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The Car and the Commons

Abstract

This paper discusses the centrality of the automobile to experiencing modern life. Access to a car is considered essential to access vital services and, as such, automobile usage plays a crucial role in commoning. However, this is said to draw lines of inclusion and exclusion premised on financial status, which particularly excludes those in rural areas. Such issues are particularly acute at a time when electric cars are being promoted as a sustainable transport, which actually contains the potential to further marginalise the less affluent. The paper concludes by suggesting that more attention need be given to alternatives from private car ownership, focusing on communal usages.

JEL Classification: J6, L9, Z1.

Key Words

Commons, Cars, Electric vehicles, Rural, Zemiology

Introduction

Issues of inequality are inevitable in discussions of the *commons*; in capitalist society, reflecting on what is or should be common will be bound together with reflections on the impact of various manners of social stratification. By Barnes' (2006) definition, commons constitute a set of assets attributing two central characteristics: they are all gifts and they are all shared. These commons are, essentially, antithetical to consumer capitalism – when they become commodified, they cease to be commons. The nature of such commons is that their ownership should not become embroiled in individualistic empire-building but, rather, be shared as widely as possible. By and large, these commons can be taken as resources. However, while the notion of the commons has traditionally focused upon the environment – water, ecosystems, food – or property rights – the privatisations justified by the infamous misreading of Hardin (1987) – they can also be seen to include elements of public good such as community health, civic space and social infrastructure. For Harvey (2012: 72):

> The common is not to be construed, therefore, as a particular kind of thing, asset or even social process, but as an unstable and malleable social relation between a particular self-defined social group and those aspects of its actually existing or yet-to-be-created social and/or physical environment deemed crucial to its life and livelihood.

What emerges, then, is a social practice of *commoning*. That is the approach to the commons that will be taken in this paper.

This present participle of commoning means that the practice is best conceived of as a verb rather than a noun – something that is actively done. As such, commons should not be seen as essential, nor all-or-nothing (either everyone has equal access or

it is not a common) but, more sophisticatedly, the commons can be understood as an ongoing concern, constantly negotiated and transformed through lived experience. It is given meaning by the participation of people. To these ends, it seems appropriate here to consider a little articulated element of the commons that appears increasingly relevant in contemporary society; the common resource of mobility. Mobility here centres on the basic ability to access all essential elements of twenty-first century living – primarily, work, leisure and services. At the present moment, such mobility can, in many circumstances, be all too often be substituted with the notion of automobility – that is, the ascendance of the car to become de facto transportation option for the majority of the population in Western nations.

After presenting the importance of the car to twenty-first century life, the paper will move on to consider how poorer citizens, especially those in rural areas, can lose out. This is highlighted as a particular problem considering the current promotion of electric cars, shown as an environmentally sustainable option, but not socially or economically sustainable for many people. Finally, alternatives to individual ownership are suggested to have most potential to protect the commoning activity of mobility in contemporary society.

Mobility

It seems important to consider cars in political economy debates, recognising Higgott and Watson's (2008) rejoinder that the field should always work on the progressive principle of building a better life and the manner that this involves transgressing conventional social science boundaries. The topic of cars should not be resigned to business studies, tackling their problems has far too great an impact for our planet and

its people to pigeon hole the technology in such a restrictive way; this would simply curb our potential to reform, both the way we use and conceptualise cars, and wider social institutions. Indeed, for Urry (2007), mobility need be considered a central social scientific concept as life is lived in relation to movement – at any moment, we are either on the move, in-between movements or reliant upon the mobility of others. In order to understand everyday life, it is essential to recognise that it is experienced in a constant state of flux. His critique of traditional social science for assuming stability and the concrete can, by extension, be applied to understandings of the commons. In mainstream sociology, people have generally been seen as static entities tied to specific places. In contrast, the mobilities paradigm encourages us to look at movements and the forces that drive, constrain and are produced by those movements. So it is with the shift this paper suggests from seeing the commons as some established set of firmly grounded entities and onto commoning as a fluid and animated institution. By looking at the place of mobility within commoning, we gain a better idea of how people actually experience life and engage with various resources – and this is just the kind of fresh sociological perspective that should be imported into political economy according to Maier (1987). Such insight can provide a richer appreciation of the economic activity that plays out in society.

In so doing, what emerges is that the rise of the automobile over the course of the twentieth century has come to lead and channel this movement. The extent of this transcendence by the automobile is such that Sheller and Urry (2002) have been able to identify the societal domination of the car – they depict an automobile monolith that subsumed society. Although people invented the car, it quickly rose to sublimate all other elements of the surrounding society by orienting this culture of automobility around itself. The culture of automobility involves an interconnected web of car-based

living. It includes manufacturing processes – such as the interplay of Fordism (mass-production, assembly lines) and Buddism (modular product design, selection of materials primed for construction efficacy), which allowed industrial consolidation and expansion on a previously unknown scale (Nieuwenhuis and Wells, 2007). Additionally implicated are a complex of roads, petrol stations motels and other such institutions that only exist in their present forms due to cars – this is the cultural environment that frames driving as a thoroughly mainstream experience (Normark, 2006). Further, cars have a tremendous environmental impact – the motor industry is rapidly attempting to (at least, appear to) green the car in recognition of the manner in which automobility drains the planet's resources and pollutes the atmosphere, inherently unsustainable practices (Mikler, 2009).

Beyond these factors, there is a social effect of car usage – car culture has contributed to a perceptible shift to the right in terms of popular ideology, a rise in individualism that cuts off social interactions and has the potential to lead to social atomisation (Monbiot, 2006). This social change means that neighbours pass by one another in their isolated metal boxes twice a day, further diminishing the value of community in consumer capitalism and encouraging a libertarian egoism whereby car ownership is seen as a mark of personal achievement and thus driving is an expression of individual freedom. Thus, as outlined by Althusser (1971: 121-176) in his conceptualisation of ideological state apparatuses, values are developed through social practices. As such, alongside the capitalist values imparted through the media or by the institution of the family, perhaps common driving practices may propagate a neo-liberal doctrine of self-centredness. Through commuting, car drivers learn to conceptualise other road users as rivals and thus reinforce a vision of life as a battle against rivals – in stark opposition to the common experience of taking the bus.

Perhaps the most significant element of car culture, that underlies the foregoing aspects, is the way in which it has gone hand-in-hand with the conflation of want and need inherent in high capitalism. The automobile and private purchasing power have become fused together. The car is the second most expensive item most people will buy, yet it has been internalised as a legitimate goal – and one that need be won and won again or, rather, bought and re-bought across the life span (Newman, 2013). As the car, then, takes such a central place in society today, it can be considered the lynchpin of an entire mode of social organisation. When we understand the social relations between communities and their environment, then, we do so framed by the car – the automobility is inherently present in what we can, or cannot, do, be and achieve. It is in this light that Soron (2009) picks out the car as the preeminent example of compulsory consumerism in contemporary society. As Rajan (1996: 6) notes, cars do not belong simply to the private domain, they are civic matters that engage an entire public. As such, cars are political. Our social system revolves around having access to, being reliant upon, or even trying to avoid, the car – automobiles and capitalist society are highly intertwined.

The Future of Cars

This *car system* is deeply pervasive and firmly entrenched, though it is important to note that it is being challenged, by way of its internal contradictions unravelling (Urry, 2004). Essentially, the dependence on limited and damaging fossil fuels might be exposed as somewhat inimical when applied to the prospect of rampant and untrammelled growth in production and consumption. They challenge the commons of the environment to such an extent that continued usage in the current fashion

cannot persist – either, we use up all the oil and cannot drive anymore or choke the planet with toxic emissions and aren't here to drive anyway. While Vogler (2000) has identified how so many of the environmental commons (oceans, Antartica, outer space) are not under the jurisdiction of governments, the air is and, as such, can be legislated upon at national and supra-national level. The European Union sets targets for limiting air pollution, as in its air quality directives (see, for example, European Commission, 2008). Such measures set goals for the level of air-borne contaminants, including particulate matter and nitrogen oxides, produced from the burning of fossil fuels, to be implemented on member state level. If these are not met, fines will be issued. Indeed, the European Union recently launched legal proceedings against the UK for failing to meet its emission targets (see McGrath, 2014). In particular, London has failed to meet standards due to its heavy concentration of vehicle emissions – with the Westminster government and devolved London Assembly thus effectively being held responsible for failing to protect the commons of the air and thus inadequately allowing residents to engage safely in commoning activity without risk of falling victim to invisible toxins.

Accordingly, it is possible that a series of social, technical and policy changes may tip the balance toward a new *post-car system*. An understanding of the movement from incumbent to emerging technologies is offered by the increasingly prominent socio-technical transitions theory that has become the preeminent lens through which to consider sustainable development (Geels, 2002). This framework locates technology within its wider social context, allowing entire systems of production and consumption to be captured, thus tracing the evolution of a new technology from obscure niche out to widespread acceptance. A key organising concept is that of the multi-level perspective, comprising: niches, in which the new technology emerges;

regimes of dominant technologies and associated institutions, and; landscapes of macro-level structuring agencies such as values and resource constraints. The landscape acts as the background, describing the social, political, economic and cultural scenery. Change tends to occur most often between niche and regime levels. Technologies become established at the niche level, although there are multiple potential pathways for transition (understood as regime shift) to occur. Change, then, is to some degree inevitable when looking from a medium- to long-term perspectives (transitions can take around a hundred years), though the nature of those changes may be unclear to the individual at any particular socio-historical moment. By this theory, there is a significant element of social need in any change – the public must want a new technology to make their lives easier so there is a possibility of this working for the commons as, perhaps, recognition of the overwhelming environmental degradation caused to our planet by resource depletion or air pollution may prompt a shift to a more sustainable alternative to the car.

However, it may be more likely that the choices made will not favour the environmental commons at all; the evolution of transport choices to date certainly have not, and nor have those in other important industries such food to housing. The theory is, after, all one derived from business schools and has an inherent assumption for consumer capitalist consumption (see Whitmarsh, 2012). It may also be worth considering, then, Flink's (1972) classic Marxist interpretation of the influence of the automobile on American society, which offers distinct parallels but with a more anti-consumerist framing. That historical account divides automobility into three distinct phases and shows how each epoch contains the seeds of the next. The first stage, from 1910 to World War II, involved the introduction of the car into American society and the reorientation of both landscape and culture to accommodate it. The second period,

in the 1940s and 1950s, constituted the American love affair with the car. Finally, which started in the late 1950s, has seen disillusionment with the car and its reconfiguration as a problem rather than an ideal. So, the car system developed as a panacea to many significant issues in American society, facilitating trade and recuing rural isolation – it provided a means to enhance the development of American society without resorting to the bogey man of state intervention or interventionist government policy. However, when it starts causing more problems than it solves, it may be the case that the emotional attachment to the car as it currently operates dwindles and that creates the possibility of change.

As to the future of personal transport, Dennis and Urry (2009) offer three future scenarios, labelled; *local sustainability*, *regional warlordism* and *digital networks of control*. Within a future of local sustainability, a form of eco-communalism is practiced whereby a network of isolated, self-reliant and largely autonomous communities are scattered across the habitable world. This scenario follows in the aftermath of some sort of energy crisis, a substantial down-scaling as economies collapse and resources become ever scarcer. Long-distance travel is unusual as society witnesses a large-scale contraction in the breadth of human affairs. In these circumstances, car usage is a luxury, the privilege of a select few; resented by the overwhelming majority denied the ability. Life is rendered local as life becomes slower and quieter. Under the second scenario, regional warlordism, an energy crisis leads to war and heightened tribalism as communities compete for the scant resources available. This is a paranoid and fractured world wherein technology and infrastructure falls in a state of ever-worsening disrepair. Situated in their armed, gated communities, the better off separate themselves from the poor, weak and vulnerable. Long-range travel becomes an exception, restricted to the super-rich and,

then, only those elements willing to accept the risks associated with moving out of the clan area. The third and final scene is that of digital networks of control, as an organic, automated system of smart grids forms a cohesive transport network. The need to ration dwindling resources would lead to increasingly sophisticated, and regimentally strict, means to protect society against the vagaries of nature. On one level, the traffic landscape is similar to that found before the car monopolised roads and marginalised users utilising other forms of mobility. On another level, though, the electronic integration and coordination of multi-modal transport nodes offers a whole new visage to movement. In this situation, carbon becomes a form of currency, with refined management systems regulating the allowances that dictate who can go where and when. This is a surveillance culture. Virtual access will increasingly come to replace physical experience in an effort to circumvented restrictions placed on travel.

Cars and Rural Poverty

In each of the above possibilities, physical mobility can be directly related to a form of social mobility and, as such, it is possible to find the impact of inequality as it pertains to the commons of access to transportation. The full ability to practice commoning is premised upon being part of the elite who can get access to cars; the masses that are not able to use such cars must make-do and try to get on with their lives as best they can. Our relationship with cars is tied in to our financial circumstances; the better-off get to use cars. These are visions of the medium- to long-term future; the short-term seems likely to be a variation on the present situation. In order to access socio-economic resources that all citizens should be entitled to, such as the potential to work or to receive healthcare, the car remains key. Although

the above theories suggest that we will move beyond the widespread use of cars as we currently know them (whether through innovation, changing attitudes or necessity), there is little sign of that happening in the foreseeable future. To these ends, it is important to consider those locked out of the commons because they might not have an automobile, To take the UK as an example, there are presently swingeing public service cuts, devastating social security clampdowns and yet ever-rising fuel bills as major energy companies are allowed to profiteer by a resolutely pro-business, anti-state support government, there is a much needed focus on fuel poverty in the UK (Winch, 2013). While recognising the import of that issue, the RAC Foundation (2012) has also raised a little-considered parallel with regard to the idea of transport poverty. Fuel poverty applies to the 4 million households that spend more than 10% of their income on powering their homes – this figure is dwarfed by the 21 million households that spend over 10% on transportation. For the average household, transport is the single biggest outgoing.

According to the Joseph Rowntree Foundation (2000), this issue is particularly heightened in rural areas, with transport acting as a major barrier to accessing services. Based on the notion that rural public transport provision is so piecemeal and restricted as to be fundamentally inadequate (and, where it does operates, prohibitively expensive) and essential services are spread out to preclude active transport, car ownership is deemed the key component of their findings that, the more remote the location, the greater the extra expense. To achieve a minimum standard of living is said to cost £14,400 in an urban area, £15,600 a year in a rural town, £17,900 a year in a village and £18,600 in a hamlet or the remote countryside. A Sustrans (2012) report suggests that rural areas in at least half the UK's local authorities have residents at high risk of being cut off from jobs, health care and leisure facilities

required for functioning as part of normal society. Transport poverty, then, risks casting aside those who cannot afford to runs a car and leaving them behind; social mobility requires automobility. In rural areas, 79% of journeys are by car, compared with 65% nationally (Department for Transport, 2010). The average rural dweller drives 8,450 miles per year, compared to the average of 5,551 miles per year (RAC Foundation, 2013). By way of contrast, it is instructive to compare the rural UK with its metropolitan capital city, London. While 91% of households in rural areas own a car, only 57% do so in London (RAC Foundation, 2013). In the most recent UK census, the total number of cars increased from 23.9 million in 2001 to 27.5 million in 2011, London showed an increase in the amount of households without a car, while London was the only part of the country to see a decrease in the number of cars (Office for National Statistics, 2012). In contrast with rural areas, London not only has the buses and trains that ordinary UK cities have, it is also boasts the tube metro system and a fully funded bike swap scheme. With a more thorough system of public transport provision, London highlights the manner in which urbanites can do perfectly well without a car.

In stark contrast, rural householders are more likely to find themselves rendered dependent upon car usage, as has been highlighted by Dargay (2002) in considering the impact of economics on automobile ownership and usage. When car costs rise, urban drivers are far more likely to give up their car or restrict their usage, while rural drivers will persist with their cars for longer – because they have to. Regarding purchase costs, the elasticity of car ownership is twice as high in urban areas, while fuels costs exert no significant influence in rural areas yet they do for urban drivers. Urban drivers feel much more able to jettison the car if they feel it over stretches them; they can do this and still experience essential labour, leisure and

health activities in their vicinity. However, for drivers in a rural area, 72% rely upon a car for shopping and 69% require one for work, in contrast with figures of 39% and 69% respectively for urban areas (RAC Foundation, 2011). Shopping allows people to get the food to feed their families, work means they can pay for it – these are not simply lifestyle choices; in contemporary society where most people do not work on the land or grow their own produce, the ability to travel to undertake such activities is a necessity. If car usage becomes more expensive, then, ordinary citizens in rural areas face the choice of leaving their homes, family and friends behind to chance their luck in the city (assuming they are in a position to move) or putting themselves into ever more perilous positions to try and afford to keep getting by.

These trends are only likely to be heightened in a situation whereby national and supra-national governments alike are pushing electric cars as the preeminent sustainable mobility option with a consideration to meeting environmental targets. Indeed, the above socio-technical transitions theory predicts that the present car system with its reliance upon the internal combustion engine will likely soon come to be replaced by the electric car (Hoogma et al, 2002) and this, indeed, tallies with the dissatisfaction of Flink's (1972) analysis whereby technological developments solve major problems. We are not seeing a revolutionary move away from the car system but, rather, attempts at evolution – simply reforming current processes, with a slightly more sustainable twist. This is, perhaps, the final stand to see off any of the more dramatic changes prophesised by Dennis and Urry (2009). In this light, automobile manufacturers are subject to an increasing array of regulations punishing the dominant internal combustion engine, such as reducing tail-pipe emissions. The first European Union targets for cutting emissions were introduced in 2012 so that, by the end of the year, 65% of member country's new cars needed to emit less than 130g/km

of carbon dioxide (see European Commission, 2012). By 2015, the entire new car fleet must meet that same limit which will be reduced to 95g/km in 2020. Despite producing emissions from both the manufacture of the car and production of the energy source, electric vehicles are classified as zero emissions. However, cost has been shown as a major debarring factor precluding the general public from considering electric vehicles as a viable mobility choice (see, for example, Graham-Rowe et al, 2012). The electric cars cost markedly more than their internal combustion engine equivalents. Many consumers feel priced out of this shift to sustainability.

In recognition of the need to address cost, governments across the European Union have taken a similar tract to the UK, who declared 2011, 'the year of the electric car', introducing significant cost incentives (Department for Transport, 2010). The Office for Low Emission Vehicles (2011) set out the government position in *Making the Connection* (which, ironically, shared a similar title to a government paper ten years previous that warned of the dangers of social exclusion if citizens were denied access to services due to their transport needs – see Social Exclusion Unit, 2003). They committed over £500million pounds to electric vehicle research, installing charging points and, as the centre piece, subsiding vehicle costs to the consumer. Those who purchase a new electric car in the UK can receive price reductions of up to £5,000, as well as exemption from road tax and toll payments. Political decisions have been taken deliberately to support what would otherwise be a completely uneconomic proposition (see Villareal, 2011). Such measures have not had the desired effect, so 2011 was a bit of a damp squib and a little over 1,000 units were registered in the UK (Automotive Industry Digest, 2012), compared with almost

two million new cars in total (Ruddick, 2012). In turn, 2012 saw electric cars fare little better (Vaughan, 2012).

Electric cars, then, are still out of reach of most ordinary people. Between 2008 and 2010, electric car sales did not rise above three figures, not even accounting for 1% of total sales. While there was a notable rise in sales between 2010 and 2011, with vehicles sold increasing nearly ten-fold from 167 cars in 2010 to 1082 cars in 2011, their overall proportion of the new car market was a little over 0.06% in 2012. The overall contribution of electric cars to new car sales remains minor in the extreme. The £5,000 reduction is still not enough as many ordinary consumers feel priced out. This supposedly environmentally sustainable option, then, is not socially or economically sustainable – ordinary working people cannot afford them. In the quest to preserve the commons of the environment, all but the rich are being made to take a back seat. Indeed, it has been argued that the high price of these cars means that they constitute technology for the affluent (Wells, 2012). In so doing, electric vehicles present a means to enshrine social exclusion within another generation or two of car buyers (Newman, 2013). Car ownership is general can be reconfigured as a political act with purchasing habits resolutely class-based in that they act to bolster and legitimise the existing regime. Indeed, Debord (1955) has presented the abundance of private automobiles as the foremost example of capitalist propaganda used a tool to persuade that car ownership is a privilege they have been fortunate enough to earn under this benevolent class system. So it is for electric cars, the latest cherry on the cake for those who have most succeeded at playing by the rules set out to order capitalist society: those earning enough money can afford to reward themselves with the latest sign of automobile affluence. The added bonus is that owners also get to feel good about themselves for supposedly saving the environment – the epitome of the

smug, middle class liberal epithet commonly attributed toward electric car drivers (see Newman, 2014).

Away from Private Ownership

As a way around this presently marginalising technology, it seems that a far more sustainable means of using electric cars would be to encourage communal usage of such vehicles (see Cairnes and Harmer, 2011). Cars can be rented or shared in various ways so that automobiles need no longer be fetishised as personal possessions (see Alvord, 2000). More so, multiple users can gain the benefits from single vehicles. Changes such as these, allow for current dangerous practices within the car system to be challenged. As such, cars are revealed as a functional and necessary lifestyle addendum, whose selection carries a great deal of social and environmental baggage so needs to be managed carefully. Moving away from the habitual car use currently operated could reduce emissions, with less individual trips, and cuts back on the raw materials used, as it will not be as necessary to build so many new vehicles. More importantly, it should promote community cohesion by bringing people together. Vitally, as regards commoning, it can be envisaged to enhance social inclusion, by providing a greater degree of choice – offering a genuine opportunity to those who would be excluded if cars had to be paid for up front (or on credit with hefty interest or repayment mechanisms). Using electric cars, in particular, in such schemes rather than internal combustion engine cars markedly enhances the prospect of attaining some level of social and environmental good (a double shift to sustainability). Such developments have great potential for facilitating commoning in the shadow of the car system, allowing the enactment of Benkler's (2003) concern that a core common

infrastructure informs our political economy, the pooling of recourses thus encouraging both democracy and individual freedom. As Benkler (2003: 9) notes:

> Building a core common infrastructure is a necessary precondition to allow us to transition away from a society of passive consumers buying what a small number of commercial producers are selling. It will allows us to develop into society in which all can speak to all, and in which anyone can become an active participant in political, social, and cultural discourse.

Such car sharing can make a powerful contribution towards meeting these aims.

In public consciousness, the foremost example in this realm is Paris Autolib's, launched in 2011.[1] In Autolib' is the world's largest system of self-service cars (see Donovan et al, 2013). It follows a similar model to the city's Vélib'; the system of over 20,000 self-service bikes, launched four years previous. Significantly, Autolib' uses electric vehicles and features 3,000 such cars distributed between 1,200 stations, facilitated by somewhere in the region of 6,000 recharge points. As Nieuwenhuis (2013) explains, Paris has long had problems with localised aid pollution. Electric cars and, in particular Autolib', helps address this. According to the French Environment and Energy Management Agency, one Autolib' vehicle replaces nine privately owned cars. Total car trips in the region are normally 23million per day, and Autolib hopes to replace 22,500 private vehicles.

As well as environmental sustainability, Autolib' asserts itself as facilitating social sustainability by being economically viable. The scheme claims to offer working-class families – particularly those in the suburbs, where cars remain hugely

[1] See https://www.autolib.eu/en/.

important – the chance to make better lives for themselves. It allows them an affordable means to access cars. There is clearly some veracity in this ambition; not having to pay to own a vehicle frees citizens from the cost of purchasing the cars, as well as the inherent risks in running them (losing their value, ongoing repairs and, not least with electric cars, the possibility of the technology becoming outdated). Autolib' can afford to take on this burden itself because it is run by the investment and industrial holding group, Bolloré – one of the 500 richest companies in the world. They cover the majority of the value chain, from some of the component supply and the car battery through to some of the distribution infrastructure with the charging stations and the associated call centre and operations management. If it succeeds in making the transition to using its own solar power, then it will be covering the almost the complete value chain. However, Huré (2012) provides an important rejoinder that the local authorities inviting this company to provide transport provision means that they have sacrificed truly public transport for the influence of capitalist forces. This move has, to all intents and purposes, privatised the city – allowing business to effectively take ownership of public spaces. It seems to solve one problem by causing another; facilitating access to common resources by underlining the commercialisation of the process of commoning to an unfortunately all-encompassing degree. As such, this is a limited and caveat-riven solution to addressing the denial of the commons that inadequate access to personal transportation provides.

A more promising vision is offered by the far less well known Talybont Energy in the Brecon Beacons national park, Wales.[2] This community group, who began by producing local hydro-electric to power residents' homes, have run their community zero carbon car share scheme since 2012. It serves Talybont, a small

[2] See http://talybontenergy.co.uk/.

village in rural Powys, with a population of 743. Talybont Energy have two vehicles, a van powered by bio-diesel – fuelled using recycled vegetable oil, named *Mr Chips*. They also have an electric car, called *Huelwen* (sunshine, in Welsh – the vehicle is charged using solar panels). There are currently 15 members using the vehicles and the group estimates that they have replaced around 10% of carbon emissions of their journeys with these more sustainable alternatives. However, they do not only want to replace fossil fuel miles with zero carbon miles and encouraging less cars on the road through car sharing. They also seek to test the feasibility of car sharing in a rural area, recognising how important transport is to an isolated community like this and attempting to counter the inadequate provision of local bus or train services. At the present time, most policy and research is premised upon conceiving of electric cars as an urban mobility option; those left in rural areas are largely forgotten about (see International Energy Agency, 2012). As fossil fuel prices increasingly rise, they provide more people with access to, often expensive, electric cars, which would otherwise remain out of reach of community members. As such, this model offers a more sustainable approach than the Autolib' – a bottom-up, grassroots approach to sustainable transport, with co-operative ownership and free from the influence of major companies. This model offers a viable means to experience the commons; local people are working together to ensure that their community can persist and that residents can continue to gain access to the services they require. Talybont Energy get to the heart of commoning – they utilise the intrinsic feature of co-operation that ties individuals together into society. They do not want their community to be broken up because residents need to leave and nor do they want the less affluent residents to suffer from staying, so they are taking the commons of mobility back into their own control.

The Talybont Energy model of communally owned and run cars may be that to follow in order to ensure that the inability to afford to buy a car does not preclude citizens from the commons. In a similar vein, interesting developments are taking place in rural Lanarkshire, Scotland with the proposed co-operatively organised eco-town, Owenstown.[3] Though still awaiting planning permission, this is to be an inclusive development – they encourage diversity and intend to make housing affordable so as to not simply create a gated community for the rich. It will be a low-carbon community with sustainability in their approach to living, working and movement is said to be the cornerstones of the town. Transport is a main element of this whereby, in addition purposively designing the town to negate the need for car usage, those cars that are run will largely do so under the auspices of a co-operative electric car share scheme, whereby residents share vehicles with one another. Again, this is all done on a local level. Planning a new community in this way offers the potential to instigate such principles from the outset and carries the possibility of ensuring access to the commons as a guiding principle. It will be important to watch this space and see how the good intentions pan out if and when it gets the go-ahead. Community-based approaches, like these, offer a means to combat challenges such as those imposed externally by governments and planners and thus wrest the commons back from an often detached and out-of-touch bureaucracy. That issue of governance and the encumbant need to provide such institutional variety and involve players at all levels is crucial to successfully negotiating the practice of commoning (Dietz et al, 2003).

The need for a movement away from private car ownership can perhaps best be considered in the light of the emerging movement of *zemiology*, which has grown

[3] See http://www.owenstown.org/.

out of criminology. Zemiology is the study of social harms. It is premised on the idea that those acts traditionally defined as crime simply represent constructs; for Hillyard and Tombs (2004), they have no ontological reality and are really little more than social judgements. Properly understanding zemiology teaches that many social phenomena do not allow for law action or sanction to be taken, though they are still firmly contrary to the common good. Rather than criminal justice, the emphasis is on social justice – with a harmonious, fair society being a necessity for a properly functioning economy yet, in light of the actions enforced by official legal sanctions, not properly recognised by political states. Zemiology encourages us to look beyond individually-based harms such as theft or assault, and consider the notion of a broader notion of social harm. The notion of social harm encompasses notions of autonomy, development and growth, as well as access to cultural, intellectual and informational resources, generally available in any given society – or, at least available to certain sections of any particular society. Omitting individuals from such provisions causes harm across population groups and social segments. These are the harms that affect peoples' lives but that are rarely criminalised such as such as poverty, unemployment or even a topic as esoteric as the effect on fans of the death of a pop star (Newman, 2014). Alongside these could be attributed the notion of social exclusion caused by lack of access to transport. Those whose life chances and quality of life are adversely affected by inadequate planning or through unequal economic distribution, they can be consider victims – and of state (in)action. If public transport provision is inadequate, then, essential inequality becomes the means along which access to travel must be measured. Contrary to popular opinion, perpetuated by government, inequality is not inevitable but results but failures of the state to provide for its citizens – perhaps, by way of a dysfunctional welfare system, unfair taxation or a lack

of a coherent policy of job creation (let alone, the more obvious failures in transport infrastructure). That citizens are denied essential services because they cannot afford to run a car, then, should be conceptualised a crime committed by the state.

If a move to electric cars cuts off many poorer, rural communities, this is a social harm that should be considered on a scale with any regular crime against an individual. Further, if the result is that more prosperous areas have better local air quality because residents can afford electric cars (or have better access to public transport), leading to more concentrated build-up of tail-pipe emissions in poorer areas, this is a social harm and, again, can be conceived on a scale of criminality. As Hall (2011) suggests, the matter of environmental victimisation has not been properly tackled and more research must be done into such insufficiently criminalised crimes. Their victimhood need be, both, legitimised and, as far as possible, remedied, with those of others prevented in the future. So, these are serious considerations that should be given due respect. Fundamentally, the state should be supporting schemes that promote access to sustainable mobility.

Conclusion

To make transport truly sustainable in economic, social and environmental terms we must bring in understanding of the commons. This highlights the need for community-based solutions not just the provision of individual options. While privatising public spaces by involving capitalist firms in public car sharing schemes as in the Paris Autolib' might make some on the left uneasy with its implications for the commons, it should be seen as a better option than simply perpetuating the individualist arms race of private car ownership currently encouraged under consumer

capitalism. Of course, a preferable option would be the co-operative ownership model presented by Talybont, which holds a great deal of promise for community engagement without the added baggage of profitability that comes with the involvement of big companies. However, it remains to be seen if and how this approach could work on a larger scale without the stabilising hand of business, though Owenstown will be fascinating case study, assuming it ever moves from appealing design into practical application. For now, it is most important that, at least the principle, of communal vehicle usage is encouraged – to save the planet and to protect any meaningful notion of society, we need to move away from the conventional model of car ownership.

The ideal solution would be for government to invest more money in buses, trains, metros and trams, and to make the roads safer for cyclists while reconfiguring future developments so that key services are walkable from residential areas. However, for the foreseeable future, it seems that the focus will remain on cars – the automobile industry a major financial player that governments will be keen to woo and keep on side, while the technology they provide presents an easily recognisable module of transport for most people brought up within the era of the automobile. Given these limitations, it seems that shared cars provide the best means of ensuring the practice of commoning remains open to the maximum number of people. Indeed, Laurier et al (2008) have highlighted that the habits and practices incumbent in car usage patterns need be taken into account when considering social organisation and, in particular, have highlight a prospect of much promise in the unusual levels of hospitality shown by occupants in shared vehicles. Sharing this particular social space appears to bring out the best in people – while separating from one another is a major problem in private vehicles, being brought together in the same technology can

actually be a positive factor. This communal element should be capitalised upon for the common good as a matter of some urgency, to bolster social engagement – we need a shift from the present car system for far more than just environmental reasons, social sustainability should be considered every bit as significant.

Further, using the language of zemiology, it is a crime that those of low economic status should be denied access to health or leisure, let alone the means to activate social mobility and improve their lot by getting a job simply on dint of their inability to afford to run a car. Cars must be made to work for people, the community; they should serve the common good and not be allowed to hold significant portions of the population back. Questioning the role of cars in our society presents an important consideration in the light of Watson's (2005) work forwarding a new political economy whereby those on the left are no longer locked in old dichotomies between agency and structure. Rather, interested scholars should engage in debate about societal preferences, social meanings and economic choices (see, for example, Higgott and Payne, 2000). It is important to ask whether we want cars and, if so, what for as well as, critically, probing if there is another way.

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