

## A Time Traveller

I had my own views on time travel, though my perspective was theoretical – I mean theoretical in the non-scientific sense, my thoughts and conversation leaning always towards the philosophies and paradoxes of it. My friend however – we were friends by now, having drifted into it through our membership of the Frontiers Society – my friend was concerned with the actual technology of it, and was full of the laws and hypotheses of physics, the endless strings of equations, the complex mental blueprints of machinery and operations. Equally theoretical, in its way, but meant ultimately to take us there, whereas my logical conflicts would keep us where we were.

I'm sure my friend – though it never showed – was as bored by my harping on about the 'grandfather paradox' as I was by the inevitable reappearance of all those 'beautiful equations' which (I was assured) would allow relativity to be harnessed and inverted without significant expenditure of energy etc etc. One paradox that strikes me now, thinking back, is how very philosophical the scientific language sounded – beauty, relativity, probability, uncertainty – even while it seemed to me that logic and morality and (im)possibility were simply excluded from the scientists' argument.

My belief was that only travel *forward* in time was possible – though it still confronts paradoxical questions. And I also believed that it was a one-way ticket. My friend, while acknowledging that the easy journeys to both future and past so familiar from science fiction were irrational, the two directions posing different scientific problems, was convinced of both, and expended much effort in attempting to elucidate for me the techniques and formulae for travelling backwards in time – quite pointlessly, not just because of my conviction to the contrary but because (to be frank) the science of it was beyond me. To me, back was just an impossibility, forward was the way we're continually moving anyway, and so was a matter of accelerating that motion by one means or another, either technologically or biologically.

For all we were agreed on so little, we were unanimous in our fascination for the subject, as well as in our great fondness for each other's company and conversation. And I was proud of having been privy to her ideas before she gave her famous talk – on 'Chronodynamic Engineering: A Proposed Basis for Time Travel'.

I supposed she meant me, when she said how stimulating and helpful it had been to discuss it in advance with several colleagues and 'a particularly critical friend'. I admired her performance too. I'd feared she might be overcome by nerves or find that her quiet way of speaking did not project. But I needn't have worried, she was fine: she

spoke audibly and confidently, and made good use of that charming smile of hers.

Furthermore, the lucidity of her explanation was a revelation to me, making sense of some of the things I'd never understood in our private conversations. It made me feel both guilty and flattered, as she had evidently overestimated my grasp of it all. I omitted telling her this afterwards, though of course I lavished her with praise, and slipped in how I felt sure her audience *had* (for whether they would or not was one of her worries) grasped the essentials as a result of her clarity of exposition.

I hope it will not seem amiss if I express how proud and impressed I was in a peculiarly personal way. From the evening of her talk I was not merely proud that she and I were such good friends, I was positively exhilarated by the fact. From that evening I think I can fairly say that I loved her.

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I exaggerate when I say her talk was 'famous' perhaps. But it was one of the few meetings of the Frontiers Society that ever received mainstream newspaper coverage; and the reports were followed by an animated correspondence in some of the papers. It likewise remained for months the main topic of conversation in the Society. Since the first man on Mars, and with the prospect of the ultra-rapid-propulsion system taking humans much further, even time travel found itself reeled in from the lunatic fringe.

Quite a heap of correspondence came to her directly as well, and this must have included the first communications from the person who offered to provide her with laboratory facilities. She was a practical as well as a theoretical scientist, and had a workroom at home where she'd contrived some models, two of which she showed in her talk. One was a didactic model only, that is, it illustrated the meaning of one of her proposals. The other however was a scale model of an actual mechanism which, propelled by certain fuels (not present), according to certain conditions expressed by certain complicated equations, and with its victim prepared and harnessed by certain rather nasty-sounding medical procedures, would (she claimed) convey a human body backwards in time.

I'd seen this latter model in earlier stages of development on my visits to her house, and we'd discussed it often. But since it purported to travel *backwards*, even her talk to the Society didn't convince me it was anything other than clever mumbojumbo. Her constant refrain, however, was that to make even convincing and experimentally valid models, never mind the real thing, required not merely the rare combination of a well-equipped physics laboratory, a precision

engineering workshop, and some kind of medical operating theatre, but also materials costing many millions of dollars.

The offer of laboratory facilities was, it turned out, entirely genuine. An aerospace tycoon (so she told me) who had already poured millions into medical research was now funding a university laboratory that combined the kind of stuff she needed, and was prepared to give her an unsalaried research position in charge of a time travel feasibility project in it.

We were cautiously excited, or at least, she was excited and I was cautious, reminding her to consider carefully what such a person might want in return. No, I didn't mean it that way – I was thinking of commercial exploitation of any inventions that ensued, whether in time travel or other technical spin-offs. The nature of science research is that unintended commercially valuable spin-offs are more common than the fundamental breakthroughs the scientists themselves are after. But it came round to the other thing as well, before long.

As she got deeper into the negotiations I sensed something increasingly secretive about the deal, and increasingly personal. She said her benefactor was a recluse and it was all done through middle-men, but I'm sorry to say I didn't believe her. Middle-men or not, what I'd gathered of the tycoon's letters implied that they were *very* personal, that he was at least as interested in my friend as he was in time travel.

Once she started in the laboratory I saw much less of her, and heard less and less about the details of her work. Eventually we slipped back into seeing each other only at meetings of the Society, and she soon began to miss those. I never saw her tycoon; but I'm afraid I formed a mental picture of him, tall and bulky and rather elderly. It seemed faintly ridiculous even then to be so jealous of him, and I've since learned how thoroughly my imagination had run away with me.

The true target of my jealousy – if it had to have one – should have been her work, and the single-mindedness of her dedication to it. By no means did I begrudge her the fulfilment of her scientific vision. To be candid, I just missed her, and perhaps also missed being part of it. Well, not perhaps. What is more, it is now clear to me that she actually did achieve it (even though to this day the scientific world remains reluctant to recognise it) – I do now believe she did things of revolutionary scientific importance in those months in the laboratory.

We still talked at the meetings she came to, but more like *old* friends than friends. She was no longer using me as the primary sounding-board for her ideas; and she no longer touched the back of my hand and kissed me when we parted. Eventually she stopped attending altogether. She missed five consecutive meetings of the Society, and I heard nothing from her. Her telephone was answered by an automated answering service, her e-mail by an out-of-office message.

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Then one night she was at my door. She looked dishevelled and exhausted, and gave me a kind of prodigal expression, her lovely brown eyes and that curiously down-turning smile, so very characteristic of her, as if appealing to me for sanctuary, for the unquestioning comfort of friendship. I hugged her, long and tender. And then we sat down with coffee and cake.

Let me guess, I said: you've been to the future and didn't like what you saw. I half thought she had. She laughed a nervous little laugh, and said she hadn't been anywhere, yet. For nearly six months she'd virtually lived in her laboratory; she'd turned all her ideas and formulae into drawings and all her drawings into real technology.

Her backer had become more and more generous – and more and more demanding. Laboratory technicians and top engineers had been seconded to her project. Millions of dollars worth of equipment and materials had been bought. A paid Research Fellowship in Chronodynamic Engineering had been endowed for her (the first in the world). Her benefactor was now, if anything, more convinced of the practicability of time travel than she herself was, and pushing for rapid results.

No, they hadn't had an affair. She put her hand across the table, offering or seeking a reassuring touch. I looked at it. She turned it over, palm upwards, and I touched the palm with a couple of my fingers. Her hand closed around them, and squeezed. I looked questioningly at her eyes, wondering what it was she really wanted to tell me.

It's ready, she said; it's ready to go. I raised my eyebrows even more questioningly. And I'm just terrified, she half laughed, half whimpered. Not of going into the unknown. But you remember what an intrusive process it is – it's not just physics, it's bio-physical, it involves absolutely horrible medical interventions. I've not been able to find any other way. After all, it's about sending a human body through time ... But now *I* have to test-drive it – I *have* to (she'd anticipated what I was going to say), and I'm terrified.

Instead I said I wasn't surprised she was terrified; and by the way, which way was she going? Back. Now I *was* surprised. She knew I thought it was impossible. There and back, she added. I've actually built instruments (she always called them instruments, to avoid sounding like science fiction I suppose) for both, but the backward instrument is too bulky and rigid to take forward, and the forward instrument too delicate for primary use, so what we have to do is take the forward instrument backward.

You mean you go back in time carrying an additional machine which will go forward in time and so bring you back. She gave me a sort of congratulatory expression as though I'd grasped something very complex. Her 'team' was divided as to whether the return instrument would work, or even survive the first journey. The test run would therefore aim to take a 'short jump' back, so that the alternative return by what she called the 'slow route' would be available – by which she meant re-living through real time.

She squeezed my fingers. You've been my most critical and comprehending encourager, she said; I perfected all my initial designs and procedures in conversation with you; you kept me on my toes. I solved the problem of travelling *back* in time because of *your* critique, because of your analysis of its impossibility. (I was struggling to disguise not just my amazement but my mounting sense of being a fraud.) I know I've left you in the dark all these months, she went on; the lab just sucks you in and takes you over.

There was an itchy silence. We reclaimed our hands. I replenished the coffee. Then I leaned on the sideboard and looked her blankly in the face – shaking my head slowly. Her hair was uncharacteristically unkempt. Her tired eyes flickered at me occasionally but were mostly downcast. I remembered my particular fondness for her fine sharp nose. And of course her beautiful smile, not much in evidence that night.

She shrugged and sighed. Come *with* me, she said. My head continued to motion its answer. I need you. Touched as I was, I either feigned jealousy or let real jealousy get the better of me (I'm not sure I remember which): I asked her why she didn't take her tycoon. She looked justifiably hurt. Of course I regretted saying it as soon as I'd said it, though I didn't actually tell her.

After another tense silence she said: I'm committed to demonstrate the process with myself as guinea-pig ... I wish you'd come with me. You understand it – I made a denying spluttering sound – no, I know you don't, I mean you understand *me*. She lowered her voice to a whisper: I thought you loved me, I don't want to go alone.

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It was the most awful thing I ever did – not going with her. I've never let anyone down so badly. I don't understand how she got the idea I would want to travel back in time – she can't have got that impression from our conversations, as I'd consistently denied that it was even possible. But she'd *made* it possible for *me*. She'd misunderstood (I told myself), just as she'd endowed me with greater understanding of the science of it. She'd projected her intense wish to travel in time on to me, a mere armchair chrononaut, to whom science and adventure alike were food for contemplation, not for action.

I anticipated months or years of telling myself these things, in a forlorn attempt to fend off the guilt. Persuading her not to go was useless, I knew that; though that too would doubtless haunt me. For what I expected to hear was that either she'd killed herself in the attempt, or she'd disappeared. Even if I conceded to her conviction that she *could* go back in time, I still believed she wouldn't return. Either way, I thought I would never see her again after that fraught late-night parting – like lovers mutually disillusioned.

But once more I misjudged. It was less than two days before I saw her again. The next meeting of the Frontiers Society happened to be two evenings later. My habit was to check the programme on my way there, rather than beforehand, for I always attended, whatever the talk was about. Imagine how it took me aback to see my friend's name as speaker for that evening. It was there in black and white: her name, B.Sc., Ph.D., C.B.E. (the latter must have been a misprint) followed by the title of her talk: 'Chronodynamic Engineering: An Account of a Journey Back in Time, and a Demonstration'.

My first assumption was that she hadn't gone, and would be talking about her past year's work (since her previous talk) and showing the two 'instruments' she'd developed in the laboratory. But it simply wasn't consistent with the mood of her visit. How could she at that point have been thinking of setting off on the dangerous and terrifying test-drive (as she called it) when she was booked for this talk two days later? I toyed with the idea that it had all (her visit to me, her appeal for me to go with her) been some kind of joke or act; or even, alternatively, that the talk was to be a spoof.

But then, with heightening anticipation, I found myself recollecting the quirky logic of time travel itself. I realised what I knew well enough, for it was I who always used to be reminding *her* of it – that in time travel a return journey (there and back) takes no actual time. The notion of waiting around for a traveller to get back, or my thought that you wouldn't set off if you had an appointment the next day, are ridiculous: for when one travels in time, time ceases to be inexorable, and sequence becomes by definition paradoxical.

Assuming she *can* return, and returns to where (meaning *when*) she started, the apparent duration of her trip, of her absence, to those left behind, will be zero. Or she could choose to return ten minutes earlier and brief herself before setting out! Or months earlier and give her talk about it before she's even done it. Which of course are the kind of paradoxes that – I'd always argued – make it impossible.

These thoughts preoccupied me until I was in the meeting room. A good deal of the Society's membership had turned out. She was there, sitting in the front row with the Society officials and several people I

didn't recognise. My stint on the committee having ended I didn't qualify for the front bench, so I sat about half way down the room.

While those around her seemed animated and talkative, my friend remained completely motionless. I couldn't quite work out what she was wearing, it looked like a bulky overcoat, or rather it looked like a dressing gown but I presumed it was an overcoat – very unusual for her. At least her hair was nicely trimmed and combed. I regretted my decision to take a seat and was about to get up and approach her with a Hello and good luck, when the proceedings were opened.

After the chairman's usual business and announcements, he introduced and welcomed tonight's speaker. But the woman who stood up to speak was not my friend. It was a different woman who had been sitting nearby – a much older woman ...

My instinctive reaction when she turned to face us was somewhat ahead of my rational thoughts. For some moments I felt strong emotions that lacked explanation, I recognised without recognition. Under the short grey hair and within the sallow, slightly wrinkled face of a woman in her sixties were the beautiful features of someone I knew, someone I loved: large dark eyes, a sharply defined nose, a thin, expressive mouth with a quirky way of turning down when it smiled. It smiled a great deal, this was a pleasant, happy woman, delighting in the story she was telling us. And the voice she was telling it in I also knew, I also loved.

She recapped what she referred to as the very speculative talk given by her 'namesake', about a year earlier. She told of the laboratory facilities and funding made available as a result of that talk, and described and showed the two 'instruments' that had been developed, which we might like to call time machines, giving lucid but very simplified résumés of the complex engineering and mathematics that went into them. Her explanation of exactly how they operated was too concise to follow.

Then she described – with less relish – the biomedical part of the procedure: how the traveller's body must be prepared and harnessed to the instrument so as to be effectively carried by it through time. A thirty-six hour preparatory régime of gradually-introduced chemicals and drugs (she showed us on a body diagram); cutaneous attachment by means of these bi-filar electrolytic epiderms (she held up something that looked ominously like a fish-hook); ingestion of an electrosomatic reactant (a bottle of thick grey liquid). It sounded – as my visitor of two evenings previous had already made clear – revolting to the point of being unthinkable that anyone would subject themselves to it voluntarily. The speaker herself said something similar in conclusion.

Now I want to go back in time, she said with a big smile, and a pause, and tell you about my own background. She had begun to be interested in time travel about twenty-five years ago, while slowly recovering from a severe trauma which had left her with almost total amnesia. She never regained her 'explicit' memory (as she called it), but gradually rediscovered instinctively an astonishing repertoire of skills and knowledge, some of which seemed to amount to technical genius. For instance, she invented various medical instruments and techniques without really knowing where the ideas came from. It gave her a peculiar sense, which had only grown stronger over the years, that she came from the future.

Psychologists would tell her (and psychiatrists had done, she added with a smile) that people who've lost their past or their identity, for example through amnesia, will invent one, often an extremely improbable one. But in spite of her scientific rationalism she could not dismiss so easily her overwhelming conviction that she had herself travelled back in time, to the point twenty-eight years ago when her naked, traumatised, almost lifeless body was recovered from a tangle of metal that seemed to have been dumped on a building site, quite near to where we were that evening.

Her identity was never discovered. She chose a name at random (as she then thought). Once physically well, she worked as a medical technician in the hospital that had cared for her, her skills and inventions catapulting her to the post of chief technician in the biomechanics laboratory. Studying for a degree on the job enabled her career to progress, and from director of technology research for the hospital region she was head-hunted by industry, and found herself on an unimaginable salary.

One of her reasons for making this move, she said (a little coyly), was that she'd set up home with a nurse who'd become her greatest friend during her illness, and they wanted to contract a civil same-sex marriage and adopt a baby boy. You wouldn't believe how much easier it is to gain permission to do that if you've got a gigantic paypacket, she added with a disarming smile.

A few years on and she moved into aerospace research, forming her own company and always half-intending to do serious work on time travel, but actually specialising in space biomechanics. About ten years ago she'd reached the lucky position of being able to set up a charitable foundation wholly funded from her lucrative patents. The two aims of her foundation were to improve medical care through technology and to advance the possibilities of human travel – in space and in time.



Its greatest achievement had been to co-sponsor the URP system of space travel, currently under test, which promised to make possible at least some journeys of the kind that had become commonplace in science fiction but were in fact prohibitively lengthy in real life. At least, she added, with another delectable smile, that was their greatest achievement till today. But she had come here today not to speculate upon but to prove and to demonstrate an invention of much more personal importance to her.

Newspaper reports about a year ago of a talk to this Society on the science of time travel had re-focused her interest in the subject, especially in view of one utterly astonishing fact – the speaker was her own namesake. As a result she'd funded and participated in the work which had already been described, and her protégée, 'my lovely young genius' she called her, was with us again tonight. But tonight was billed as both an account of a journey back in time and a demonstration of it. She (the older woman) had told her story, and we could make of it what we would; now her collaborator (she said) would perform the demonstration, in which we were to witness her become the first person ever to travel in time – for the strangeness of time travel is, she said, that the traveller can stand before you and give account of her journey before she has even begun it.

At this point, somewhat melodramatically, she held out her hand to the motionless figure of my friend, who stood up and was led to the machine. Most of the machine was a complex cage of metal bars, wires, and electrode-like attachments and protrusions. The second machine was essentially the same but smaller and flimsier, and fitted within the first. The traveller's body was meant to fit inside this. My friend was clearly tranquilised or heavily drugged, she moved like a zombie and her face was (at first) expressionless. The older woman kissed her on the cheek, undid and removed the dressing gown, lifted the wig from her head, and my friend stood before us completely naked and completely shaven.

Without further ado the older woman and a young man commenced attaching some of those fish-hooks, each on the end of a wire, to her skin – literally to her skin, each one was pinned into her flesh like a badge. They worked upwards from her feet, attaching one every few inches. At first she showed no response, but by the time they were going into her belly she flinched slightly at each one, and by the time they were going into her face she was squirming continuously and two white-coated men had stepped forward to hold her and restrain her arms.

Some kind of greasy substance was now smeared on to parts of her body. She or rather *it* was pushed into the cage-like machine, from which all the hooked wires emanated. Various rigid parts of the cage were fitted into position tightly against her body. Ratchets were turned which closed the cage fully around her and then seemed to tighten it

still more. The shape of it forced her into a queer tilted-back position, forming a crescent from her tipped-back head down to her feet, which were suspended a little above the floor. She couldn't possibly move now, the cage held her totally; yet there seemed no question that she was resisting in every inch of her body. A bottle of what looked like molten grey metal was poured into her mouth via a funnel and swallowed unwillingly and with convulsions.

All this was done without commentary, only slight, stifled moans escaping from the victim and occasional subdued coughs from the astounded audience. It was the most sickening and embarrassing spectacle I've ever seen. It was a sort of public torture. I could see why she didn't want to do it. Yet of course she did, the ordeal was self-imposed. Not only did she invent the procedure and submit herself to it, but her older self was there to officiate in the ritual, to enforce it.

This older self pressed some button and stepped back. A crackling sound and some of the electrodes and fish-hooks smoking were accompanied by a sudden, pungent smell. The whole body glowed like radium for a moment, and then it and parts of the inner cage of the machine seemed to dissolve into dust and disappear ...

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Gradually the meeting room emptied, and the people who'd gathered around her afterwards got answers to their questions and drifted away, bemused and muttering, mostly convinced that they'd witnessed a spectacular conjuring act, I suspect. I hung around at a slight distance, wondering how to introduce myself. But I didn't need to: as soon as she was free, the time traveller came up to me.

Long time no see, she said, with that slightly prodigal look of hers. I was literally speechless. I wanted to make a quip about her twenty-eight years seeming a mere couple of days to me. I came back by the slow route, she added, as if reading my thoughts.

Then I suddenly thought what to say. I said: How's the amnesia then? She sparkled into a beautiful smile, touched the back of my hand and kissed me and walked away, exactly as had been her habit before. As an afterthought, once my eyes had followed her to the door, I said Where next? She replied without turning or pausing: The future.

I never saw either of them again.

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