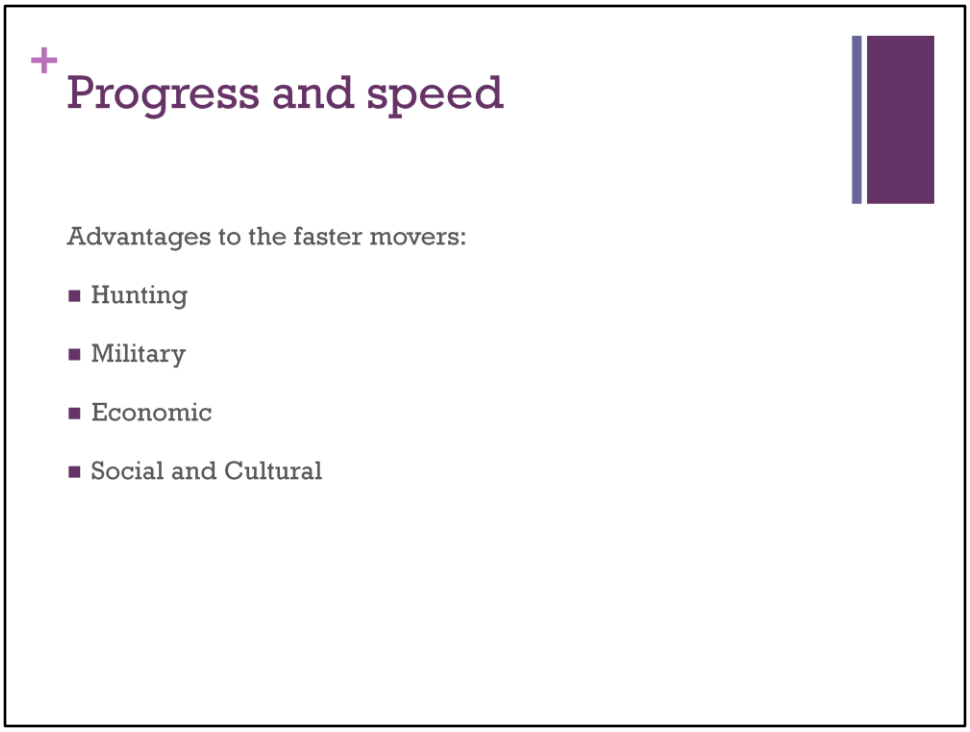
Greeting,
Talking about travel and because you are all here, you are all travellers and can consider yourselves experts.
First a very quick ride through the history of travel.



Being able to travel faster than others usually brings advantages. Obviously if you can run faster than your prey, you are likely to get more food from hunting and if you are faster than others around you, you may eat better than them or be able to commandeer greater social prestige within the group. Also you tribe may flourish more than other local tribes who cannot move as fast.

Being able to move faster than your opponents can give military advantage, so it is no wonder that armed forces have invested heavily in transport technology to keep ahead of the game or to catch up with other forces they see as a threat.

Moving goods faster not only means they can be got to the markets ahead of rivals', but can extend the available hinter and forelands, mean less wealth is stuck in transit and enable greater specialisation of labour.

Being able to move faster or further has often been associated with being in touch with different cultures and communities, giving the traveller greater social and cultural exposure and capital than those who do not have access to this range of experience.

The first tracks were footpaths worn into the landscape by the passage of people, needing little maintenance or planning. They just evolved and probably where there was an obstacle, the footpath went round it, unless there were compelling reasons for and the means to remove it.

Along came the Romans, who invested heavily in the infrastructure to move around the country, not for the benefit of the local population, but in order to be more mobile and flexible than the forces they might encounter and to maintain their own system of supplies and communication. This took strategic thinking and a willingness to think about the future.

This is near Lancaster in the early part of the 20th Century. As you can see there is little distinction between the passage and dwelling spaces. The low speed and volume of traffic means the road can be used for other activities, standing and talking, even playing games. (Copyright of Lancashire Lantern)

The arrival of the canals was probably the first time that a regional travel network imposed itself on the local landscape and travel patterns. Here the Lancaster canal, forced local land travel onto bridges, causing pinchpoints. The canals were built as business enterprises to extend the supply chains and hinterlands of local industrialists.

Similar restrictions must have followed in the wake of the expanding rail network, although you did not get wet if you attempted to cross its tracks.

And here we have the grade separation necessary for the two networks to co-exist. Note the canoe on the canal, an example of how this network is now largely for leisure and prized for its leisurely pace, when once it was the cutting edge of speed, at least for heavy goods.

The development of trunk roads to accommodate motorised travel and transport, here the A6, brought new speeds and dimensions to land travel. This takes more strategic planning both in terms of the area being planned and the time horizons being considered. More and more, roads are straightened and leveled out to permit higher speeds. This requires more disruption to the landscape and compromising of local activities for the needs of the ‘passers-though’.

The motorways continued this trend, but became even less integrated into the locality, by being a separate track, isolated from the local road network and only accessible from a few entry/exit points. With multiple lanes, smooth cambers, relatively straight lines, barriers, hard shoulders, wide margins, slip roads and bridges, they prioritise the flow of fast vehicles and demonstrate considerable investment in avoiding potential problems. Unfortunately, like the previous developments, they not only catered for the existing traffic but encouraged extra traffic and travel by lessening many of the time and money costs of travelling further afield.

Although air travel does not require the same land take as motor travel, it still has heavy consequences for the people living near airports and under flight paths. Even more than motorways, access to this network is limited to relatively few points, airport, creating greater geographical inequities.

My mother always told me 'You can't stand in the way of progress' which made me a bit of a rebel against 'progress'. Does going faster really mean progress?

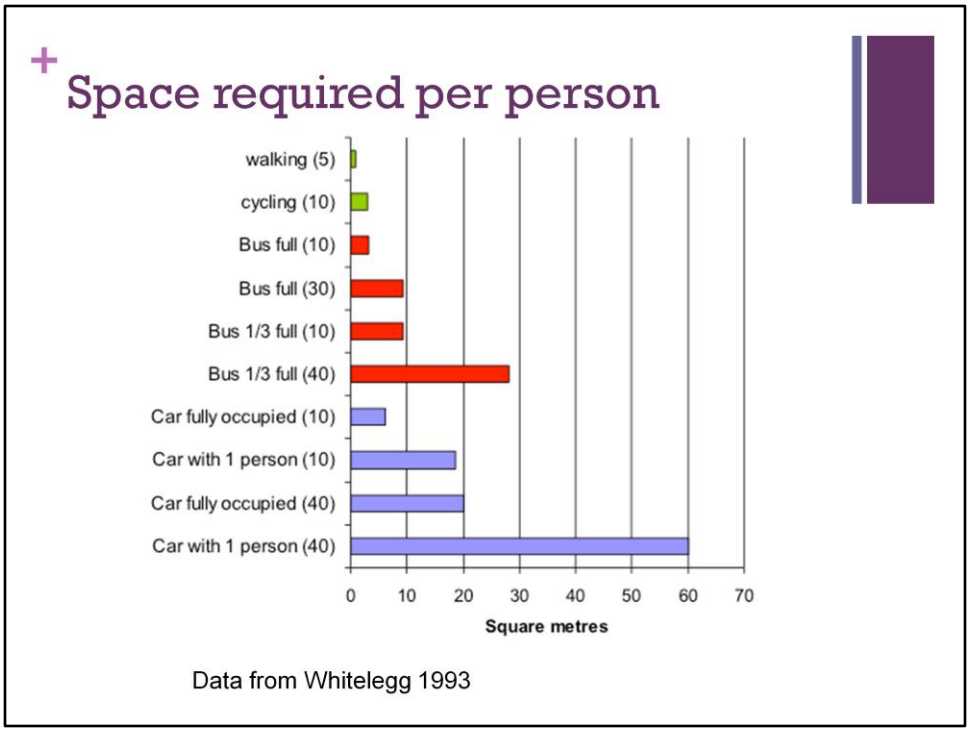
Each step in this progress requires more land and adaptation of the land, as we have seen faster vehicles require broader curves, gentler cambers and wider margins, This explains why cycling along a road designed for high speed motor travel can be very boring. The faster we go, the more we have to take land from 'dwelling' and local activities to devote to the passage of people and goods, many not related to the locality, but just passing through.

This is not just a quantity of land, it frequently severs communities and creates extra borders for human and wildlife, so the disruption caused is of greater proportion than the land taken. For example, severing colonies of plants and animals can result in their decline and demise because the severed colony if too small to thrive. Forests are more prone to wind damage on their borders, increased when transport infrastructure cuts through them. There are also plenty of examples of human settlements cut through by roads or motorways, which make them difficult places to live, for example Craven Arms which straddles the A49.

Another consequence of speed achieved through motorisation is that it comes at a price which may be too high for some sections of the community. The differential between walking speeds is not great, but that between walkers and motorists is very

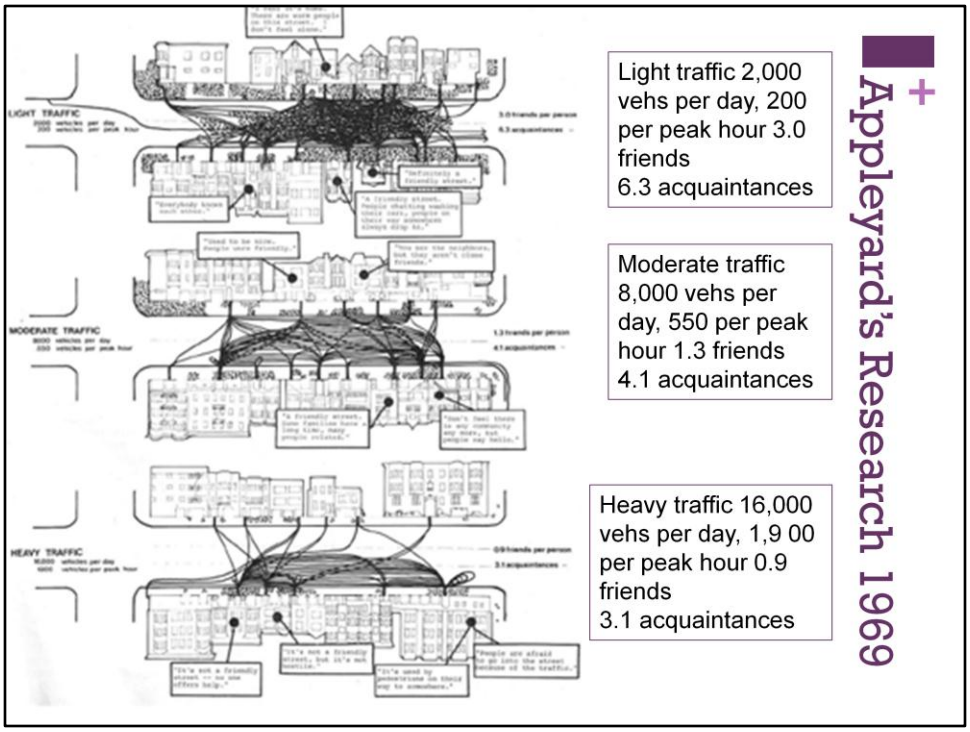
high. Those without access to a car or unable to drive with suffer a relatively high loss of opportunity in a motorised society.

The investment in infrastructure also abstracts resources from other activities in the hope of greater reward in the future. This is also another way in which how we perform mobility reflects some of our attitudes towards time.

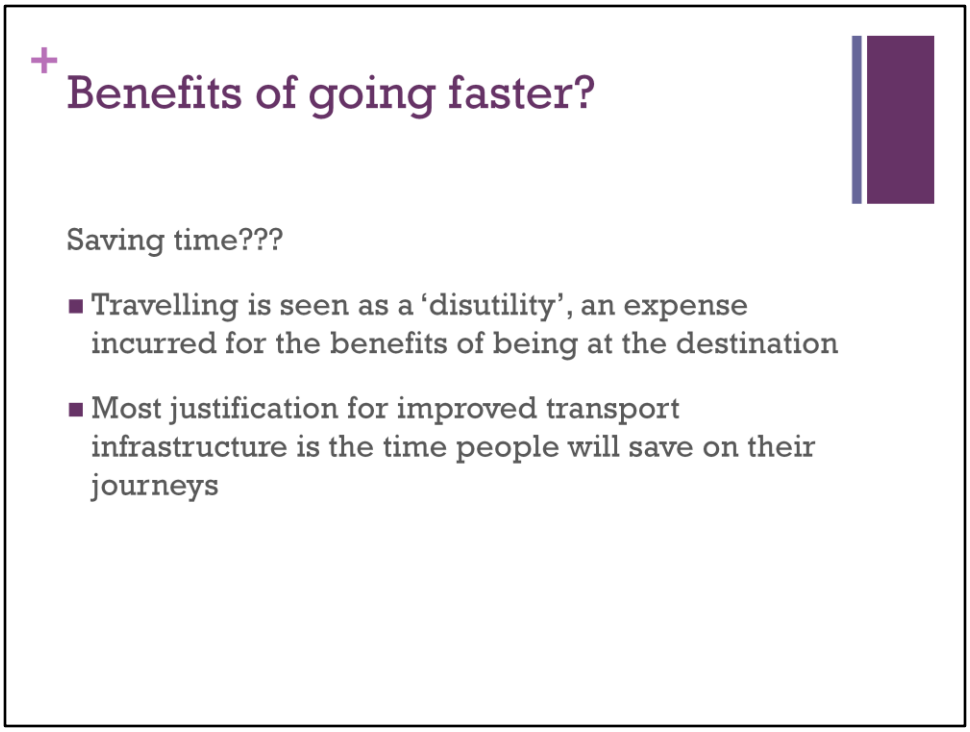


These are relatively old data, but I have yet to find more up-to-date equivalents. It shows the amount of space required for one person to travel one kilometre at different speeds (the figures in brackets), on different modes and with different occupancies. So we can see walking or cycling requires very little space. A fully loaded bus, travelling slowly also does not require much space per person, and there is very little difference when the bus is not full, but quite a lot of difference if it starts going faster.

A fully occupied car gong slow is actually more efficient than the bus in terms of space, but that is lost once it goes faster or with fewer people.

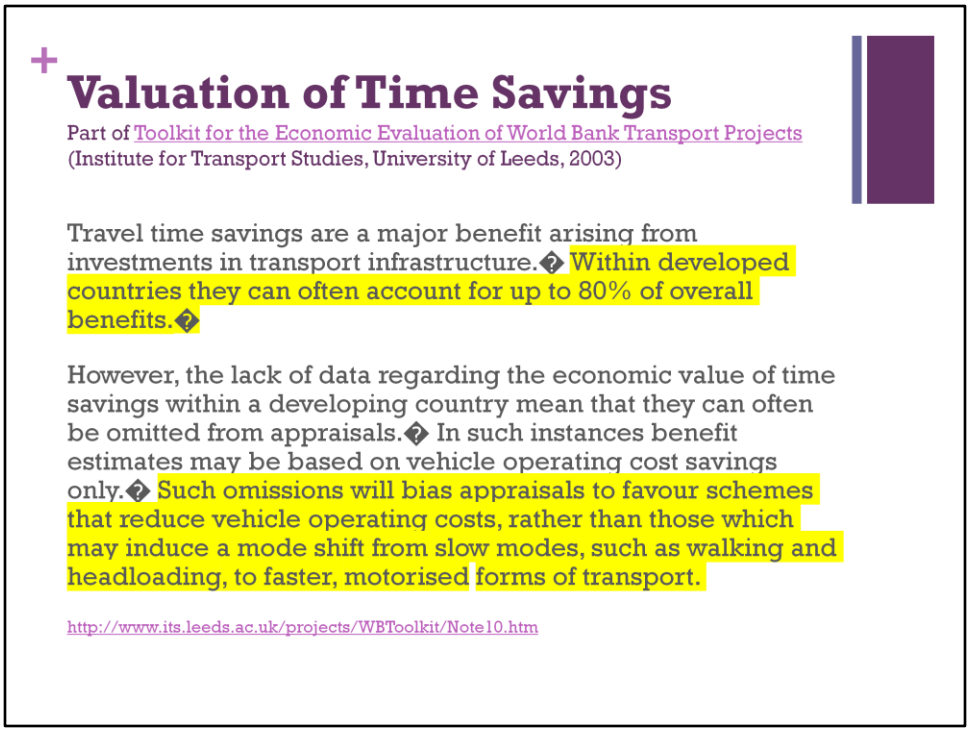


These are diagrams from Appleyard's research in the 1960s and 1970s. They look at the social relationships along streets with varying degrees of traffic. As you can see with relatively light traffic, there is a lot of social interactions across and along the street and on average, with 2,000 vehicles a day, people had 3 friends and 6.3 acquaintances. In streets with moderate traffic (8,000 vehicles per day), the average number of friends on the street was 1.3 and acquaintances 4.1, with far fewer social interactions, particularly across the street. With heavy traffic (16, 000 vehicles per day) the average number of friends on the street is 0.9 and acquaintances 3.1, with most social interactions along, not across, the street. This is part of the severing of human communities which happens when they are dissected by flows of people and vehicles. In very heavily trafficked streets, people move from their front rooms to live at the back of the house, property prices fall and there can be a more rapid turnover of residents, further weakening the community ties.
This research has been replicated in Bristol by a Masters student who produced similar findings to the original.



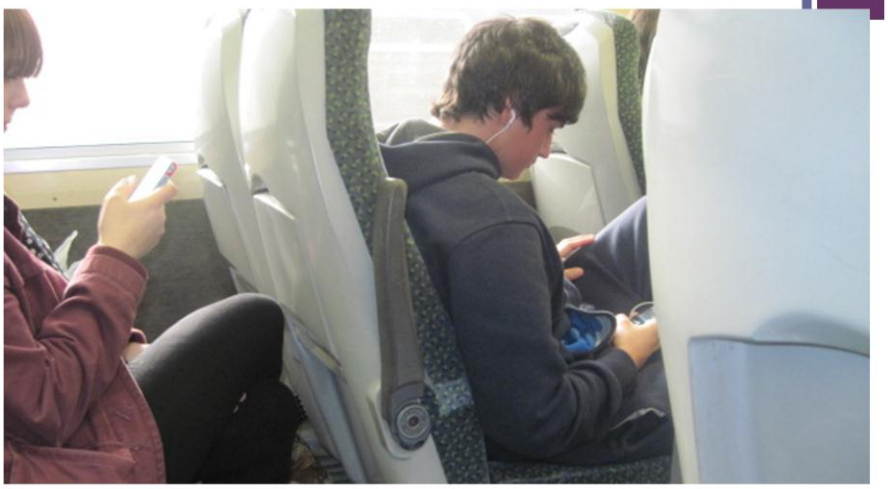
In Transport Economics, travel time is traditionally seen as a disutility, so the aim is to reduce it as much as possible to free up time for work, chores or enjoyable activities.

These potential time savings are the major justification of public investment in improved transport infrastructure.



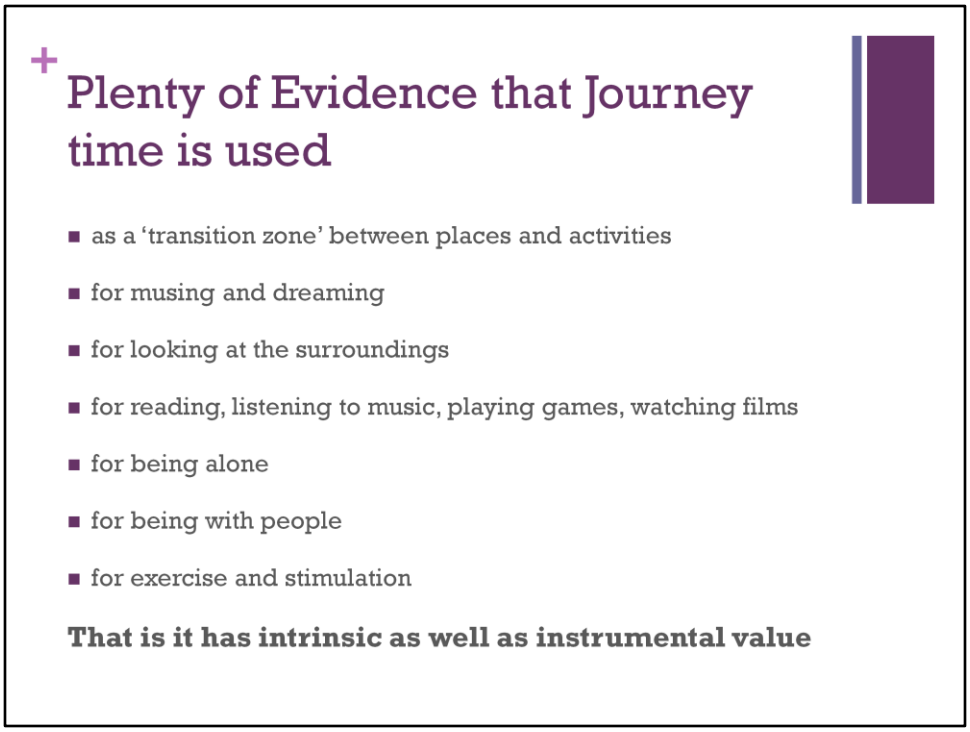
Having known for a long time that time savings form the largest part of any justification for transport infrastructure, I found it difficult to find evidence for it. This quotation for a toolkit on evaluating transport projects in developing countries suggests they account for 80% of the benefits taken into account in the Benefit Cost calculations in developed countries. It also claims that developing countries may not have the data about the value of time to perform the correct calculation to justify investment which moves travel and transport onto motorised vehicles.

Is journey time wasted?



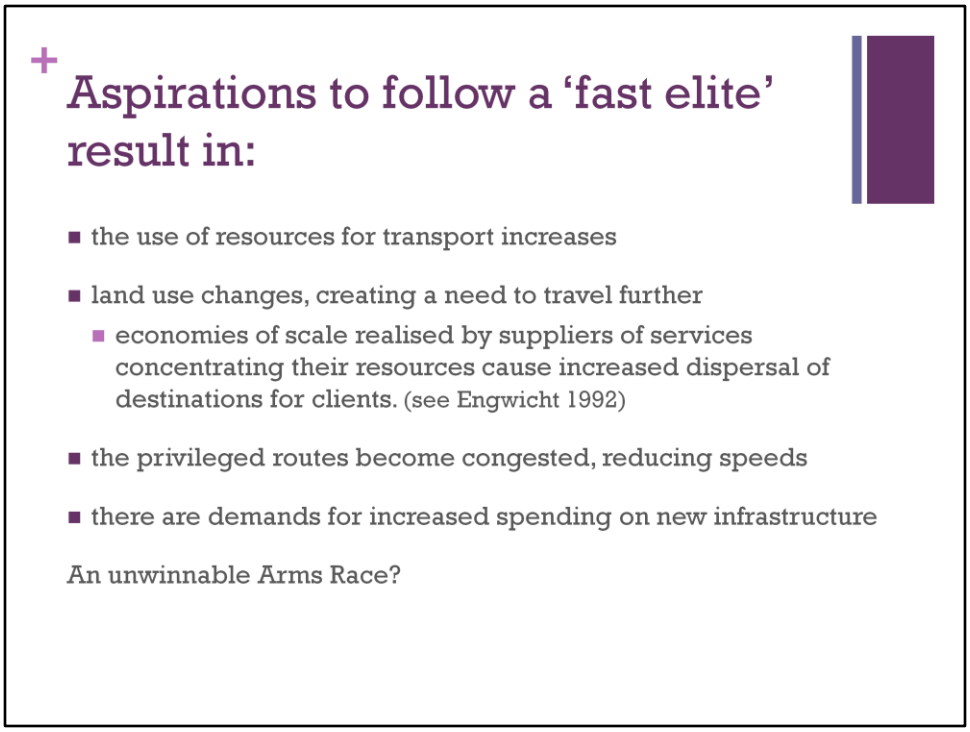
Yet, is travel time totally wasted? This is a typical scene on a British train (Her from Liverpool to Preston) and there is growing evidence that the use of electronic communications and devices are making travel time more productive.

Some operators have been ready to market the potential of journey time and being able to use technology, where they offer an advantage over driving. Bus to the University from Lancaster centre



Even without technology, there is considerable evidence that travel is used for thinking, musing, reading, talking and is often valued as a 'buffer zone' between activities and places such as work and home and time for one's own thoughts. One test is the teleporting test. If you ask people if they would like to be able to travel instantaneously to their destination, they usually answer 'yes', and then reflect that that might be a bit sudden and start talking about all the things they do on their journey.

So it is evident that travel time is not a complete disutilty.



Increasing speed has been used to gain advantage over other people, but naturally makes them aspire to the same or even faster travel. Even people who are happy not travelling will find that their areas change as more people can travel faster and further. Local facilities move away because suppliers can achieve economies of scale by concentrating their resources and especially if they can put the transport costs onto their customers. However, often their concentration results in a dispersal of destinations for the clients. Out-of-town hospitals and supermarkets, warehouses, etc increase the need for people without cars, who once had most of their needs within walking or public transport reach to use and purchase a car.

Engwicht gives the example of a new road between two towns allowing someone in town A to go for a job in town B which previously would not have been practical. A little later, a vacancy they might have applied for becomes available in town A, which is filled by someone from town B, so the two pass each other every day, when without the road both would have had a job near their home. This might be a bit simplistic, but illustrates the process of traffic being generated by new roads.

For most of the latter part of the 20th Century, governments made predictions about the amount of traffic they anticipated and built roads to accommodate it. So sure enough, the traffic increased to fill the new capacity (as Buchanan said, like water from a sodden field into a new ditch. However, eventually the 'predict and provide' policy was challenged by transport experts pointing out there would never be enough

space to accommodate everyone's desire for travel and that the policy was fuelling that demand.

As both the aspirers and the reluctant take to their cars, so the routes of the privileged become more congested and slower and they seek alternative means to assert their competitive advantage, while at the same time there are increased calls for additional spending on infrastructure to accommodate the extra traffic generated by the initial investment.

Illich also saw the way that transport provision was changing the human landscape, making cars necessary, although he underestimated the proportion of the population who would obtain them. I would suggest that aviation is following a similar pattern with even less chance of being able to stop it, because it is predominantly international.

As more people can or want to travel further, communities change, they become more 'porous' with more people in them for limited purposes, such as a job, education, health care, or residence. So ties become weaker and motorised transport allows none of the 'exchange space' whereby people re-enforce their connection through seeing each other, conversing, etc as they do when they are walking.

The provision for and passage of people in cars also impacts on town and landscape.

Westbourne Road, Lancaster around 1900

This is a picture of a road close to my house in Lancaster around 1900. You can see that although there is a lot of public space dedicated to travel, it is barely used and only by people walking. Copyright of Lancashire Lantern

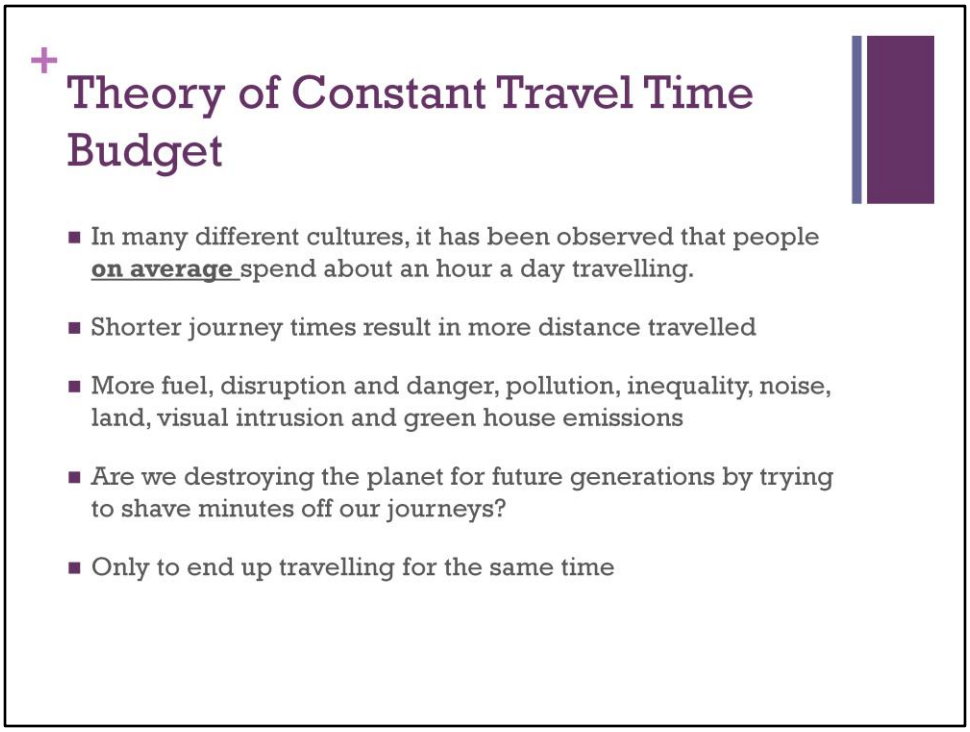
This is the same road about a month ago. I could not take the photo fro the same spot, because it would now be dangerous to stand in the road. However, this is the gate post shown in the previous picture. As you can see the road has been narrowed by parked cars and pedestrians are largely confined to the pavements.

This is the same view this Sunday, again the parked cars take up much of the space, although there is less traffic.

Westbourne Road, Lancaster around 1900

And this is the earlier photo again, with the gatepost for reference. Copyright of Lancashire Lantern

And this view of Preston may be familiar to you. It illustrates the space and intrusion through street furniture that roads impose on our towns and cities



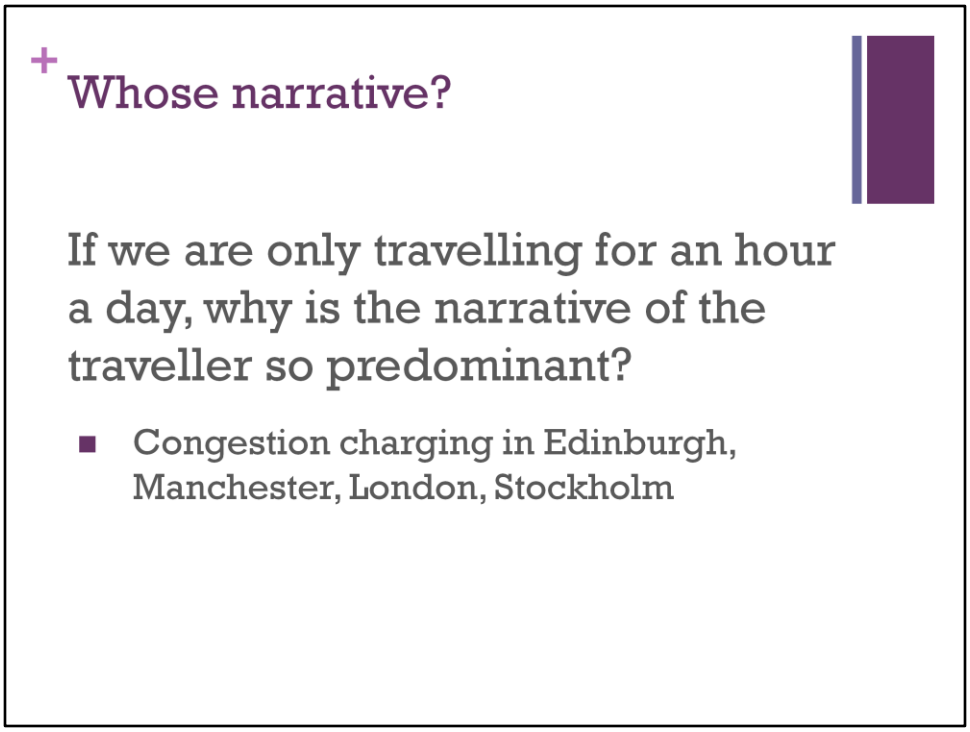
As you will remember, much of the justification for building infrastructure to allow faster speeds was that we would save time for more productive activities. However, there is a theory that we have a relatively stable amount of time devoted to travel. This theory is based on observations in a number of countries with different transport contexts, eg in cultures predominantly using walking or cycling, that on average (so allowing for people who are housebound and those who are travelling all the time) we travel about an hour a day and this remains remarkably constant across time and cultures.

Thus when journey times are reduced, rather than working or playing more, we tend to travel further, either because we now consider further destinations or because we feel forced to travel more to meet our needs as the previously local facilities have moved away. Perhaps a distinction between being a subject or object of changes in the provision.

However, as we have seen faster travel, particularly when it involves the move from human or animal powered travel to that powered by fossil fuels, requires more resources, land, greater inequality and pollution in the form of air, land and water contamination, noise, danger and visual intrusion, let alone increasing the emission of climate-changing gases.

Are we destroying the planet for future generations by trying to shave minutes off our

journeys? And is that just an illusion, because we will end up travelling for the same amount of time anyway?



However, if we are only travelling for about an hour a day, why does the narrative of the traveller appear to 'trump' that of the non-traveller or ourselves for 23 hours a day? Why do we appear to identify much more with the traveller than anyone affected by the traffic? What about the asthma sufferer, the parent of young children, the pet-owner, the bus user, cyclist or pedestrian, the resident on a noisy road they cannot cross or the shop worker breathing in traffic fumes?

An example is the media's treatment of congestion charging. The opposition to this was really strong and I would suggest, it was the local press's adoption of the narrative of the traveller which resulted in the defeat of the proposals in Edinburgh and Manchester. Many people who did not use cars in the cities and who would have benefitted from the improved public transport voted against the proposals.

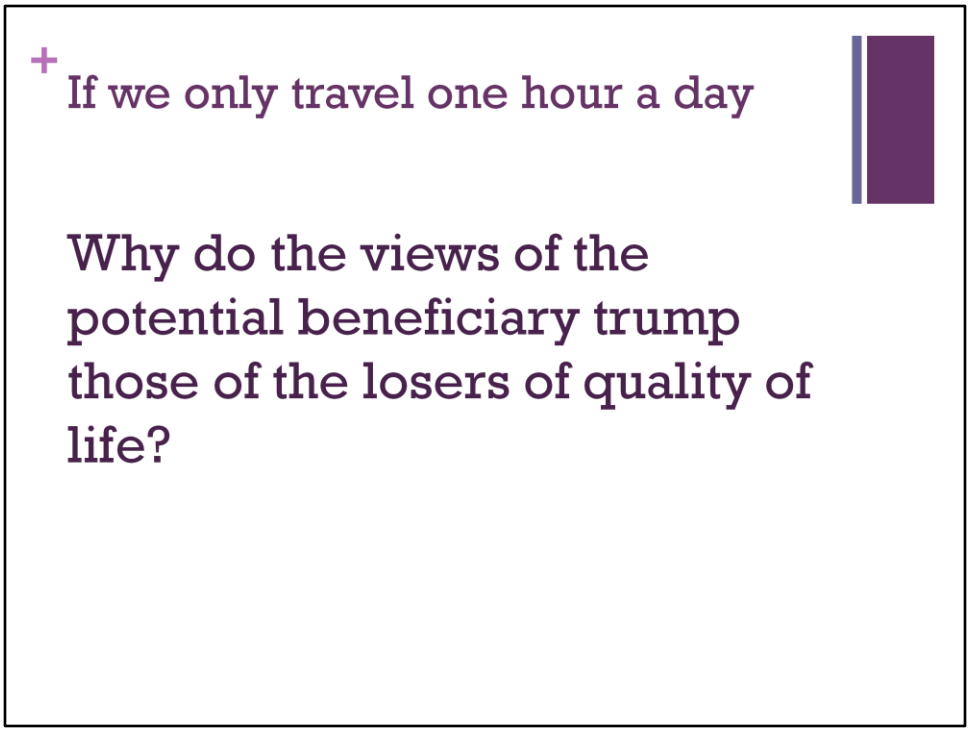
Stockholm was a bit more canny. They held a six month trial and then returned to non-congestion charging for six months before holding a referendum, which voted in congestion charging. However, there was a split between the inner wards who realised the benefits to their environment and the outer wards who saw the disadvantage to their travel. The slim margin was also a result of a change in the political districts during the experimental period.

Cultural capital of traveller?

Urry and others suggest that one reason we travel is to gain social capital. In this Constable, the people in the picture are tied to the landscape, part of it, but the artist and his class have the advantage of a perspective of being able to compare different landscapes and cultures, unlike those depicted.

But I am not sure of the cultural capital being gained in this kind of situation.

Or this, where the ‘view’ of the privileged has be desecrated through providing for the passers by or though.



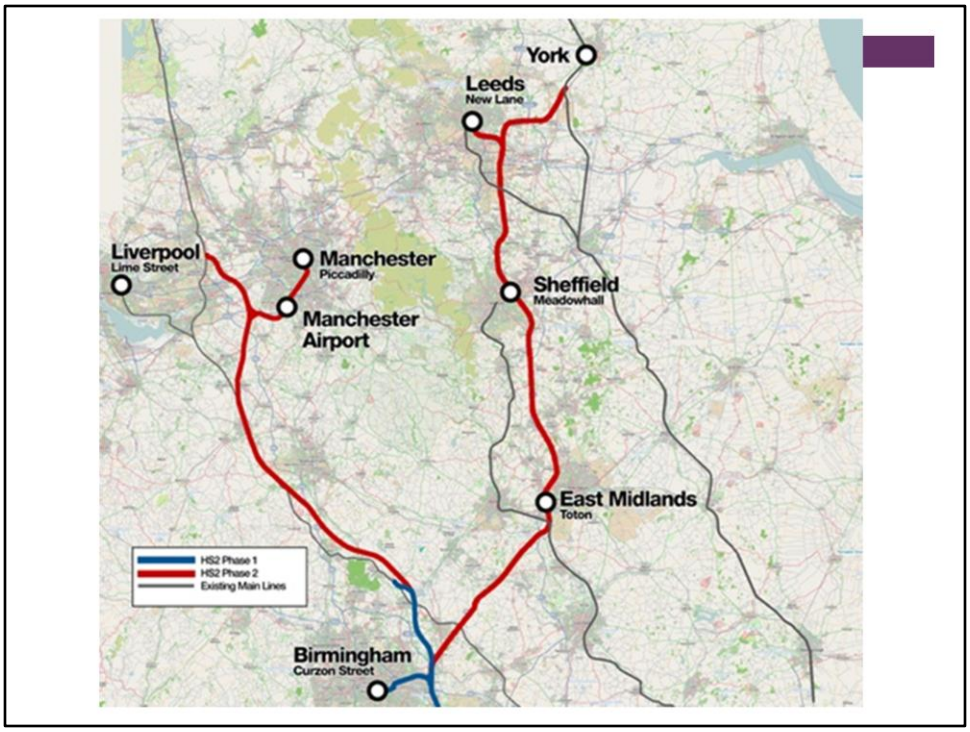
It puzzles me that, although on average we only travel one hour a day, that we so readily identify with the views of the traveller and forget our other roles as residents, workers, shoppers, parents, patients, members of communities. This is particular so when new infrastructure is proposed, when the potential benefits for people to travel further seem to be more prized than the known damage on the current residents and communities in the pathway of the new route.

Planned Heysham Link Road

Creating carbon dependency for new generations,
Tarmacking the future?

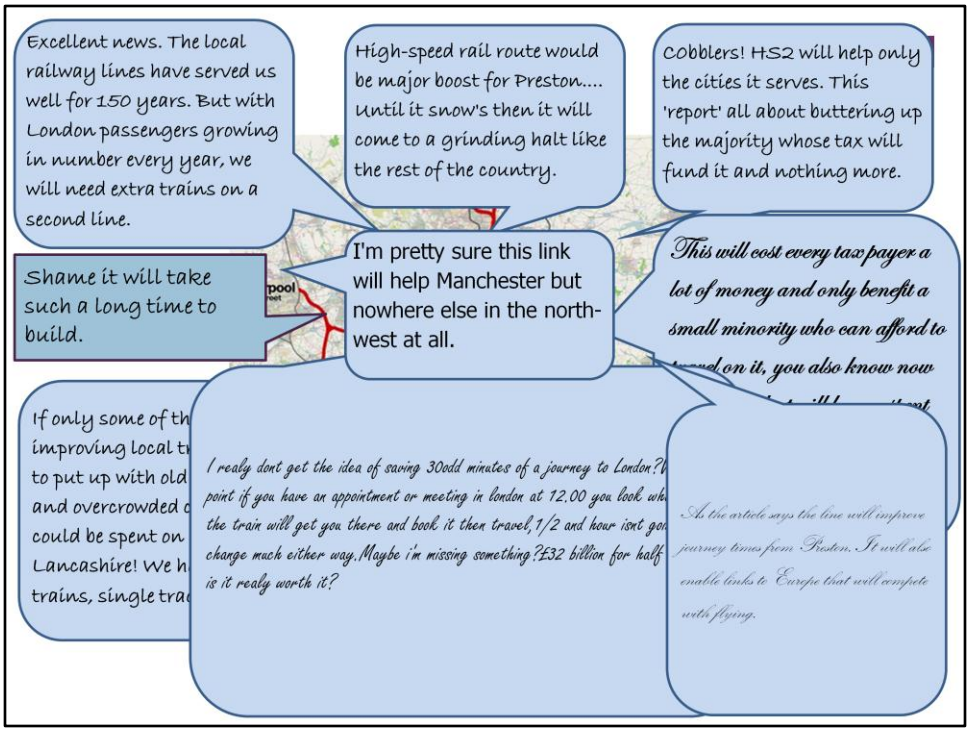
In Lancaster a public inquiry supported the County Council's decision to built a road between the M6 and Heysham. As you can see the route will go through both residential areas and agricultural and recreational land. We are awaiting the result of a judicial inquiry as to whether the decision was lawful, partly because the County Council denied the existence of otters, a protected species in the River Lune where the new bridge will be built,

The County Council acknowledges that the increased traffic will swallow up all the carbon savings that Lancaster has achieved in the last few years and it is bound to increase the dependency on motorised travel for several generations and yet it seems very likely to be built. What puzzles me is how the potential gains of a few people take priority over the inevitable losses of a large number of people.

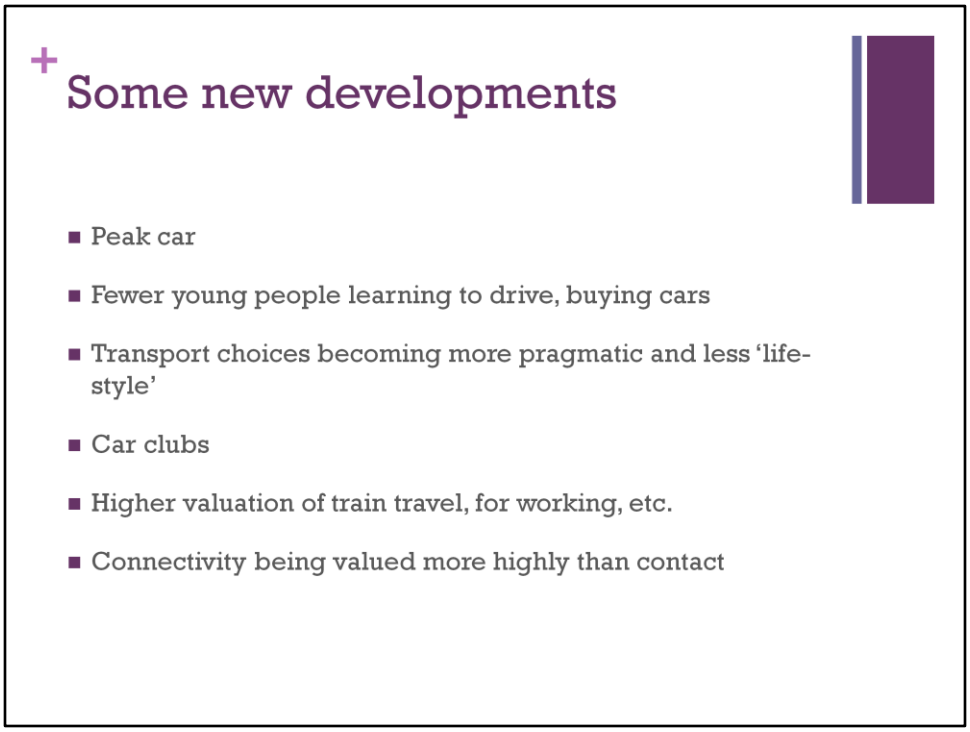


High speed 2 is drawing out a lot of the arguments for and against faster travel. Initially it was justified on the time savings afforded to the users. However, it transpired that this was calculated on the basis of an average salary of £70, 000+, so would not be for the likes of you or me. Now, the argument is tending towards the capacity the line would free up on the normal network. That raised other questions about whether there are more effective and cheaper ways to increase the capacity of the railways which does not involve cutting across treasured landscapes or creating a two-class railway. There is also interesting evidence that work done on trains needs a minimum journey time to be useful, so that making the journey between Birmingham and London even shorter might prevent it being useful for work. There is also research suggesting that time savings, especially on the return journey are considered as benefits to the employee rather than the employer.

I have taken some of the comments from a local newspaper about HS2, to illustrate the kind of arguments generated by the topic of faster travel.



These are views of people in Preston to the HS2 proposals. As you can see there are a number of themes about the distribution of costs and benefits and disputing the value of the benefits. Some take the perspective of the traveller, but others tax payers, residents in the area, etc



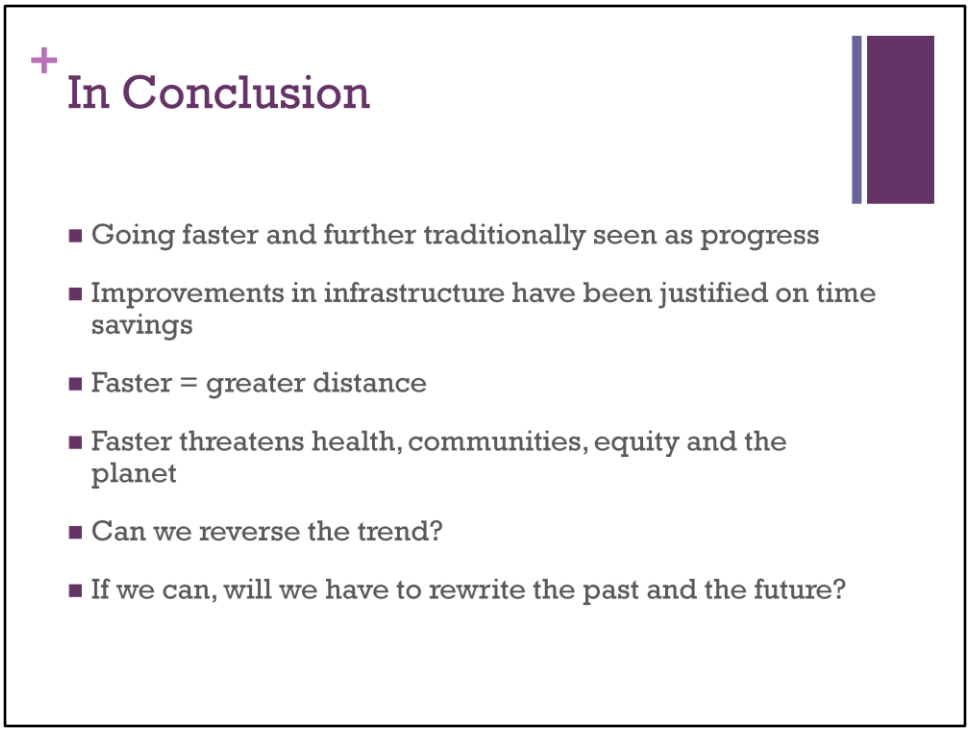
However, there are some changes in the transport trend which hint that the race towards 'faster' may not be continuing.

Until recently the number of cars owned and traffic on the road had always increased. Now both are falling, causing some experts to claim we have reached 'peak car'. Fewer young people are learning to drive or buying cars, probably because of the debts caused by student loans and high housing costs as well the cost of insurance for young people.

I was at a conference about mobility in September and I was struck that a number of presenters from different countries reported that transport choices are becoming more pragmatic. This is a change from the situation where having a car, usually meant you did not use public transport, and cars were intimately tied up with identity. The speakers were talking about city-dwellers, usually with a good choice of public transport as well reasonably short distances suitable for walking and cycling and in Germany the growth of smart car clubs, which allow you to locate a self-drive electric car using a smart phone.

As I have mentioned before, the growing valuation of train travel which allows all sorts of activities including work and entertainment.
There is also evidence that young people value their connectivity more than their mobility and a recent survey in the USA found young people were more willing to give

up their car than their access to broadband.



If for reasons of environment or social justice, the trend towards faster travel is reversed, how will we view that past trend? As totally deluded? An aberration? Will it be necessary to create a new narrative about our past efforrts to go faster and further?