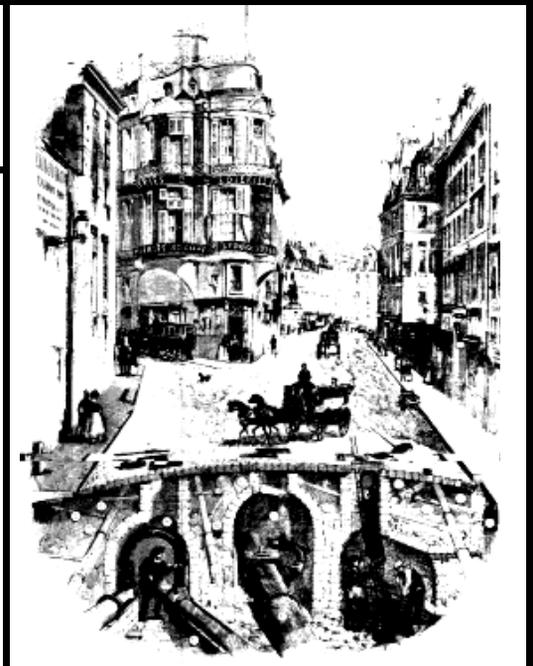
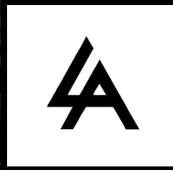
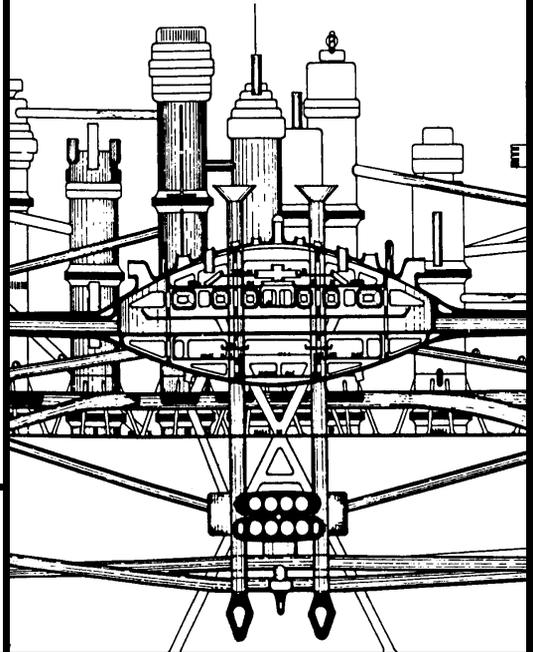


THE PRIVATE OWNERSHIP OF PUBLIC SPACE: THE NEW AGE OF RATIONALLY PRICED ROAD USE

BRIAN MICKLETHWAIT



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www.libertarian.co.uk email: admin@libertarian.co.uk

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Director: Dr Chris R. Tame
Editorial Director: Brian Micklethwait
Webmaster: Dr Sean Gabb



FOR LIFE LIBERTY AND PROPERTY

THE PRIVATE OWNERSHIP OF PUBLIC SPACE: THE NEW AGE OF RATIONALLY PRICED ROAD USE

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CURRENT POLITICAL MOVES TOWARDS ROAD PRICING

The alert newspaper reader in Britain, circa 1993, will have noticed that privately owned roads and road pricing are now serious politics. The public may think these notions as mad as ever, but apparently the government is in favour of such things.

The reasons for this are very mundane, very politics-as-usual.

The government is in its usual stew about public spending, and about how to reduce it. Privatisation has been so popular with governments in recent years for one simple reason, namely that if the government sells something, it gets hold of lots of money. Failing that, it at least cuts down on the losing of it. It “cuts public spending” in other words. In the *Daily Telegraph* of February 10th 1993, we learn that the German government is planning to sell off its autobahns. Germany also wants to privatise its railways. The motive here is loss avoidance, for the German railway system is now in debt to the tune of £29 billion. If the government forgets about the £29 billion, then it might be able to sell — or at least give away — the railways, and not run up any more such debts. So the plan is to sell off the autobahns and pay off the railway debt with the proceeds. And if anyone is to buy the autobahns, he has to be able to get an income from them, hence all the talk of pricing their use.

The selling of roads and the pricing of their use, in other words, are ideas that many governments, including our British government, is eager to think about.

Another reason for selling roads is that this might result in more “infrastructure” without what is now regarded as the inevitable price of new “infrastructure”, namely ... higher public spending! Voters want more “infrastructure”, which they associate with jobs. *But*, the voters do not want to *pay* for this infrastructure. So, thinks the government, get the capitalists to pay for it. Which they will only do if roads can be turned into a way for capitalists to make money.

If the politicians decide to keep the roads but charge for their use, they will make the same pig’s dinner of them that they have already made of the railways. But even that would be an improvement over the transport mess we have now, if only because publicly owned but less irrationally priced roads would be easier for people to imagine in private hands in the future.

And the third reason for road pricing is that it just might impinge upon that other great political imponderable, the “urban crisis”, otherwise known as the crisis of the “inner cities”. This crisis consists of lots of things, but two things it especially consists of is: traffic jams, and chaotic public transport. The usual answer to the “urban crisis” is, once again ... ber-boom! ... *higher public spending*. But what if you want fewer traffic jams and better public transport, *without* higher public spending? Road pricing will deliver both of these seemingly unattainable miracles. (Privately owned roads will deliver other even more significant “inner city” miracles, such as a dramatic improvement in public morals, but that is not my concern here. Here, I merely allude without elaboration to that particular miracle.)

Road pricing will, alas, enrage millions of motorists too stupid to think through how necessary and wonderful it will be, just as increasing the price of food in the former USSR and its former imperial possessions has enraged people there. But you can’t win them all. Most politicians these days will settle for not losing them all. Hence their willingness to settle for road pricing, despite its obvious political dangers.

THE UNIMAGINABILITY OF PRIVATELY OWNED ROADS

“Public” is a confusing word. On the one hand it means places used by the public, and on the other hand it means things that are merely “owned” by the public. Many “public” places and spaces, such as cinemas, restaurants, pleasure gardens and shops, are “privately” owned, while great swathes of the “public” sector are surrounded by impenetrable barbed wired barriers to keep the supposed owners out.

Maybe it is this word “public” which makes it so obvious to everyone except me and my free marketeering friends that the roads along which the “public” travel must necessarily be “publicly owned”. It isn’t just that most people *oppose* the private ownership of roads; almost all of “the public” assume that *by their nature* roads *have* to be publicly owned. The question of whether they *should* be publicly owned is, for them, too bizarre even to ask. Why question what, by the nature of things, cannot be otherwise?

But what if roads were *not* publicly owned? What if there existed a parallel universe to our own, identical in all respects save one, namely, that privately owned roads were as much part of the regular order of things as publicly owned

roads are in our own universe? What if *hiring a piece of road* from a road operating capitalist was no more unusual a practice than hiring a video is now? What would happen?

I will spare the reader any pretence of impartiality and declare at once that I believe that this parallel universe would be a colossal improvement — quite literally an epoch making improvement — upon our own.

THE RIGHT TO BUY AND SELL ROADS

So, my turn-of-the-millennium God of Transport has waved his magic wand, and all roads are privately owned. Some roads are owned by greedy capitalists, thinking only of money. Other roads are the property of poorer, more public spirited institutions like local “community groups”, more concerned about their notion of the public interest than merely to pile up the cash.

We can't know for sure what would happen, but I suppose a rather trivial first development would be that many of the “public spirited” road owners would reckon that although they could do much good by operating their roads in the public interest, they might do even more good with whatever cash they could get by selling their roads. Ownership most definitely, in my proposed parallel universe, includes the right to sell, as ownership, properly understood, always does.

But let's get stuck into the more interesting stuff. If step zero is an inevitable flurry of buying and selling, along the lines of the vigorous trading that follows one of the more orthodox privatisations of recent years, step one would presumably be the attempt to “charge”, in some way or another, the users of the roads.

Not all the roads would remain economic. If their use became costly enough to persuade the owners to keep them as roads, that might be too costly for the motorists. So, those roads would be turned into other things.

But what of the roads that would remain? Clearly, there would be many roads which would be so popular that it would be folly to neglect the economic opportunities of ownership.

ROAD PRICING NOW: A DIGRESSION

Before discussing how road use might be priced, consider how road use is priced now, in the mundane, traffic-jam-ridden universe we poor twentieth century souls must now grope about in.

Motoring costs now take three forms. The government charges you a tax, once per vehicle-year. They charge a different amount according to what approximate size of vehicle you have, but they charge you the same amount however much or little you use your vehicle. Once you've got your vehicle, in other words, the economic pressure on you, at any rate from this tax, is to use the thing, to justify the fixed cost of your tax.

Second, the government taxes petrol. This certainly causes you to wonder if your journey is really necessary, but the bad news is that no distinction is made between burning petrol on a deserted road at half past three in the morning, or burning the same amount of petrol at the height of the morning rush hour five hours later. The price of petrol —

inflated by tax — discourages motorists a lot from using roads when they are nearly empty, but discourages them no more when the roads are busy to the point of near gridlock.

It is of the essence of my proposed parallel universe that these two methods of pricing should be *replaced* by road owners charging for road use. The so-called “road fund” should end. Each road owner would worry about his own road fund, and the government would charge no more tax on roads, cars, car ownership or car use, than it charges on fountains pens or gas cookers now.

The only element of the present system for pricing road use that would remain would be that people would continue, in my proposed alternative universe, to pay capitalists for whatever vehicle they wanted, according to how much the capitalist wanted to charge for it. And, as now, they would pay other capitalists as and when they want their vehicles mended or insured. This is the only bit of the system that already works well, in the sense that motorists are rewarded for using resources efficiently and punished for wasting them. And to all vehicle lovers who imagine that it could not possibly work any better I say: read on!

STOPPING YOUR JOURNEY TO PAY FOR THE RIGHT TO RESUME YOUR JOURNEY

Back to my alternative universe. What sort of things would road owners do?

It is obvious, at any rate to me, that road owners would want drivers to use their roads as much as possible, and would want to use different prices at different times, to maximise their profits from those times when roads are popular, and to encourage road use at the times when roads are not now popular. Road use would indeed be cheaper at three in the morning, and motorists will surely consider the opportunities this might open up for them. Sheer greed would guarantee such arrangements, just as it already causes such arrangements on the railways, provided only that, again as on the railways, charging for use happened continuously instead of in mere annual lumps. (There would be nothing to prevent road owners charging a fixed fee for a larger time span of road use, if that made sense to them. British Rail already supplies passes that last all year long. When charging by the year does still make sense, it can continue.)

But how might the road owners contrive the mechanics of these more flexible pricing arrangements?

An immediate answer that springs to mind is that the owners of a road might install toll booths, just as the government does already at the entrances to its more grandiose and recent estuary bridges. At each payment point, the road would widen out, like that snake that has swallowed a lager can in the 4X advert, and a great team of retired Royal Marines in white coats would collect up the cash.

Slow. Cumbersome. And unless there were toll booths every half a mile, such a method would only work well on motorways, where each stretch of motorway between intersections would require only one such interruption. But maybe, on motorways, something like that would still be profitable.

It would be a lot more profitable if some means could be devised of separating the motorist from his money without

stopping his progress, progress being, after all, what the motorist is paying for.

So, suppose motorists were offered the same old clutch of ex-servicemen, but also an alternative, faster means of getting through each toll point. Instead of stopping and paying through the window, they could instead drive past a big bucket and simply chuck the necessary number of pound coins in, without coming to a stop. A robot could then permit or deny progress, on the basis of whether the coins had indeed been thrown in, were genuine, etc., in the manner of ticket machines at railway stations now.

Still rather cumbersome. How does the robot know exactly which coins were chucked in by which car's occupants? Stop each car before each transaction? That would rather defeat the purpose of the exercise, which is to speed things up. But otherwise, how would it know which car to stop, and how would it do this? Bring down another barrier?

THE EMERGENCE OF A STANDARD SYSTEM FOR PAYING ON THE MOVE

But what if the motorist had some kind of gas-meter-like gadget attached to his car, from which the robot would extract money by some kind of late twentieth century, electronic, Barclaycard type of trick? That would really start to speed things up.

No compulsion would be required. It would simply be that if you had the gadget on your car you'd be able to make rapid progress, much more so that if you had to have regular sessions with the ex-service personnel. The gas-meter gadget, in other words, would be like the difference between a very fast engine and a very slow one.

These gadgets would become, I surmise, popular.

A battle of the gauges would ensue, during which the Volvo Standard, the IBM Standard, the Singapore Rules Standard, and the M25b/New Jersey Turnpike Configuration would vie for market dominance, and for a while the busier motorways might offer the motorist a choice between the most popular standards.

Soon most vehicles would be able to travel without interruption on most roads. And pretty soon, also, any vehicle whose driver expected to be able to go on paying through his car window to another human in a booth would be disappointed. Such arrangements would inexorably be phased out.

A dominant standard of "interface" between vehicles and roads would in due course emerge in the market, in the manner of IBM personal computers or VHS videos now.

(Such a "natural monopoly" is often regarded as an excuse for the imposition of a real monopoly of the sort that needs no inverted commas, by the government. You will be relieved to learn that this piece of writing is not about the fatuity of such assumptions; it is about the rational pricing of road use. So we'll get on with our story, and leave the followers of J. K. Galbraith to their economically illiterate presumptions.)

A standard has emerged. The machines for charging passing vehicles are, I would conjecture, buried in wires across the road. The wires can be buried as often as the road owner desires. The price imposed by each wire will vary according to a complex set of rules. Account will be taken

of time of day, make of vehicle, and maybe even of such on-the-spot variables as speed of vehicle, and pollution behaviour of the vehicle, more about which below. The very occasional, very cumbersome charging of something like £5 would be replaced by a the more frequent debiting of vehicles by a lesser sum.

The process of using the road to travel would no longer be interrupted by the process of paying to use the road to travel. Good for the motorists. Good for business. Lots of money to concentrate the minds of the road owners on getting it all to work well. The money involved would start to get serious.

IT IS NOT TO THE BENEVOLENCE OF THE ROAD OWNER ...

So what if, encouraged by such seriousness, some road owners cheated? Whenever I speak to groups of people about things like road pricing, someone asks this. Sure, they may say that it only costs X, but what if instead they decide to charge 2X or 3X or 4X? What then? What would motorists do about that?

Pretty much the same as what you do at Harrods now if they overcharge you there, or at the Bank. You raise a fuss, occupy a disproportionate amount of their time, urinate all over their brand image as best you can e.g. by writing to Esther Rantzen, and you generally try to spoil their day. If a road owner seriously annoyed you, you could get an old car and park it sideways on in the middle of one of his roads, and remove the sparking plugs. In other words, any road operator who tried to be clever and cheat, by ticking off more debits than promised or by any other means, would soon learn that cheating is not profitable. Motorists would switch back to the more primitive manual methods. Traffic flow, and with it cash flow, would suffer. If cheating got completely out of hand, the word would go around the motoring community, and motorists would seek entirely different roads, or go by train, or simply stay at home. Greedy capitalists who understand their own interests behave honourably towards their customers. What Adam Smith said about butchers and bakers would apply just as strongly to road suppliers.

THE SPREAD OF THE STANDARD TO SMALLER ROADS: THE MORE FREQUENT CHARGING OF A SMALLER SUM

It would now be much easier to apply the same principle to non-motorways, and that would duly happen. The wires could be stretched — buried, surely — at twenty or thirty yard intervals, and each wire could cost you a few mere pence to cross, and the wires could be buried across any road whose owners wanted to charge you anything. Only those who positively *wanted* you to use their road instead of a more direct route would desist from burying wires, and they'd most definitely tell you all about their giveaway arrangements.

I also anticipate that many motorists would insist on having a free passage over the pricing wires nearest to their homes. No problem.

Some road owners might even be willing to *pay motorists to use their roads*, if the motorists were willing to run a gauntlet of capitalistic enticements of other kinds. Motorists are, after all, a rather splendid market.

As it happens, the technology for everything in this alternative universe already exists. It has been exhaustively written about by road pricing experts. (See my endnotes for further information about a few of such writings.)

THE HONG KONG ERROR

Major decisions about how and how not to distribute information around the system would have to be made. The advantage of the gas-meter-in-each-car idea is that the information about what the motorist owes would not need to be electronically centralised. The wires would merely broadcast their presence to the gas-meters, and the gas-meters would do all the calculating.

In Hong Kong, where they have mighty traffic problems and where road pricing has already been attempted, they tried the central computer method, with the cars all waving their different electronic number plates at the same giant road meter, owned by the government. The Hong Kong version of Big Brother thus had a permanent and permanently updated history of the movements of all Hong Kong cars. The Triads — the oriental Mafia — immediately became fascinated, and if I remember the story correctly started to rob people on the basis of when their cars were on the road. There was also the question of what the People's Republic of China was going to do with such information, as and when it got its thieving Bolshevik hands on it. Partly because of the above, and partly because the government of Hong Kong continued to charge all their previous road taxes and car taxes, which was much resented, the citizens of Hong Kong put a stop to the scheme.

THE INFLUENCE OF ROAD PRICING ON ROAD DESIGN AND VEHICLE DESIGN

Okay so we each *do* have our own road meters, and there we all are, wizzing around from one road to another, click-click-clicking. We're wizzing because us wizzing is better for business. And we're wizzing because some of us have been deterred by the cost of wizzing, which has left the roads emptier for those who *really want* to wizz, and are prepared to pay for it.

The road use queues (we call them "traffic jams") melt away, in other words, as other queues are now melting away in East Europe, as a natural consequence of the introduction of a sane price system.

Would all vehicles pay the same amount to cross each bit of buried wire? I think not. The roads in my parallel universe have got more complicated now, what with all these wires going this way and that, and they've become very, very profitable. So I think we can state with confidence that the cost of switching everything off and mending the roads would be scrutinised with an altogether more exalted degree of thoroughness and calculational expertise than is the case nowadays. Therefore, the question of exactly which vehicles do exactly how much damage to exactly which sort of road surface would very quickly become the object of prolonged speculation in *Road Owner* magazine, and profitable road management would very quickly include learning how to charge very heavily those vehicles which threaten very heavy damage to your road.

Should roads be made of indestructible concrete reinforced with vastly expensive strips of a new metal first used to

make the heat shields of space rockets, and should the smoothness of the ride be the concern only of car makers? Or should roads be made very smooth and comfortable, and be advertised on this basis? Both, probably. Perhaps there'd be specialised roads for goods haulage, rough, tough, indestructibly bumpy, a test for the macho skills of the truckers. And there'd be other specialised roads — like Grand Prix circuits straightened out — for comfort seeking car drivers. Maybe something in between for most of us, such as we have now? Who knows?

An accident in a busy city would be a financially very significant event, especially if there were medical complications. Successful road managers would accordingly learn how to dissuade unsafe looking vehicles, perhaps with differential prices according to degree of mechanical dubiousness, perhaps with outright bans. Much effort and cash would go into achieving more exact and more honest versions of the present MOT test. The safety records of rival road owners would be much discussed, in the manner of the safety records of rival airlines now. Airlines now are much, *much* safer than roads now. No prizes for guessing my explanation for this. On the other hand, a few people would actually *like* a bit of danger on the roads. Would they like it enough to pay for all the chaos and delay involved? They would at least get the chance to decide, once the price had been made clear to them.

ROAD PRICING WOULD INCREASE THE SUPPLY OF ROADS

A recent publication put out by a Labour Party think tank recommended road pricing, but warned sternly against any idea that the resulting income flows should be allowed to encourage anyone to *supply more roads*. Alas for vain hopes.

The Labour Party includes people ready to support road pricing because their hatred of market forces is exceeded — try to imagine how much hatred that must mean — by their even greater hatred of the motor car. To the contemporary leftist the motor car ranks with the cigarette as a quintessential symbol of irresponsible individualism, thoughtlessly sacrificing the collective needs of the citizenry to the whims of the socially atomised motorist. Such leftists want to punish motorists for their habit as they already punish smokers.

But if road pricing puts a great gusher of money into the hands of existing road owners, it is inevitable that others will think about how they too might acquire more such money gushers, by building more roads. This will even be true if, as I strongly urge, the vile and barbaric practice of the "compulsory purchase order" were to be abolished along with the abolition of "publicly owned" roads. Even with that great leap towards political civility, certain potential roads will add up to a string of offers too lavish for those in the direct path of them to refuse.

There is now an elevated section of the M4, joining the London metropolis to the rural west of England. It is very, very popular. If its owners charged for drivers to use it, it would surely remain rather popular, particularly at very popular times like Friday evening, and also become very lucrative for its new owners. This Niagara of lucre will suggest to the owners that they ought to think about putting further decks of roads above the single four lane deck that

already exists, or about buying out the landowners on each side of the road, so they could widen it, or both.

And it is equally certain that other roads, used by hardly anybody, will cost more to maintain than anyone is willing to pay to use them. So good riddance to them. In discussions of road pricing, the fact that entire rural villages stuck out at the far end of the back of beyond might have to be closed down is constantly offered by anti-road-pricers as some kind of final proof that these rural parasites “need” free roads courtesy the government, and should accordingly have them. And I need a stately home crammed with servants for when I get bored with working.

ROAD PRICING WILL ENCOURAGE OTHER FORMS OF TRANSPORT BESIDES CARS

Another reason why some leftists like the idea of road use pricing is that road use pricing will encourage “public” transport. Yes it will, sort of. It will encourage buses and railways. That’s the good news for the leftists. The bad news is that road pricing will encourage buses and trains by making buses and trains profitable, which means that buses and trains will not “need” to be run at a loss by the government, in the preferred leftist manner. “Public” transport will mutate into yet another triumph for private enterprise.

I share the strong leftist hunch that it is deeply inefficient to dole out ever more cubic mileage of concrete and tarmac for saloon car users, thereby clogging up bus services and rendering unprofitable the train services which now compete with the subsidised road-monster, thereby encouraging yet more car use, thereby clogging up bus services and discouraging train services even more, and so on in a vicious circle.

But road use pricing will stop all that at once. Twenty people in a bus, even if each is individually poorer than the average motorist, will together “outbid” all but the most determined and free spending motorist for the use of the same piece of road, and so there’ll be a general tendency for buses to do relatively better compared to cars than they do now. They will simply *buy* their way through the city’s traffic.

To put it another way, the individual motorist will have to think much more clearly than he does now about the true cost of his solitary driving, not just in the form of road building and house demolition, but also in the form of the collective costs he imposes upon others in the form of the bus journeys he impedes. Or to put it yet *another* way, road owners, when they contemplate a string of cars, will ponder how much more money they might make if they could only encourage people to travel in large lumps, in buses.

In all twentieth century markets where the numerous poor have been allowed to club together and bid against the less numerous and hence collectively less rich, the poor have more than looked after themselves. It is the rich who have wrung their hands and moaned about “lowest common denominators”, and the relatively poor who have celebrated all the way to the shopping centre. *Twenty first century transport need be no different.* All that is required is a true market in transport, which does justice to all the costs incurred. We have a market in cars and buses, but the absence of a market in road use means that the cars are designed to screw up the road system ever more prettily and

comfortably and economically, rather than to fit together to form a sensible road system.

Most fundamentally of all, people who now thoughtlessly drive cars will be persuaded to think more carefully about *whether they really want to travel at all*, given that it will now cost them what it is truly costing everybody else. Given the costs in queueing and chaos already incurred by all who attempt regular use of London’s present shambolic transport system, many Londoners in recent years have resorted to working at the far end of electric wires that transmit telephone, fax and computer messages. I avoid most travel of any kind except walking by (a) living in central London rather than in the suburbs or beyond, and (b) by doing most of my work in my kitchen, helped by those wires. Road use pricing will undoubtedly intensify such arrangements.

ABOVE AND BELOW THE SURFACE OF THE ROAD

Roads are not merely *areas*, they are *volumes*.

Consider the vexed question of clearances. Consider the miracle of how few inches of air are wasted by trains, how perfectly, that is, tube trains fit into their tubes. Volume being at such a premium, at any rate in cities, I surmise that roads will, if priced, be constructed with much more exact concern about how high the space has to be above their mere surface. Don’t forget that a bridge that has to go up twice as high takes a lot more than twice as much concrete and space to do it. In this respect at least, cars may turn out to be not nearly so wasteful compared to buses as is now supposed. Would it make sense to build certain roads with a height limit of nearer five feet than fifteen, only negotiable by standard size saloon cars? Might there be roads with even lower clearances, used only by three-and-a-half foot high sports cars? I envisage cunning little roads for the benefit of Harrods customers, inexpensive both in terms of supporting structure (the vehicles being relatively light) and in terms of volume of city consumed (the vehicles being only so high).

In particular, I suspect that the present self-satisfied manner in which we British boast about our *double decker* buses is almost certainly an error. A double decker bus, in order to make progress, must have a huge cavern of road dug for it wherever it roams. If double decker buses made sense, still, in modern cities, then why have we not switched to double decker trains? Because double decker trains would be daft is why. So how come double decker buses are *not* daft? When was that decided?

And what of the volume *under* the road? Road pricing will necessarily involve lots of wires travelling all over the place, and modern life already involves more and more wires, tubes and subterranean walkways with every passing decade.

One of the biggest sources of economic miscalculation in our present world, aside from the non-pricing of road use by cars, is the non-pricing of road use by the owners and operators of other infrastructures of the sort usually buried under the roads. Sewers, telephones, water supplies, gas. Just like car shifters, all such enterprises should likewise have their various minds concentrated on the costs they are imposing on the rest of us.

Most especially, when infrastructuralists now dig up the road in order to play about with their wires or tubes, they are given no very carefully calculated economic incentive to consider the havoc they cause to motorists. It will bear constant repetition that in a world of road use pricing, a hole in the road will be a costly event, and an event whose cost can be exactly calculated.

You can't have a market in "infrastructure" if you *don't* have a market in roads. Accept the "need" for "publicly" owned roads, and you necessarily must accept the "need" if not for "publicly owned" wires, tubes and sewers, then at the very least for the intimate public regulation of these arrangements. A vast swathe of the "public" sector is thus conceded as incontrovertibly unprivatisable. But, embrace a free market in roads, and that great prize of the twenty first century, a totally free market in communications and "public" (that word again!) utilities, suddenly becomes imaginable and practical.

And what of the transmission of new and mysterious fluids, not now considered proper to bury in the roads. Does all water have to be of the same degree of purity, or could some of it be rather purer than the rest? Could petrol be piped hither and thither, for private use? What might happen to the disposal of waste fluids? There is already talk in privatisation circles of an emerging market in waste, with different prices depending on what kind of waste it is. Privately administered roads would enable such schemes to be cut loose from the dead-end of local politics.

A very significant fluid, already distributed in some parts of the world where it has been guessed that such distribution makes economic sense, is *hot* water. Would that make sense in other places too? If so, *how* hot?

And how about the mechanical distribution of packages and letters? Rumours abound in London about subterranean miniature railways constructed for the exclusive use of the government bureaucracy. Would such arrangements be worth thinking about for the rest of us? Would private road ownership, and the resulting rational system of road pricing that would emerge, provide, in other words, grown-up jobs for toy train enthusiasts? If so, what would be the best gauge for the tracks?

AUTOMATIC VEHICLE GUIDANCE

The reason why our present full-size trains waste so little space in their tunnels is that they are not only of a fixed height, but are also entirely predictable in their lateral motions. They move on rails. So could cars ever be made to travel with anything like the same horizontal predictability?

And consider the waste caused by the space that must now be left between the bumpers of cars. "Keep your distance" is what we are now told. In other words: "Use more road!"

Trains are, you could say, mobile traffic jams. No need for that same old message, about how the next bit of road is now available, to be passed laboriously from car to car. With trains, all the cars move together, in one coherent convoy. (Incidentally, did you know that the relative success of convoys compared to isolated ships during World War I used to be used as an argument for socialism?)

As privately owned roads evolve, private road owners would learn to cooperate with one another as well as to compete. After all, successfully handing motorists on from

one road to another is what the job of road owning is all about. There'd be no future in failing to remain in satisfactory communion with one's road owning neighbours. Accordingly, clutches of roads would coagulate into road systems, centrally owned or not as seemed most sensible to those most directly involved. Maybe some Rockefeller-of-the-roads would insist on creating vast new road networks under his entire control, and would reap the rewards of his own central control, and maybe he wouldn't. The market would decide. But whatever happened, *systems* of roads would evolve, not just individual isolated roads.

The case for the free market is not that control is bad and chaos better, but that control — like margarine — is a product that is best bought and sold in the market.

So, there *would be* potentially very organised and automated road *systems*. The only question is just how they would function, and just what degree of central control would prove most efficient and attractive.

If the central computer of a road system could in some way control the motions — in all horizontal directions — of individual road vehicles, enormous efficiency gains are imaginable. Road surface would be saved on each side of the travelling vehicle, as it slid past walls inches away. And road surface would be saved between the vehicles as they all proceeded in convoys across the town.

Note, however, that for such arrangements to succeed, the Hong Kong objection would have somehow to be overcome. The information about individual road users that was centralised would somehow have to be prevented from getting into the wrong hands, otherwise such arrangements would be shunned. This, in my opinion, is one of the most important benefits of privately owned roads, for private really would have to mean private. The problem is in principle no harder to solve than the same problem as now faced by high street banks. (And I wonder what is happening with the high street banks in Hong Kong, right now?)

Once collectively imposed vehicle guidance is in place, then instead of the individual city motorist laboriously doing all his own navigating, it might be worth his while simply to type in his destination, and let the central computer do the rest. Perhaps the computer could offer him three alternatives, with cost and timing estimates attached, and the motorist could choose. From then on, cars would move in great lumps, all starting and stopping at once, instead of in the laboriously elasticated motions used by traffic jams now, and vehicles could be sent along roads that are only wide enough and high enough by a tiny few inches. (I predict, by the way, that a few standard vehicle profiles would emerge.)

Which of course would mean an intensified concern for mechanical reliability. A car which fails to obey the central computer would be interrupting a much more efficient process than the process he interrupts now, and of course in our parallel universe, the means might well exist to punish such mechanical failure financially.

Would motorists take to such centralised control? The market would decide. (Which is but a shorthand way of saying that the producers and consumers of road services would endlessly negotiate and renegotiate their relationship, in whatever way makes the most sense.)

THE “MODERN MOVEMENT” IN ARCHITECTURE VERSUS MODERN ARCHITECTURE

Etcetera, etcetera. My fundamental point is this. Road pricing means far more than merely unclogging urban traffic jams, by thinning them out a little and paying for new bridges which would otherwise have to be paid for entirely by the government. We’re talking about approximately half the terrain of the civilised urban world.

At the beginning of the twentieth century modern man confronted the modern city. Cities weren’t planned. They simply erupted. And they were fairly chaotic.

European architects journeyed to America, where the new urban eruptions were at their most volcanic, and they shuddered. Chaos! Rampant individualism! Atomised urban man, with no soul! Greed! Madness!

The streets were publicly owned, and were indeed, even then, a shambles. The skyscrapers in the gaps between the streets were privately owned and were not a shambles, not inside. On the contrary, the insides of the skyscrapers, then as now, were islands of sanity in a sea of urban lunacy. *The architects didn’t blame the streets for the chaos in the streets, they blamed the skyscrapers. Instead of saying that the streets should be privately owned, they said that the skyscrapers should stop being privately owned.*

As we know, to an appalling extent they got their way. Many skyscrapers *were* seized by governments, and many more skyscrapers were *built* by governments. Privately owned streets continued throughout our century to be as unimaginable as they had been at its beginning — a decision which added up to one of the twentieth century’s biggest economic and environmental catastrophes, to set beside communist agricultural policies or the decision to embark upon the First World War.

Those architects who complained so ferociously about the cities had all sorts of seemingly brilliant ideas for improving upon the system of public streets and roads and houses and skyscrapers that they inherited from the nineteenth century. They produced thousands of ideas for new sorts of buildings, new sorts of roads, for aerial railways, and new sorts of heaven knows what else. Think how wonderful it would be if a city could be made to work as well as an aeroplane!

Almost all of these ideas turned out to be wrong, but in the absence of a price system in public space it took literally decades for this wrongness to become obvious, by which time great swathes of some of the world’s greatest cities had been wrecked.

And after the horrors of the “modern movement” in architecture had become obvious even to architects, what did the world change to? Simply, in the continuing absence of any way to distinguish between things being made better and being made worse, the world lurched back to the pattern of public space organisation that prevailed before the modern movement had struck. In a century of volcanic technological development, roads, railways, pavements and bridges are either (give or take a few motorway intersections) shaped and sized much as they were eighty years ago, or else they are sized and shaped in a way that is *worse*. The only big change is that there is simply much more of the same old stuff.

But if there *had* been a market in public space as well as private space, what wonders we might have seen! In such an economic environment, all the infrastructural wonders that architects have now given up dreaming of would come to pass.

APPLYING THE LESSON OF COMMUNIST ECONOMIC DISASTER TO THE DISASTER OF NON-COMMUNIST ROADS

All but a few doctrinal dinosaurs in the Western world are now properly scathing about the decision of successive cliques of Communist predators to inflict economic ruin upon whatever states they got their fangs into. Could these absurd old codgers not see that in a state planned economy there are no incentives? Did they not understand that shortages would vanish if there was a proper pricing system? *Of course* there is no meat, if meat prices are held ludicrously below the market rate. Oh happy, happy Western world. We know better. Look at our supermarkets, and look at theirs! Look at our magazines and our television sets and our computers and our compact disks! Look at their ludicrous factories, churning out millions of left footed shoes, none right footed, and all of them the wrong size entirely! Ho ho ho. And it’s true. If the Sovietised economies hadn’t been such an all engulfing tragedy for those on the receiving end of them, they’d indeed have been most hilarious.

But look our roads! What the hell do you think a traffic jam is, if not a queue for the use of a road, caused by the fact that the price of using the road is held artificially below the market level by a government of impenetrable economic illiteracy, regularly reelected by a similarly bone-headed electorate? And if you can’t see that, dear reader, then would you please tell me how your brain can in any way be regarded as superior to that of some witless Polish housewife who still believes in price control for bread, on the grounds that bread is too important for anybody to be allowed to make money out of it, and as a result finds herself, still, with no bread?

All the arguments about “economic calculation” that are now mustered by the free market intellectuals to explain why the Soviet economy was such an embarrassment apply with equal force to western traffic jams. If Hayek and von Mises were right about the impossibility of “planning” an economy, then why on earth should it make any more sense to “plan” London’s road system. If Oscar Lange was wrong about how computers could sort out the mess caused by the central planning of potato growing, by creating a pretend market in potatoes, why do we suppose that merely bolting a few computers onto our publicly owned, centrally controlled roads will be any more helpful?

The Sovietised bits of the western world — the sordid, grubby, chaotic and falling-apart bits — coincide precisely with those bits of it that are publicly owned. Private affluence, public squalour. Rolls Royces weave about on roads filled with potholes or clogged with a billion bollards put there by workers who have buggered off to consume a permanent lunch. Men in five hundred pound suits shiver on disintegrating railway platforms, vainly seeking an employee to tell them exactly how late the train will be. They resurface the platform with marble slabs, which turns the damn thing into a skating rink. Roads are resurfaced with equal gloriousness, and then dug up a fortnight later to bury

some new wires that no one thought to mention. It's all the USSR! Right here! So sell the public bits. All of them. Easy.

In the absence of a market and the price signals that only a market can supply, it becomes impossible to propose changes with any way of knowing whether they will improve anything. "Efficiency" degenerates into the whim of a politician.

ROAD OWNERSHIP WOULD ENABLE CAR POLLUTION TO BE RATIONALLY CONTROLLED

Pollution of the sort produced by private vehicles would, in a world of road pricing, quite suddenly become manageable. Simply, the *owner* of a road would become responsible for all the pollution emitted by the vehicles he permits on his road. Expect lots of differential prices, rewarding low polluters and penalising high ones. No need for elaborate and potentially very inefficient schemes administered by the government, using the inevitable non market method of blind guesswork.

Expect, also, that the most effort to eliminate pollution would be made where it was most pertinent. Country drivers would not be made to abide by pollution standards which are only relevant in cities. Although, you never know, the economic inducement to design less polluting vehicles might make it pointless not to buy such a vehicle, and thus would pollution everywhere be reduced.

THE BICYCLE QUESTION

Cycling enthusiasts take it for granted that bicycles are a virtuous and efficient form of transport. I have extreme doubts about this seldom-queried assumption, and I strongly suspect that a rationally priced road system would prove me right. The trouble with cyclists is that they are so damned wobbly and unpredictable in their motions. A bicycle could go anywhere at any time, and everyone else, including even pedestrians, has to give them about thirty yards clearance in all directions in order to be certain of avoiding catastrophe. In my opinion bicycles impose colossal costs upon everyone except their insufferably smug owners, every time they are used. Also, cars (especially sports cars) require lower clearances above them than do cyclists. Well, am I right? Would bicycles be priced off the face of the earth by rational road pricing? Or would it still make sense for them to have their own specially constructed pathways? Would the present habit of allowing bicycles total freedom of both the roads and the pavements persist?

Would those low clearance roads for Ferraris make sense? Or would accidents clog them up? Can automatic vehicle guidance really be made to work, at less that space program prices?

AND WHAT OF PEDESTRIANS?

One of the commonest follies of prediction is to imagine that because some new way of communicating or travelling has been devised, the old methods will all cease. Printing will abolish writing, TV will abolish printing, cars will abolish walking, and so forth.

Actually, walking will be with us for ever, no matter how intelligently cars can be persuaded to behave. After all, the

economic benefits of walking will, in a world of rationally priced road use, be starkly revealed. But how, in this new, improved world, will walkers behave, or be made to behave?

These questions are so important — and the answers to them are so splendid — that they deserve another separate piece of writing.

LIMOS? HELICOPTERS? CONTAINERS? ...

And what of the innovations in vehicle design that will be unleashed? Reliability will be at a premium. So will space, even more than now. If automatic guidance catches on, will grandees desire vehicles even more like mobile homes or offices than the limousines they cruise around in now? They'll be willing to pay extra for such luxuries, but will they be willing to pay what it will really cost?

Will rich or important vehicles be allowed to buy or overrule their way through traffic jams, in the manner of crowded buses, if there is a fire to be put out, or if a very rich person is in a very great hurry?

Or will the most important vehicles simply take to the air because that turns out to be cheaper, after all the bills of carving an instant path through a city rush hour have been added up? (In Hong Kong, I recently learned, the ambulances have taken to the air.)

I've already mentioned small containers, letters and such. But will new, highly automated methods of transmitting *large* containers evolve, making the most efficient use possible of different combinations of road, rail and other methods, with robots switching the boxes from one medium to the next, as and when required? And will people perhaps decide to get involved in these arrangements, and devise container-homes which can be moved from continent to continent? Will house design and vehicle design converge? (This is an idea much favoured by the architectural futurists.)

What sorts of new communications systems from vehicle to vehicle will be devised? Will advertisements on roads affect safety, and even if they don't, how effective will they be?

What of vehicle noise? Will noisy vehicles pay a higher price for the right to travel?

ANSWERS! ANSWERS!

Questions, questions, questions. Throughout the twentieth century our more imaginative fellow humans have thought of all manner of gadgetry and cleverness to make our cities, and our environment generally, work better. The more dangerous and obsessive of such dreamers have joined the Modern Architecture Movement, and the more humane and civilised have confined themselves to writing science fiction.

The difference is that in a regime of road pricing, there will also be a deluge of answers, answers, answers. Yes, vehicle guidance will work, for certain purposes, but not in the way that was first tried. This bridge is an economic proposition, but not that one. This motorway intersection is worth rebuilding in the new improved style that has evolved, but that one does too little business for the bother to be worth it. This little old lady who refuses to move for less than £5

million is worth buying out, but that one must be left to die in her same old bed and the answer meanwhile is a detour, or a tunnel, or nothing at all. These undersurface wires are worth replacing with the new laser-costing machines, but those ones are worth leaving in place until laser-costing gets cheaper and better understood. Yes, these new tyre designs are worth a reduced fee, on safety grounds, but no, that suspension system looks like it will cost too much to develop, given the relatively modest safety and efficiency gains it seems likely to bring. Yes, the cost of Britain switching from left to right hand driving will be horrific, but yes again, the costs of *not* thus switching will be even more horrific, given the increasing amount of international road travel, what with these new super-express-hyperbahns they're opening now.

All very sci-fi, wizz-bang, next-millennium and exciting, or so I think. *Blade Runner*, with nice weather and with Harrison Ford happy instead of miserable and with no skull-crushing replicants.

I will inevitably be dissatisfied by the pictures on the front of this, because how do I know what it will look like, and what pictures could possibly do justice to it all? How can I do it justice? I have a rule about quoting Shakespeare in pieces of writing which are about something else, which goes: never quote Shakespeare in pieces of writing which are about something else. But for once, I set this rule aside. Oh for a muse of fire that would ascend the brightest heaven of invention. Can this boring mid-eighties IBM clone, with only me and my command of the English language to help it along, conjure up the vasty fields of Techno-Elysium? When I speak of cars, think that you see them, ripping through the cities of the twenty second century at five hundred miles an hour, missing each other by two inches and debiting all the passengers automatically. Now thrive the road-owners ... !

Seriously, I have had great trouble with this piece of writing. It lay neglected on my hard disk for two years, assumed by me to be hopelessly inadequate for its earth-shaping, epoch-making task. It was only disinterred when a friend asked if I had written anything on the subject, and I faxed him what I had without alteration but with trepidation. My friends tell me I write well, and this friend said kind things about this, but no matter how well I write, I cannot hope to do justice to this fabulous, fabulous subject. Whenever I give a talk about road pricing (that same friend got me to give another talk about it last Sunday—as I write—to a bunch of his students), I think of new and dazzling phrases, which I yearn to remember and include in this, my first big written effort on the subject. I also cover only about half of the key issues, because the ones I do mention are so consumingly interesting. (In that latest talk, for instance, I said nothing of what goes on above or below the surface of the road. This is like discussing a Beethoven symphony by talking only of the notes played by the first violins.)

Yet in the end, no matter how vast may be the gap between the glory of my subject and the inadequacy of my mere writing about it, I have to say: enough. If one potential road pricing enthusiast has been switched on to the subject by this effort, that suffices. And if the rest of you think this piece poorly done, I suggest you rewrite it in your own heads the way it should have been written. (We're back with Shakespeare again.)

If only because I hope soon to be writing that next pamphlet about making pedestrians behave themselves better, I now declare this piece of writing done.

ENDNOTES

I haven't read anything like all of "the literature" on road pricing; all I have done is nibbled a little at the tip of the iceberg. To me, road pricing is a basically a simple idea, and you either get it and start thinking about it for yourself, or you don't. If you do, you arrive independently at similar conclusions to those that others arrive at. I first caught this benign intellectual infection in the mid nineteen seventies when I read David Friedman's *The Machinery of Freedom*. This was first published by Arlington House, New Rochelle, New York in 1973, my edition being the 1978 one from that same publisher. Chapter 15, pp. 98-101, is called "Sell the streets".

Since then, the main protagonists of the idea that I have attended to have mostly been associated with the Adam Smith Institute of London. *Roads and the Private Sector* was published by the ASI in 1982, containing a chapter by Gabriel Roth called "The costs of roads and alternative payment methods", pp. 35-46, strongly advocating road pricing. *New Roads to Finance* (1989), contains a piece by John Hibbs called "The Advent of Road Pricing" (pp. 16-21), and a follow up piece by Nick Ayland, called "Advanced Technology for Road Pricing" (pp. 22-27), which is all fairly self explanatory. So is *Tomorrow's Way* by Hibbs and Roth, published by the ASI in 1992, which includes chapters entitled "Charging for highway use and investing for improvement" and "Private provision of roads". Roth is a policy think tanker, now based at Enterprise and Development, Suite 300, 1919 Pennsylvania Avenue NW, Washington DC, USA. Hibbs is Professor Emeritus of Transport Management at the University of Central England in Birmingham (formerly Birmingham Polytechnic). As well as writing on transport themes (see also the LA's Economic Notes No. 38, *The Liberalisation of the British Bus and Coach Industry: An Uncompleted Enterprise*, 1991), Hibbs also writes on Christian and church matters (see the LA's Religious Notes No. 5, *Forsyth, Hayek and the Remoralisation of Society: Church, Life and Economics*, 1992). Both Hibbs and Roth manage to keep any excitement they may feel about the topic of road pricing within manageable bounds, when writing for the ASI. In any case, it's not the ASI's style to get *too* enthused about things, not in print. They downplay the science fiction aspects of the idea. Road pricing is the obvious, sane, sensible thing, and the suited classes should now proceed with it, is their line.

Walter Block is best known to most libertarians as the author of *Defending the Undefendable*, subtitle: *The Pimp, Prostitute, Scab, Slumlord, Libeler, Moneylender, and Other Scapegoats in the Rogues Gallery of American Society*, Fleet Press, New York, 1976, foreword by Murray Rothbard. But Block has also written a lot on the topic of road pricing. I possess photocopies of three articles he did for the *Journal of Libertarian Studies*, namely: “Free Market Transportation: Denationalizing The Roads” (*JLS*, Vol. III, No. 2, Summer 1979); “Congestion and Road Pricing” (*JLS*, Vol. IV, No. 3, Summer 1980); “Public Goods and Externalities: The Case of Roads” (*JLS*, Vol. VII, No. 1, Spring 1983). When he wrote these articles, Block was based at the Fraser Institute, Vancouver. He is now at the Department of Economics, College of the Holy Cross, Worcester, Massachusetts, USA.

The Labour think tank publication I mention is Patricia Hewitt’s *A Cleaner, Faster, London: Road Pricing, Transport Policy and the Environment*, Green Paper No. 1 of the Institute for Public Policy Research, London, 1989. This emphasises the environmental case for road pricing, but regards the huge creative consequences of road pricing as a problem, not an answer.

If you had to name the most dominant personality of the “modern movement” in architecture, it would have to be Le Corbusier. As a sampler of the anti-commercial, pro-“planning” mentality of the “Modern Movement” in architecture, I suggest his *The City of Tomorrow* (original French title: *Urbanisme*), first published in England in 1929 by the Architectural Press, London.

For some current British media coverage of the road pricing issue, see the *Daily Telegraph*, February 10 and 11, 1993, as mentioned at the beginning of my piece. And see also *The Economist*, March 6th-12th 1993, “Jams Tomorrow”, about road pricing, privatisation, and so forth (the point being that the former is a precondition for the latter) on page 18, and another little piece on page 106 of the same issue called “Backing off”, which is about “smart cars” and “smart roads”. “Today’s designer is as comfortable with microelectronics as mechanics, and is looking to apply his learning—by making cars cleverer, and maybe doing the same for the roads beneath their wheels.” The latest gadget is for cars to sense the position and speed of other vehicles in the vicinity. Such auto-cleverness (and autobahn-cleverness) will only really take off if roads are privatised and road use is priced, but *The Economist* makes no connection between these two pieces, which seem to have emanated from quite different parts of their building. Pricing is politics, and technology is technology, it would seem.

The illustration on the bottom right of the front cover of this is of mid-nineteenth century Paris, and it reflects the fascination then felt about the amazing new sewage devices that the great town planning genius of the nineteenth century, Baron Haussman, was then devising for Paris. The photograph reproduced on the mid-left of the cover is of 1880s New York. The motorway traffic, mid-right, is from the cover of the ASI’s *New Roads to Finance* (see above). The top right illustration is from a drawing of a City Interchange project, done in 1963 by Ron Herron and Warren Chalk of the “Archigram” group of architectural futurists. It is a typical example of the kind of techno-excitement that the twentieth century’s crass method of non-pricing for public space has made impossible. Such large-scale “megastructures” are now less fashionable because of environmental doubts, but the sixties and seventies architectural scene was awash with such sci-fi influenced imagery. However (see my *Design as Outcome*, Cultural Notes No. 15, Libertarian Alliance, London, 1988) when such excitements do finally materialise, they will be as much *outcomes* as design “pre-decisions”. They will be the aggregated consequences of many individual design decisions, rather than the single plans of top-down design dictators. (See my *Freedom, Order and Architecture*, Cultural Notes No. 3, Libertarian Alliance, London, 1983, for a discussion of how the *terrace* also began its life as an *aggregation* of individual design decisions, only later evolving into a distinct building type in its own right.)

Finally, the Shakespeare passage that I allude to at the end of my piece is the opening speech of *Henry V*, delivered by “Chorus”. It goes thus:

*O for a Muse of fire, that would ascend
The brightest heaven of invention,
A kingdom for a stage, princes to act,
And monarchs to behold the swelling scene!
Then should the warlike Harry, like himself,
Assume the port of Mars, and at his heels,
Leashed in like hounds, should famine, sword, and fire
Crouch for employment. But pardon, gentles all,
The flat unraisèd spirits that hath dared
On this unworthy scaffold to bring forth
So great an object. Can this cockpit hold
The vasty fields of France? Or may we cram
Within this wooden O the very casques
That did affright the air at Agincourt?
O, pardon! since a crookèd figure may
Attest in little place a million,
And let us, ciphers to this great account,
On your imaginary forces work.
Suppose within the girdle of these walls
Are now confined two mighty monarchies,
Whose high uprearèd and abutting fronts
The perilous narrow ocean parts asunder.
Piece out our imperfections with your thoughts:
Into a thousand parts divide one man,
And make imaginary puissance.
Think, when we talk of horses, that you see them
Printing their proud hoofs i’ th’ receiving earth;
For ’tis your thoughts that now must deck our kings,
Carry them here and there, jumping o’er times,
Turning th’ accomplishment of many years
Into an hour-glass: for the which supply,
Admit me Chorus to this history,
Who Prologue-like your humble patience pray,
Gently to hear, kindly to judge, our play.*