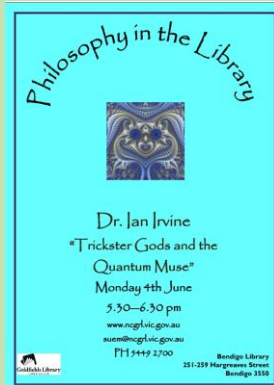


Island 31—Isle of Quantum Weirddness & ‘The Songs of the Interstitium’ Transmedia Project

(Extract from: *Muse of the Long Haul - Thirty-One Isles of the Creative Imagination*)

Text, copyright Ian Irvine, 2022, all rights reserved. Thank you to the various event organisers, radio stations, etc. who designed posters, etc. for Ian’s public talks, performances or songs. Special thank you, also, to Peter Wiseman, for the excellent design work related to the cover of *The City of Quartz* (novel).

This is the second of two islands summarizing aspects of my current ‘poetic’, or personal way of approaching creative activities. The two chapters are linked in various ways, since *The Songs of the Interstitium* multi-novel project is, essentially, both a complex ‘Quantum Fiction’ narrative presented through contemporary transmedia/multiplatform story-telling techniques *and* a project articulating elements of the Transpersonal Relational Poetics approach as well as the Zoetics approach to creativity in literary and artistic settings developed by Dr Sue King-Smith and I over the past decade or so. The Zoetics approach also contains explicit New Science elements that are directly relevant to the topic explored in this chapter.



Many of the ideas in this chapter were explored in public talks and creativity workshops delivered to various audiences between 2012 and 2018. The talks and papers that resulted heralded a new interest for me in contrasting the psychological, sociological, philosophical and creative insights possible within the Classical Scientific Paradigm *with* the insights possible within the New Science/Quantum paradigm. A growing interest in the creativity consequences of Quantum physics arose naturally out of the alchemical research I’d been undertaking between about 2000 and 2010, regarding proto-scientific understandings of the imagination and creativity (summarized in a previous chapter).

I’m particularly interested in the ways in which the New Physics undermine certain long-standing mechanistic certainties dear to pre 20th century science. Also, I’m fascinated by the enigmatic role that ‘observation’ (i.e. consciousness?) plays in quantum mechanics. One of the texts that helped usher in my interest in Quantum Fiction was Borges’s phenomenal short story the ‘Library of Babel’.

The Library of Babel, Free Will (and The Possibility We Are Living in the Programmed Reality of an Advanced Civilisation)

Every year or so I deliver a class to my writing students about Borges's famous short story 'The Library Of Babel'. The story is, among other things, a complex exploration of the meaning of alphabets, reading and writing and the fascinating relationship between reality and systems of representation (i.e. sign systems used in all forms of communication. The

story also asks us to ponder the role of the literary arts in society, the relationship between computers and language codes etc. The more we ponder this strange story the more we are asked to think about the metaphysical dimensions to books and libraries, as well as the 'digital libraries' coming into existence in our 'Information Age'. We also end up pondering the relationship between meaning and lack of meaning (nonsense), the idea of the Canon, and—as the full consequences of the story's insights become manifest—we even end up canvassing the possibility that our Universe, i.e. reality itself, is primarily 'informational' (or, in the case of organic life forms, 'biosemiotic'). By 2015 or so I'd come to believe that the story represented one of the first literary 'quantum fiction' stories since to me it deals, in subtle fashion, with the emerging Quantum Fiction trope of 'simulated realities'.

Usually, I start the class on Borges by asking students to read the story itself before accessing a fascinating 'computer recreation' of the library—programmed as closely as possible to the design parameters described by Borges (given current computational powers). The library is available at the following online site:

<https://libraryofbabel.info/>

Students are then asked to place text from a favourite literary classic into the 'library's' search function and locate the number of the 'book' and 'shelf position' (in the 'Babel Universal Library') that their exact piece of text appears in. [NOTE: the online text library follows Borges's story quite closely, so no numbers can be entered into the machine (though numbers *can be written out as names* e.g. ONE, TWO, etc. and so any number, theoretically, can be found in the Library of Babel). Although only three non-letters are used (as per Borges's story)—being a space, a comma and a full-stop—this fact doesn't really matter since, as illustrated already in terms of numbers, one can simply type the name of a symbol into the search engine if one wishes, e.g. 'question mark'.

I then ask students to place a short piece of text drawn from an example of their own creative work into the search function at the site. This is sometimes a profoundly shocking moment for students, since their own words quickly stare back at them on the screen appearing in a particular pre-existent book available on a particular shelf in a particular wing/alcove of the library. Usually their words are surrounded by little else but unintelligible 'babel'. Students note the number of the book their work appears in and pass that number on to a fellow student who then goes in search of the same piece of text in their Babel Library programme ... and, if the text has been entered into the search engine in exactly the same way as the it was by their fellow student the second student also finds the text in the same book, shelf, alcove etc. within a minute or two.

In this moment, students usually begin to understand that Borges's library is very weird indeed, but in truth I'm just getting started with illustrating the weirdness.

I next ask students to place text from something highly personal e.g. extracts from a love letter from high school days, into the library's search function. Of course, given the algorithms at play in Borges's story, the exact words of any conceivable 'real life' love letter, diary extract, etc. is already IN THE LIBRARY in a definitive place i.e. a book with page number etc. placed on a 'digital shelf' in particular alcove/wing of the library. Again, with the right book address other students, indeed anyone, could locate anyone else's most private and supposedly unique/original word sequences. What then is 'originality'?

I next ask students to rewrite a part of their life so that it happens in a different way, leading to a different life path (compared to their historical experience). Again they are asked to place this 'textual rewrite' in the online library's search function. Sure enough ... every conceivable 'alternative life' the students could possibly live is already recorded in the library in very specific places! Sometimes students go very quiet at this point and ask whether their

words, alternative lives etc. really ‘already exist in the library’. ‘Surely ...’ some argue, ‘the programme just assigns a place after the event of me putting the word combination into the search engine?’ When I assure such students that that is definitely not the case there are looks of puzzlement.

I tell them that every human alphabet functions in much the same way as Borges’ ‘Universal Library’—i.e. once letters or symbols are assigned as ‘signifiers’ within words, sentences, paragraphs etc.—in theory we could work out mathematically every possible combination of letters and punctuation symbols and numbers, therefore every conceivable constellation of meaningful texts e.g. a fiction stories, poems, nonfiction stories, plays, blog posts, mathematical formula, etc. In a sense, they already exist as textual possibilities, however, up until the ‘computer age’, there was no real way to explore the uncanny dimensions to this insight, since the task of demonstrating that a ‘possible text’ already existed somewhere was too massive. Now, of course, we possess powerful computers—and very soon we will be using quantum computers—capable of tracking, locating, sorting, etc. all possible letter, word, sentence, paragraph, chapter, book, etc. combinations at lightning speed. Future powerful computers may well reach the point where they can locate cohesive ‘unwritten’ and ‘lost’ texts by way of programs that can sort ‘sense’ from ‘nonsense’ in the Universal Library. This informational dimension to Borges’ story, is what makes an encounter with the Library of Babel story made-digital such an uncanny experience, to say the least.

But there are still further revelations to uncover before we can understand the connection to Quantum physics—for surely Borges’s library ‘turned digital’ hides a series of revelations, each one more fascinating and un-easing than the last. I next ask students to go to the online library’s ‘image search’ section.

<https://babelia.libraryofbabel.info/imagesearch.html>

Students are then asked to upload either an image they can cut and paste from somewhere on the WWW, or, if they wish, a photo from a moment in their own lives. Of course, the ‘library’ already contains the image. Some students rightly point out that Borges’s original story had nothing to do with images so why am I acting so awed about the images being found in the new concept/program of a Universal Image Library.

I point out that every digital image is reducible to a simple set of digital codes (zeroes and ones) and that therefore every photograph that has ever been taken (and will ever be taken or could ever be taken, including in parallel universes) is in fact already resident in the textual/book version of the library where it has been assigned a specific book (or set of books), a shelf address and an alcove/wing, because *the coding for photographic files*, or video files, or sound files, or virtual reality files, as well as the coding for media forms yet to be invented, can be rendered as combinations of letters and spaces, making them already resident, somewhere, in Borges’s library. Once located in the library as ‘word combinations’ any form of unique coding can be quickly translated (even in Word) into number combinations e.g. 01001 etc. ... Voila! We have computer code sequences—and therefore every conceivable computer programme is already in the Universal Library, including *programmes yet to be invented*.

I then pose the following question to the students: can we write, sing, say, enact, photograph, paint, film, code, formulate (as in mathematical equations), etc. ANYTHING that isn’t already stored in the Universal Library of Babel?

We then discuss the idea that every animal, plant and human being possesses a unique genetic sequence—well, unique except that it is already stored as a coded sequence somewhere in Borges’s Universal Library. And if, as the bio-semioticians would have it,

‘everything is bundles of information relating to other bundles of information’ we might ponder whether *all* aspects of our lives—including the lives that would have come into existence had we made different decisions at critical junctures—are ALREADY in the library somewhere. If we had the right decoding technology might we be able to tune in to watch/hear etc. an accurate version of our life as already lived—i.e. might we be able to locate coding for 3D ‘virtual’ renderings of moments from our lives, and maybe we could even locate the coding for futuristic multi-sensorial 3D ‘virtual’ renderings of our lives (i.e. renderings based on not just sound and image, as per current ‘simulation’ technologies, but smell, touch, taste, etc.)? Could we also perhaps watch etc. possible future moments of our lives?

So that students understand what I mean by the statement ‘the coding for images, video, sound files, computer programmes, etc. is already in the library’, I sometimes get them to actually convert-translate back and forth the same essential ‘message’ across a range of programming languages, which are then converted first into combinations of 0s and 1s, before being converted again into text-based combinations of **zeroes** and **ones** so that the programme elements can be located by everyone/anyone in the digital version of the Library of Babel.

As an aside, we note that theories, philosophies, ideologies, religions, formulae and, maybe, unknown computer programmes that could save humans from extinction are also, very likely, already hiding somewhere in the Library of Babel. How might we find some of these books, programs, computer games, virtual reality experiences, instructions for crucial inventions, etc. in the vast and almost infinite ‘alcoves with shelving’ of the library? What would it mean for humanity if we could develop a secondary program (also, we note, already existent in the books of the library somewhere!) capable of finding, at great speed, the effective, life-nurturing texts, films, formulae, plans for inventions, etc. lurking already in the Library of Babel? Similarly, it is likely that the library already contains programmes related to yet to be invented robots, cyborgs, space travel tech, etc....

In truth, of course, it is much more likely that AIs (i.e. Artificial Intelligence/Machine Learning robots and AI programmes etc.) will find the world transforming texts/futuristic inventions, etc. lurking on the shelves of the Library of Babel before humans ever come across them. Which might make us pause for a moment: What would it mean if an insentient AI found some of these world transforming texts before we humans could find them? Could they, for example, locate a formula, or the plans for an invention or programme, that would give them consciousness/sentience?

What does all this say about—what we take to be—**reality** if every possible ‘simulation’ (or ‘representation’)—i.e. image, VR/AR, moving image, sound file, text combination, computer program, scientific invention, ‘human simulation program’, etc. IS ALREADY BURIED SOMEWHERE IN THE UNIVERSAL LIBRARY’S BOOKS, ALCOVES AND SHELVES?

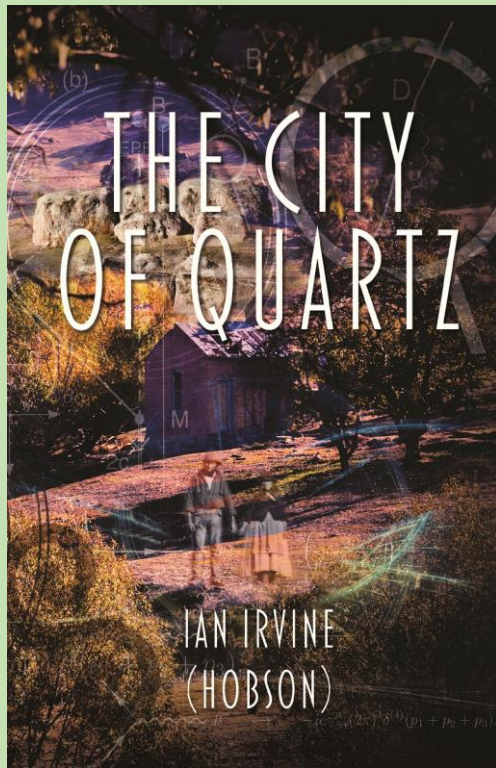
What does it say about the nature of the past, present, future, and, also, human free will?

Finally, how should one proceed to write fiction, poetry, nonfiction, plays, film scripts, etc. in the face of such a vast, already existent, but for the moment only inefficiently accessible, library?

Borges’s short story plus the current Library of Babel online version (which is not powerful enough yet to permit us to search for large bodies of texts, e.g. entire novels) affirm that he gifted us a story that signalled the birth of a new kind of fiction. Later Oulipean writers would also ponder the implications of the idea that all texts, indeed all ‘media’ creations, are essentially mathematical patterns/signifier combinations, that can also represent ‘data’ to be computed, programmed etc.

Wikipedia labels Borges's stories *The Library of Babel* and *The Garden of Forking Paths*, in particular, as early examples of 'Quantum Fiction'. I tend to agree.

Combining Quantum Fiction Tropes with Transmedia/Multiplatform Techniques

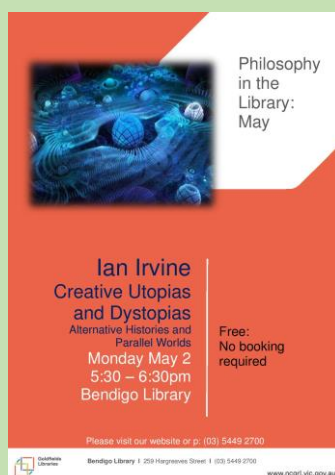


My second novel, *The City of Quartz*, initially seemed like a one-off book exploring various Science Fiction and Quantum Fiction tropes. I'd become interested in mutations to older, classical 20th century SF tropes after several years watching dozens of new millennium SF movies and TV shows. At the same time, I reached something of a dead end with my 'alchemical' studies, noting that the proto-science was more or less extinguished as a legitimate science in the Early Modern era, replaced instead by the Classical or 'Mechanist' model of the sciences as developed by the likes of Newton, Descartes, etc. Around the same time, I started to read more extensively a number of key texts related to the new sciences—especially texts explaining Quantum Mechanics, the Simulated Universe Theory, Everett's so-called 'Many Worlds' interpretation of Quantum Mechanics, and so on. I gradually discerned a definitive break between Classical understandings of the physics and 20th Century Quantum based understandings.

With the completion of *The City of Quartz*, in 2016, I sat around for a couple of weeks feeling quite anxious about what my next novel project might involve. Around the same time, I was exposed, through my teaching work at Bendigo TAFE and Victoria University, to the concept of Transmedia or Multiplatform Story-telling. The basic argument was that this new type of story-telling—i.e. story-telling that capitalised upon the possibilities arising out of Digital Publishing and the WWW—was perfectly suited to the complexities of our New Media world. I cannot remember the exact moment that the epiphanies related to New Media story-telling merged with epiphanies related to the New Sciences, but in my 'interstitial' state (i.e. between novel projects) it hit me that I was not done with exploring the New Science possibilities posed by my recently completed novel. Shortly afterwards, outlines

for three more novels came to mind and, in true Transmedia fashion, I decided to expand the number of platforms I could use to tell the story to include: 1) a number of music albums; 2) various social media platforms; 3) various well-researched nonfiction essays and articles; 4) public talks, workshops and presentations, and, finally, 5) a WWW hub site coordinating the unfolding of the entire project across these multiple 'platforms'. By early 2017 the 'Songs of the Interstitium' transmedia project was born.

Around that time, I did a number of talks, public presentations and workshops to do with the transmedia writing and my transmedia project ('Songs of the Interstitium') for *The Bendigo Writers Council*, *The Bendigo Writers Festival* (and *Fringe Festival*), the *Bendigo Philosophical Society*, various



writers retreats, as well as, *The Central Victorian Young Writers Group*. Gradually the talks started to focus on key Quantum Fiction tropes (e.g. the ‘Many Selves in Many Worlds’ trope, the ‘Supernatural is Natural in A Quantum Multiverse’ trope, the ‘Simulated Realities’ trope). I also delivered talks on Quantum Creativity as well as the specific quantum fiction themes explored in *The City of Quartz*. My partner Sue, and I, for example, were invited to attend and present at several Australian writers’ festivals to discuss our ideas about ‘creativity’ in the 21st Century with other innovative, new media writers/artists.

By late 2018, my previously impossible dream of professionally producing dozens of my songs for inclusion in the ‘Songs of the Interstitium’ project, started to become a reality, and between then and early 2023 over 70 songs were produced, distributed internationally and played on radio stations in many countries. The song plays served as ‘rocket fuel boosters’ for the other platforms linked to the story, and I was interviewed by radio stations in UK, the US, Germany, Canada, Australia and elsewhere about links between the various songs of ours that the stations were playing and the larger story structures underpinning the ‘Songs of the Interstitium’ project.

Summarising the ‘Songs of the Interstitium’ Project



Interstitium band’s Twitter handle (slightly expanded below!) states: “Imagine a band with different histories in different parallel worlds. Imagine if our world, containing what we take to be “the real *Interstitium*”, (i.e. an alt rock Indie band that quietly started to engage with the International Indie music scene after 2018), is connected to/communicating with its counterparts in other parallel realities.” To develop the ideas behind the project further we might also ask: What if in those parallel realities the band also creates, distributes and performs more or less the same number of songs that have been created, etc. by versions of more or less the same people? What if all the

various bands and selves (of the main characters) have been set a multi-reality creative task by a strange, apparently female, but possibly part ‘cybernetic/A.I.’ entity existing either: a) out of time and space as we know it (like a goddess/Muse Goddess/ ancestor spirit, etc.); or b) in the future (but capable of time-travel communicating back with our present through Quantum Computer technologies); or c) in a parallel world to ours. We do not know which of these (and other possibilities) are true until the end of the four novels (also, until the end of the ‘alt rock stage show’).

Astute readers of earlier chapters in this work, will note that the project quickly expanded to encompass both the ‘Zoetics’ model of Fundamental and ‘Quantum Age’ Creativity that Sue and I had been developing, as well as the model arising out of our earlier writings concerning ‘Transpersonal Relational Poetics’. Put simply, the ‘Songs of the Interstitium’ project is, at a deep level, a search for a survival-oriented understanding of ‘creativity’ that might assist our fraught species—and all the other life forms impacted by our traumatic Anthropocene mutations—to find a way through the rest of the 21st century with minimal suffering for all.

The ‘Songs of the Interstitium’ Project: Major Themes

The novels, public talks/presentations, social media handles, WWW hub, 70+ songs and planned alt. rock stage show thus explore certain key themes related to the major crises of our

age. Imagine if dynamic creative cultures—i.e. musical, poetic, arts, new media, etc. cultures/disciplines, that have been influenced by New Science understandings of physics, consciousness, identity, reality etc., could decisively alter, in positive ways, the future of the species and life on our planet in coming decades? What kind of understanding of creativity, what kind of creative works, might help us to avert the multiple crises facing humanity and the planet during the late Anthropocene? Our song ‘Century Storm’, more or less unplayable on radio due to its length (it is more of a movie theme song really), captures something of the gathering mood of crisis associated with the latest stages of Global ‘Modernity’. Another of our songs, i.e. ‘The Many Selves of Rowan Sweeney’, narrates aspects of the project’s ‘meta-story’ in a fun, up-beat way as it explores the ‘many selves’ sub-narrative to our main multiplatform project.

‘Songs of the Interstitium’ is, then, a story beginning in the 1960s and concluding in the 2020s (around the time of a theorised ‘A.I./Transhuman Singularity’, or ‘point of no return’) about a group of creatives—musicians, poets, fiction writers, painters, moviemakers, creative thinkers etc.—operating across parallel realities, who are coming to terms with the perils, challenges and opportunities of the Late Anthropocene during their lives. This small band are called upon to articulate—through their music, art, writing, etc.—‘Better Futures’ (see our tracks ‘Song of Futures Bright’ and ‘Glory Road’) for themselves, the human species and the many living entities we share this marvellous but troubled planet with.

Author Bio (as at December 2022)

Dr. Ian Irvine (Hobson) is an Australian-based poet, lyricist-musician, fiction writer, non-fiction writer, editor and creative arts and humanities lecturer. His work has featured in publications as diverse as *Humanitas* (USA), *The Antigone Review* (Canada), *Tears in the Fence* (UK), *Linq* (Australia) and *Takahe* (NZ), as well as in a number of Australian national poetry anthologies: *Best Australian Poems 2005* (Black Ink Books) and *Agenda: ‘Australian Edition’*. He is the author of four books and co-editor of three journals and currently teaches in the Professional Writing and Editing program at Bendigo Kangan Institute (Bendigo, Australia). Between 2012 and 2018 he taught in the same program at Victoria University, Melbourne. He has also taught Medieval and Early Modern history, as well as Contemporary Social Theory at La Trobe University (Bendigo, Australia) in the 1990s and holds a PhD for his work on creative, normative and dysfunctional forms of alienation and morbid ennui. Between 2018 and 2022, almost 100 of his songs (totalling 9 studio albums) were professionally produced and distributed via international Indie music networks. Many of the songs have been played on underground, Indie, Alternative Rock, community and commercial radio stations in numerous countries, and a significant number have charted.