

On 25 July to 1 August 2026 I attended an Oxford University Summer School for Adults on the topic of "**Understanding Space and Time**", by Marina DeBattista.

This is my pre-course assignment (c.1500 words) on the topic...

"Describe your earliest ideas about time and space. For example, did you have any sense about an absolute condition of rest; or about time flowing uniformly, at the same rate for all clocks?"

The simple answer is No! And I'm not joking.

But part of the question is to "describe your earliest ideas about time and space". So I will start with this question, although my answer might be a little unexpected.

My Space - My Time

My answer No! was my truthful answer, **I have never had any ideas about an absolute condition of rest¹, or about time flowing uniformly².**

I'm not going to invent some intellectual gibberish, just to satisfy this question.

However, the question did provoke a moment of reflection. If anything, I have always been determined to ignore time, and I love changing spaces.

¹ Since Newton, we know that motion is relative, and that there is nothing like absolute rest.

² Newton conceived of absolute, true, and mathematical time as flowing uniformly without relation to anything external. But Einstein's Special Relativity (1905) tells us that time is not absolute but relative. He would go to tell us that gravity also affects time.

My first honest memory of time/space, was having to stay with my grandparents (new bed-room and for 3 nights) at the age of 3 years 5 months, when my sister was born.

As a child I always had a kind of dream of jumping off the upstairs landing and slowly floating down the stairs to the ground floor. I know that dreams or recurring fantasies about floating, gliding, or gently descending are very common in childhood. They are often associated with wanting to escape ordinary limits, and a wish to take a risk while still remaining protected. I still remember this dream-emotion today, despite never experiencing it again after we moved homes (when I was about 9).

By the age of 9, I could go alone, or with school friends, to Saturday morning picture, and use both London buses and the underground. Not to mention attending local school, which evidently did impact my view of space. But even then, **time was just a number, it was what it took to move from one space to another.**

When we moved (I was 9), space became an even bigger factor in my life. My sister got the big back bedroom, and I got the small bedroom over the front door. I actually liked that, because all the space became usable, and wasn't just sitting around in corners³. For the first time, "far"⁴ was what it took to visit my grandparents, and "very far" was the occasional seaside caravan holiday in the West Country.

³ Space should be continuous, meaning it should have no edges, boundaries, or hard angles. But in our real world, space always has boundaries, edges and angles.

⁴ Far meant we needed a car (or in the early days a sidecar).

At least until the age of 18, time was just something to be managed. Space was different. I summarise.-

- Getting a bicycle, enabled me to first buy (later sell for a small profit) an evening newspaper round, then obtain a morning round, and finally become a "marker-upper", and later also a shop attendant (selling fags to idiots).
- With three friends, I had my first holiday (Butlin's Bognor Regis) away from family. Specific days can take on a symbolic moment. It was 3rd September 1967, I was 15 years and 10 months old.
- In late August 1969, with two different friends, I had my first trip abroad (walking down the Rhine) at the age of 17.

Time was just a number⁵, the duration that defined a change of space (place). Space was always the key, be it travelling, jobbing, playing, working with wood/metal, drawing (technical/building), etc. I define space as being (or wanting to be) in a new place (physically or in my head). Time was just what I needed, in order to be in that new space. This is still true today. Even now, for me travelling is not about time, but about changing spaces. Writing this text is not an issue of time, its just about imagining a space, and then adding texture.

At 18, I decided to study Applied Physics⁶, with a thin-sandwich course⁷ (or the world decided for me). Again practical science attracted me, and the idea to work for 6-month periods in three

⁵ According to Einstein's theory of relativity and quantum mechanics, time is flexible, relative, and inextricably linked to space. There is no universal clock, and time is merely a measure of how events and physical systems change relative to one another. This fits perfectly with my idea that time is just what is needed to move between spaces.

⁶ https://en.wikipedia.org/wiki/Applied_physics

⁷ https://en.wikipedia.org/wiki/Sandwich_degree

different real-world sites (e.g. UKAEA⁸, MoD⁹, BICC¹⁰) was an absolute pleasure for me. I also holidayed in France and Italy during that time. I can always visualise a space. Time is just a metadata tag¹¹ on a space.

It would be easy to imagine that my life was a time sequence, lumpy, but define by one-way, irreversible aging. But that never crossed my mind, time was just the necessary bits between spaces.

When I won a European Commission PhD scholarship to study in Europe, I jumped. I didn't care about the topic, or the location. It just meant a new space, or even better, a world of new spaces.

I turned my back on delivering newspapers, being a bin-man, studying thermal properties of nuclear fuel, building military night vision systems, working in a chippy shop, studying novel dialectics for underground power cables, being a London bus conductor,... and bought a dune buggy¹² for £200, drove to the Italian lakes, and studied something totally alien and ridiculous.

It's an interesting aside about time and space. I was told to go to a place called Ispra¹³, in Italy. In those days, place was an important social focus. Atlases were just a collection of maps of large land masses, so a small place like Ispra did not exist. Finally, I was told it was on a lake near Varese (I could find that in an atlas). Not as helpful as it might sound, since Varese is surrounded by lakes, and even has it's own lake. So I drove to Arras, Lyon, Geneva, Milan, each time buying a new local

⁸ https://en.wikipedia.org/wiki/United_Kingdom_Atomic_Energy_Authority

⁹ [https://en.wikipedia.org/wiki/Ministry_of_Defence_\(United_Kingdom\)](https://en.wikipedia.org/wiki/Ministry_of_Defence_(United_Kingdom))

¹⁰ https://en.wikipedia.org/wiki/British_Insulated_Callender's_Cables

¹¹ [https://en.wikipedia.org/wiki/Tag_\(metadata\)](https://en.wikipedia.org/wiki/Tag_(metadata))

¹² https://en.wikipedia.org/wiki/Dune_buggy

¹³ <https://en.wikipedia.org/wiki/Ispra>

map, so I could find my youth hostel for the night. Time was never an issue, it was always space, that's why we invented maps¹⁴. For me, a car is not just a means of transport, it's both a space to inhabit, and a kind of time machine¹⁵. Even the on-board navigation is not about directions, distances, times, etc., its about an ability to change the future.

I can remember before digital navigation, places carried a heavier cognitive and emotional load because they were tied to symbols on maps, the sense of orientation, memory (sights, events, airports, train stations), status (been there), danger (of newness and the unknown), and identity (growth of individuality and uniqueness) in a way that's hard to imagine now.

Yet I've always wondered if I should really consider airports, railways stations, roads, cars, planes, trains, etc. as non-places, just different kinds of time capsules.

It's interesting, do we define ourselves by space or time, or both. Historically, states needed two things to make human beings legible¹⁶. Firstly, where you belonged (space), and secondly, when you existed (time). That combination creates administrative identity. A nation-state is fundamentally a machine for organising populations across territory through time. The historical justification emerged gradually from taxation, inheritance, military conscription, religion, and property. In medieval Europe people were not abstract citizen, they were defined locally, not nationally. It was rulers (helped by religion) that transformed territory into bounded sovereign spaces, and who spatially classified people into citizen or foreigner, resident or migrant, native or alien. Space and time together create controllable continuity. Spatial records defined nationality and sovereignty,

¹⁴ https://en.wikipedia.org/wiki/History_of_cartography#Earliest_known_maps

¹⁵ It's not a retrofitted DMC DeLorean, so I can't go back in time. But a road is like travelling into the future, and to some extent steer the car, affects the drivers future (sometimes with disastrous consequences).

¹⁶ Understandable, measurable, and trackable by the state

temporal records defined property and thus law. Our human experience itself is more place-based, embodied, and built around relationships, yet modern institutions require abstraction in the form of identities define by coordinates and timestamps. Empires once ruled land, but today modern states rule timelines. Final point, in this quick rant, you can change coordinates (e.g. nationality, where you live), but not your timeline (e.g. data and place of birth, etc.).

I'm certainly not of a philosophical mind, but I like the way Heidegger thought that authentic life comes from inhabiting places deeply enough that they gather meanings, memories, and relationships around them. My idea is that time flattens experience and destroys uniqueness, whereas a space gathers a world around it, and reinforces the sense of being unique and making existence feel more personal and meaningful.

In Italy I learned that we were three people studying the same thing, The US guy gave up, but I managed after 3 years to get +/- 2%, and simply confirm what people presumed, and had already factored in. And the third guy, after another 6 years, managed to get +/- 0.2%. For a few years I was a footnote, before being erased by someone better. Time, the great eraser.

I learned that I should not waste my time in the future doing something I did not like, and that nobody cared about. But you have to eat.

*It's interesting, **I can waste time, but never space.***

I also realised that I was not going to get a Nobel Prize, and that to keep getting paid, I needed to be mobile. In those days, it was "can you come here and do this?" Being a nomad had a different meaning from today.

I then worked for the BMFT¹⁷ (in KFA Jülich¹⁸), which confirmed that I did not want anything to do with what I had studied (and was still doing). The place and the people were really great, but my time was being wasted.

I became a nomad, between late 1977 and mid-1982, I spent about 3½ years travelling every weekend on the train back and forth to Italy. My "reason to exist" would wait for me on the platform early Saturday morning, and drop me off on Sunday evening.

I knew that time could have structure, texture, purpose, but to me it was still only "movement between spaces". I would "fluctuate" back and forth, come into existence around my wife, then disappear, and reappear at work, only to prepare for my next re-appearance on "her" railway platform.

However, I did also learn Fortran¹⁹ on the mainframe, which meant that for one year I could return to Italy and work as an external contractor on a EU-US program. My work was to alter and benchmarking reactor physics codes for MOX fuel²⁰. I then transitioned to a UK-FR nuclear waste measurement project, and had a CNRS²¹ research contract in the University of Lyon²². This was another waste (non-nuclear) of my time, but the food was an improvement over Germany.

¹⁷ https://en.wikipedia.org/wiki/Federal_Ministry_of_Research,_Technology_and_Space

¹⁸ https://en.wikipedia.org/wiki/Forschungszentrum_Jülich

¹⁹ <https://en.wikipedia.org/wiki/Fortran>

²⁰ https://en.wikipedia.org/wiki/MOX_fuel

²¹ https://en.wikipedia.org/wiki/French_National_Centre_for_Scientific_Research

²² https://en.wikipedia.org/wiki/Claude_Bernard_University_Lyon_1

I also learned that you can waste time, or use time to learn and acquire new skills. But wasting time is also a necessary learning experience, it teaches you humility, and tests your willpower.

In mid-1981, I won an open competition and joined the permanent staff of the European Commission in Luxembourg. End of one story, and the beginning of a new story.

Maybe that is what time is. It's what is needed to end one reality, and start another. The myths of destruction and creation, of birth, death, and rebirth.

I appreciate that this text is totally useless and out of context concerning the question of space and time.

But I will continue, and mention the most important thing in my universe, both in space and time. On my first full day in my new laboratory in Italy, the 5th November 1974, I meet my future wife, who would accept to remain with me for more than 49 years.

That is the most important, in fact the only, true meaning of time and space for me.

It's interesting because usually time is just a metadata tag attached to spatial reality. But certain moments invert the hierarchy. When an event becomes fundamental (e.g. birth, death, revolution, catastrophe, revelation, encounter,...) time stops being descriptive, and becomes the "when" that reorganises everything around it (events, history, place, space, ...). I only have five "when's", and I await calmly the sixth and final one.

Between late-1974 and this trip to Oxford, I have visited around 1,200 places, and far more spaces (including a few hundred repeat visits - I have a list). For me, time is just what I use to change spaces. In fact, I once reviewed those places, and was surprised to see that with my wife, we had visited more than the "88 temples"²³ that defined our life together. Was that a sacred geography? Did the time spent between those "temples" mean something, was time really a kind of space, between moments?

We were once in Australia and learned a little about the Aboriginal²⁴ tradition that place (landscape) is the primary reality, while time is embedded in movement through it. "Meaning" is stored in places, and that we can read "memory" from our environment by again moving through it (e.g. walking routes, performing ceremonies, retracing ancestral paths). But for me remembering the route, narrating and visualising it in my mind, and recalling the sequence of places, etc. is also part of that same act of "meaning through memory". In some way, **space is the story, and time is the play button.**

As a final comment, I always viewed my wife as a photon²⁵. She was 18 years older than me, but as any self-respecting photon, she had no age, no past, no mass, yet she tore through the fabric of my life. She was immutable, but unfortunately not indestructible. She excited me, I a lowly, meandering, vaguely charged heavy ion, she shone in the dark, pointing always to our future together.

²³ https://en.wikipedia.org/wiki/Shikoku_Pilgrimage

²⁴ https://en.wikipedia.org/wiki/Aboriginal_Australians

²⁵ <https://en.wikipedia.org/wiki/Photon>

My job in life was to fabricate space, into which my wife could continue her trajectory. We bought in Italy, we moved to Luxembourg, we bought in Spain. She had her own work, but she would accompany me on any interesting trips around Europe, and the world. We lived in Luxembourg, Italy and Spain, and we occasionally "familied" in France and the UK.

Her track through the fabric of my life-space, still goes on. I see her many times a day, as she still excites my mind, and as ever, pushes me to create more space into which I can live on.