Vernon's Hertz-Benz Instantaneous Displacement Engine

We were a kind of informal little club, Tapshire, Vernon, Forley-Shawden, and myself. None of us was really Pickwick, but Tups and Snodders accepted the characters of Tupman and Snodgrass with alacrity and looked to the irrepressible Vernon for leadership; I suppose that made me Sam Weller, being from humbler origins, though I don't think I played the part. They called me Potter, for obvious reasons.

None of us would have come together normally, nor seen the others as natural friends; but that's what college does for you, and it's a good thing. It's good for me now, to be able to call at the Middle Temple when I'm in town and have a drink with Tups and gently tease an opinion from him about some difficulties we're having with a contract; and it's good for Snodders, now he's President of the Board of Trade, to be on easy terms with a manufacturer. It impresses the office no end: Lord Southampton on the line for you, *sir*, the telephonist said, with disbelief in her voice, and called me sir for nearly the rest of the afternoon. Advice for the King, I quipped on my way out; though it was actually about the Pembroke gaudy.

That was the one that Tabley (as Vernon liked to be called after coming into his family fortune) didn't turn up to, the first reunion he'd missed, which led me to go seeking him at his new home in Cheshire. I was delegated by the club, so to speak, living not far away and being (by Tups and Snodders's reckoning) free of weighty national responsibilities. I'd clearly failed to impress upon them how busy and important a captain of industry is. I didn't mind though, I was very fond of Vernon, and concerned about him in a peculiar way, we all were – he was the cleverest and the most dynamic of our group, but he was also vulnerable. We always thought, vulnerable to the disappointments inherent in his incorrigible urge to be inventing things, most of which came a cropper; he was thus also vulnerable to the physical dangers of being his own guinea-pig in these schemes. He himself, I should say, was impervious to it: he never complained, either about failure or about pain.

At college it was Hertz waves and X-rays and, on and off, flying machines. I was convinced the electrical waves were deadly – they're everywhere now of course, so I hope I was wrong. But when he volunteered me to go into another room and tell him if his galvanometer twitched when he shot Hertz waves at it through the wall, I took a bit of persuading. If these waves of Herr Hertz's are passing through the wall what are they going to do to my body? I suppose I was naive, scientifically, even though I was reading

chemistry. I wasn't all that comfortable about him radiographing me either, though he did it a number of times; but perhaps that was more to do with the sheer horror of seeing a photograph (as it essentially was) of your own skeleton.

But when it came to his several attempted flying machines there was no persuading us. Viewing Cambridge from the sky like a bird does, had a momentary if slightly dizzy attractiveness. But you only had to see the ridiculous contraption chugging and puffing out smoke like a miniature locomotive that he'd attached to the underside of his balloon to know that you, it, and balloon as well, launched from his parapet, were going no further than the cobbles of the back quad below. Actually, the engine obeyed gravity but the balloon travelled on some way, looking quite absurd as it wobbled alone over spires and rooftops.

Vernon went with the former and was quite badly hurt, more than the previous two times with the flapping-wings machine. But although we felt sorry for him, and found ourselves smugly lecturing him about how we'd warned him (we *had*) and surely he'd learnt his lesson, *he* sat there in his hospital bed revising his calculations, with all the drawings spread out so that he could cross certain things off. It's just a matter of reducing the payload, he said. Or using lighter-weight metal. D'you know anything about light alloys? The theory's fine, it's the balance. Get Pepper for me would you, it's on my desk. Or it might be in the shed. And M. P. W. Boulton's pamphlet too. Surely you know someone in metallurgy we could bring in?

Bring in was just like Vernon. Lone inventor as he was, he counted us all in on his schemes, he wasn't secretive or possessive. In theory I might manufacture and market whatever he invented, we'd essentially agreed. It was nice so long as one didn't feel a fraud, for often I understood precious little of what he was saying, for all my chemistry and knowledge of manufacturing; the other two considerably less I'm sure. I don't think Vernon minded, he was very well-balanced that way, he valued us as moral support and willing listeners.

That wasn't, I should say, what the club I spoke of was about at all. It was more truly Pickwickian at first: we wandered aimlessly, visited eccentric people, stayed in old inns and viewed ancient ruins (or vice versa); but the great age of inventions and the lure of the *English Mechanic* irresistibly captivated our inventive leader. Increasingly the inns we stayed in were near to some pumping station or engineering works; increasingly the eccentric people we visited had oil all up their arms – or bandages.

Then came the internal combustion engine, the motor car chugged and spluttered into our lives. I'm not sure, come to think of it, when or even whether it was invented; perhaps it had been around for a while, awaiting its moment. But it seemed much in the news about the time we graduated and dispersed. Not that the papers or anyone were taking

it seriously. Horses will never accept it, was Tups's comment. But Vernon was fascinated. This was the solution to his flying machine, he said, and set about once more revising his designs. After a while – we met up now perhaps three or four times a year – we asked what had become of the scheme, no wonderful Montgolfier-Benz contraption having burst forth – or risen – from his famous shed.

I've by-passed flight, he said, we can leap straight past that to the next stage in the cavalcade of human travel. Our eyebrows were doubtless all raised in curiosity – the Moon, I was thinking, was the next destination after joining the creatures of the air. He took us down to the shed, his workshop, which we didn't visit often: it wasn't secret, it was just too cluttered and precarious, a graveyard of failed inventions and half-empty oil cans – or a nursery of future inventions, depending on one's point of view. And it was always rather smelly and dark.

The machine resembled the motor cars I'd seen, except that it had wires trailing about it and no wheels. I assumed that was a mere detail that could easily be supplied once it was ready to move. No, that's exactly what I mean, he said, I've by-passed wheels. This machine never moves, or never *seems* to move. It gets you there without having to trouble Mr Dunlop, nor your horses my friend, he said to Tups. Nor the boy with the red flag. It leaps over them.

Aah, I said – the penny had dropped, or at least I thought it had. I pictured it attached beneath a balloon. But is it light enough? I know it's an improvement on the steam engine, but it still doesn't look light enough. Oh no that's ceased to be a consideration, he replied. I could cut out most of the undercarriage and seating, I could make it very light, if it mattered; but it's not relevant any more.

Yet it will still leap over things? I said.

He laughed. Oh, I see, I said that didn't I. It's very hard to coin the phraseology for something so new, for a concept no one's ever had to talk about before. Language isn't up to it. The displacement engine combines – this is terribly simplified of course – the mark three combines – I started with exactly what you're picturing, then stumbled upon the displacement effect and had a rather dodgy bash at it, now I've cracked it and got a proper prototype (he patted it proudly) – what I think I'll call the Hertz-Benz displacement engine combines the internal combustion carriage I've developed from Benz's, with the electrical waves or radiations discovered by Hertz.

You may remember me saying – I always said – there'd turn out to be far more we could do with these waves that pass through solid obstacles than the early experimenters envisaged. I didn't even mean wireless telegraphy, though that's a brilliant idea of course – no one had even thought of it that day you came running down the passage

saying it worked, the galvanometer twitched each time at the stated interval. D'you remember?

I did indeed remember. I think I ran down the passage relieved to be alive, I truly thought the waves were deadly. But was it really before Mr Marconi came along? I'd forgotten that.

The wonder-boy was still in short trousers, he said. Missed the boat there, didn't we? But I take nothing from Macaroni of course, what vision he had! Yet why should one stop at sending messages? Think what more can be made of a natural force – a harmless natural force, my brave friend (he patted me on the shoulder) – that passes through solid stone walls, and everything else.

So you've harnessed these waves as a form of transport?

Well as I said, it's a deal more complicated to achieve than that, but basically – yes. Put simply, combining the two types of locomotive power, I can get to Burslem and have a look round your factory without having to chug for hours along bumpy roads through Rugby and Rugeley, and without flying over them and getting a bird's eye view – or an eye full of smoke – either.

But that's not all. He assumed a mischievous smile. I can breakfast at home (his home was still in Cambridge, unlike us he'd stayed on awaiting a career in academe), come to Burslem for lunch, look round your factory, decline your kindly invitation to tea from the original pot even though it's almost tea-time, yet be back here in my own rooms supping tea and the clock striking half past four as I do it.

For as you know, Potter knows anyway (he said to the others), electrical waves travel exceedingly quickly. I nodded my head, I did at least know that. So like a wireless wave, it's hardly measurable, the tiny moment of time it takes to displace you, if that's the word we're to use, say from here to Burslem. To all intents and purposes, the Vernon mark III Hertz-Benz displacement engine is instantaneous.

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So Potter, you never told us Burslem had been honoured with an instantaneous visitation, said Tups over tea.

I keep inviting him. I expect he'll drop out of the clouds one day.

No excuse now it's instantaneous, said Snodders. You'll regret inventing it: there'll be no excuse to turn anyone down, not to visit the crusty old relatives, no excuse for ever being late anywhere, no trains to blame or idle coachmen to curse – not even bally balloon blown off course!

It wasn't a joke. Vernon had of course tried the conventional balloon, and that had been precisely his excuse for arriving late and rather damp at one of our get-togethers a year or so before.

I was hesitating to suggest it myself, but Tups said it instead: You haven't tried it have you? It's all just theory.

Down in the shed, our request for a demonstration of this unlikely mode of transport had been declined, not at all to our surprise, on the grounds that he'd just that very morning dismantled the what-you-may-call-it as he wanted to re-grind its thingamy – there it was all dismantled on the floor as he spoke.

I must be honest with you—, he said, and we groaned in familiar unison. No, really, I have in fact test run it a couple of times. But I must be honest about one essential that isn't settled yet. I haven't perfected the destination selector. It's not fine-tunable.

So you *can't* in fact come to Burslem for lunch and get back here for tea, I said, in a deflating tone.

I can get back. It knows precisely where it lives and comes back there. But how to tell it where Burslem is, that's actually quite a difficult problem. It's a hybrid problem you see, he went on after passing round a diagram which I don't think we understood. It's like tuning in to a Hertz wave, but requires precise direction and distance. I've been stubbornly trying to crack it one-sidedly, I mean rather, so that the point of reception is determined entirely from the transmission end; but to be honest I'm not getting on very well. I might have to give that line up and conclude that it can only work with a receiver, as with ordinary Hertz transmissions.

Aerial conductors *are* beginning to sprout up, I said.

Just so. Neither orientation nor length of transmission are proving definable within adequate parameters without some static receiver or beacon at the intersection, the place of destination.

That's achievable though, surely, said Snodders. Like a railway station.

Technology first Snodders – but yes. If I sort it out and it looks like a viable transport system, presumably stations or intersection beacons could be set up. And that'd be fine. It'd also be a jolly awful disappointment, to be honest, from the point of view of the original idea. I was looking at a blueprint for something greatly more convenient and flexible than even Benz's horseless carriage, but we'll end up with a system miraculous in its instantaneity, to be sure, but awfully hide-bound in its dependence on these receiving stations. The vision was one of infinite spatial flexibility, or freedom of movement, as well as of instantaneousness.

I'm not sure I like that idea too much, said Tups, with nods of agreement from Snodders. All kinds of people one might not want turning up at little notice turning up at little notice – at no notice in fact.

The Pater and Mater suddenly appearing in the middle of your drawing room in their little Vernon carriage, said Snodders. Or the Kaiser!

But you said you'd tried it, I interposed while we were shivering at the thought. Do tell us.

I decided to brave it, without a fully functioning destination selector. Roughly tuned to an approximate intersection of direction and distance, as best I could judge. I tried to aim for the middle of nowhere, for obvious reasons.

Can't you sort of steer it once you're off? said Tups.

Instantaneous remember, I said, you move so fast you quite literally don't notice the journey – if Vern's right.

Yes of course, silly of me.

Not at all silly old chap – it's a struggle to get the mind round such a novel idea as instantaneous displacement, just as it is to find the language to express it. But Potter's right, and so, if I may say so, was Vernon. My first run was a complete success, and it *was* instantaneous. That's how I know it remembers its home location, its transmission point, very exactly. That aspect of the engine works – I confess I hadn't been brimming with confidence about it – but the return journey's not a worry. We returned to exactly the spot we set out from, absolutely precise. Barely disturbed the dust.

Almost as if you hadn't been anywhere at all? Snodders suggested, teasingly. I suspect we were all thinking it.

You've a real point there Snod, said Vernon seriously, he was neither teased nor deflated by the thought. It's made me wish I knew more about apportation. I've thought a lot about alternative interpretations. We know little enough, when all's said and done, about the true nature of the ether, and hardly anything about how Hertz waves and their ilke make their way through it. Look at X-rays for instance, and ectoplasm. I *have* given thought to it being some form of static projection or ethereal phantasm; but in fact my experience of being where it took me was thoroughly physical and real, both times.

You've missed that out, I said, eager to know. You've gone and you've returned. What happened in between? Do tell.

First time, we arrived as I'd intended in an out-of-the-way place. Rural and deserted, large flat vista of green before me, some cottages visible at a slight distance, smoke rising from them. My immediate environs a kind of heath, quite a lot of trees about – I'd not thought about trees particularly, I think I need more detailed maps for future tests, that could obviously have been a problem. But we were lucky. We—

He took his young lady, Tups muttered.

And she took a picnic, I should hope, said Snodders.

Makes for an impressive proposition to the fair gender, was my contribution to the ribbing. A ride to the middle of nowhere in my instantaneous displacement carriage.

Vernon laughed tolerantly, and resumed. We as in self and vehicle. I was hesitant to get out or linger. For one thing, the susceptibility of the engine to interference is untested – that's obviously one of the possible problems. I wasn't even sure of the stability of the arrival, so to speak, whether once displaced to the destination, the process is exhausted and the engine stable. I'd switched off of course. Yet I still had visions of walking a few paces away from it and turning round and it was gone, and me (by my rough reckoning) somewhere deep in the wilds of Lincolnshire.

Anyway, I stepped out and walked around the carriage, kicked the grass, sniffed the air, sufficient to convince me I wasn't dreaming and we really had – for this is how it seemed – instantly transmitted ourselves from my shed in Cambridge to this rural spot. I'd started up and activated the controls, the engine and the Tesla coil both clicking merrily away, and except for the briefest instant of what I can best describe as giddyness, all that happened was that our surroundings changed to this rural scene. Literally in an instant. No sense of movement whatever, no jolt or bump or anything, no peculiar sound, not even a popping of the ear.

A moment of giddyness though, I said, that's interesting. I thought it *was* interesting, I wasn't merely humouring him, though I have to say I wasn't entirely swallowing his story.

Very brief, yet perhaps not as brief as the journey time. I suspect the human body can't register such brief events, so it amplifies it, though still for only a fraction of a second. Natural that there would be something of the sort. I didn't know what to expect. Had I given it much thought I'd probably have frightened myself off going, thinking what effects such a journey – a transmission of oneself at that speed as an electrical pulse – could be expected to have.

That's what's baffling me about this, said Tups. Your wireless waves can pass through things and get there in an instant, I can accept that,

though I understand it very imperfectly. (I may have cleared my throat at that point.) All right, not at all then. Modern science, we most of us just have to accept it. Your body and this motor car thing of yours getting transmitted this way, I don't get. That part I don't see.

Well that's what's so spiffing about this discovery, this invention, if you like. Even old Mah Coney's not thought of it. It's an absolutely new concept, the notion that Hertz waves could embody not just sounds or pictures but solid matter, actual objects, people. It's never even been thought of, never mind tried.

Pictures? said Snodders.

Oh yes, in principal the same electrical impulses that carry sound can carry pictures, that's fairly accepted I think. He turned to me as if for confirmation, though he's the one who reads all the technical magazines. Even so, I thought he was right, I nodded.

But solid matter ... He shook his head. Even Eddie's son's not thought of it, never mind Mark O'Neil.

So what happens? said Tups and I more or less together.

I think, as with the transmission of sound, the matter of an object, inanimate or animate, becomes in an instant, and just for an instant, a mass of electrical impulses. Essentially you're decomposed into what some theories believe to be the essential bits of everything anyway, miniscule electromagnetic units. You're passed through the ether, and then immediately reconstituted.

Sounds dashed painful, said Snodders.

That's what I'd have expected, I said, even if only for the instant: a dreadful, intolerable stab of pain. I'd not have tried it.

Well I said I deliberately didn't think about the bodily effects. But – luckily – the instant of time involved is so very slight it doesn't. It's possible if you were travelling, say, to a distant star, perhaps millions of miles away, the instant of slight giddyness might translate into something more unpleasant, more genuinely nauseous or painful, for your journey would take minutes or hours.

Or years, I added.

I thought it was instantaneous, said Tups. Why wouldn't it be the same up there?

It's just relatively instantaneous, I said. By earthly terms – distances of hundreds of miles – the speed is tremendous. But on a scale of millions of miles, in space, the journey time would become measurable.

But Lincolnshire – paah – no time at all, said Snodders.

That aside though, I said, one of the things it makes me wonder is just that. If perfected, could this be the solution to travelling into space? Presumably we could go to the Moon, or Mars, by Vernon's technique.

Well that's what I did next, he said, and we gazed at him in astonishment.

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Curiously enough, I did think of heading much further, for the second run: the Sahara Desert or Greenland, though I can't say the Moon crossed my mind. But instead I decided to do something more sensible, as I thought, which was to see how reversing the polarity might effect it. I didn't see any reason why it should at all, but at some point the test had to be done, just to verify. So that's what I did. We should have gone back to the same place, unless the polarity affected it.

I was foolish actually, I wasn't thinking quite as a scientist should. Because what I ought in fact to have done, first, was exactly that: to go again a second time altering nothing. I mean, repeat exactly the experiment I'd just done, to check that it *was* repeatable, that it wasn't a fluke. Without running such a control, as they're called, I can't truly say, for the purposes of a scientific report or a paper to the Royal Society, that the engine wouldn't take you somewhere different every time you ran it. Stupid really. Anyway, I left the destination selector unaltered but reversed the polarity, and went again. As I say, I fully expected to find myself back in the same place.

Time had marched on a little, I suppose dusk had come without my noticing. You know what my shed's like, it's always rather gloomy. I started up, activated the controls, felt exactly the same brief moment of giddyness, and sat there in darkness. My first thought *was* that if I'd noticed it go dark I'd have waited till morning; and my second thought, how *very* dark my spot in rural Lincolnshire was. It was pitch black. Country places are, of course, on moonless nights. I pulled my collar up, for it suddenly seemed jolly cold too, and stepped from the carriage.

The crunching sound my shoes made took me aback, and when my second step was the same I knelt down. The ground was ash. It was the mixed ash of one's grate, fine and powdery in part but with an admixture of small clinkers. I was, at the least, not in the same spot I'd trodden shortly before. I walked round the carriage, as I had before, peering into the night as I did so. It seemed that the ground continued flattish and covered with this ash, in all directions, into the darkness.

No trees emerged as my eyes accustomed themselves to the dark. No light or smoke from a cottage. No rustic aroma accompanied my deep intake of breath. The fresh smell of greenery I'd filled my lungs with before wasn't there, the air was odourless but dusty.

A slight sense of the distinction between black and black, between dark ashen-grey earth and pitch black sky, fell into place as my eyes adjusted, and made me shiver not just from cold – it was decidedly chilly – but from awe at the endless barrenness with which I felt I was confronted. I became convinced that that's all there was – all there was forever – flat grey ash below and empty black sky above. Where in heaven's name am I? I thought, or may even have said aloud, such was my sense of desolation. I felt in those moments as if I were the only person on the planet.

And now, on mature reflection, I believe I was. I believe this cold desert of ash I'd displaced or transmitted myself to was not this verdant earth at all, but the dreadful emptiness of an alien world. I think I *was* on the Moon, or else on Mars.

I'm fortified in this belief by the curious fact – you know I'm in reasonable fettle, not prone to flag even on our long walks – that as I stood there, I began to find myself breathless. I realised the air was not only cold, and dusty: it was thin, it was like the air up very high mountains, barely sufficient to breathe. In fact I felt unwell. I had to hold on to the carriage as I walked round to the front, and turning the handle just three times positively exhausted me. By the time I was seated and engaging the controls, I wanted nothing but to return and lie down, and breathe properly. Even the oily air in my shed ...

We always made ourselves entirely at home in Vernon's rooms, his relaxed personality as well as his untidiness encouraged it. So with tea having extended into the evening, and his story having turned us all a tad contemplative, I raided the drinks cabinet when he fell silent, and was handing out glasses of our several favourite tipples (we each had a different preference). He seemed as if he needed one, even the telling of it affected him.

That's pretty good evidence for it isn't it? he said as he took his glass from me. Not much air on the Moon is there?

I'm not sure if there's any, I said. But there are barren enough wastes on your verdant earth too. High plateaus in the Andes, deserts of volcanic ash.

And Mars, I have it on good authority, is a buzzing hive of activity, said Tups, breaking out of the melancholy effect Vernon's account had had on us: canals and locks and aqueducts and ... I read it just recently.

In a penny dreadful, said Snodders.

I think it's more likely to have a breathable atmosphere than the Moon, was my contribution. But both should be cold.

Obviously I've thought about it a good deal, Vernon continued. I'm convinced that's where I was, probably the Moon. I can't explain it – why a simple modification of the transmitter should cause such a huge alteration to the reception point. The distance tuning I suppose was the thing affected. Though in fact the destination selector doesn't go that far – I hadn't anticipated, even if I got it working properly, that such large distances would be feasible, I mean feasible for the tuning instrument. Beyond a certain distance, one is essentially setting it to infinity.

That could take you quite a way then, chuckled Tups.

But did you examine your settings after getting back? I said. You got back without incident I take it?

I didn't feel very well when I got back. Yes, it was a perfect return, as before. But I wasn't up to it. I stumbled round the shed and made my way up here, and slept.

We had never heard Vernon say he felt unwell before. Even after his several flying disasters he never once said he felt ill or in pain, even in hospital with several limbs trussed up. It was at least effective in making us take him seriously, our scepticism, mine anyway, had taken a back seat. Even so, I didn't believe he was on the Moon.

You're sure the sky was pitch black? I said. He nodded. You see, I'm fairly certain on the Moon you'd see stars. Whatever air there may be, there's no haze or cloud. Observers can always see the detail of the Moon's surface whenever *our* skies are clear enough; so *from* the Moon you'd see a starry sky.

That's more your line of country, if you say so I'm sure you're right. But something convinced me, some deep instinct perhaps; or the overpowering unearthliness of that ashen landscape. I'm convinced I went beyond this earth. Perhaps it was Mars.

I don't mean any disrespect by suggesting it Vern, said Snodders, but ... the human mind's a tricky cove. I've seen tougher chaps than us go down with what they call mountain fever. (We were all hill walkers, but Snodders was a slightly more serious climber, or anyway had had a phase of being.) D'you think your breathlessness, your feeling faint or unwell, might have been a product of, well, damn it, your sheer sense of horror and isolation and ...

Vern afraid of the dark? said Tups. Unthinkable – Snod, what are you insinuating?

I'm not offended by the suggestion. We must explore all lines of thought to reach the best explanation. Snod's quite right to raise it. Did I panic at the thought of having displaced myself to some godforsaken waste? Even to another planet.

It's not at all like you, I said. I think we're all struck by how out of character that would be, as is your feeling ill. But the point is really – it doesn't matter if you were on the Moon, strange to say, merely that your machine took you somewhere queer; it behaved anomalously after you reversed the polarity. In that respect, as a test run, it's told you something hasn't it?

Well yes ... I may have over-reacted, whether from panic or genuine physical symptoms, my sense of horror at the place may have got the better of me. To be honest the thought of it haunts me still, I can't shake it. I'm convinced – irrationally or not – that I set foot in an alien world, where I was utterly alone. A world where man had no place and could not live.

There was a silence in which we variously yawned and stretched and scratched heads, and re-lit cigars and pipes, and Vernon took a few deep breaths of our smokey air, as if glad to be back on earth.

I was going to say about the next day, he resumed. I *did* examine the settings, and everything else – I felt fine after a sleep. Unfortunately the settings were way out, but I attribute it to my stumbling against them after returning, when my only thought was to stagger back to my bedroom. I'm sure I knocked them. Everything else was normal. I also set about a rigorous check of the whole thing against the drawings, and that's extended into the overhaul I'm still doing.

You didn't try again then? said Snodders.

As I say, I decided to make myself thoroughly confident about everything being tickety-boo. It's a complicated thing, an organism, almost. I felt ... I suppose I felt I'd gone into the test runs too casually, ill equipped to explain anomalies, ill equipped to diagnose a fault if there was one; indeed, ill equipped full stop. If it had broken down on the Moon – or wherever I was – I hadn't drawings or tools or spare parts with me, never mind aids to my own survival.

Perhaps that's what scared you, in the back of your mind? I said.

He nodded unconvincingly.

So you still haven't tried it again? said Tups discouragingly.

Oh I intend to, make no mistake about it – the instant I've finished the overhaul. I've come up with several improvements and corrections,

I've made new simpler drawings, I know the contraption a deal better. So ... I'm where you've caught me today, just trying to get each part right. A few weeks at the bench is worth it. I want it smooth like a fine clock. I need a full understanding of every part. I must have complete confidence in it. I also need witnesses ...

Well we did ask for a demonstration, said Tups.

So you'll be happy to come back, in a month or two?

We all nodded of course.

Two of you can watch what happens at this end, when we go and when we return – interesting to know if we just disappear like magic, or if there's some fuzziness or sparks or ... whatever. And one of you can come with me.

We stopped nodding.

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I was devastated not to be able to make it. I hope Vernon didn't feel too let down. There really *was* a crisis in the firm. Both my telegrams – I know they seemed to give two different excuses – they were both true. An emergency meeting of the board of directors was called, *and* I had to go to Liverpool to meet our American agent – a very important person to our business – his boat having been delayed. I could have done with Vernon's instantaneous transporter that very day. Wild horses wouldn't have kept me from attending his demonstration, but the imminent collapse of our family business I'm afraid did.

I realise Tups and Snodders, up from town, were already on their way by the time of my first telegram. It wouldn't have been fair to postpone it. I assumed, if it went without hitch and didn't project Vernon on to Neptune or into infinity, there'd be other opportunities for me to watch, or join in – the expectation seemed to be that I'd be the one to go with him. Like many things in life, it didn't work out that way. I never did get to witness it.

It obviously *would* have been I going with him, had I been there. Neither Tups nor Snodders would go – they both refused and wouldn't be budged. But they were happy, so long as they could keep the shed door open, to watch carefully and report to him what happens or what it looks like when he and his machine depart, and when they return. It turned out not so demanding a task as they'd anticipated.

Tups's letter to me describes what they saw. This time, Vernon was equipped. Motoring cap and great coat, a tool kit attached at the back of the carriage, copies of all his drawings, a first aid tin, and the pockets of his coat stuffed with useful odds and ends – from

handkerchieves to hair brush. The *vacant* passenger seat (Tups's emphasis I'm afraid) was occupied by a brolly and a basket of refreshments, and the space in front of it by tin-cans of spare petrol and oil. In spite of all of which, he'd promised not to keep us waiting too long for his return, he'd be just a few minutes.

He turned the starting handle a couple of times and the Benz motor chuffed into life, and after a moment or two sounded smooth and happy, like a purring cat. He told us he'd already carefully set or tuned the destination selector to the very same setting used for his first journey, which he estimated was a spot in central Lincolnshire, rural and out-of-the-way. He hadn't been able to find better maps – or rather, the ones he'd found didn't show much in the way of trees, so he hadn't made any correction. He sat in the driver's seat for a minute or so, fiddling with controls that pertained to the Tesla coils and Hertz transmission equipment (most of which were under a cover behind his seat, with just some wires trailing across). A regular slight sparking sound joined the sound of the motor. He said: I'm off then, shan't be long, and pushed the final little lever with his left hand.

Absolutely nothing happened whatever. Believe me Potter, absolutely nothing happened that either I or Snodders could see. We didn't even blink at that point. We missed nothing, and *nothing* happened.

Vern's left hand still clutched the same lever. He pulled it back, and began switching off the other switches, turning towards us with a grin of satisfaction. He flicked a final knob that caused the Benz engine to splutter into silence, stepped out of the carriage, and shook us each warmly by the hand. My dear friends! Thankyou for waiting so patiently, I'm so sorry I was longer than intended. I got into a chat with a yokel and couldn't begin to tell him why I must dash back into his spinney.

But ... was I think the sum total of what I found to say for myself at that point (Tups writes). Snodders was more loquacious. I see the humour of it, from your point of view, old chap, he said, but I'm not sure it was worth all the effort. Watching you crash your flying machines was a dashed deal funnier.

Tups's letter goes on, once they've adjourned to the easy chairs of Vernon's sitting room, with extracts of the conversations in which they sought to convince him that nothing happened, he didn't go anywhere, as well as with repeated assurances to *me* that that truly was what they saw. I won't trouble you with quoting it all. For my part I entirely trust Tups and Snodders's observation. There's no earthly reason for them to be disingenuous about it, to me nor even (save in momentary jest) to Vernon. And of course, although they're not scientists, their pretend naivety and tendency to take Vernon's technical talk rather lightly covers, in their different ways, two exceedingly sharp and observant intellects. They're not bumbling Pickwickian characters by any means.

At the same time, I must say I believe Vernon too. His incorrigibleness sometimes draws him perilously close to farce, and he is a good-humoured fellow when the mood takes him. But his experiments aren't practical jokes, he's very earnest about them. If he says something different happened from what Tups and Snodders saw, paradoxical as it may be, I believe him too. I haven't the faintest idea what the explanation can be; but there must be one, for I believe them both.

Predictably there was a long struggle, conversationally speaking, between the two accounts. For a long time Tups and Snodders genuinely thought they were being duped, that Vernon was trying an elaborate April fool out of season; for a long time Vernon clearly thought his friends had conspired to play a similar joke on him, by pretending they'd seen nothing.

Eventually there emerged an understanding, paradoxical and impossible as it seemed: that Vernon had truly made the journey he describes, and spent at least half an hour in Lincolnshire before returning; and that Tups and Snodders had stood right beside the vehicle and watched him activate the transmission lever (the last thing you do before going) and de-activate the transmission lever (the first thing you do after returning) in smooth, unblinking succession, without dissolving into atoms or smoke (as Tups puts it) and without any time passing.

It's as well Vernon tried it with witnesses, for whatever the explanation it's an important thing to know about the process. It certainly couldn't have been predicted, and it certainly doesn't conform to anything in our present understanding of the science involved. Even if the phenomenon of instantaneous transmission, or displacement as Vernon calls it, sounds fairly incredible, it would nonetheless have to be a physical process – physically removing you from one place to another; and although the *journey*, because it's electrical in nature, is to all intents and purposes instantaneous, the time you stay before returning remains subject to the usual, inexorable laws of time. Half an hour in Lincolnshire (or on the Moon) is half an hour in a shed in Cambridge too.

What you describe (Vernon said, according to Tups's letter) could almost be achieved if one displaced and returned immediately. Both journeys being instantaneous could fit into the batting of an eye. I don't think even that would look as continuous as you describe though, because of the comparative slowness of human reactions. My activating the control to return would be subject to that slight delay or pause, so if you *didn't* bat your eye you should still see a momentary disappearance, a flicker let us say.

The other thing Vernon returned to was alternative explanations drawn from a rather less physical branch of scientific discourse – astral

projection, apportation, phantasms of the living, ethereal disturbances, effects brought about by spiritualist mediums. And taken seriously by your own Sir Oliver! he once said when I expressed some scepticism – he was mine because he too hailed from the Staffordshire Potteries. Unfortunately we're still waiting for Lodge's great work on the ether, and how waves and matter move and behave within it, or interact with it, which may well shed light on Vernon's results. Both Lodge and Vernon come to the problem from work with Hertz waves. On the other hand, you read increasingly that continental scientists don't even accept that the ether – the medium through which such waves are believed to flow – exists at all, as anything distinct from the ordinary gases of the air.

I could easily accept (Tups quotes Vernon again as saying) that my engine doesn't do what I think it may do but instead transmits a picture to the destination. That would make sense. That it should cause *me* to see a picture, that is, to have an hallucination, like a dream, would not make sense, but is arguably possible. But neither explanation survives one's actual experience of it: when I displace myself I am witness to my own physical, three-dimensional presence in the place I'm displaced to – I kick the grass, I breathe the air, I talk to a local yokel. I *did* pinch myself, remembering how important it is to be able to confirm that I was really there, and conscious. Oh and I brought you each an apple, fresh from the yokel's tree. Bite into my delusion!

He chucked us each a nice apple reached from the deep pockets of his coat, which he'd slung over the arm of his chair. As we bit into them a peculiar thought struck me (this is Tups's account), but just as I was about to say it Snodders astonished us with a completely different but quite casual remark: You've soiled your carpet with your muddy shoes. We immediately looked at each other, Snod as if he hadn't realised what he was saying till he heard himself say it; and then we looked back at Vern's shoes.

I'm as near certain as can be that they were polished and clean when he set out. Vern looked down at his dirty carpet, and then rocked back in his chair laughing heartily.

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Vernon wrote me too, regretting I hadn't been able to make it and giving an account of his interesting visit to Lincolnshire. Of course he comments also on the puzzling fact (as he calls it) that Tups and Snodders saw nothing: he didn't turn to smoke, he didn't disappear, he didn't go anywhere. If you've any suggestions for an explanation I'll be glad to have them, he says, I've given it a lot of thought but come up with nothing. I've also written to Lodge.

Here's what happened on my side (he writes). The same brief moment of fuzzy-headedness I described before, and without any sense of

movement whatever my cluttered old shed and our two friends waving me off (Tups hadn't said they waved) were replaced by the trees and grass of the same country place I'd fetched up in, first time out. The destination selector was tuned to the same intersection, though as you know I don't think it works except roughly – I may be wrong, for it seemed to have brought us back to the very spot. An area of rough grass surrounded by trees, and slightly elevated above a flat landscape of green fields.

I shut off the engine, intending to waste about a quarter of an hour – keep the lads waiting and wondering, I thought – and this time, well equipped and mentally prepared too I think, I had no compunction about wandering abroad. I did walk round the carriage first, as I had before. I could almost swear, unlikely as it seems, that we were *exactly* – I mean, absolutely precisely to the inch – where we'd been on the first occasion. I remembered the position of several trees, and certain marks or variations in the grass.

I walked down the slope and across the field in the direction of the cottages. I hadn't a definite plan, but it seemed sensible to head for civilisation, or what passes for it in rural Lincs, if only to verify where I was. As I neared the ditch, which was all that divided one field from the next, a figure came into view, bent at some task just beyond. He straightened up and looked towards me, so obviously I approached him directly, not wanting to seem impolite or be thought a poacher.

He was an elderly yokel of very old-fashioned sort, you know the type. His clothes wouldn't have been out of place on the Bayeux Tapestry. I greeted him with a cheery How now my friend! I'm sorry if I'm trespassing on your fields, I lost my way.

I've led too sheltered or too privileged a life you'll tell me, I know, but his speech was so rustic and rude I couldn't tell but fragments of it. I remember you saying how conversing with some of your factory hands was almost like speaking a foreign language – it was definitely like that. His drawl had much the twang of the Cambridge countryfolk's, but a deal more replete with unrecognisable vocabulary – I suppose *theirs* is when they're talking amongst themselves. It didn't help that he was squeaky with age and toothless, and I think a little deaf.

He was a chirpy fellow though, and persevered, doubtless thinking me stupid or foreign or both. He called me your worship, and touched the brim of his cap repeatedly for the first few paragraphs of our natter. I told him I was on my way to Lincoln, and asked which was the way and how far was it. He pointed, but frowned and seemed to be saying it was a huge distance off, though I couldn't get anything specific. I suppose such rustics seldom venture beyond their native parish, so distances are relative. I mentioned Cambridge too, and he gestured back in the opposite direction beyond the spinney (as he seemed to call it), the wooded heath my engine is so fond of.

He offered me refreshment so I agreed to being a bit thirsty, and we headed for his cottage. He didn't ask me in, but brought out a wooden beaker of ale of some sort – very strong and very revolting, though I managed most of it politely. The cottage was a tiny hovel, a great wig of thatch sitting on a very low whitewashed wall, a door that even he – he wasn't tall – had to stoop through, and a window that was just a hole with a wooden shutter slung open. There can't have been but the one room inside it. Everything was terribly poor and old fashioned.

My main thought was how little I know my fellow countrymen. One forgets that our rustics live in such mean conditions and such poverty – though perhaps nature's bounty compensates in some measure. For instance, I admired his apple trees, loaded with fine looking apples they were, and several tubs of them already fallen or picked. Presumably that formed part of his meagre living. He invited me to help myself – I took one for each of the three of us back in Cambridge, and handed him a silver coin. He looked at it hard. I wondered if it wasn't enough, but – if I understood correctly – it was just that he didn't know what it was worth – is it likely he'd never seen a florin? When I said two shillings he responded by clutching his cap to his chest and lor' blessing me as if I'd given him a crock of silver.

I'd long overstayed my time by now. Obviously I couldn't hope to explain to him how I'd got there and why I must dash; that and my saying I was lost on my way to Lincoln made it awkward for me to head back to the spinney. So I set off down the muddy track where he'd pointed the way to Lincoln, until I saw that he'd disappeared indoors, when I niftily re-trespassed across his field and back to the trees. I wiped the mud from my shoes to some extent – not thinking how muddy shoes might impress Snodders – and then I cranked my handle, sat in my carriage, twiddled my knobs, pushed my lever, and was back in the shed in Cambridge.

All that effort, to be told I hadn't been anywhere at all! I thought they were playing a prank at first, but I can't even bribe them into changing their story. You'll have heard it from Tups, so I won't repeat it. Forgive my writing my version in such detail, I know it has no intrinsic relevance, but in light of our friends' denying me twice I want you to see that my displacement, my half-an-hour's sojourn in Lincolnshire, was a real experience, and not something I dreamed.

Funny about the apples though – it never crossed my mind till Tups mentioned it. Did you pick them yourself? he said. I nodded, and bit into mine. Well I know Lincolnshire's famous for its crops, Tups said, but your yokel's on to a better invention than you if he's bred a tree that gives apples six months ahead of season.

So there's another conundrum for you.

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It wasn't long after this that Vernon's circumstances changed. I remember, back when we were students, how his future had been rewritten at a stroke by the unexpected death of a cousin – a bachelor, whose neglect of his duty to marry and have lots of children made Vernon the heir to a grand title and a large estate. His life in Cambridge wasn't affected, at the time, except I think he received an allowance from the distant relative whose heir he now was, and used it to fund his experiments. But when *that* relative died, Vernon became the new Lord de Tabley, and I gather had little choice but to abandon his academic career, such as it was, and move to Cheshire.

At least transferring thither brought the prospect of more space for his experimental work. That was what he was talking of the last couple of times we met up, I think we'd managed just the two get-togethers after his elevation. He was speaking with eager anticipation of a very spacious outbuilding that he wanted to convert and equip, and how he would build there a new improved instantaneous displacement vehicle, with no expense spared.

How soon he might get around to it though – he looked a little despondent and shook his head. You think I'm my own boss but it's been an endless round of shaking hands attached to very dull people, and finding polite things to say to them. Flower shows and agricultural societies and parochial church councils and magistrates benches and – do you know, I'm the High Sheriff of Macclesfield? He said it with a shrug, as if he had no more idea than we did what that involved. It's quite exhausting, he said, and very time consuming. I patted his shoulder instead of shaking his hand, and said I felt sure he'd be visiting Lincolnshire again very soon, irrepressible being one of his middle names. And do displace yourself to Burslem for lunch some time, I added.

Next came the reunion he didn't turn up to, which was a particularly special one as it took us back to Cambridge to coincide with the Pembroke gaudy. What worried us was not so much his non-appearance – though he'd never missed one before – as not hearing from him, not even a telegram to the effect that he was stuck in the middle of a particularly exhausting flower show, or had been summoned by the good burgesses of Macclesfield to fight off Robin Hood. Needless to say, we tried to think of the oddest or silliest excuses for him – which inevitably included coming in his displacement carriage but finding himself instead on the Moon, or better still, Tups came up with the roof of Harvard College (which is in Cambridge, America).

So, as I said, I was delegated to check up on him, and I set out for Knutsford in my new motor car. A company asset, you'll understand, I thought it would impress our American visitors. It doesn't, apparently

motor cars are becoming quite common over there. I'm sure though, when we said our name to the gatekeeper of Tatton, that we were saluted through with a respect that would never have been accorded to a horse and carriage. One would miss that, with instantaneous displacement, though it would certainly save time, I'm afraid the motor is no faster than a slightly lame horse.

We weren't turning up unannounced, I'd telegraphed ahead. Obviously we'd telegraphed and telephoned immediately after the gaudy, in our concern about Vernon, or Tabley as he now liked to be called. The telephone operator put us through to the estate steward's office, where they said his lordship had been taken unwell, very suddenly the week before, but reassured us he was not in mortal danger; he wasn't seeing anyone at present, but would perhaps respond to a letter or telegram. His reply to my second telegraph was: Do come prefer weekday stop story to tell. So I was reasonably reassured of his wellbeing and a welcome, but hadn't thought at all in what style or genre his story would be.

The butler was a friendly young fellow, not the usual straightlaced type, barely a footman by most country house standards, typical that Vernon would employ such a chap. He steered my driver straight to the kitchens where there was plenty of refreshment and conviviality for as long as he cared to stay, he said. I was put in a beautiful tall drawing room, too resplendent to be comfortable really, though the message was to make myself entirely at home.

Those are his lordship's very words sir, so you just say if I can do anything for you at all, and pull on that bell-pull there whenever you want self or the girl to wait upon you, don't you hesitate. I'm briefed before I leave if I may sir – do please have a seat if you care – to tell you how it occurred, last week but one, when his lordship was took poorly. You know about his tinkering I'm told, scientific experiments they are really, so you'll know what I mean when I say he was a-tinkering in the great barn, as we call it, all morning. As he scoffed his lunch he forewarned us as to how he would likely be going away directly, that very afternoon, and we mustn't mind if he was gone even a day or two, it depended on the work he was a-tinkering at.

So off his lordship dashed sir, too eager to be on his way to even let his lunch settle. Well, you can imagine how surprised we was later to hear the door go and then the bell-pull tinkle just at tea-time, as usual, he obviously hadn't gone off nowhere. Oh dear, says I to the girl when the bell goes, his experiment's gone wrong and he'll be in a dudgeon; I'll go, says I. I'm glad I did sir, for the shock of it would have had Polly screaming or fainted I'll be bound. I walks in this very room, with the tea tray – I like to think my brief time in the force steeled me for I'd defy anyone not to have dropped it with a crash. Sitting in his lordship's chair – the one you're in now sir, no, stay put, he'll not mind at all – sitting in the chair, I'll not mince my words, was an old man.

Not unlike the *old* lord, that I was under-footman to briefly before he passed on, I thought his ghost had come for tea. But closer up the very image of his present lordship but doubled in age, seventy if he was a day I'd have said. Yes it's me Hanks he says. He calls me that and you're welcome to as well, my right name is Hankisson sir. I'm very tired, he says, I'll take tea then retire, would you get the housekeeper, I've forgotten her name – Micklewright I interposes – get her to prepare my bed straight away.

You're taken serious poorly me lord, says I, I must fetch Doctor Gaskell.

I'll be fine with a rest, I want you – I confess sir I interrupted him. I'm not rightly trained in butling, you'll have noticed and made allowance, and his lordship's a kind and easy master, but also, my excuse is I was dreadful concerned and worried sir, as you'd be. He's told me you're his best friend, and that's why I'm telling you all this. His lordship's said I might.

I was listening with surprise and concern of course, and a mounting curiosity. I'm glad of your account Hanks, and very glad to know Tabley has such loyal support, you have my gratitude as I'm sure you have his. You were saying ...

Thankyou sir, most kindly. I interrupted him as no gent's gentleman should, I did, but I was so concerned sir. We must get the Doctor and no messing, says I, whatever ails your lordship has seemed to make you elderly in an afternoon, if you'll pardon me saying it. Let me send the boy to Knutsford urgent, or I fear you'll be dead before morning sir.

It's arrested Hanks, believe me, the process is arrested. Sit down would you? I understand my ailment better than any Doctor would. You're right that it's aged me as you say; nor can it be reversed. But the influence that did it is gone, the process is arrested. Sit down while I explain it to you Hanks, I want you to be able to tell the other servants; please sit down, my neck hurts looking up at you. Thus he got me to sit sir, which I'm not accustomed to do in the normal course of things.

You're very welcome to sit while you finish telling me, I said, taking the hint.

I'll perch on the arm of the couch if I may, I confess I've come out of the past fortnight fair weary. But his lordship was right, he hasn't got no worse, nor aged none, in fact he's rallied a bit in recent days, since he knew you were coming sir. But there's more to the tale. His lordship explained it to me, so he said, so that I could be his ally in summarising it to others, for his lordship has many duties and callers as you'll know. You'll know too, more about his experiments than I

do, but I gather it's not just machines he tinkers with but strange electrical fluences and waves, such as vibrate the ether, I think he said, and appear to do impossible things. By way of example he said one type of wave he's a special interest in is that used for wireless – he did say the name if its inventor but it's slipped my mind, it wasn't Marconi though – and wouldn't that have seemed like magic to our grandparents. Mine are still living and look very sceptical upon it, I told him.

Anyway, wireless waves aren't harmful, his lordship went on to say, yet they can pass through solid walls. X-rays see into your body. Some substances give off a glowing that's called radio-activity. I want you to understand Hanks, his lordship says, that what I've done is expose myself to some rays of these kinds, which have had the effect of ... of prematurely ageing me. I hate dishonesty, as you know, but the true details are complicated and unedifying, it will be better to understand the way I'm telling you. That's how I want it understood. I've been affected by exposure to a type of electrical radiation from my experiments.

I'll add that ... Obviously no one must go interfering in the great barn, there are dangerous things there like petrol and high-frequency coils. But what affected me was a particular experiment I did, you can assure people there's no danger to anyone else. I ... He hesitated with something more he wanted to say. As he continued pausing I asked if he was stopping his experiments now. I may do just one more, and ... it's hard to explain, but it may take me from you entirely. I shouldn't do it then, I says, like I was presuming to advise him. He smiles. If it happens, I mean if I *am* taken entirely, you'll know what it was.

There's one other thing, his lordship says. I'm not sure if I should be telling you this sir, his lordship didn't say I should, nor he didn't say I shouldn't neither. There's one other thing, he says. Awkward coincidence and I'm sorry to inconvenience you and ... Micklewright. But would you have a guest room made ready straight away? I'm ... I'm sorry I forgot to say sooner, do make my apology to Micklewright, I know she'll be cross. I'll see her right, there'll be a bonus for you all if you'll help me with this. I swear his lordship got a mite emotional at this point, there was, you know, a crack in his voice. You see, he says, you see I've ... there's a young lady ... she's my ward, let's say. She's my ward.

A young lady, somewhat impoverished: you'll probably find she's brought nothing with her to speak of, but I want her to have everything, everything she needs. The finest money can buy Hanks. Polly will take to her I'm sure. Tell her there's a pay rise in it, though I know it won't need that, Polly's a good-hearted girl, she'll take to her fine. When she arrives you and Polly settle her in her room and treat her kindly, for my sake. Get her whatever she needs. Perhaps take her shopping tomorrow in Knutsford, for a new dress or whatever ... The

dressmaker will come out me lord, I says, for you'll know his lordship's not fully used to being a great nobleman as yet. The dressmaker and her assistant not to say any tradesman in Cheshire will come at the drop of a hat to wait upon the ward of Tatton sir, make no mistake, that's how it's done. Well do what you and Polly think best, he says to me. She's to be treated in all respects ... He looks up at me with his eyes full of tears sir, I swear. She's to be treated in all respects as my daughter Hanks. As soon as the legalities are sorted out, she will be.

I quite understand sir, says I. I think I did. But I won't say anything out of place. Miss Kathy, well Polly and me we've taken to her greatly. She's a fine bred young lady make no mistake, a lovely young lady and the master's treasure and joy. The dressmaker and others come out, and we had her equipped with everything her misfortune – whatever it was, I won't ask – deprived her of. The Sargent comes next week to make her his heiress I believe, by means of adoption papers and the setting up of a trust.

Yet how queer is it, she should turn up from nowhere that very afternoon his lordship radiated himself?

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It was indeed my friend Vernon, quite unmistakeably; and it was indeed a man anyway in his sixties, thirty or so years older than the last time I'd seen him. He clasped and shook my hand very warmly, with both of his, as though it had been those many years, not the few months it was. He actually said, I thought it a witticism but on reflection it was sincere: You haven't changed a bit. He was in good enough health, though slow in movement and inclined to seem weary, and depressed. He sported a neat white moustache. He used a walking stick, but didn't lean heavily upon it. Hanks and Polly, a plump young maid-of-all-work who was exceedingly obliging and friendly, settled us to tea, with lots of jam and butter and scones and Chorley cakes. Polly's parting words were: Ring when you want the young mistress to come down your lordship, and I'll see to her directly.

I see you've plunged into family history, I said, having entertained myself for a while between Hanks's departure and Tabley's arrival by perusing papers on a desk by the tall window. They were historical materials about the ancient De Tabley and Vernon families and their various roots and branches, including long family trees going back, as usual in Cheshire, to 1066. I take a *personal* interest in it now, was his reply. Indeed, I said, the new Lord de Tabley must know how he evolved: that's quite a history you're heir to. I didn't mean that, he said, that wasn't what put me on to it. It's since I've actually been there, and lived part of that history; since, indeed, I became one of them. The long scrolly one – would you be kind enough? I jumped up of course and fetched him his family tree. Let me show you, he said.

At the bottom, the recent end, were two parallel trunks, with himself at the foot of one, the other being the recently extinct line of distant cousins. He rolled backwards through the scroll, exposing a few generations at once; he went a long way back before the two lines met, in two brothers, the younger of whom was his ancestor. So our common ancestors are this couple, he said: Katherine de Tabley, the heiress of Tatton, and ... His finger rested below the name of her husband, Charles Leigh Vernon. Your namesake, how apt, I said, so you were named after him. No, he said firmly.

I laughed momentarily, but had a distinct inkling he was beginning to tell me something that was not meant to amuse me. Axon pointed out how unusual the Christian name Charles was prior to the Stuart period, he said; I ought to send a note about it to *Cheshire Notes & Queries*. Origins of the mysterious husband of ... Katherine de Tabley. He said her name as if tasting a delicately beautiful wine, and repeated it: Katherine de Tabley. We've no portrait of her, the fashion for family portraits starts a bit later. But there's a life-size effigy in the chapel. I can hardly bear to go and look at it Potter. I had it made, I put it there, I buried her beneath it ... and there she lies, all these centuries on, waiting for me.

There was real emotion in his voice: the butler's description of it seemed out of character, but here it was again. I didn't of course know what he meant, it sounded as if he'd been letting this research into his ancestors play on his mind rather. He read my expression, if not my actual thoughts. You'll have to forgive me for having changed, I realise I'm much more highly strung and sentimental than I was as a young chap, much more wistful. Thirty years is a long time Potter, please make allowance. I shook my head. There's nothing to make allowance for Vern. You've experienced something I don't even begin to understand, and come through it – whether smoothed a little here or creased somewhat there – the same sterling fellow you always were. Speaking to Hanks told me that.

He's a talkative chap Hanks, I trust you didn't mind me making use of his gift, to brief you so to speak. One reason was that I didn't want to walk in and shock you, with my appearance I mean. But another, you'll have gathered, was that I wanted you to be in no doubt whatever that it happened one afternoon, a couple of weeks ago, in the brief space between finishing lunch and ringing for tea. In fact, from a Tups and Snodders's eye view, as it were, and I wish they'd been there, it happened in an instant.

I activated the transmission control on my newly rebuilt mark four; and what they'd have seen would have been my hair instantaneously turn white, my clothes will have changed too of course, looking closely my hands and face will have become gaunt and older – but in an instant. And then I de-activated the transmission control and stepped back into

that same summer afternoon, that I'd left thirty-one years before, barely a minute from stepping into the carriage in the first place.

So the thing you omitted telling Hanks was that an actual journey in your engine had this ageing effect on you.

I've told no-one. I've not told a soul of the journeys, the displacement, the actual or supposed purpose of the engine: only you three and one other know of it. I hate dishonesty, I sacked a maid for telling a fairly innocuous lie soon after I succeeded. I regret doing it now, but I so hate dishonesty. Yet I can't of course tell anyone the truth, can I? Pull the bell for me would you?

Are you all right? I said, he seemed a little emotional again. It's something that's been on my mind for thirty years. I'll put it to rest, while I think of it, if you don't mind. Of course old sport, I said. Polly popped her head round the door and said Miss Kathy? No, he said, come here would you Polly?

Do you remember the girl Alice? Do you see anything of her? I do see her your lordship, it's hard to break a friendship— No I mean to *ask* after her: did she find work? Not yet sir, she's looking about but ... she's no letter, and word gets around when you're sacked I mean dismissed. She'll find something on a farm if she lowers her sites.

I'll write a letter directly and I want you to take it to her this very day, and tell her she can use the letter, or resume her work here.

I don't doubt such a kindness will teach her a better lesson than punishment sir, if I may say, said Polly with a smile. Now is there anything I can get your lordship or the gentleman. Refresh the pot if you would, I said, and she scuttled off with the teapot.

You wouldn't write it for me would you Potter, I'm illegible these days? Gladly, I replied, bemused, and wrote to his dictation a brief letter to whom it may concern saying Lord de Tabley was entirely satisfied with Mistress Alice Dodd's service as scullery maid and confident she was suited to better employments in any good house; she had left Tatton after a slight misunderstanding and was welcome to return there whenever she wished, but the Earl sincerely hoped she might find a better situation.

That's one d in Dod, the Cheshire way, he said, correcting it, then signed it and put it in an envelope with a little coronet embossed upon it. Polly took it away when she brought the fresh tea. So what went wrong? I said, settling into my chair with a new cup, and in expectation of a hair-raising – or hair-greying – account of some fault in his equipment which had dosed him with radio-activity, or else with zed-rays, some electromagnetic influence hitherto unknown.

You know I've never been all that susceptible to the charms of ladies, was his improbable opening – it wasn't to be the story I'd had in mind. While you and Tups were chasing damsels I was immune, it never once affected me. I'd never seen a female who did anything to my insides, the way you used to describe.

I had no luck with them though, I lamented.

No I know. You and I were very alike: we both yearned for something and we both failed to attain it. Your restlessness was in your heart while mine was in my intellect; I've discovered they're the same thing Potter. I thought I wanted to invent something that would change the world. Then I saw Kitty.

Even though I was a stranger, a trespasser, not only on her property, a trespasser in her time; even though she was startled to see me, coming from her barn, and approached me fearfully – I instantly loved her Potter. It was truly magical. I've looked at beautiful women and my heart has not stirred. I looked at Katherine de Tabley and it was as if I knew her, as if I already loved her and was just waiting for the moment, the meeting. I felt as if she was written into my destiny Potter. Does any of this mean anything to you?

Falling in love's a bit like that, I conceded. But are you saying – I was rather at sea. However, it was as if he wanted to evade direct questions and go on a while, extolling her virtues. How the beauty of her features was outstripped as he came to know her by the beauty of her personality. How her very voice sounded somehow familiar to him – could she have spoken to him in dreams? Or are we really predestined to meet and marry the particular person? Marry? I said.

You've seen the family tree, was his reply. She took me to be one of the Vernons of Davenport, returning impoverished from the wars, disoriented, perhaps even a little stupefied by the violence of the battlefield. There was a period of awkwardness of course, for my speech was peculiar, my habits rather odd, I was unfamiliar with much that to her was ordinary, I was hopeless at protocol. Yet her patient tolerance of all this, her gentle tutoring of me in the ways of the fifteenth century, her loyalty to me when my presence in her house threatened her with scandal, grew from her sharing my feelings. I flatter myself that she felt it from the start, as I did. It matters little. For Potter, she loved me with all her heart before long, and to her dying day.

When did she die? I said meekly.

Four months ago, he replied. Thirty-one years from our meeting, from the arrival of my engine in her great barn. Oh thirty years' marriage has it's ups and downs Potter, believe me, there were bad times as well

as good, there were outer and inner crises, there were a couple of lost babies ... there was her long final illness ...

Tabley wept at this point, he put his head in his hands and quietly wept, truly a bereaved husband. You'll appreciate my dilemma, he said. I should have come back and fetched medicine, or brought her here to hospital. I wish I had Potter. I told myself I couldn't interfere with her destiny – I don't know how stupid that sounds, but it's underlain my life these thirty years. I turned my back on the future.

I decided – my heart decided for me – there and then, in those first moments, that I would not come back. I had found something there that I hadn't found here – though I hadn't been aware I wanted it: the heart's joy, a companion, love. My life in the twentieth century fell away from my thoughts, it became irrelevant, nothing mattered but my love for the one I loved. You remember?

I remembered using that phrase in explaining it to him once, what it feels like to be in love.

Her passing broke the spell, freed me – so to speak – to think of my home. Not Tatton, I mean my home in time. Missing and mourning Kitty, and finding memories of my former life flooding back, led me to dust down the old mark four and think of returning. Our two fine sons are grown and have both recently married, both branches of our line are secure. They don't need me any more. Our last child – she's not on the family tree, genealogists have missed her – the very image of her mother, yet I think she's more like us, you and me, searching for something that she hasn't yet found – her destiny perhaps. I've brought her, thinking her destiny might be here. I've brought her with me Potter.

For myself I'm not so sure. To be honest I'm thinking of going back. I can play the benign squire here for a few years and then die, but where does that get me? I'm thinking of going back and being an old sage for a while – back there I'm a kind of wizard you know Potter, I can see into the future! And when I die I'll join my darling Kitty directly, why keep her waiting for centuries? I haven't especially got religion, I know what you're thinking, I haven't ceased being a bit sceptical. But those were very devout times you know. I've spent thirty years with a good, intelligent woman who was unshakeable in her belief that we go to heaven when we die and our loved ones join us there. If there's even the remotest chance of it Potter ...

As he talked I gradually drew my own conclusion. He was speaking as though it was obvious, as though he didn't need to spell it out for me, for he of course had walked into it very directly, and then had thirty-one years to let the incredibleness or impossibility of it fade from his mind. He had taken a further experimental journey, in his new machine from his new workshop, but instead of finding himself in Lincolnshire

or on the Moon, he had found himself still in the great medieval barn of Tatton, his bench and equipment replaced, presumably, by bails of hay. He'd emerged from the barn and met his future wife (though that may not be the correct expression).

So the rural place he'd visited from Cambridge wasn't Lincolnshire either, it was the very site that his shed was built on in the suburbs of Cambridge – but centuries earlier. The engine he'd invented, with its Benz motor and Hertz transmitter, that he thought created the new phenomenon he'd named displacement, instantaneously transmitting you to another place, wasn't doing that.

The carriage didn't in fact move at all – except through time. He'd inadvertantly invented a method of travelling in time.

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You've invented a method of travelling in time Vern.

It's not a good idea Potter. Please keep it between ourselves. I don't want to make anything of it. I think it's a very bad idea.

Yet it was evidently your destiny, I said, though I meant to convey his own thoughts rather than mine.

But you don't really think the scientific world – or the world at large – should know about it, do you? Don't you think it confronts dilemmas and paradoxes about history and who we are, too dreadful to unleash? I have travelled back in time and loved and married my own fourteen-times great grandmother Potter. I *am* my own ancestor. Destiny or not, I don't know, I can't let it loose can I? Could *you*? You have the power to, you probably have the right—

Not if you're swearing me to secrecy Vern, I wouldn't dream of it.

Good! he said. Pull the bell would you? There's a favour I want to ask you my old friend, a very big favour. If I decide to go back – Polly popped her head round the door. Fetch the damsel! he said, seeming to have cheered up.

If I decide to go back – I'm very strongly minded to, for the reasons I've said – and of course the engine will go with me, and never reappear – if I go back, would you keep an eye on Kathy? Would you be a kind of guardian to her? Of course old chap, I replied. Even if I'm wrong, he added, and she doesn't slay you at a glance ...

The door opened. I stood up to greet the girl from the fifteenth century. A nice-looking young woman of about twenty ran by me, ignoring me, as was proper, for she went straight to her father to embrace and kiss him. Then she turned round and, as he held her hand out towards me,

he said: Kathy darling, I want to present you to my friend, Mr Josiah Ridgway. I took the hand that he himself proffered, lifted it to my lips and kissed it, and then raised my eyes to behold a face that churned my heart, and conquered it, in that instant.

Tabley took a little nap before dinner, though we didn't dress, for it was just the three of us. So while he rested Kathy and I walked in the grounds. To both of us, as we left, he said: You can speak openly to each other, Potter knows all about us darling, and Kathy knows all about the engine. So we did, we talked freely. She was a remarkably bright and self-assured young lady, and except for a slight quaintness of speech entirely modern in her manners and outlook. And in her knowledge: Tabley had evidently taught her the history and science of her future, right up to the early twentieth century. She was slightly uncertain as to whether Macaroni or Mark O'Neil was the true name of the pioneer of wireless; but she'd heard of Oliver Lodge, knew that the President of the Board of Trade was called Snodders, and had a hankering to read Mr H. G. Wells's story of 'The Time Machine'.

Unfortunately, modern writers were not represented in the library of Tatton. She'd spent many hours there nonetheless, for she had never seen printed books before. She found the Latin ones easier to read than the English. Though she *was* enjoying the works of another author whose name her father had mentioned, William Shakespeare, who wrote several plays about her own times.

Daddy has spoken a great deal of you, she said.

Oh dear.

He is trying to match-make between us you know. I have an idea to confound him by winning you all by myself.

She said it without looking towards me at all, and with her head held proudly. The perfect free-thinking Edwardian young woman, I thought – and rather liked the idea.

I'm a bit old-school myself, I said. And true romance has eluded me often enough to make me cautious. So I may appear to leave the decision to you. That way, at least I know it's in good hands. But you have one assurance, no matter what you decide. Your father's my best and oldest friend (I hadn't intended an irony), and I've promised him, if he ... if anything happens to him, that I'll also be your friend and adviser. And I always will. You must turn to me without hesitation whenever you wish or need to.

Thankyou sir, she said, and took hold of my hand as we walked. He is going back you know.

He seems strongly inclined to.

He is, he is definitely going.

You'll naturally want to go with him I suppose.

No, she said firmly. All my life he has promised he would take me to the twentieth century. I believed him – I think I am the only one who ever believed him. He has not let me down. I am staying. I am the heiress of Tatton.

Dinner was convivial and tasty, and oddly perhaps, given our curious circumstances, we talked of all kinds of things – music hall and the Coronation and electric light and the *entente cordiale* and female suffrage and the Wars of the Roses and flying machines and the weather – and never once mentioned their own incredible story. It turned out that Kathy truly was an Edwardian. King Edward was spoken of, naturally, and it was only after several misunderstandings and a wry smile from Tabley that I realised we were speaking of King Edward IV. Though nominally a Lancastrian, and sorry for Old King Harry, Kathy was greatly taken with the dynamic young king, whom she'd actually seen – he really is as tall as they say!

I mentioned once about going to the Moon and she thought it was a splendid idea and would be possible one day, now that the brothers Wright are off the ground. Meanwhile Tabley signalled by a movement of his hand and a slight frown that the subject was under an embargo, so I merged it immediately into anecdotes of her father's flying catastrophes, which Kathy thought hilarious.

She retired mid-evening, kissed us both goodnight, and said: You can get the cigars out now. My first duty was to compliment him not just on the beauty but on the culture and education and bearing of the fine young lady he had brought up in the fifteenth century and (evidently) trained so thoroughly for her introduction to the twentieth. I had never met anyone like her.

She is her mother, turned into a woman of the twentieth century. It is my bequest, to the age I was so keen to invent for, the future I wanted to change. Life doesn't work out how one expects Potter. I have invented nothing. (I opened my mouth to argue, but he put his finger to his lips in the sign of secrecy.) So I give it instead the finest young woman that breeding and the efforts of devoted parents can prepare. She will soon be twenty-one. She will fly all by herself.

I fear she might, I said, I don't know if I could keep up with her.

You will be her rudder, he said, and I laughed. Nothing could please me more than how well you get on together. It's what I wanted. I knew you'd like her.

After pouring more drinks and re-lighting my cigar I said, casually: You haven't told her about going to the Moon that time.

I'm sorry I misled you. It's the only thing I've kept from her. If you'd oblige, I don't want her ever to know. It horrifies me still Potter, that experience, it haunts my darker moods and feeds my nightmares.

It still does? I said with surprise. I thought it would have rested into a mildly amusing chaser about being lost in your experimental travels. Thinking you were on the Moon *is* funny, you must admit.

He didn't, he shook his head. The horror I expressed at the time has never gone away, he said. And I discovered why, thirty-one years ago.

You went again?

You haven't put two and two together have you Potter? *Think* old chap. We know now that the carriage didn't move. When I thought I was in Lincolnshire I was really in the past. So when I reversed the polarity, and arrived somewhere so desolate and dreadful that I instinctively knew I was alone on a dead planet, and wondered if it was the Moon or Mars – I hadn't moved an inch ...

I was vouchsafed a solitary and terrible vision of the earth as it will be at some time in our future – this century, centuries hence, thousands or millions of years, I simply can't know. Or rather, *not* our future, for we weren't there Potter, no one was left, the earth was reduced to ash. And after only seconds I felt ill and couldn't breathe. It's the future of our own planet. I don't want her ever to know it Potter – promise me.

I promised of course, and I'll keep all my several promises to him. He's obviously right, I hadn't thought. And the sense of utter horror it instilled in him had lasted through all those years. His eyes told it as much as his words. I can see how it would now, it haunts me a little too. But I never speak of it.

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We stayed the night, my driver and I. In the morning Tabley had a tray in bed. Although he's not unwell, he's clearly weak or weary. Kathy thinks he has little will to live, without her mother, but will be happier if he goes back to the life he knows (she said). She's very brave and matter-of-fact about it: she too believes they will all be reunited in heaven. We breakfasted together, she and I. I had to return to my business, but I promised to visit often. I kept that promise too, and saw them several more times before Tabley left.

His chief preoccupation was settling everything legally – the adoption (for in the twentieth century she had no identity); the will, making her his heiress; the trust, appointing trustees (myself one) to manage the

estate and fortune on her behalf; the betrothal. How could I resist? Kathy encouraged and accepted my proposal. She assured me it was her wish too, not just her father's.

I saw the mark four several times, it was real and solid enough, pretty similar to the previous version I'd seen. He was busy, now and then, checking it over, oiling it, cleaning its electrical contacts, and so on. I commented that I'd missed out on seeing it demonstrated; but he had his mind fixed on the one final journey it would now make. So I never saw it work. He didn't want to be waved off or wept over.

One day I arrived clutching his telegram – Be sure to come stop take Kathy to barn – steeling myself to tell her that that was the day. Instead she told me. He had gone into the barn to tinker some more with his engine: Shall we see if he is still there? It was clear enough what she expected. Hand-in-hand we crossed the courtyard and entered the venerable old building. His tools and spare parts and oily rags were scattered around the edges, as before. But there was an empty space in the middle. The mark IV Hertz-Benz instantaneous diplacement engine was gone.

By the logic of his other journeys, in which any return, whether it be minutes later or decades, brings it back to the very moment in time it set out from, the engine's absence does not simply mean that he's gone. Its absence means, he is never coming back.

Kathy crossed herself and muttered a little prayer, in Latin, which seemed to call on all the angels of the air to protect him through eternity. I bowed my head and said Amen.

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 2008/4