

The Biosphere and Me

*N.A.J. Taylor**

For another way to visualise the tenuousness of life, imagine yourself on a journey upward from the center of the earth, taken at the pace of a leisurely walk. For the first twelve weeks you travel through furnace-hot rock and magma devoid of life. Three minutes to the surface, five hundred meters to go, you encounter the first organisms, bacteria feeding on nutrients that have filtered into the deep water-bearing strata. You breach the surface and for ten seconds glimpse a dazzling burst of life, tens of thousands of species of micro-organisms, plants and animals within a horizontal line of sight. Half a minute later almost all are gone. Two hours later only the faintest traces remain consisting largely of people in airliners who are filled in turn with colon bacteria.

E.O. Wilson¹

I: The technical account

On June 3, 1967, all four of my grandparents boarded a plane at Manston airport in Kent, in the southeast of England, in a concerted effort to become acquainted. My parents, Jan and Roy, then 21 and 25 years of age, had been married only several months. And so, it was in this spirit of new beginnings that both sets of parents—and my grandparents—were to holiday together in Spain. As was becoming fashionable at the time, Isabel and Joseph, along with Royston and Nancy, had decided to fly into Perpignan, France, rather than travel the first leg of their journey by bus or by boat. The plane they boarded was marked: “G-APYK”.

What happened on that flight, the report of the Ministère des Transports later concluded, is that “the accident occurred following a collision with the mountainside”.² On board the Douglas DC-4 were 88 passengers and crew—all perished together in a single collision with the Pyrenees. The plane was a mere four minutes from its destination when it impacted with Mont Canigou, some 4,000 feet above sea level. The Commission’s chain of causation curiously downplayed the finding that G-APYK’s pilots displayed signs of “intoxication by carbon monoxide coming from a defective heating system”. The subsequent flight investigation found that the crash “resulted directly from a series of errors on the part of the crew”.

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¹ Edward O. Wilson, *The Diversity of Life* (Harvard University Press, 1992), 33.

² “Rapport final de la Commission D’enquete sur l’accident survenu le 3 Juni 1967 pres du Canigou (Pyrenees-Orientales) au G – APYK” (Ministere des Transports, December 6, 1968). Translated from the French throughout.



Image taken at the summit of Mont Canigou. Republished under Creative Commons 2.0 courtesy of the Wikimedia Foundation.³

Having studied the report in search of reasons, I infer three primary causes. First, the “language difficulties and in particular the non-existence of any standard phraseology” is evident in the transcribed black box recording between the co-pilot and the traffic controller. The investigating commission asserts that this resulted in grave “misunderstandings” in what was being communicated (and comprehended) by both parties. Second, and coupled with the first, the pilot and co-pilot made “a series of errors”, including:

[...] failure to use all the means of radio navigation available in the aircraft, error in dead reckoning, descent starting from a point which had been inadequately identified, failure to observe the safe altitudes fixed on the company’s flight plan and, perhaps, mistakes in identification by visual reference to the ground.

The report also points to a failure on the part of the ground controller to cross-check the plane’s bearing—due in part because he was led to believe by the pilots that they had the runway in sight—such that, “[i]t is legitimate to think that if the bearing had been checked by the controller, the latter would have found the [error]”. And lastly, and contributing to both aforementioned reasons, the pilot and co-pilot displayed signs of “severe intoxication by carbon monoxide [...] coming from a defective heating system”.

II: Reasons

To say that my four grandparents died because of a defecting heating system seems no reason at all. But for a very long time, it was the only reason I had.

“I don’t like talking about it,” my mother would most often say while blowing her nose, “But don’t be afraid to ask!” Seeing my mother in this way—my father and I never spoke about it—how could I ever ask her *anything*? Thus, whilst the event was an accident, acquiring a sense of what I’ve been born into has taken some effort.

This essay started out as an attempt to reconstruct my family’s narrative that has remained unequivocally hidden away and fragmented.⁴ In so doing what was revealed is the

³ 360 Panorama from Summit of Le Canigou, July 7, 2009, 360 Panorama from Summit of Le Canigou, http://commons.wikimedia.org/wiki/File:Pyrenees_Canigou_Summit.jpg

⁴ As this text has evolved, so has my thinking. For the initial impulse that the author’s personal narrative can offer scholarly insights and understandings I am grateful for chance conversations with Dennis Altman, Susan Brison, Robin Cameron, and L.H.M. Ling, as well as encounters with the published work of a good many others, including but not limited to Dennis Altman, “Writing the Self,” *Anthropological Quarterly* 75, no. 2 (2002): 317–21; Morgan Brigg and Roland Bleiker, “Autoethnographic International Relations: Exploring the Self as a Source of Knowledge,” *Review of International Studies* 36, no. 03 (July 8, 2010): 779–98; Susan J. Brison, *Aftermath: Violence and the Remaking of a Self* (Princeton University Press, 2011); Anthony Burke, “Life, in the Hall of Smashed Mirrors: Biopolitics and Terror Today,” *Borderlands E-Journal* 7, no. 1 (2008). For helping me better marry my academic writing with my personal narrative, I am particularly indebted to Tim Aistrophe, Roland Bleiker,

feeling of alienation—from the self, the family, society, and world—that produced a desire within me to make sense of this feeling not merely as a personal experience, or a string of sad stories (which to some readers it may only seem to be), but rather as something that gave rise to the altogether new desire to philosophically interrogate another, more fundamental, isolation of my body from its biospheric surrounds.

Before I proceed, I have come to believe that I must declare the reasons why I've decided to publicly share my pained meditation on a familial tragedy rather than to do so privately.⁵ You see, much of what I know about the accident—and thus also my grandparents—has been translated from the French, extracted from online databases, purchased from libraries, kindly donated by amateur plane spotters, and procured from forums of aviation enthusiasts. Sadly, very little may be gleaned from stories passed within my family, or engaging with my relatives' personal effects or photographs. To understand whom my grandparents were and the repercussions of their sudden deaths, I had wanted to ask my mother and father: How did it make you *feel*? But doing so, much less so now, seemed impossible.

Writing about the reasons we give and how we give them, the late sociologist Charles Tilly wrote that there is no hierarchy of reasons; no one mode of communicating that always trumps the rest.⁶ Although my mother often fell back on the sorts of “conventions” that are so helpful in dealing with grief, she also revealed key details about when and where the accident happened. She did this not by sharing what she and my father thought or felt, but by relaying snippets of various other, rather more impersonal, “technical accounts” or “codes”. According to Tilly, what was missing—from what my mother told me—were the “stories” that are typically passed within families, or shared between loved-ones and friends.

And so whilst I was informed about what had *happened*, my mother didn't share all that was *happening*. When I did ask about my grandparents, what I was afforded was the technical account, not what I had most wanted: a familial story. As it so often does, the trauma surrounding the event and its aftermath had served to isolate my mother and father from one another, and later still, from their own son. Despite the solidarity that might have been forged from our shared pain, suffering and vulnerability, part of my family—and our tragic past—has drifted in-and-out of focus. Quite rightly, Tilly would leap to my mother and father's defence here. He would claim that there's no relation between the kinds of reasons that people give and their character. For how we communicate more commonly reflects the situation, and our role in it.

“You were just a child!” my mother recently protested, “How could I have told small children?” The trouble is, as our family evolves, I want my role in it to change too.

What follows, therefore, is not just recounting of life and death in the Taylor and Nicholson clans. No, perhaps enough has been said already to suggest that it attempts much more than that. Rather, it is intended as an essay that not only serves to unmake some of those social isolations, but one in which I also explore – and confess to – my own awakening to what Peter Sloterdijk calls “the silent condition of [my] existence”: the air I breathe, the water I drink, and the Earth on which I stand.⁷ In many ways then, this is a piece of writing about the biosphere and me.

Elizabeth Dauphinee, Jan Fadnes, Naeem Inayatullah, Meghan Robison, and my mother, Jan, who all kindly commented on one or more earlier drafts. Whatever errors or omissions remain in the published text are, of course, mine only.

⁵ I especially thank Elizabeth Dauphinee and Naeem Inayatullah, for prompting me to be less opaque in this regard.

⁶ Charles Tilly, *Why?* (Princeton, NJ: Princeton University Press, 2006).

⁷ Peter Sloterdijk, *Terror from the Air*, trans. Amy Patton (Semiotexte/Smart Art, 2009), 28.

III. Stories

If you search long enough on the Internet, you can browse the full transcript of the blackbox recording taken from the cockpit, photos of the wreckage, as well as recollections by former airport controllers and aviation enthusiasts. One of the things that stands out is how the website moderators seem unable to find the words to describe the sorts of harms that were inflicted. For example, the popular aviation site *Aviation Safety Network* entry for G-APYK lists “airplane damage”, and elsewhere, “written off”.⁸ Whereas *Aero Transport* records the plane’s status as simply “destroyed” next to the “termination” date, with no tally at all of the human lives lost.⁹

Thinking back, I remember when I first started reading this sort of stuff in the early days of the Internet. Back in the mid-1990s, as now, I didn’t know what I’d find, and I had even less of an idea what I was looking for. But in some way I felt that if I learned more about the accident of G-APYK, I’d also bring my four grandparents—and who I was—into sharper focus.

Over the years I’ve amassed an archive of roughly one hundred documents that includes photographs, PDFs, official reports, correspondences, and handwritten notes. All these documents sit in a cardboard box under my house marked: “G-APYK”. This box is important to me not just because I took the time to collect it, but because some of the originals have since disappeared from where I had found them; in some instances, possibly removed from the Internet altogether.

A sort of black-market has opened up, capitalising on the dearth of information about the accident for those whose motivation is to study it. One of the *Professional Pilots Rumour Network*¹⁰ forum users, who goes by the moniker “Sigafaro” (forum users are nearly always anonymous), suggests he might on-sell various documents, including a string of letters between a relative of one of the deceased and his solicitor, and one “from the board of trade”.

Still others have uploaded some of their images of the crash site and the wreckage online. For example, “A330-flyer”, who doesn’t declare any personal connection to the accident or the airliner, lets readers know that:

Most parts have vanished into the forest floor and only a metal detector reveals [sic]¹¹ that the area is littered with pieces of the wreckage. The most eerie parts lying scattered in the river are parts of the seats and a safety belt!

Quite often the most interesting sort of content is only available in paid sections of websites. A discomfort with this practice has prompted me to get to know many of the forum moderators, not by posting online but rather communicating privately on email. In so doing, I’ve negotiated to have much of the paid content opened up for open, public access. (Though of course I don’t know what others—not least my grandparents, or my mother—would make of any of it.)

Some things that I’ve found online are more worrisome. Over the years I’ve noticed that many of these forums have begun mentioning my mother. One user, “robb arrieula”, writes on February 4, 2008 that he “recently come across a lady who lost both parents and her husbands parents in the air ferry crash”. He goes on to say that he is “actually meeting her tonight!” before asking readers whether they can, “[...] give me any idea at all where the memorial site for this

⁸ “ASN Aircraft Accident Douglas C-54A-1-DC (DC-4) G-APYK Mont Canigou,” *Aviation Safety Network*, accessed May 3, 2014, <http://aviation-safety.net/database/record.php?id=19670603-1&lang=en>

⁹ “Air Ferry,” *Aero Transport Data Bank*, accessed May 3, 2014, <http://www.aerotransport.org/php/go.php?query=operator&qstring=Air+Ferry&where=26618&luck>

¹⁰ “Air Ferry DC-4 Crash 3 June 1967,” *Professional Pilot’s Rumour Network*, December 15, 2007, <http://www.pprune.org/aviation-history-nostalgia/304703-air-ferry-dc-4-crash-3-june-1967-a.html>

¹¹ Passages from online forums will be quoted in full, with no attempt to correct or note any errors of spelling or syntax.

crash may be. she has been trying to find out and i have spent hours on the internet and making calls to france but nobody seems to know.”

Learning of this online enabled me to ask my mother about the accident once more. My mother revealed that she had been put in contact with “robb arrieula” through a family friend. Stories travel. When I returned to the site a few days later, I saw “robb arrieula” had replied with an update after having seemingly met my mother:

[...] the meeting went just fine and i will no doubt see her again soon. she was very pleased to finally find some info on the crash. unfortunately her husband passed away just before christmas so she won't be able to share it with him but she is now on a mission to find out if the memorial still exists and i think she is registering on this site.



Image taken of the plane's wreckage in June 2010. Republished courtesy of Winston Smith.

My mother never became a registered user on the site for the same reasons that I keep visiting them: even behind the technical accounts are people's personal narratives. One such contribution comes from the user, “ONE GREEN AND HOPING”:

I never worked for Air Ferry, but for some strange reason I was reported somewhere in the press as having been on board. Fortunately, I was still living with my parents in London, and had been at home when the accident occurred.

Another user, “voxmundi”, later chimes in:

I was married on June 3rd 1967 and had a honeymoon booked for Malgrat de Mar in Spain. We were to fly from Gatwick midday on the Sunday 4th June. In the morning I listened to the radio and heard of the disaster. As my new wife was nervous of flying I kept it to myself. We even flew over the disaster site without realising it and landed in Barcelona. We went to our hotel in Malgrat de Mar and settled in. When we went to the dining room it was half empty and when we enquired why we were told that the Swan Tours Flight that should have brought in the rest of the holidaymakers was the flight that had crashed. The reason for my pre-ambles is to let you know how eerie it was to sit in that half empty dining room for the rest of the week. It was just as if we were with the ghosts of those that should have been there.

I don't like this idea that my grandparents are mere "ghosts". When I first read voxmundi's personal account I wrote down all the little things I knew about each of my grandparents to add to my "G-APYK" box. One of the entry cards in the archive reads:

Joseph "Nick" Nicholson. Mum's father. Completely white head of hair by his mid-20s. RAF pilot—perhaps not very good as he crashed two Spitfires (perhaps best pull his service records). Later served as a trainer in England and then in Egypt towards the end of the Second World War. Told his only daughter "not to cry" as a children--which although sounds like bad parenting, at least he doesn't sound like a chauvinist! Used to buy his wife "XXX" mints on his way home as a treat.

To say this is all I know about one of my grandfathers might not seem like much. But when I think that the third time he was in a plane that crashed he died beside his wife, he comes alive. I think he would've spoken up, at least to his wife and perhaps also some of the other passengers, if they had any warning they were going to crash into the mountains.

But equally I'm also aware that there are so many more things that I still *don't* know. I've never heard his voice, or touched his hand. In fact I've never felt his presence in anything other than still photographs. My grandparents may very well all be dead, but I regret that they must all remain so lifeless.

The erasure of my four grandparents from our family's living memory was not due to a lack of love or a conscious choice on the part of my parents, but a reflection of the pain and suffering—the harm—that was inflicted.

III. Theorising harm

"The body can be a source of solidarity", theorists of harm such as Andrew Linklater remind us, "but it can also be the reason for fear and enmity".¹² Linklater and others theorize harm as "evil (physical or otherwise) as done to or suffered by some person or thing" that results in "hurt, injury, damage, mischief" as done to "people or things", that results in "grief, sorrow, pain, trouble, distress, [or] affliction". Indeed, one of the leading liberal theorists of harm, Joel Feinberg, suggests that whilst the concept itself may be "treacherous",¹³ harms are best understood as a "setback to vital interests".¹⁴

The technical reasons for the crash of G-APYK prompted me to situate harm to our vital interests in an altogether different way, whereby I was awakened to Sloterdijk's "silent

¹² Andrew Linklater, *The Problem of Harm in World Politics: Theoretical Investigations* (Cambridge; New York: Cambridge University Press, 2011), 35.

¹³ Joel Feinberg, *Harmless Wrongdoing* (Oxford University Press, 1988), xxvii.

¹⁴ Joel Feinberg, *Harm to Others* (Oxford University Press, 1984), 36.

condition of their existence”. What of harm to the biosphere on which all life depends?¹⁵ My sense is that the sorts of harms associated with G-APYK haven’t even been properly diagnosed yet and, hence, cannot properly be treated.

IV: The body¹⁶

It began on a couch, privately in our home. It ends on a bed, at the foot of a hall.

“Shall we turn him?” the nurse asks politely. They do, without response. I already knew what they were doing: patients who are unconscious for long periods are frequently ‘log-rolled’ from one side to another to alleviate discomfort and protect the spine. Since we know Roy is never waking up, their presence arguably provides me with more comfort than it does him.

It’s been two days since I flew home to see my father. Now, perched at his bedside in the hall of a nursing home, I listen to Roy’s lungs rustle as the pneumonia takes hold. I pass the time by learning all the nurses’ names, and milling about underneath the fruit trees out front. The nurses worry that I’ve not been sleeping, but truth be known, I’m drawn by the labour of his struggle.

Laying there a dishevelled old man, at times it doesn’t appear to be him. But I know that it is. Having chosen to neither drain his lungs nor nourish him intravenously, my heart skips every time his oesophagus seals and the wheezing stops. I wonder if the bed sheets will shift again as the air races to his lungs. My answer is yes, but my judgment is no.

Impervious, the nurses’ routine continues. I watch as they finish burning his legs with some sort of alcohol, another gesture which seems pointless now. Their routine completed, the registered nurse affords me another glance. In response, I simply nod. She stoops toward the steel tray she’d placed on his chest, and prepares another syringe of morphine. As she administers it, I leaf through the items of a bookshelf to avoid his emotionless face. I do this every four hours, every time with a different nurse. This time I note that all of the dusty book jackets are painted by fingers long since gone.

Here’s a memory. Arriving home from school I trudge up the stairs, only to find Ma and Dad crying on a couch in the living room. Broken. My father’s forlorn face welcomes me into the room. His hands are clasped and cradled between his knees.

After more than a decade as a senior manager, Roy’s employer had terminated his contract. Roy was 55 years old, unemployed and not ready for retirement. Over the following months the shock cleared, an uneasy stress filled its place and his breakdown unfurled. I hadn’t known then, but Dad had been suffering panic attacks and a loss of confidence for some time.

The experts’ diagnoses varied. “Mid-life crisis.” “Nervous breakdown.” “Depression.”

¹⁵ Elsewhere, I have developed the notion of biospheric harm in the context of the spatial and temporal dimensions of nuclear and chemical ones. For a representative sample, see N.A.J. Taylor, “Teargas: Or, the State as Atmo-Terrorist,” *Al Jazeera English*, May 5, 2012, <http://www.aljazeera.com/indepth/opinion/2012/04/201242913130963418.html>; “Andrew Linklater: The Problem of Harm in World Politics,” *Australian Book Review*, June 2012, <https://www.australianbookreview.com.au/prizes/calibre-prize/71-june-2012/964-andrew-linklater-the-problem-of-harm-in-world-politics>; “Rethinking Cosmopolitan Solidarity: Nuclear Harm from a Cosmic Point of View,” in *Welcome (?) to the Anthropocene* (11th Meeting on Environmental Philosophy, Allenspark, Colorado, USA: International Society for Environmental Ethics, International Association for Environmental Philosophy, Center for Environmental Philosophy, 2014).

¹⁶ This essay on “the body” appears here in revised form, having earlier been published as N.A.J. Taylor, “The Grey Matter,” *The Big Issue*, July 2009.

Then one well-known psychologist said confidently: “Roy, you’ll be right by Christmas!” But he wasn’t. So he drank, remained jobless and eventually became depressed. Now he was having a nervous breakdown. And so was my mother.

By letting Roy go, perhaps his employer had diagnosed his condition better than his doctors.

No one knows why, but—now jobless—Roy’s health noticeably declined in 1995. We learned much later that his brain was accommodating Dementia with Lewy Bodies—a chronic and progressive disease akin to suffering both Parkinson’s and Alzheimer’s disease at the same time. Simply put, his brain was patiently ‘shutting down’. Over thirteen years Roy progressively lost his movement, his speech, his rationality, his intellect, and his memory.

Entwined within those first threads of puberty, I followed my own spiral. I stayed in on weekends to read, write and decipher the messages of Billy Bragg and Tim Buckley. At 2 am I’d close my eyes and pretend I was part of an English football crowd, rather than alone at the mercy of the BBC World Service. As I lay there half awake—the tension of the match eased by the inflection of broadcaster James Alexander Gordon—I imagined countless other teenagers would be clamouring into bed, together and drunk.



A portrait of my father, Royston, sleeping several months before his death. Republished courtesy of the author.

Yet, the loneliness was entirely harvested. For the interactions I most enjoyed were delivered and stored as words in my head—however measured and distant. Eventually it all made me exceptionally depressed. I had gone out so far on my own, there was really no way anyone could wade out and bring me back.

A decade on, I'm ashamed that suicide came to mind before I talked to any of my family or friends about how Dad's mental illness was affecting me. And yet I'm also aware it wasn't me who told them. Five or six years after Dad's health had declined, a good friend of mine found a children's maths book on the kitchen counter. Assuming it was mine, he said: "Gee Nico, you're not that bad at maths, are you?" Unfazed, Dad confessed that the book was his and kindly explained how mental exercises helped preserve the functioning of his brain. Perhaps my friend had learned about Dad's condition the hard way, but the way Dad had handled it with such tenderness has stayed with me.

Now I appreciate that Dad endured his illness better than me, I believe it wasn't a conscious choice to keep it all private, but rather a function of circumstance. I wasn't ashamed of my Dad's illness; I was lost within it.

Roy's lungs stopped working just before 9am on 21 December 2007. His heart kept beating for 25 minutes. I spent the next six days writing his eulogy.

As I mapped out those 13 years of Dad's mental decline, I realised that his influence on me extended much further. I found it hard to imagine playing a football match without Dad coming to watch. He had been ever-present. Well into his illness, Dad would invariably travel two or three hours to see me play—on buses, on trains, and on foot. It meant so much to me then, but now I realise those memories of Dad perched on the touchline are among all I have left.

Having to accept that my father was fast becoming an old man, I'd neglected to see that Dad's story was now mine too—I'd lost hold of what he was like without that bloody mental illness. Too much had been stored in the grey matter. And so I wanted his eulogy to highlight the duplicity of mental illness: that it invariably leaves an equal measure of treasured and tortured memories for those, like me, caught up behind it.

Thus I began: "So this is Roy's day. A day we'll laugh. A day we'll cry. A day we've come together to remember [...]"

At which point—realising I was sharing my story years too late—I broke down and cried.

V: The aftermath

My father's ashes arrived several days afterward in a cardboard shoebox. The undertaker later took the liberty of crafting a bespoke wooden box for the shoebox to fit inside, with a noticeably oversized gold-plated inscription that reads: "Royston Harold Taylor, Aged 66".

Soon after I went for a long bushwalk near my family home. I pondered what being implicated in the death of someone—however directly or indirectly—actually means. In my father's death I was called upon to be an active participant. Someone had to consider whether morphine was easing his pain or poisoning his veins. Someone had to reason with the nurses who came down on the other side of this dilemma, and refused. Someone had to consult with his doctor through those dark days. And someone had to settle the patient—himself a mentally ill man—who suggested my dad "die more quietly" as he was taking what were to be his last breaths. But I am also aware that that same someone was crying into his knees the moment he'd gone. And that same someone was not merely asking his friends for a shoulder to cry on, but: "If I don't believe in any higher Gods, where has he gone? What have I done?"

As one might expect, all this marks the experience out, for me. Though I am aware of the irony in all of this—as a scholar of harms that are inflicted by nuclear weapons, accident and waste—to be finding meaning only in my own family's pain, suffering and vulnerability and to hide behind such cold, indifferent, academic prose about those things I read and write in relation

to so many countless others. But sometimes that is what it takes to be shocked into understanding and a new way of thinking; one's awakening is inherently personal.¹⁷ It is not as though I am unmoved by my understanding of nuclear harms, but I do often find myself asking myself whether or not I can go on.

Jeanette Winterson more precisely refers to this process as "forgetting".¹⁸ Writing about the "burdens of scholarship" as a specialist in terrorism studies, Richard Jackson speaks more expansively on the ways in which our bodies and minds can betray us:

Some days I feel like I'm being slowly crushed under the weight of this unholy knowledge. It constricts the breath out of me, squeezes my heart in a vice. No matter what I do, the stories creep back into the crevices of my mind, leaping out on me like a great toad, piercing my calm, snarling and snapping. [...] So many stories, peeking through the cracks of my work, whispering through the pages I read every day.

I don't really understand how I do it, study this horror day after day, year after year. I've thought long and hard about it, but I honestly can't say for sure how I maintain my sense of self in this daily sea of blood. It's a miracle I don't sink below the depths, that I'm not a depressive, an alcoholic, suicidal—or worse, an IR scholar, writing and speaking about human suffering like it's a balance sheet, a simple tally of abstract values. I think it's the love and kindness so freely given to me every day by my wife, my friends, my family, my colleagues, my students, sometimes complete strangers, which keeps me going. Those moments of warmth and fellowship, of being in the moment with others. And maybe the fishing, out *in the mountains*, or the music, jamming on guitar with mates (emphasis mine).¹⁹

For me, however, a retreat to the clean, mountain air provides no such solace. The mountains and air travel only serve to remind me of these "new surfaces of vulnerability".²⁰

VI: Biospheres Earth and G-APYK

The events surrounding flight G-APYK and the experience of having stood over the death of my father suggests to me that the notion of the biosphere²¹—or more simply, a zone of life—is

¹⁷ Two specific contributions from feminist scholars relevant to my own work are notable in this regard. See Carol Cohn, "Sex and Death in the Rational World of Defense Intellectuals," *Signs* 12, no. 4 (1987): 687–718; Cynthia Enloe, "The Recruiter and the Sceptic: A Critical Feminist Approach to Military Studies," *Critical Military Studies* Vol. 1, No. 1 (October 10, 2014): 1–8.

¹⁸ Jeanette Winterson, *The Passion* (Penguin, 1987), 42–3. The relevant passage is worth reproducing in full: "They say that every snowflake is different. If that were true, how could we go on? How could we ever get up and off our knees? How could we ever recover from the wonder of it? By forgetting. We cannot keep in mind too many things. There is only the present and nothing to remember." As cited in Roland Bleiker, "Forget IR Theory," *Alternatives: Global, Local, Political* 22, No. 1 (January 1, 1997): 57–85.

¹⁹ Richard Jackson, "A Self-Inflicted Wound; Or, The Burden of Scholarship," *Richardjacksonterrorismblog*, accessed November 3, 2014, <http://richardjacksonterrorismblog.wordpress.com/2013/04/02/a-self-inflicted-wound-or-the-burden-of-scholarship/>.

²⁰ A phrase redeployed to illuminate a related but altogether different point made about the emergence of chemical warfare by Sloterdijk, *Terror from the Air*, 28.

²¹ It is worth noting that when Vladimir Vernadsky's idea of the biosphere first appeared in Russian in 1926, scientists in the West largely ignored his insights for many decades. We have already seen over the past several decades how the same blindness has befallen most people's limited sense of the meaning of politics and ethics—though the difficulty now is not merely one of accessibility and language! See: Vladimir I. Vernadsky, *The Biosphere* (Springer, 1998).

crucial to a proper understanding of the human condition.²² The traversing of the plane's safe operating conditions—whereby toxic air is all that remains to be breathed—awakened me to the true precariousness of the human condition within the global biosphere. For as E.O. Wilson's epigraph to this essay reminds us, at greater altitudes of Earth's atmosphere, somewhere between the tops of mountains and the upper limits of the clouds, "only the faintest traces [of life] remain consisting largely of people in airliners".²³ Thus, it must be remembered that the global biosphere that envelops the Earth below, is replicated in the passenger aircraft that ferry us around the world in the atmosphere above. Seen in this way, the artificial biosphere of airliners at 30,000 or more feet serves to render its passengers hostage to the true precariousness of our Earthly existence. In this way, the case of G-APYK explicates the otherwise unseen fragility of life in the global biosphere.

Writing soon after the investigation drew to a close, the leading civil aviation magazine *Flight International* ran a one-page report with the attention-grabbing headline: "Perpignan: CO Poisoning?" The editorial, whilst displaying some doubt as to the investigating commission's conclusion, does note that the "[Accident Review Board] put out a notice warning other operators and later tightened the regulations regarding the inspection and overhaul of Janitrol heaters".²⁴

²² At this juncture I must digress in order to make a substantive point that may only be discussed more fully in another forum. Suffice to say, in *The Human Condition* Hannah Arendt (p.251) speaks of "the decisive shrinkage of the earth", by which she was referring to the simultaneous expansion of human knowledge about the earth at the same time as its relative shrinkage in terms of both spatial and temporal distance. For Arendt, such a process was "the consequence of the invention of the airplane, that is, of leaving the surface of the earth altogether". The idea of "alienating man from his immediate earthly surroundings" by way of looking back on its surface is not an idea altogether unique to Arendt (e.g. for Macauley (p.28-29), Arendt appears "influenced strongly" by earlier remarks made by Martin Heidegger), and nor was it developed by her in any great detail. However it does serve to contextualise the now more commonplace image of "the blue marble" taken aboard the Apollo 17 spacecraft on December 7, 1972, or the "pale blue dot" taken from the Voyager 1 space probe on February 14, 1990. For instance, Anthony Burke (p.59 and 61) has recently proposed that international political theory take a "cosmic point of view", which appears at least partly provoked by the "vast emptiness" that transformed this same blue marble into that "tiny blue dot". For Arendt (p.x), of course, such images of spaceship earth were conceivable though not yet possible at the time of writing *The Human Condition*, although she was in a position to remark that the launch of Sputnik was "second in importance to no other, not even the splitting of the atom". Even still, it is my view that the supposed dichotomy that has emerged between the cosmic (as represented by images from space) and Earth perspectives (as represented by the experience of air travel) is downplaying the critical importance of the biosphere as a set of arrangements that are unlikely to be exclusively enjoyed by humans on Earth. It is my hope that this essay makes a modest contribution to such a biospheric vision, whereby humanity remains central as a constituent part of a wider constellation that encompasses not only the life zone of Earth but also the greater cosmos. See: Hannah Arendt, *The Human Condition* (University of Chicago Press, 1998); Anthony Burke, "The Good State, from a Cosmic Point of View," *International Politics* Vol. 50, No. 1 (January 2013): 57–76; David Macauley, "Out of Place and Outer Space: Hannah Arendt on Earth Alienation: An Historical and Critical Perspective," *Capitalism Nature Socialism*, Vol 3, No. 4 (December 1, 1992): 19–45.

²³ Wilson, *The Diversity of Life*, 33.

²⁴ "Perpignan: CO Poisoning?" *Flight International*, December 12, 1968, 969.



The last known image of G-APYK's interior cabin. Republished courtesy of Dave Thaxter.

In effect, I lost four members of my immediate family that day due to what Peter Sloterdijk would later term, “negative air-conditioning”.²⁵ That is to say, the carbon monoxide that silently filled the plane’s cabin—a gas that is at once colorless, odorless, tasteless, and thus altogether non-discernible until one has already become nauseous, confused, unconscious, or subject to suffocation—did not readily make itself known to the pilots or ground staff according to what is discernible from the black box recorder. That is to say, they were unaware that their death was to be brought about by their very own breathing.²⁶

Indeed, Sloterdijk, was instead remarking on the use of lethal gases in contemporary warfare, “[...] gas warfare is about integrating the most fundamental strata of the biological conditions for life into the attack: the breather, by continuing his elementary habitus, i.e., the necessity to breathe, becomes at once a victim and an unwilling accomplice in his own annihilation”.²⁷ When read together, this otherwise routine event in civil aviation and Sloterdijk served to ‘explicate’ the fragile yet symbiotic relationship all living matter and organisms have to their immediate surroundings, whether they are “natural” (as in the global biosphere) or

²⁵ Sloterdijk, *Terror from the Air*, 23.

²⁶ It has been variously suggested within toxicology and physiology studies that the lethal effects of carbon monoxide were first known at the time of Aristotle (384-322 BC) and later Galen (129-199AD), whom relayed details of its use by the ancient Greeks and Romans in order to carry out executions, as well as to assist in the suicide of various historical figures, beginning with Seneca in 65AD. However, it wasn’t until 1772 that the English chemist Joseph Priestley is said to have first distinguished carbon monoxide from carbon dioxide, and thus began the gradual process of understanding the harm of CO to the human body and psyche.

²⁷ Sloterdijk, *Terror from the Air*, 22–23. For my intervention that teargas is in fact a form of “atmo-terrorism” wholly neglected by Sloterdijk, see Taylor, “Teargas.”

“artificial” (as in the cabin of G-APYK).²⁸ For arguably both contain what George Wald famously described as the “necessary conditions for life”.²⁹ To our present knowledge, such zones of life are particular to Earth, but not necessary exclusively so in the great expanses of the cosmos.³⁰ Indeed, Sloterdijk’s explicating of the atmosphere from daily life, whilst certainly far-reaching and innovative, echoes Wald where he had much earlier described:

It is usual to think of the physical environment as given, as the absolute setting to which organisms must at all times adapt if they are to survive. It is becoming plain, however, that some of the salient features of our physical environment are themselves the work of living organisms.³¹

Simply put, this is because to continually pollute the zones of life—whether the global biosphere or the pressurized cabins that house people in airliners—with toxic gases will produce what toxicologists term, “lethal concentration time”.³² Whilst the evidence provided by the black box retrieved by the investigating Commission suggests that the levels of carbon monoxide in the cabin on flight G-APYK did not reach “lethal” doses, there was nonetheless sufficient “concentration time” inside the cockpit for the crew to have been noticeably intoxicated.

It wasn’t until the late-1970s that specialists at Boeing coined the term “controlled flight into terrain” (CFIT) to explain the phenomena where “when an airworthy aircraft is flown, under the control of a qualified pilot, into terrain (water or obstacles) with inadequate awareness on the part of the pilot of the impending collision”. Where pilots had lost control of the aircraft or it was deemed to be in some way “malfunctioning” (i.e. defective or unserviceable), as is arguable in the case of G-APYK, the Boeing staffers argued for such incidents to be referred to as *uncontrolled flight into terrain*. According to a pioneer of situational awareness theory, Mica R. Endsley, the crucial difference between the two is the presence of “situational awareness”, whereby pilots have control over “the perception of the elements in the environment within a volume of time and space, the comprehension of their meaning, and the projection of their status in the near future”.³³ In this way, situational awareness came to be seen as, “the pilot’s internal model of the world around him (sic) at any point in time”.³⁴

²⁸ It is important to note how the process of ‘explication’, for Sloterdijk refers to a ‘revealing-inclusion of the background givens’, not as it more commonly meant in the everyday sense, as a stating, making clear, unfolding, interpreting, or the development of meaning. Though perhaps Sloterdijk’s explication is all of those things. See: Sloterdijk, *Terror from the Air*, 9.

²⁹ George Wald, “The Origins of Life,” *Proceedings of the National Academy of Sciences of the United States of America* 52, No. 2 (1964): 601.

³⁰ *Ibid.*, 603. Wald expresses this notion thus: ‘What is perhaps more interesting is the dawning realization that this problem involves universal elements, that life in fact is probably a universal phenomenon, bound to occur wherever in the universe conditions permit and sufficient time has elapsed’.

³¹ *Ibid.*, 599.

³² Federation of American Scientists, “Types of Chemical Weapons,” *Federation of American Scientists*, accessed May 5, 2014, <http://www.fas.org/programs/bio/chemweapons/cwagents.html>.

³³ Mica R. Endsley, “Design and Evaluation for Situation Awareness Enhancement,” in *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, vol. 32 (SAGE Publications, 1988), 97–101, <http://pro.sagepub.com/content/32/2/97.short>

³⁴ Mica R. Endsley, “Situation Awareness Global Assessment Technique (SAGAT),” in *Aerospace and Electronics Conference, 1988. NAECON 1988., Proceedings of the IEEE 1988 National* (IEEE, 1988), 789–95, http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=195097. It is perhaps worth noting too that Boeing led an industry-wide initiative in the mid-1970s to reduce the incidence of CFIT by developing an Enhanced Ground Proximity Warning System alongside the addition of a Minimum Safe Altitude Warning System (MSAW) to the

The body must therefore be understood in relation to the biosphere that is necessary to produce and sustain it.

VII. Violating Earth's zones of life

In rethinking the human body in these terms, is it not the Earth that looms large?

Indeed the haunting image taken inside the cabin of G-APYK—itself merely a zone of life—suggests that life on Earth is as tenuous as it is for people in airliners. If that's so, perhaps the task for the ecologically-minded moral philosopher is not to *decentre* the human as so many keep doing—thereby elevating the whole, or parts, of the nonhuman world to the core of our moral thinking and thus relegating others to the periphery—but to focus instead on the mutual implication of humanity and the nonhuman world in Earth's biosphere.

Much more could be said about how a problem that has philosophical roots requires a philosophical remedy, for the dominant strands of Western intellectual thinking have much to answer for them. But equally, from time to time I'm reminded that our everyday thinking isn't so far removed from averting the problem altogether.

One piece of such everyday thinking is evident in one of the posts in the online forums that surround the accident of G-APYK. "MinervaFord" writes:

My Father told me a story today about my Grandparents in the 1960s. My Grandfather was asked by friends in the summer of 1967 if they would like to join them on a trip to Perpignan. Apparently he was very hopeful of going on this trip and tried to convince my Grandmother to accept the invitation to join the other couple on this holiday. However, my Grandmother was simply afraid of flying and was adamant that she did not want to go. They ended up not going. If they had decided to go, my Mother (aged 12) would have been on the flight also. My Grandmother and Grandfather actually witnessed the flight leave Manston Airport (I believe they watched the plane head off from the vantage point of Sandwich Bay). Life is so fragile. One moment of history can change everything.

Life in the biosphere *is* so fragile. And for me, that one moment in history did change everything. The weight of having acquired that "unholy knowledge" now falls upon me.

VIII: Dedication

Whilst I never met my four grandparents, I am indebted to them—and the 84 other lives lost on flight G-APYK—for fostering within me this less hubristic biospheric vision.