examples of "mutual aid" do not, in fact, appear in *Mutual Aid*.95 They do appear in other works by

^{91 &#}x27;The Russian Anarchists – And Kropotkin', pp.85-9, For Workers' Power (AK Press, 2004), p.86, p.88

⁹² Words of a Rebel (Black Rose, 1992), p.30. Brinton's comments were made in the context of a review of Paul Avrich's book *The Russian Anarchists* (AK Press, (2005). This contained the incorrect assertion that "the partisans of syndicalism went beyond Kropotkin by reconciling the principle of mutual assistance with the Marxian doctrine of class struggle. For the syndicalists, mutual aid did not embrace humanity as a whole, but existed only with the ranks of a single class, the proletariat, enhancing its solidarity in the battle with the manufacturers" (p. 80) Kropotkin clearly embraced the "doctrine of class struggle" as had Bakunin before him (and so there is nothing specifically 'Marxian' about it) and, as shown, Kropotkin and the syndicalists held similar viewpoints on this and other issues. Avrich, ironically, went on to refute his own assertion by quoting, on the very next page, Kropotkin on how the unions were "natural organs for the direct struggle with capitalism and for the composition of the future order" and that the general strike was "a powerful weapon of struggle"! (pp.81-2)

⁹³ Anarchism, p.99

^{94 &#}x27;Anarchy in the UK?', Socialist Review, no.246

Kropotkin but not as examples of mutual aid. Now, if Kropotkin had considered them as examples of mutual aid then he would have listed them in that work. Thirdly, *Mutual Aid* highlights such aspects of working class "collective struggle" as strikes and unions.

All in all, it is Stack's total and utter lack of understanding of Kropotkin's ideas which immediately stands out from his comments. Which suggests that Stack has either not read Kropotkin's works or that he has and consciously decided to misrepresent his ideas. In fact, it is a combination of the two. Stack gathered his examples of "mutual aid" from an essay by Paul Avrich on Kropotkin. For example, Avrich lists many of the same examples Stack presents but not in his discussion of Kropotkin's ideas on mutual aid. Rather, he correctly lists them in his discussion of how Kropotkin saw examples of anarchist communism "manifesting itself 'in the thousands of developments of modern life." Significantly, while over-stressing the role of cooperation in Kropotkin's ideas, he also notes (unlike Stack) that the Russian did not "deny that the 'struggle for existence' played an important role in the evolution of species" and that he "did not shrink from the necessity of revolution" (and "did not expect the propertied classes to give up their privileges and possession without a fight"). This "was to be a social revolution, carried out by the masses themselves" achieved by means of "expropriation" of social wealth. 96 Not only had Stack not read Kropotkin's works, he misrepresented his secondary source.97

Kropotkin never claimed, as Stack asserts, that mutual aid "was the natural order". Rather, he repeatedly argued that "the war of each against all is not the law of nature. Mutual aid is as much a law of nature as mutual struggle" At no stage did he deny either factor (mutual aid and mutual struggle), unlike the bourgeois apologists he was refuting. Moreover, reading *Mutual*

Aid quickly shows that Kropotkin saw history marked by both cooperation and conflict as you would expect in a society divided by class and hierarchy. He recognised the importance of struggle or competition as a means of survival but also argued that cooperation within a species was the best means for it to survive in a hostile environment. This applied to life under capitalism. In the hostile environment of class society, the only way in which working class people could survive would be to practice mutual aid (in other words, solidarity). Little wonder, then, that Kropotkin listed strikes and unions as expressions of mutual aid in capitalist society.

So if Stack had bothered to read Kropotkin's classic he would have been aware that it listed both unions and strikes as expressions of mutual aid99 (a fact which would undermine Stack's silly assertion that anarchists reject collective working class struggle and organisation). For Kropotkin "Unionism" expressed the "worker's need of mutual support" and he was well aware of how the state repressed and "legislated against the workers' unions", that these were "the conditions under which the mutual-aid tendency had to make its way." This repression failed, as "the workers' unions were continually reconstituted" and spread, forming "vigorous federal organisations... to support the branches during strikes and prosecutions." In spite of the difficulties in organising unions and fighting strikes, he noted that "every year there are thousands of strikes... the most severe and protracted contests being, as a rule, the so-called 'sympathy strikes,' which are entered upon to support locked-out comrades or to maintain the rights of the unions." Anyone (like Kropotkin) who had "lived among strikers speak with admiration of the mutual aid and support which are constantly practised by them."100 This is hard to square with Stack's assertion that Kropotkin, like anarchists in general, thought that "class conflict is not the motor of change, the working class is not the agent and collective struggle not the means."

Moreover, if we take Stack's arguments at face value, then he clearly is arguing that solidarity is not an important factor in the

⁹⁵ Notably the essay 'Anarchist-Communism: Its Basis and Principles' where they are used as examples of communistic tendencies within capitalism, empirical evidence that can be used to not only show that communism can work but also that it is not a utopian social solution but an expression of tendencies within society. That is, he was using examples from existing society to show that communism is not impossible.

^{96 &#}x27;Kropotkin's Ethical Anarchism', p.62, p.58, p.66

⁹⁷ Stack's nonsense is sadly typical of the quality of almost all Marxist critiques of anarchism.

⁹⁸ Mutual Aid, p.50

⁹⁹ This was not accidental. In 1895, when researching the articles which would become the chapter 'Mutual Aid Amongst Ourselves' of *Mutual Aid*, he wrote to fellow anarchist Max Nettlau of his desire "to show the incredible...amount of mutual aid support among workers, as manifested during strikes." (quoted by Ruth Kinna, 'Kropotkin's theory of Mutual Aid in Historical Context', p.279). 100 *Mutual Aid*, pp.209-12

class struggle and that mutual aid and co-operation cannot change the world! Similarly, Stack's argument that Kropotkin argued that co-operation was the source of progress is in contradiction with his other claims that anarchism "despises the collectivity" and anarchists "dismiss the importance of the collective nature of change." How can you have co-operation without forming a collective? And, equally, surely support for co-operation clearly implies the recognition of the "collective nature of change"?

Finally, *Mutual Aid* is primarily a work of popular science and not a work on revolutionary anarchist theory like, say, The *Conquest Of Bread* or *Words Of A Rebel*. As such, it does not present a full example of Kropotkin's revolutionary ideas and how mutual aid fits into them. Unsurprisingly, Kropotkin was a firm supporter of unions and strikes. In his article on Anarchism for the *Encyclopaedia Britannica*, he stressed that anarchists "have endeavoured to promote their ideas directly amongst the labour organisations and to induce those unions to a direct struggle against capital, without placing their faith in parliamentary legislation." ¹⁰¹

Mutual Aid And Sociobiology

One scientist states that Kropotkin was the "most influential mutual aid theorist, and one of the most important evolutionary theorists and sociobiologists of his time." For Noam Chomsky, sociobiology "is reasonable enough as a research program. It has substantial results for simpler organisms, but little to say about humans, to my knowledge, beyond speculations of various kinds, the earliest, to my knowledge, in Kropotkin's work on mutual aid as a factor in evolution." ¹⁰³

However, Kropotkin's relation to sociobiology is not straight forward. He is often attacked for writing *Mutual Aid* in an attempt to use animal behaviour to show that we are naturally altruistic, attempting to employ science to make a political point. Needless to say, those who use animal behaviour to justify the notion we

101 Anarchism, p.287

are naturally competitive or hierarchical suffer no such attacks. As primatologist Frans de Waal recounts, euphemisms for friendly, co-operative or altruistic behaviour are often utilised as using those terms is considered "overly anthropomorphic. Whereas terms related to aggression, violence, and competition never posed the slightest problem." He notes that he was expected to "switch to dehumanised language as soon as the affectionate aftermath of a fight was the issue" rather than the fight itself.¹⁰⁴ This is to be expected, as the notion we are 'competitive' and 'hierarchical' is just 'common-sense' as we live in such a society.

As noted above, using "natural" or "natural law" to justify inequalities has a long history, particularly in the social sciences. This has been, to some degree, the argument against sociobiology by many on the left. 105 These attacks are understandable given that, when sociobiology first appeared in the 1970s, numerous articles were published in the media using it to justify capitalism and other social hierarchies. For example, Business Week published an article entitled, 'A Genetic Defense of the Free Market' (April 10, 1978) which claimed that "Bioeconomics says that government programs that force individuals to be less competitive and selfish than they are genetically programmed to be are preordained to fail." Newsweek and Time both ran articles on sociobiology which asserted the inevitability of patriarchy. Since then, dubious genetic defences of racism, sexism, capitalism and such like have surfaced with depressing regularity. It does not help that many supporters of, and commentators on, sociobiology make the fatal error of confusing 'selfish' genes with 'selfish' individuals and draw inappropriate conclusions from such inaccurate assumptions. 106

¹⁰² Michael Glassman, 'Mutual Aid Theory and Human Development: Sociability as Primary', pp.391-412, *Journal for the Theory of Social Behaviour*, vol. 30, no. 4, p.392

^{103 &#}x27;On Linguistics and Politics: Noam Chomsky interviewed by Günther Grewendorf', pp.293-303, *Protosociology*, Vol. 6, 1994

¹⁰⁴ Good Natured, p.18

¹⁰⁵ See, for example, Murray Bookchin's critique 'Sociobiology or Social Ecology' in Which Way for the Ecology Movement? (AK Press, 1994) or 'Sociobiology: An alternative view' by Brian Morris, The Raven, Vol. 3, No. 1.

proclaiming in *The Selfish Gene* that "gene selfishness will usually give rise to selfishness in individual behaviour" (although "there are special circumstances in which a gene can achieve its own selfish goals best by fostering a limited form of altruism at the level of individual animal"), that individual animals are "selfish machines" and "[I]et us try to teach generosity and altruism, because we are born selfish." In the 30th anniversary edition Dawkins admitted he did "with hindsight notice lapses" in confusing the replicators (genes) with their vehicles (individuals). Thus he acknowledges that to write "we are born selfish" was

Kropotkin's work has not been received in the same way, something Chomsky has discussed. He notes that Edward O. Wilson¹⁰⁷ is considered one of the founders of this school and his 1975 book *Sociobiology* "has interesting material on simpler organisms, and ends with a few pages of speculations on human sociobiology." Chomsky goes on to speculate on the reaction to Kropotkin's similar work:

"The field was actually founded 85 years earlier by the leading anarchist thinker Peter Kropotkin, also a natural scientist, in seminal work that led to his classic *Mutual Aid: a Factor of Evolution*, published in 1902. His studies criticised the conclusions on 'struggle for existence' drawn by the noted Darwinian T.H. Huxley, who never responded publicly, though in private he wrote that Kropotkin's prominently-published work was 'very interesting and important.' Kropotkin's Darwinian speculations about the possible role of co-operation in evolution, with their implications for anarchist social organisation, remain about as solid a contribution to human sociobiology as exists today. But somehow this work has not entered 'the canon'; one can hardly imagine why." 108

This use of sociobiology to justify capitalism and the marginalisation of Kropotkin's masterpiece come as no surprise, as elites have always seized upon theories that can be used to perpetuate and justify inequalities of power and wealth, particularly those who base themselves on 'natural' factors rather than institutional ones. ¹⁰⁹ This was the case in the 19th century with the publication of Darwin's *On the Origin of Species*, when it was utilised to defend laissez-faire capitalism against social

reform and spawned the repulsive 'Social Darwinism' which Mutual Aid was written to refute. So while the more conservative and religious elements of the ruling class were taken aback by the 'atheistic' implications of Darwin's idea, the more liberal elements of the capitalist class clearly saw its utility to their social position – just as they had with Malthus's essay on population – regardless of the facts.

Which raises the question, does a sociobological argument become more acceptable because it reaches libertarian ('leftwing') conclusions? Usually the people who are, rightly, critical of sociobiology as little more than apologetics for social hierarchies and capitalism become more receptive when it is suggested that co-operation rather than competition is programmed into us by 'nature'. Yet, Kropotkin does not draw such stark conclusions himself. He does not deny the role and importance of competition within and between groups, suggesting that he was well aware that our 'nature' does not preclude it nor co-operation. As he was at pains to suggest, the environment has an impact on the evolutionary process and, as such, whether co-operation or competition predominates in a given society is dependent on many environmental and cultural factors.

In this Kropotkin's position is identical to Stephen Jay Gould, who argued that "the range of our potential behaviour is circumscribed by our biology" and if this is what sociobiology means "by genetic control, then we can scarcely disagree." However, this is not what is meant. Rather, it is a form of "biological determinism" that sociobiology argues for. Saying that there are specific genes for specific human traits says little for while "[v]iolence, sexism, and general nastiness are biological since they represent one subset of a possible range of behaviours" so are "peacefulness, equality, and kindness." And so "we may see their influence increase if we can create social structures that permit them to flourish." That this may be the case can be seen from the works of sociobiologists themselves, who "acknowledge diversity" in human cultures while "often dismiss[ing] the uncomfortable 'exceptions' as temporary and unimportant aberrations." This is surprising, for if you believe that "repeated, often genocidal warfare has shaped our genetic destiny, the existence of nonaggressive peoples is embarrassing."110 Ultimately, if some people are co-operative or

sentences and replace them with more suitable ones. (p.2, p.66, p.3, p.ix)
107 Wilson once asserted that anarchism was "biologically impossible." (On
Human Nature (Harvard University Press, 1978), p.208)
108 'Rollback, Part II', Z Magazine, February, 1995
109 As Gould notes, "biological determinism possesses such evident utility for
groups in power." (Mismeasure of Man, p.21) Dawkins has explicitly, and
repeatedly, denied that humans are subject to biological determinism. "We, alone
on earth, can rebel against the tyranny of the selfish replicators" he concluded
and, as an example, suggests we "do so in a small way every time we use
contraception. There is no reason why we should not rebel in a large way,
too." (The Selfish Gene, p.201, p.332) This has not stopped others using
sociobiology to argue that capitalistic and hierarchical forms of social
organisation, along with most if not all forms of human activity, are due to
genetic factors.

peaceful now, at other times competitive and aggressive, then neither aggression or competitiveness are encoded in our genes, merely the potential for them: "If innate only means possible, or even likely in certain environments, then everything we do is innate and the word has no meaning."¹¹¹

That Kropotkin would share this analysis and critique can be seen from his discussion of cultural differences in 'savage' cultures and so-called 'civilised' ones. He would have agreed with Gould that the "issue is not universal biology vs. human uniqueness, but biological potentiality vs. biological determinism." That suggests that "[b]asic human kindness may be as 'animal' as human nastiness" and that upbringing, class, culture and other influences "determine how we restrict our behaviours from the wide spectrum – extreme altruism to extreme selfishness – that our genes permit." As *Mutual Aid* put it: "Man is a result of both his inherited instincts and his education." For Kropotkin, human action was not genetically predetermined but rather influenced by nurture:

"While the fundamental features of human characters can only be mediated by a very slow evolution, the relative amount of individualist and mutual aid spirit are among the most changeable features of man. Both being equally products of an anterior development, their relative amounts are seen to change in individuals and even societies with a rapidity which would strike the sociologist if only he paid attention to the subject, and analysed the corresponding facts." 114

This was a theme Kropotkin continually returned to, namely the impact of the environment on organisms (animals and plants are "altered by the direct action of their changing surroundings"¹¹⁵). A hierarchical society will shape people in certain (negative) ways and produce a 'human nature' radically different from a libertarian one. "In a society based on exploitation and servitude," he stressed, "human nature itself is degraded" and "authority and servility walk ever hand in

hand."¹¹⁶Yet, if hierarchy degrades, freedom can raise. So "when we hear men saying that Anarchists imagine men much better than they really are, we merely wonder how intelligent people can repeat that nonsense. Do we not say continually that the only means of rendering men less rapacious and egotistic, less ambitious and less slavish at the same time, is to eliminate those conditions which favour the growth of egotism and rapacity, of slavishness and ambition?"¹¹⁷ Thus we have the potential to change ourselves while we change the world and by changing the world we cannot help but change ourselves.

Finally, it would be remiss not to mention a co-incidence between Kropotkin's critique of the limitations of mainstream 19th century Darwinism and Gould's critique of sociobiology. The former noted that the section in the Origins entitled 'Struggle For Life Most Severe Between Individuals And Varieties Of The Same Species' had "none of that wealth of proofs and illustrations which we are accustomed to find in whatever Darwin wrote. The struggle between individuals of the same species is not illustrated under that heading by even one single instance: it is taken as granted."118 Decades later, Gould lamented that "[a]fter twentysix chapters of careful documentation for the nonhuman animals, Wilson concludes [Sociobiology] with an extended speculation on the genetic basis of supposedly universal patterns in human behaviour."119 It is simply because such speculation fits so well with the assumptions of the dominant (capitalist) culture that it is treated as 'science' rather than what it is - speculation.

Sociobiologists are not immune to this, regardless of their

¹¹¹ Stephen Jay Gould, Mismeasure of Man, p.330

¹¹² Ever Since Darwin, p.252, p.266

¹¹³ Mutual Aid, p.217

¹¹⁴ Small Communal Experiments and Why They Fail (Jura Media, 1997), p.17. Unsurprisingly, Kropotkin held that capitalism, religion and government are "the great sources of moral depravity." (Anarchism, p.106)

¹¹⁵ Evolution and Environment, p.159. It should be noted that no modern biologist would be impressed by Kropotkin's neo-Lamarckian tendencies, but

Lamarckian concepts with Darwinian ones was hardly unusual. It should be remembered that, as Stephen Jay Gould noted, Lamarckism "remained a popular evolutionary theory well into" the twentieth century. Darwin "won the battle for evolution as a fact, but his theory for its mechanism – natural selection – did not win wide popularity until the traditions of natural selection and Mendelian genetics were fused during the 1930s." By then Lamarckism was "still a respectable, if fast fading, theory." Human cultural evolution, however, "is Lamarckian in character" unlike our biological history. (*The Panda's Thumb: More Reflections in Natural History* (Penguin Books, 1980), p.66, p.67, p.71) This can be seen from the wealth of social institutions and their evolution that Kropotkin documents in *Mutual Aid*.

¹¹⁶ Anarchism, p.104, p.81

¹¹⁷ Act for Yourselves, p.83

¹¹⁸ Mutual Aid, p.71

¹¹⁹ Ever Since Darwin, p.252

claims that they are scientists who are somehow objective or above politics. As anarchist anthropologist Brian Morris put it, "many anthropologists have been critical of Wilson's presentation of empirical data, which is selective and which tends to universalise what are essentially the values and attributes of a particular kind of society – one with a capitalist market economy. Wilson's depiction of hunter-gatherers as aggressive carnivores hardly matches the empirical evidence... Equally evident is Wilson's tendency to describe other cultures in terms that derive from his own culture... Even the genes they possess are described as 'capital'... As with Thomas Hobbes, Wilson seems to equate the state of human nature with the ideology of capitalism." 120

Rather than the likes of Kropotkin's and Gould's position on human nature being influenced by politics rather than science, it is just as, if not more, likely that sociobiologists are themselves heavily influenced, perhaps unconsciously, by their own prejudices, interests and the societal influences of the dominant culture as well as economic and political systems.

Mutual Aid and Group Selection

Michael Glassman argues that in "modern parlance Kropotkin's theory is one of group selection." Stephen Jay Gould suggested that Kropotkin "did commit a common conceptual error in failing to recognise that natural selection is an argument about advantages to individual organisms, however they may struggle... Kropotkin sometimes speaks of mutual aid as selected for the benefit of entire populations or species – a concept foreign to classic Darwinian logic (where organisms work, albeit unconsciously, for their own benefit in terms of genes passed to future generations)." 122

However, a close reading suggests that it is not true that Kropotkin emphasised evolution taking place at the level of groups or species. His arguments are not centred on "group selection," 123 which argues that adaptations can become fixed or

spread in a population because of the benefits they bestow on groups, regardless of the effect on the fitness of individuals within that group. This is possible because of the differential survival of groups and species (e.g. while altruistic individuals may be at a disadvantage as regards selfish ones within groups, internally co-operative groups are more likely to survive than internally competitive ones and so, overtime, natural selection favours co-operative behaviour).

While Kropotkin would not have been surprised by this, the notion of 'group selection' is somewhat irrelevant as the benefits of mutual aid apply at the individual level as well as the group level. As an anarchist, he was well aware that groups are made up of individuals and, unsurprisingly, argued in Mutual Aid that "we may safely say that mutual aid is as much a law of animal life as mutual struggle, but that, as a factor of evolution, it most probably has a far greater importance, inasmuch as it favours the development of such habits and characters as insure the maintenance and further development of the species, together with the greatest amount of welfare and enjoyment of life for the individual, with the least waste of energy."124 Thus mutual aid is seen as benefiting the individuals who practice it as well as giving their groups an advantage in the struggle of life. The two outcomes, for Kropotkin, are not mutually exclusive nor in conflict.

This is recognised by Gould, which drains his criticism of much of its force: "But Kropotkin also (and often) recognised that selection for mutual aid directly benefits each individual in its own struggle for personal success." As such, the Russian was well aware that the "result of struggle for existence may be cooperation rather than competition, but mutual aid must benefit individual organisms in Darwin's world of explanation" and so "did include the orthodox solution as his primary justification for mutual aid." Kropotkin simply made the obvious point that individuals can and do benefit when they practice mutual aid and live within groups based on it.

^{120 &#}x27;Sociobiology: An Alternative View', pp.39-40

¹²¹ Michael Glassman, p.402

^{122 &#}x27;Kropotkin Was No Crackpot', p.338

¹²³ This is an old view that is currently going through something of a revival.

See, for example, the December 2007 article by David Sloan Wilson and Edward O. Wilson arguing that sociobiology has taken a false turn by explaining co-

operative activities in an almost exclusively individualistic framework and so

^{123 (}cont) ignoring "multilevel selection", including group selection. They critique the "naive group selectionism" that predominated in the 1960s and which sociobiology replaced. ('Rethinking The Theoretical Foundation Of Sociobiology', pp.327-48, The Quarterly Review of Biology, vol. 82, no. 4)

¹²⁴ Mutual Aid, p.33

^{125 &#}x27;Kropotkin Was No Crackpot', p.338

Kropotkin, like many of his fellows of the time, did, at times, use language which could be interpreted to imply he thought that evolution worked at the level of the species rather than the individual. Yet he was hardly alone in this - for example, many used Darwinism to justify laissez-faire capitalism and the 'war of all against all' because it strengthened 'the species' by weeding out the 'unfit'. It is fair to suggest, however, that Kropotkin would have been sympathetic to attempts to analyse evolution and natural selection at multiple levels (the gene, cell, individual, group and species). He was well aware, for example, that group living produced different behaviour than that associated with solitary animals (most obviously, group pressure to reduce and control anti-social activity). Yet this should not detract from the obvious fact that, for Kropotkin, co-operation was fundamentally of benefit to the individuals who practice it and that groups based on such behaviour will survive better.

For a good overview of co-operative and altruistic acts and a theory on how group selection gives rise to co-operation, see Unto Others by Elliott Sober and David Sloan Wilson. 126 Interestingly, "Darwin did invoke group selection to explain sterile forms among ants"127 as well as using "the principle of group selection to explain the evolution of human morality."128 It should be noted that there is nothing in the 'selfish gene' which automatically excludes group selection, regardless of Dawkins' protestations otherwise. As Kim Sterelny summaries, it is "now uncontroversial" that an embrace of gene selection "need not reject group selection" as "the evolution of the organism itself involves" the same problems usually associated with group selection. Both are claims about vehicles. This means that Sober and Wilson "have reopened the debate about group selection, arguing that animals are not just co-operative, they are altruistic."129

126 Unto Others: The Evolution And Psychology Of Unselfish Behaviour (Harvard University Press, 1998)

However, it is useful to sketch the flaws in Matt Ridley's argument against group selection to illustrate how Darwinism can be misused for political agendas (he is keen to enlist evolutionary theory to support his neo-liberalism). Ridley dismisses it because he argues that only individuals can be selected, not groups. He raises the question: "But what happens when something is good for the species but bad for the individual?" And answers it: "We know what happens. The individual's interest comes first. Selfless groups would be perpetually undermined by the selfishness of their individuals." He seems to have forgotten that he earlier stressed that genes were what counted, not individuals: "But always, without exception, living things are designed to do things that enhance the chances of their genes or copies of their genes surviving and replicating."130 While confusing the selfish gene with the selfish individual (like confounding communal property with private property, as he also does) may be good for his ideology, it is bad science. 131 If genes can be replicated by promoting adaptations which favour group survival then surely this is as feasible as genes co-operating within an individual to ensure their survival.

Then there is Ridley's ideological dichotomy between individuals and groups. Co-operation, he argues, is "not group selection: it is individual selection mediated by groupishness." Thus while individual interests can lie "with which group," it means that we "are an extremely groupish species, but not a group selected one. We are designed [sic!] not to sacrifice ourselves for the group but to exploit the group for ourselves."132 Fine; except for two things. First, he should be focusing on the gene, not the individual and so simply cannot dismiss the possibility that gene survival could produce such "sacrifice". Second, groups are made of other individuals. Surely they would act to stop an individual exploiting the group (i.e. themselves)? Ridley seems to assume that 'altruist' equates to 'stupid', as can be seen from his fictional example of how 'selfish' people will abuse 'altruistic' ones over commonly owned resources that assumes that the 'law-abiding' individuals just let the 'law-

¹²⁷ Todes, p.11

¹²⁸ Sober and Wilson, p.4

Sober and Wilson argue that groups, as well as individuals, can be vehicles for gene selection and so propose a multi-level selection theory using the same set of concepts at every level. (pp.88-92) Dawkins himself once noted that there can "be a kind of higher-level... selection in favour of reciprocal altruism. This can be developed into an argument in favour of a kind of group selection that, unlike most theories of group selection, might actually work." (*The Selfish Gene*, p.321)

¹³⁰ The Origin of Virtue (Viking, 1996), p.175, p.18

¹³¹ As Dawkins put it: "To invoke the rainmakers yet again, there is no more connection between a selfish gene and a selfish human than there is between a rock and a rain cloud." (*Unweaving the Rainbow*, p.210)

¹³² Ridley, p.188

breakers' do what they want.¹³³ In reality, it is extremely unlike that the 'altruistic' individuals (or would that be their genes?) would let themselves be sacrificed by the actions of others and would, unsurprisingly, act to stop it. Ridley himself, ironically, indicates such communal pressures at work later in his book when discussing 'the commons' in real life rather than in ideologically driven 'just-so' stories.¹³⁴

Kropotkin, significantly, was not blind to this issue and indicates in Mutual Aid how social customs arise to stop antisocial individuals exploiting the group. He notes that "[i]f every individual were constantly abusing its personal advantages without the others interfering in favour of the wronged, no society-life would be possible" and so social animals, like humans, intervene to stop such action. 135 Addressing the issue of the stability of an anarchist society, he argued that direct action would stop the "gradual and temporarily imperceptible regeneration of the old evils." If someone were oppressive or "drawing from society all that he can, and monopolising from others as much as possible" then the others "have it in their power to apply a prompt check by boycotting such a person and refusing to help him with their labour or to willingly supply him with any articles in their possession. They have it in their power to use force against him. They have these powers individually as well as collectively. Being either past rebels who have been inspired with the spirit of liberty, or else habituated to enjoy freedom from their infancy, they are hardly to rest passive in view of what they feel to be wrong."136 In The Conquest of Bread, he indicated how the individuals in a group within a free society can protect themselves from anti-social activities of their members by, for example, asking the work-shy to leave. ¹³⁷ In other words, the tit-for-tat refusal of reciprocity to uncooperative individuals and so anarchists have long been aware that, to quote Robert Trivers, "co-operation required perpetual vigilance to enjoy its fruits, but tit-for-tat... could bring this co-operative world."

Whether this mutual aid, expressed in community self-defence, amounts to 'group selection' or not will, undoubtedly, be much discussed but if it is true that individuals will try to exploit groups, so it is that the other individuals who make up those groups will act to discourage it. Who wins this struggle cannot be predicted, but whoever it is will see themselves, and their genes, survive and flourish.

Mutual Aid and Altruism

A common mistake is to confuse mutual aid with altruism. For example, during his attempt to justify Thatcherism genetically, Matt Ridley asserts that "Kropotkin argued that because ants were nice to each other, so must we be instinctively virtuous." ¹³⁹ It is hard to think of a more misleading caricature of Kropotkin's argument (and there is stiff competition for that prize!).

Steve Jones, Professor of Genetics at University College London, presents a similarly inaccurate diatribe against Kropotkin. In his book *Coral* he asserts that the "split between the anarchists and the capitalists reflected a fundamental clash of beliefs. Is humankind ruled by self-interest, or is it altruism our true state? What is the lesson from Nature: mutual aid or inevitable strife?" For Jones, anarchists "see a benevolent message in the natural world." He is echoing Ridley, who asserted that Kropotkin "could not stomach the idea that life was a ruthless struggle of selfish beings." 141

The grim reality is, Jones states, that symbiosis "marks each stage in evolution, but the notion of mutual aid, a joint effort to a

¹³³ Ridley, p.178

¹³⁴ As he notes in that discussion, the commons were "carefully regulated communal property" and "were never free-for-alls" (Ridley, p.232) Which shows the power of ideology in action, with the true nature of communal property conveniently forgotten when speculating against group selection but then invoked when arguing against nationalisation. Not to mention the strange sight of a supporter of capitalism defending the commons when that system was created, in part, by their systematic destruction by the state (as discussed by Kropotkin in chapter 7I of *Mutual Aid*).

¹³⁵ Mutual Aid, p.69

^{&#}x27;freedom' to oppress and exploit is ridiculous and one anarchists have long refuted. As Malatesta put it, some seem to suppose "that anarchists, in the name of their principles, would wish to see that strange freedom respected which violates and destroys the freedom and life of others. They seem almost to believe that after having brought down government and private property we would allow both to be quietly built up again, because of respect for the freedom of those

^{136 (}cont) who might feel the need to be rulers and property owners. A truly curious way of interpreting our ideas." (Anarchy (Freedom Press, 2001), pp42-3)

¹³⁷ The Conquest of Bread (AK Press, 2007), p.180

¹³⁸ Trivers, Natural Selection and Social Theory, p.54

¹³⁹ Ridley, p.155

¹⁴⁰ Jones, Coral: A Pessimist in Paradise (Little, Brown, 2007), p.96, p.94

¹⁴¹ Ridley, pp.4-5

common end, has been superseded by a sterner view: that such arrangements began with simple exploitation. Disease, parasitism and cannibalism have been around since life began." He does admit that many creatures "do appear to indulge in mutual aid" and that the "semblance of co-operation is all around." However, this is just appearance, for this is, in fact, based "not on mutual aid but on greed and mutual exploitation." 142

First, the awkward fact that Kropotkin was not discussing symbiosis in *Mutual Aid* needs to be mentioned. This term commonly describes close and often long-term interactions between different biological species and this is not what the book is about. Nor is it about mutualism, which describes any relationship between individuals of different species where both individuals derive a fitness benefit, although this does not contradict Kropotkin's argument. Rather, as is clear once you read the book, it is about co-operation, i.e., individuals of the same species living together within groups of varying sizes to derive a fitness benefit. 144

Second, Kropotkin would hardly have disagreed. He was well aware that "strife" and "self-interest" in both the animal world and humanity existed – and that it drove mutual aid. "Life is struggle," he argued, "and in that struggle the fittest survive." He explicitly and repeatedly noted that *Mutual Aid* presented a one-sided perspective to counter the dominant perspective that stressed competition between individuals:

"Huxley's view of nature had as little claim to be taken as a scientific deduction as the opposite view of Rousseau, who saw in nature but love, peace, and harmony destroyed by the accession of man... Rousseau had committed the error of excluding the beak-and-claw fight from his thoughts; and Huxley committed the opposite error; but neither Rousseau's optimism nor Huxley's pessimism can be accepted as an impartial interpretation of nature."

The notion of constant struggle between individuals is an "exaggeration" which "is even more unscientific than Rousseau's idealisation." Kropotkin's position was that sociability "is as much a law of nature as mutual struggle" and that the question was who is the fittest, those who compete against each other or those who co-operate in the struggle against a harsh environment. He presented evidence that supported his view that "those animals which acquire habits of mutual aid are undoubtedly the fittest" because "life in societies is the most powerful weapon in the struggle for life, taken in its widest sense." Thus co-operation provides "more chances to survive" and animals and humans "find in association the best arms for the struggle for life: understood, of course, in its wide Darwinian sense."147 As Todes correctly notes, Kropotkin's "arguments rested, not on the notion, which he associated with Rousseau and Büchner, that love was inherent to the natural world, but on an analysis of the dynamics of the struggle for existence."148

In other words, Kropotkin was well aware that the drive for co-operation rested on the 'selfish' desire to survive. His argument was that mutual aid, rather than mutual struggle, between members of the same group or species was the best means of doing so. Indeed, he explicitly eschews the notion that 'altruism' (in the common meaning of the word) is the basis of mutual aid: it is neither love nor sympathy as such that causes animals to assist one another, but rather a more hard-nosed recognition that it is in their own interests for survival to do so. Moreover, he argued, this group living would have an effect on those subject to it. They would develop attitudes that encouraged co-operative behaviour and so mutual aid was the "broad and necessary foundation" upon which "the still higher moral feelings are developed."149 As such, it was "the real foundation of our ethical conceptions."150 So mutual aid helps to explain altruistic actions and sentiments (and why these have evolved), but it is not identical. As he explained in a subsequent work, "Mutual Aid-Justice-Morality are thus the consecutive steps of an ascending series" and that morality "developed later than the others" (and

¹⁴² Jones, p.116, p.97, p.98, p.121

Significantly, a reference for Mutual Aid does not even appear in his "Literature cited" listing.

¹⁴⁴ At best it could be argued that Jones subscribes to the tendency of some sociobiologists to lump all kinds of association (from parasitism to mutualism) into one category labelled "symbiosis" but this confuses and conflates more than it explains (see 'A Note on Terminology: Mutual Aid, Mutualism and Symbiosis' below).

¹⁴⁵ Mutual Aid, p.70

¹⁴⁶ Mutual Aid, p.32

¹⁴⁷ Mutual Aid, p.104, p.32, p.33, p.68, p.33, p.229

¹⁴⁸ Todes, p.132

¹⁴⁹ Mutual Aid, p.24

¹⁵⁰ Mutual Aid, p.233. Kropotkin, it should be noted, had been discussing the evolutionary base for ethics since the early 1880s (see 'Law and Authority' in Words of a Rebel, for example).

so was "an unstable feeling and the least imperative of the three"). Thus mutual aid came first and ensured "the ground is prepared for the further and the more general development of more refined relations."151 So while Kropotkin touches on this issue in Mutual Aid, it needs to be supplemented by the essay Anarchist Morality152 as well as the posthumously published Ethics.

Then there is the central contradiction in Jones' account. He claims that for scientists "neither symbiosis nor the struggle for existence has much message for human affairs" before concluding a few pages later that anarchism has been "sidelined by the iron rules of greed that rule the globe."153 This would be more convincing if he had not attacked philosophers like Nietzsche and political thinkers like Marx for drawing lessons for human society from nature. This is forgotten when he turns to Kropotkin. Then we have an assertion that the "iron rule of greed" is a universal law of nature. So, apparently, nature does have a "message for human affairs" after all and it just happens to coincide with the dominant economic system and the ideology of its ruling elite. The cultural presumptions and assumptions in suggesting that describing animals and people working together in mutually beneficial ways as "mutual exploitation" is value-free science while describing it as "mutual aid" is just non-scientific, emotional woolly-thinking should be all too obvious. 154

Somewhat ironically, Jones notes that "scientists have nothing to add to philosophy apart from facts." Yet his comments about Kropotkin's life are repeatedly wrong. He talks of the fighting between the "adherents of Marx and Kropotkin" in the IWMA when, in reality, it was Bakunin who fought the former. We are informed that with "the apparent triumph of his ideas in the Bolshevik Revolution his Utopia was, it seemed, realised and the Prince returned to Moscow. Within two years he was

151 Ethics: Origin and Development (Blom, 1968), pp.30-1

disappointed, and within three dead." Kropotkin, however, returned to Russia before the October Revolution which suggests that Jones either is unaware Kropotkin died in 1921 or that both Russian Revolutions took place in 1917. The notion that Kropotkin would have expected his ideas to have been implemented by Marxists is simply staggering and so the Bolshevik experiment simply confirmed five decades of arguing against state socialism. Jones even talks about how "the Slavic experiment in mutualism that followed the Russian Revolution failed," so showing that it is not only Trotskyists who are ignorant of Lenin's stated desire to create state capitalism in Russia and his systematic campaign against co-operation in the workplace in favour of one-man management. 155

Mutual Aid and Anarchism

While Mutual Aid is fundamentally a work of popular science, it does have a relationship with anarchist theory. It would be surprising if this were not the case and so we find that Mutual Aid, both in terms of methodology and subject, has themes which Kropotkin addressed in his explicitly libertarian work.

In terms of the methodology used, he was always keen to apply his scientific training. While (rightly) eschewing any suggestion of a "scientific anarchism" 156 Kropotkin (like Bakunin) had a healthy respect for science and did, quite rightly, seek to apply the scientific method to anarchist theory. "As to the method followed by the anarchist thinker," he wrote in 1887, "it is entirely different from that followed by the utopists... He studies human society as it is now and was in the past... tries to discover its tendencies, past and present, its growing needs, intellectual and economic, and in his ideal he merely points out in which direction evolution goes."157 Decades later, in Modern Science and Anarchism, he reiterated that the anarchist applied "the inductive-deductive method" (the "only scientific method") to the

¹⁵² Contained in the collections Anarchism and Fugitive Writings.

¹⁵³ Jones, p.98 p.122

¹⁵⁴ That Jones clearly projects cultural biases onto nature can be seen when he states that economics "may help [us] to understand evolution" and the "laws of the market also help to explain systems in which proponents appear... to strive towards the same shared end." Moreover, sometimes "the market returns to Nature for advice." (p.120, p.98) Thatcherite Matt Ridley states "I do not believe it is too far-fetched to see in the actions of hunter-gatherers distant echoes of the origins of modern markets in financial derivatives." (p.115)

¹⁵⁵ Jones, p.122, p.96, p.121. Maurice Brinton's 'The Bolsheviks and Workers Control' (included in For Workers' Power) is still the classic work on the Leninist imposition of state capitalism.

¹⁵⁶ Ironically, it was Proudhon, not Marx, who first proclaimed the need for a "scientific socialism" in 1840, shortly after stating "I am an anarchist" and just before defining "anarchy" and discussing its implications as a social goal (What is Property? (Cambridge University Press, 1994), p.209, p.205)

¹⁵⁷ Anarchism, p.47. Significantly, this essay was originally entitled 'The Scientific Basis of Anarchy'

study of history, economy, and developments in modern society. This was because "man is a part of Nature, as his personal and social life is a natural phenomenon" and so there was "no reason why we should... abandon the method" when we study humanity.

158 Thus Kropotkin brought his scientific training into his anarchism, being scientific "in the usual sense of being based on empirical observation and on developing an analysis that was consistent with and made sense of the data."

159

This can be seen in *Mutual Aid* and so, while not directly an anarchist text, it applied what Kropotkin argued was the anarchistic method to evolution, history and popular social institutions and their development. First, there is the perspective adopted with *Mutual Aid*. It is significant that Kropotkin considered his book as an attempt to write a history of evolution from below, from the perspective of the oppressed. As he put it, history, "such as it has hitherto been written, is almost entirely a description of the ways and means by which theocracy, military power, autocracy, and, later on, the richer classes' rule have been promoted, established, and maintained." The "mutual aid factor has been hitherto totally lost sight of; it was simply denied, or even scoffed at." This, of course, is the anarchist position on social change from the bottom-up applied to popularising scientific ideas.

Mutual Aid also provides substantial evidence to support the anarchist theory of social change. Anarchists argue that human societal evolution (including periods of swift evolution called revolution) was based on the conflict between what could be termed the 'law of mutual struggle' and the 'law of mutual aid.' The book provides empirical evidence that both historically and within current struggles, people have organised themselves to resist the institutions and negative results of mutual struggle (such as the oppression and exploitation resulting from private property, the state and other social hierarchies). These take many forms, including village folkmoots, neighbourhood forums, unions, strikes, guilds, co-operatives, and so on). Thus the

mutual aid tendency "continued to live in the villages and among the poorer classes in the towns." Indeed, "in so far as" new "economical and social institutions" were "a creation of the masses" they "have all originated from the same source" of mutual aid. By these means, the masses "maintained their own social organisation, which was based upon their own conceptions of equity, mutual aid, and mutual support... even when they were submitted to the most ferocious theocracy or autocracy." 162

Thus the necessity of mutual aid produced in the struggle within, but against, class/hierarchical society would be the means by which the institutions of a free society would be created. As Harry Cleaver puts it, "Kropotkin was presenting the results of research into those concrete developments in the present which constituted elements of a post-capitalist society... He was showing how the future was already appearing in the present!"163 In the words of Kropotkin himself, Anarchism "originated in everyday struggles" and "the Anarchist movement was renewed each time it received an impression from some great practical lesson: it derived its origin from the teachings of life itself."164 So rather than abstractly counterpoise a better society to capitalism, Kropotkin's work showed how we create the former while fighting the latter ("building the new world in the shell of the old", to quote the preamble of the Industrial Workers of the World). Given this, libertarian Marxist Paul Mattick was simply wrong to assert that the "whole controversy between Huxley and Kropotkin is somewhat beside the point — it does not touch upon the relevant issues of society, namely that 'mutual aid' in human society presupposes the abolition of class relations."165 He failed to understand that institutions of 'mutual aid' were created as part of the struggle against class systems and were the means to their abolition.

This can be seen from comparing Kropotkin's anarchist works to *Mutual Aid*. Trade unions and co-operatives are highlighted in the latter as examples of mutual aid within capitalism and these mutual aid institutions are mentioned in his 1906 preface to *The Conquest of Bread*. There, trade unionism was praised as having "a growing tendency towards... being not only an instrument for

^{158 &#}x27;Modern Science and Anarchism', p.54.

¹⁵⁹ Harry Cleaver, Kropotkin, Self-valorization and the Crisis of Marxism, p.121

^{160 &}quot;You have seen, with Mutual Aid", he wrote to another anarchist, "what a remarkable, powerful tool of investigation the anarchist tendency

represents." (quoted by Ruth Kinna, 'Kropotkin's theory of Mutual Aid in

Historical Context', p. 279)

¹⁶¹ Mutual Aid, pp.230-1

¹⁶² Mutual Aid, p.181, p.107

^{163 &#}x27;Kropotkin, Self-valorization and the Crisis of Marxism', p.120

^{164 &#}x27;Modern Science and Anarchism', p.58, p.57

^{165 &#}x27;Kropotkin on Mutual Aid — Review', Western Socialist, Boston, USA, January

⁻ February 1956

improving the conditions of labour, but also to become an organisation which might, at a given moment, take into its hands the management of production." Co-operatives "both for production and for distribution, both in industry and agriculture" were also pointed to. 166 Elsewhere he stressed that the union "is absolutely necessary. It is the sole force of the workers which continues the direct struggle against capital without turning to parliamentarism." 167 Unsurprisingly, Kropotkin continually stressed the importance of strikes, solidarity and direct action by unions and was (like most communist-anarchists) a sympathetic, if not uncritical, supporter of syndicalism. 168

If, as Mutual Aid suggests, the potential for anarchism is created by the masses themselves in the course of their struggles against oppression then it follows that socialism itself must be created that way. If not, if imposed from above, socialism would never work - an analysis which was at the heart of Bakunin's critique of Marxism and which was proven right in Lenin's Russia. Like the Russian anarchists in 1905 and 1917, Kropotkin supported the workers' and peasants' councils (soviets) as the framework of a free society and their "controlling the economic and political life of the country is a great idea." However, this was not what happened in Russia for "as long as the country is governed by a party dictatorship, the workers' and peasants' councils evidently lose their entire significance" and are "reduced" to a "passive role", ceasing "to be free and of any use." The "pressure of a party dictatorship...means the death-knell of the new system." He stressed that "production and exchange represented an undertaking so complicated that the plans of the state socialists... would prove to be absolutely ineffective as soon as they were applied to life. No government would be able to organise production if the workers themselves through their unions did not do it in each branch of industry; for in all production there arise daily thousands of difficulties which no government can solve or foresee...Only the efforts of thousands of intelligences working on the problems can co-operate in the development of a new social system and find the best solutions

for the thousands of local needs."169 Unsurprisingly, he concluded that the Bolsheviks "have shown how the Revolution is not to be made."170

This was due to the nature of the state. If the state, as Kropotkin stresses, is defined by "the existence of a power situated above society, but also of a territorial concentration as well as the concentration in the hands of a few of many functions in the life of societies" then such a structure has not evolved by chance. The "pyramidal organisation which is the essence of the State" has "developed in the history of human societies to prevent the direct association among men to shackle the development of local and individual initiative, to crush existing liberties, to prevent their new blossoming - all this in order to subject the masses to the will of minorities." This means that "a social institution cannot lend itself to all the desired goals, since, as with every organ, [the state] developed according to the function it performed, in a definite direction and not in all possible directions." Therefore by "seeing the State as it has been in history, and as it is in essence today," the conclusion anarchists "arrive at is for the abolition of the State."171

Kropotkin argued that many people, particularly state socialists, take "pleasure in confusing State with Society", a "confusion" made by those "who cannot visualise Society without a concentration of the State." Yet this "is to overlook the fact that Man lived in Societies for thousands of years before the State had been heard of" and that "large numbers of people [have] lived in communes and free federations." These were not states as the state "is only one of the forms assumed by society in the course of history. Why then make no distinction between what is permanent and what is accidental?" The state, then, was a particular form of social organisation based on certain key attributes and so "the word 'State'... should be reserved for those societies with the hierarchical system and centralisation."

Kropotkin was well aware that the state was not some evil imposed on society from outside, but one which grows out of it and which, while sharing key features, evolves along side it. 174

¹⁶⁶ The Conquest of Bread (AK Press, 2007), pp.52-3. However, "none of these may, in any degree, be taken as a substitute for Communism, or even for Socialism."

quoted by Miller, Kropotkin (University of Chicago Press, 1976), p.177
168 See Caroline Cahm's *Kropotkin and the Rise of Revolutionary Anarchism*,
1872-1886 for an excellent account of Kropotkin's ideas on this matter.

¹⁶⁹ Anarchism, pp.254-5, pp.76-7

¹⁷⁰ Quoted by Alexander Berkman, The Bolshevik Myth (Pluto Press, 1989), p.75

¹⁷¹ The State: Its Historic Role (Freedom Press, 1987), p.10, p.59, p.56

¹⁷² The State: Its Historic Role, pp.9-10

¹⁷³ Peter Kropotkin, Ethics, p.317fn

^{174 &}quot;Every economic phase has a political phase corresponding to it, and it would

Based on this evolutionary analysis of the state, Kropotkin, like all anarchists, drew the conclusion "that the State organisation, having been the force to which the minorities resorted for establishing and organising their power over the masses, cannot be the force which will serve to destroy these privileges."175

This meant that socialism had to be built using new forms of social organisation, based on the popular participation from below like those documented in Mutual Aid and elsewhere. 176 This suggests that Kropotkin's discussion of the Medieval City in Mutual Aid is of particular note, as it indicates that large communities can be organised in a non-statist manner. It "was not a centralised State" and, at the start, could "hardly be named a State as regards its interior organisation" because it did not have the "present centralisation of functions" nor "territorial centralisation." In fact, "supreme political power could be vested entirely in a democratic forum" and the city was thus a "double federation" of democratic neighbourhood forums and guilds for economic activity.177

Unsurprisingly, we find Kropotkin echoing both Proudhon and Bakunin, arguing in his explicitly anarchist works that a free society would be organised in the same manner based on the organisations created in the struggle within capitalism. 178 Thus 174 (cont) be impossible to touch private property unless a new mode of political life be found at the same time," argued Kropotkin. "A society founded on serfdom, is in keeping with absolute monarchy; a society based on the wage system, and the exploitation of the masses by the capitalists finds its political expression in parliamentarianism." As such, the state form changes and evolves, but its basic function (defender of minority rule) and structure (delegated power into the hands of a few) remains. This suggests that "a free society regaining possession of the common inheritance must seek, in free groups and free federations of groups, a new organisation, in harmony with the new economic phase of history." (The Conquest of Bread, p.82)

175 'Modern Science and Anarchism', p.82

176 Kropotkin pointed to the directly democratic federated 'sections' of the Great French Revolution as one example of "a people governing itself directly - when possible - without intermediaries, without masters." In fact, "the principles of anarchism...dated from 1789, and that they had their origin, not in theoretical speculations, but in the deeds of the Great French Revolution." (The Great French Revolution (Elephant Editions, 1986), vol. 1, p.210, p.204)

177 Mutual Aid, pp.151-3

178 "As early as the 1860's and 1870's, the followers of Proudhon and Bakunin in the First International were proposing the formation of workers' councils designed both as a weapon of class struggle against capitalists and as the structural basis of the future libertarian society." (Paul Avrich, The Russian Anarchists (AK Press, 2005), p.73)

"the form that the Social Revolution must take" was "the independent Commune" and their federations along with "a parallel triumph of the people in the economic field" based on "associations of men and women who would work on the land, in the factories, in the mines, and so on, [and so] became themselves the managers of production." This meant that the "idea of independent Communes for the territorial organisation, and of federations of Trade Unions for the organisation of men in accordance with their different [productive] functions, gave a concrete conception of society regenerated by a social revolution."179 Needless to say, Kropotkin was at pains to stress that this new system would be similar in its outlines to the past Communes discussed in Mutual Aid and not an exact copy:

"the Commune of today cannot possibly clothe itself again in the forms it assumed seven centuries ago... the Commune would have an organisation so different from that which it had in the twelfth century that we would be in the presence of an absolutely new fact, emerging in new conditions and leading inevitably to absolutely different consequences."180

Significantly, every social revolution has confirmed Kropotkin's arguments. In Russia, the anarchists were the first to suggest that the workers' councils (soviets in Russian), produced in the process of the struggle against the Tsarist regime in 1905, should be the framework of a free society. 181 Unsurprisingly, in 1917 the libertarians whole-heartedly supported the factory committee movement and its attempts to introduce workers' selfmanagement in the face of hostility from the capitalists as well as the Leninist state. 182 The largely anarchist-inspired Spanish Revolution of 1936 produced both community organisations (the neighbourhood 'Defence Committees') as well as the more well-

182 See Maurice Brinton, 'The Bolsheviks and Workers Control' (contained in For Workers' Power).

^{179 &#}x27;Modern Science and Anarchism', p.74, p.78, p.79. This self-management would, of course, be based on the popular expropriation "of all those who have the means of exploiting human beings; the return to the community... of everything that in the hands of anyone can be used to exploit others." (Words of a Rebel, pp.207-8)

¹⁸⁰ Words of a Rebel, p.81

¹⁸¹ See Paul Avrich, The Russian Anarchists (pp.80-1). In 1907, libertarians concluded that the revolution required "the proclamation in villages and towns of workers' communes with soviets of workers' deputies...at their head." (quoted by Alexandre Skirda, Facing the Enemy: A History of Anarchist Organisation from Proudhon to May 1968 (AK Press, 2002), p.77)

known workplace and rural collectives. 183

More recently, the popular revolt against neo-liberalism in Argentina which started in December 2001 saw both Autogestión and Horizontalidad develop, that is occupied (or 'recuperated') workplaces as well as neighbourhood (or *barrio*) and inter-barrial assemblies. As one participant in this revolt noted: "The anarchist movement has been talking about these ideas for years" Indeed, one popular slogan at the time was "Occupy, Resist, and Produce" and it would be no exaggeration to suggest that this, undoubtedly unknowingly, summarised Kropotkin's message in *The Conquest of Bread!* Similarly, the demand "They all must go" ("Que se vayan todos") has distinct parallels with Kropotkin's proclamation "Enough with governments! Make way for the people! Make way for anarchy!" Make way

Conclusions

In terms of scientific analysis, most of Kropotkin's positions have become mainstream. His work has been confirmed by developments in modern science. Rather than being the wishful thinking of an anarchist seeking to use science to confirm his ideas, *Mutual Aid* is the groundbreaking work of a trained scientist who also happened to be the foremost anarchist thinker of his time. While his terminology and evidence have dated, his methodology and conclusions have been confirmed and built upon. It is those who deny the conclusions and scientific nature of *Mutual Aid* who are forcing reality into the dogmas of ideology, not Kropotkin.

This is not all. Mutual Aid is still important as many of the justifications for capitalism (on the right) and for state intervention (on the left) retain some traces of the old Social Darwinian rationale he combated in the 19th century. Neoliberalism and its 'trickle-down' ideology is premised on the assumption the ascendancy of 'the fittest' benefits the whole species, as is the related underlying implication that those at the bottom of the heap are fated by nature to be there. This is all combined with paeans to 'the free market' and the wonderful

effects of 'competition' in the economy. We are back to the harsh capitalism Kropotkin forsook his promising scientific career to help end.

Yet while this self-congratulatory rhetoric may flow, it does not stop it being self-contradictory and, ultimately, hypocritical. As Kropotkin was at pains to stress, business elites never really believe in the free market. As now, when push came to shove (and often long before) they turned to the state. Then, as now, the ruling class looked to the state for political favours, for contracts, for tariffs and subsidies, for public grants of land and natural resources, for financial bail-outs, and, needless to say, for protection – the use of armed force, against all those who might interfere with the power derived from their wealth:

"while all Governments have given the capitalists and monopolists full liberty to enrich themselves with the underpaid labour of working men [and women]... they have never, nowhere given the working [people] the liberty of opposing that exploitation. Never has any Government applied the 'leave things alone' principle to the exploited masses. It reserved it for the exploiters only... nowhere has the system of 'non-intervention of the State' ever existed. Everywhere the State has been, and still is, the main pillar and the creator, direct and indirect, of Capitalism and its powers over the masses. Nowhere, since States have grown up, have the masses had the freedom of resisting the oppression by capitalists... The state has always interfered in the economic life in favour of the capitalist exploiter. It has always granted him protection in robbery, given aid and support for further enrichment. And it could not be otherwise. To do so was one of the functions - the chief mission - of the State."187

Then, as now, while the rhetoric is always about 'competition', 'individual enterprise', 'the free market', 'survival of the fittest' and so forth (ad nauseam) the reality is corporate oligopoly, oligarchic big business, state intervention ('socialism') for the rich, and, ultimately, the might, power and violence of the state. Kropotkin would not have been remotely surprised by our current system of neo-liberal crony capitalism and its soaring inequality – nor its Social Darwinian self-justifications and 'free-market' hypocrisy. Given this, Kropotkin's work is still an important antidote to the dominant culture, it brings to the forefront that

¹⁸³ See Abel Paz, Durruti in the Spanish Revolution (AK Press, 2007)

¹⁸⁴ See Horizontalism: Voices of Popular Power in Argentina, edited by Marina Sitrin (AK Press, 2006)

¹⁸⁵ Emilio, quoted in Horizontalism, p.38

¹⁸⁶ Words of a Rebel, p.177

we need not live like this and that there is nothing in 'nature' which precludes transcending capitalism.

That means that *Mutual Aid*, in spite of its age, can still play a role in the struggle for freedom and equality – as long as it is used to understand history rather than repeat it, used to inspire **new** forms of mutual aid and **new** modes of struggle against oppression and exploitation. If we do that, then our struggles within, but against, capitalism can not only improve our situation today they can also create the potential for a society of free and equal individuals who co-operate in order to achieve their full potential. As Kropotkin's work suggests, not only is it in keeping with our 'nature', it is in our self-interest, as individuals, as a class and, ultimately, as a species to do so.

system of neo-liberal crony capitalism and its sparing inequality -

Further Reading

A great many of Kropotkin's works, including *Mutual Aid*, are available on-line. In terms of published works, George Woodcock edited Kropotkin's *Collected Works* shortly before his death. In 11 volumes, it includes all his major writings as well as numerous important essays and articles.¹⁸⁸

This collection is by no means complete, missing out the articles collated in Act for Yourselves (Freedom Press, 1988) for example. Two of Kropotkin's shorter introductions to anarchism are contained in Anarchism and Anarchist-Communism (Freedom Press, 1987) while his The State: Its Historic Role (Freedom Press, 1987) is about the evolution of the state and why socialism cannot be introduced using it.189 A useful collection of his pamphlets is available in Anarchism: A Collection of Revolutionary Writings (Dover Press, 2002). This was formerly published as Kropotkin's Revolutionary Pamphlets and contains much of his best short work, although some (like 'Modern Science and Anarchism') are edited. The collection The Conquest of Bread and Other Writings (Cambridge University Press, 1995) contains newly translated material from the Russian editions of Kropotkin's memoirs, along with his Encyclopaedia Britannica article on 'Anarchism'. Another version of The Conquest of Bread (AK Press, 2007) has also appeared, with a new introduction. Also available is Kropotkin's classic argument for appropriate technology and the integration of agriculture and industry, Fields, Factories and Workshops Tomorrow (Freedom Press, 1985) edited by Colin Ward.

With regards to the topics discussion in *Mutual Aid*, a short talk by Kropotkin entitled 'Mutual Aid: An Important Factor in Evolution' along with a few other of his articles are available in *Anarchy! An Anthology of Emma Goldman's Mother Earth* (Counterpoint, 2001). Many of Kropotkin's articles on evolution after *Mutual Aid* are contained in volume 11 of his *Collected Works* (entitled *Evolution and Environment*), alongside a full version of 'Modern Science and Anarchism'. The unfinished and

188 Published by Black Rose, it includes Conquest of Bread; Ethics; Fugitive Writings; Evolution and Environment; Fields, Factories and Workshops; In Russian and French Prisons; Great French Revolution; Memoirs of a Revolutionist; Mutual Aid; Russian Literature; and Words of a Rebel.

189 Both 'Anarchist Communism' and 'The State' are contained in Fugitive Writings (Volume 10 of Collected Works), along with 'Anarchist Morality' and two other essays.

posthumously published *Ethics: Origin and Development* can be considered as a development of some of the themes in *Mutual Aid*, specifically the evolution of ethical views and standards. *The State: Its Historic Role* is, as Kropotkin himself noted, a supplement to *Mutual Aid's* discussion of human institutions.

In terms of Kropotkin's life story, the most obvious starting place must be his own autobiography, Memoirs of a Revolutionist, first published in English in 1899 and reprinted as part of his Collected Works. There are three biographies available. The one by George Woodcock and Ivan Avakumovic (The Anarchist Prince: a Biographical Study of Peter Kropotkin) has been republished as From Prince to Rebel (Black Rose Books, 1989) as a supplement to the Collected Works project. As this dates from 1950, it should be supplemented by Martin A. Miller's biography Kropotkin (University of Chicago Press, 1976). The Anarchist-Geographer: an Introduction to the Life of Peter Kropotkin (Genge, 2007) by Brian Morris is a useful, if short, work on this matter. Caroline Cahm's Kropotkin and the Rise of Revolutionary Anarchism, 1872-1886 (Cambridge University Press, 1989) is essential reading as it covers the development of Kropotkin's communistanarchist ideas when he was an active militant in the European anarchist movement. The two standard general histories of anarchism, George Woodcock's Anarchism: A History of Libertarian Ideas and Movements (Penguin Books, 1986) and Peter Marshall's Demanding the Impossible: A history of Anarchism (Fontana, 1993), both have chapters on Kropotkin's life and ideas. Paul Avrich's The Russian Anarchists (AK Press, 2005) and the anthology Anarchist Portraits (Princeton University Press, 1988) both contain useful accounts of Kropotkin's ideas and life. Daniel Guérin's essential No Gods, No Masters: An Anthology of Anarchism (AK Press, 2005) has a section on Kropotkin.

For good introductions of Kropotkin's ideas by anarchists, Evolution and Revolution: An Introduction to the Life and Thought of Peter Kropotkin (Jura Books, 1996) by Graham Purchase and Kropotkin: The Politics of Community (Humanity Books, 2004) by Brian Morris should be consulted. Both cover his basic ideas and life, as well as indicating how modern research has confirmed them. Harry Cleaver's 'Kropotkin, Self-valorization and the Crisis of Marxism' essay (Anarchist Studies, Vol. 2, No. 2) is an excellent introduction to Kropotkin's ideas written from a

libertarian Marxist perspective. Colin Ward, in *Anarchy in Action* (Freedom Press, 2008), has applied the methodology Kropotkin used so well in *Mutual Aid* to document and discuss libertarian tendencies within modern society. While somewhat dated (it was first published in 1973), it is still of interest and worth reading. The anarchistic aspects of human history are explored in a similar manner as Kropotkin by Murray Bookchin in his *Ecology of Freedom: The Emergence and Dissolution of Hierarchy* (AK Press, 2005).

A Note on Terminology: Mutual Aid, Mutualism and Symbiosis

Co-operation between animals takes many different forms and is often called by different names to signify different types of association. In scientific circles these terms include co-operation, mutualism and symbiosis and are often confused. 190

Symbiosis commonly describes close and often long-term interactions between different biological species. It is used to describe a wide range of associations, including parasitic, commensal or mutualistic, ones. Parasitism, obviously, is an association where one species (the parasite) benefits from its host, which is harmed. Commensalism is a relationship between two organisms where one benefits and the other is not significantly harmed or helped. Mutualism is interaction where both individuals benefit.¹⁹¹

So mutualism is often considered a subset of symbiosis, although there are different types: "symbiotic and non-symbiotic mutualism." In both cases it is any relationship between individuals of different species where both individuals derive a fitness benefit. Non-symbiotic mutualism is a relationship "in which the two species are physically unconnected." Similar interactions within a species are known as co-operation.

This means that Mutual Aid is about co-operation rather than mutualism as "most of the discussion is not about mutualism at all, strictly speaking, since the majority of the examples concern co-operation within species rather than between species." However, mutualism does not contradict mutual aid and, as such, it can be argued that with Kropotkin's book the "tradition of mutualism had in fact become important in biology, but in quite another form" if mutualism is taken in its widest sense. 194 It is doubtful that Kropotkin would have disagreed with adding examples of co-operation between species to his argument.

The differences have also become somewhat muddled as

some scientists argue that all these terms should be merged into one (perhaps also including parasitism). Richard Dawkins, for example, states that a "relationship of mutual benefit between members of different species is called mutualism or symbiosis" and argues that "reciprocal altruism is not confined to members of a single species. It is at work in all relationships that are called symbiotic." He then suggests that while the "word symbiosis is conventionally used for associations between members of different species," with a gene centred perspective "there seems no logical reason to distinguish associations between species as things apart from associations between members of the same species." ¹⁹⁵

However, to do that means blurring the different kinds of association which animals can practice. Some associations are parasitical, and so extremely one-sided, while others are more mutually beneficial and co-operative. It would be like arguing that the capitalist workplace is essentially the same as a co-operative one simply because both are economic associations. However, to quote Proudhon, either the workers "will be simply the employee of the proprietor-capitalist-promoter; or he will participate" and "have a voice in the council, in a word he will become an associate." In the former, the worker "is subordinated, exploited: his permanent condition is one of obedience" while in the later "he resumes his dignity as a man and citizen... he forms part of the producing organisation, of which he was before but the slave." This meant "we need not hesitate, for we have no choice... it is necessary to form an ASSOCIATION among workers... because without that, they would remain related as subordinates and superiors, and there would ensue two...castes of masters and wage-workers, which is repugnant to a free and democratic society."196

Given the different relationships produced, it makes little sense to confuse symbiosis with mutualism as the former can include parasitism while the latter excludes it.

Quoting Proudhon, incidentally, is appropriate given the history of the term mutualism. The term symbiosis is credited to Anton de Bary, a German botanist who first used the term in 1878 to describe "various kinds of complex associations, ranging along a continuum from parasitic relations to relations in which

¹⁹⁰ In fact, "even its name is not generally agreed on. Terms that may be considered synonyms, in whole or part, are symbiosis, commensalism, cooperation, protocooperation, mutual aid, facilitation, reciprocal altruism, and entraide." (Boucher, James and Keller, *The Ecology of Mutualism*, p.315) 191 This is the usual definition, as it has "both historical priority and general currency." (*The Ecology of Mutualism*, p.315)

¹⁹² This "approach is artificial but convenient." (The Ecology of Mutualism, p.316)

¹⁹³ The Ecology of Mutualism, p.322

¹⁹⁴ Douglas H. Boucher, The Idea of Mutualism, Past and Future, p.17

¹⁹⁵ The Selfish Gene, p.181, p.202, p.182

¹⁹⁶ General Idea of the Revolution, (Pluto Press, 1989), pp.215-216

"mutualism", which had been introduced into biology a few years earlier by Belgian zoologist Pierre-Joseph van Beneden who "argued that the kinds of social relations in animal societies were as varied as those found in human societies." Beneden, like de Bary, also differentiated between parasitism, at one end, and mutualism at the other. 197

Beneden introduced the term mutualism in 1873, arguing that in addition to parasites "we find others who mutually provide each other services" and "it would be most unflattering to call them all parasites or commensals. We consider it fairer to call them **Mutualists**, and thus mutualism takes its place beside **commensalism** and **parasitism**." Given that the French working class had organised societies of Mutualité for decades, it is unlikely that van Beneden was unaware of this use of the term. This is particularly the case as workers in Lyon explicitly called this system "mutualism" and this is where the founder of anarchism, Pierre-Joseph Proudhon, picked up the term by which he later described his own socio-political ideas. 199

Proudhon was "French **mutuellisme's** most famous exponent" and had "became famous with his book *What is Property?*, a question he answered simply, 'property is theft." In 1871, the "ruling classes's worse fears of mutualism were realised... when the Commune took control of Paris" and "manifested a clear Proudhonian inspiration" by its support for a socialism based on federalism and co-operatives. It was "in this context that the term **mutualism** was brought into biology by the renowned Belgian zoologist Pierre Van Beneden" two years later. Significantly, he drew "the parallel between the lower animals and human society," suggesting that "the industrialist is a thief" or a parasite before going on "to distinguish other species which, far from being parasites, actually assist other species by keeping them clean." It is "interesting to note the possible

resonances of the particular parallels he chooses. Use of the term 'mutualism' may well have evoked thoughts of Proudhon and the mutualists of the Commune... in the minds of some of Van Beneden's listeners and the ironic comparison" of parasites with capitalists "is tantalisingly close to 'Property is theft'... It is simply hard to believe that he would have used such words without some knowledge of Proudhonian thought."²⁰⁰

While not conclusively proven, the links between working class mutual aid with an evolutionary perspective that focuses on co-operation rather than competition seem quite clear. Interestingly, Nozhin (one of the first Russian naturalists to discuss mutual aid in nature) seems to have been influenced by Proudhon and his argument was "guided by the Proudhonist concept of **mutualité**."²⁰¹ With Kropotkin's work, the wheel came full circle as the Russian emphasis came back to anarchism.

Just as Darwin was inspired, in part, by Malthus and his defence of laissez-faire capitalism, so Kropotkin inherited a cooperative tradition in biology which was inspired, in part, by working class people's mutual aid in response to that very system.

¹⁹⁷ Jan Sapp, Evolution by Association: A History of Symbiosis (Oxford University Press, 1994), p.7

¹⁹⁸ Quoted by Douglas H. Boucher, Sam James and Kathleen H. Keller, The Ecology of Mutualism, p.317

¹⁹⁹ As one historian notes, there was "close similarity between the associational ideal of Proudhon... and the program of the Lyon Mutualists... The socialist ideal that he championed was already being realised, to a certain extent, by such workers." (K. Steven Vincent, *Pierre-Joseph Proudhon and the Rise of French Republican Socialism* (Oxford University Press, Oxford, 1984), p.164)

²⁰⁰ Douglas H. Boucher, 'The Idea of Mutualism, Past and Future', p.11, p.12, pp. 13-4

²⁰¹ James Allen Rogers, 'Russia: Social Sciences', pp.256-68, *The Comparative Reception of Darwinism* (University of Texas Press, 1974), Thomas F. Glick (ed.), p.239