A Bridge between Worlds: Parallel Universes and the Observer in “The Celestial Plot”

by Adolfo Bioy Casares

Abstract:

Adolfo Bioy Casares’s story “The Celestial Plot” (1948) is among the best known examples of Latin American science fiction writings of the early twentieth century, inspired by contemporary advances in quantum physics. Most readings of the story focus on the movements of its main protagonist, Captain Ireneo Morris, as he traverses realities while test flying a plane. This approach overlooks the role of the story’s other protagonist, Dr Carlos Servian, who, we argue, is the lynchpin upon which the multiple realities are dependent. We read the changes to Dr Servian’s character from a variety of scientific and philosophical perspectives on parallel universes. By addressing variations in Servian’s character and language, and focusing on the disparate representations of the key objects in the story, we show how the story anticipates in some ways the Many Worlds notion which argues that reality bifurcates during quantum measurements, leading to near-identical copies of observers.

Keywords: Adolfo Bioy Casares, Many Worlds, observer, parallel universes, alternative histories, Hugh Everett

Adolfo Bioy Casares (1914 – 1999), one of the founders of the genre of science fiction in Argentina as noted by Karl Posso (2012, 3), is among the central figures in Latin American literature. His works include several novels (La invención de Morel (1940), Plan de evasión (1945), El sueño de los héroes (1954), Diario de la guerra del cerdo (1969), and others), and short story collections (La trama celeste (1948), El gran serafín (1967), Historias de amor (1975), and others). The literary phenomenon of “Borges” (Bioy Casares’s collaboration with Jorge Luis Borges (1899 – 1986), an Argentinean writer and one of the key figures in twentieth-century literature), from their joint contributions to the magazines Destiempo and Sur to mutual reviews and co-authored novels, is well-researched and well-documented (see Balderston 2012, Facundo Espino 2014, Lafon 2012, Mascioto 2016, and Parodi 2007, among many others).
Bioy Casares’s interest in fantasy and science fiction led to him co-editing the famous *Anthology of Science Fiction* (*Antología de la literatura fantástica*) with Borges and Silvina Ocampo in 1940 (for an analysis of this collaboration see Mascioto 2016), and interpreting various scientific theories in his work. Bioy Casares’s novel *The Invention of Morel* (*La invención de Morel*, 1940) is, arguably, the most frequently cited example of this interpretation, along with the stories “The Other Labyrinth” (“El otro laberinto”) and “In Memory of Paulina” (“En memoria de Paulina”), both published in 1948 in the collection *The Celestial Plot* (*La trama celeste*; see Matas 1978, Schöllhammer 1995, and Rest 2004). Surprisingly, the story “The Celestial Plot” (from the same collection) is often left out of these studies or mentioned in passim (for examples, see Boiero de De Angelo 2006, Navascués 2014, Pellicer 2003, and Rivera 2004). Some notable exceptions can be found in criticism by Barrera 1997, Güich Rodríguez 2009, Mastronardi 2004, and Villate 2003, which address the issue of multiple narrators and narrative lines.

In this study, we consider how the insights and interactions of several versions of one of the narrators in the story, Dr Carlos Alberto Servian, anticipate the revelation that parallel universes exist. To this end, we will explore connections between the story and various scientific and philosophical ideas about parallel universes, and focus upon the nature of the observer in this context. In particular, we will show how the story in some ways anticipates the Many Worlds notion advanced in the late 1950s by physicist Hugh Everett, who argued that reality bifurcates during quantum measurements, leading to near-identical copies of observers (Everett 1957).

“The Celestial Plot” was first published in 1948; the second edition of the story appeared in 1967. Set in Buenos Aires, the story is about a pilot (Ireneo Morris) who traverses realities while test-flying a plane. The story opens with an unnamed narrator (narrator X) reading the news of the disappearance of Captain Ireneo Morris and Doctor
Carlos Servian. Shortly afterwards, he receives a parcel containing a ring, the complete works of Louis Blanqui, and a stack of typewritten pages titled “The Adventures of Captain Morris,” signed by C.A.S. The narrative changes as the reader is given access to these pages, written by Dr Carlos Alberto Servian. He tells about several events in the life of Captain Ireneo Morris, his lifelong friend.

Servian notes that the strange turn of events began on 23 June, when Morris was test-flying a Dewoitine-309. During the flight he felt dizzy and apparently lost consciousness; when he came to, he found himself in a hospital bed surrounded by military officials, who questioned him, not believing a word he was saying. Morris called upon some fellow pilots and friends to verify his identity; they appeared to have never heard of him. The only person who seemed to empathise with his plight was Idibal, a nurse looking after him. She tried to help him by giving him her ring and sending him to see a priest at a local church. The ring appeared to have magical powers: when Morris showed the ring to the guard at the ward door, he let Morris leave freely. The priest, however, did not help and, after writing a letter to Servian and telling the officials what they wanted to hear (that he is a Uruguayan spy) Morris found himself having to try to reconstruct his flight to convince his captors that he was telling the truth about what had happened to him.

The flight proceeded as before: at some point, Morris lost consciousness and woke up in a hospital bed. But this time, the officials questioning him knew who he was. Servian arrived at the hospital to see Morris and learned that he had apparently sent Morris a letter and a set of complete works by Louis Blanqui after receiving Morris’s letter – yet Servian had not done either. Curious about the letter and the books, he examined both (Morris somehow retained them through his ordeal) and discovered that Morris had traversed into another reality, where Wales did not exist and the Carthaginian Empire had won over Rome. He hatched a plan to take Morris for another flight and “disappear” into another world, which
he thought was accomplished by making “passes” with the plane, the way a magician does with his hands when performing a disappearing trick.

Once Servian’s story ends, the narrator tells of his visit to a town on the border between Uruguay and Brazil, where he meets Ireneo Morris, a former pilot turned smuggler. Following the line of argument in Blanqui’s *Eternity through the Stars*, the narrator posits that there are three worlds involved: the one from which Morris disappears at the start of Servian’s story (the Wales-world, or W-world, from now on); the one Morris enters, in which Wales does not exist (the non-Wales world, or NW-world, from now on); and the third world, where Morris exists as a smuggler (the Uruguay world, or U-world, from now on). The three worlds, the narrator concludes, are “like bundles of parallel spaces and times” (Bioy Casares 1990, 184) and may intersect each other.

The idea of intersecting realities, so intricately explored in Bioy Casares’s story, is linked to the notion of alternative histories, speculating about what the world might be like if certain historical events transpired differently, which constitute a respected genre of literature and a significant area of research in science and humanities (see Collins 1990, Gevers 1997, Hellekson 2001, McKnight 1994, Rosenfeld 2002, and Schneider-Mayerson 2009, to name but a few). If key battles ended with different victors or important politicians never lived, such stories wonder, how might history have played out? A subcategory of the alternative history genre imagines interactions between different strands of reality. Not only does history take alternate paths, such tales imagine, those avenues sometimes intersect, offering glimpses of other possibilities. Often central roles in such stories are played by the savants who obtain knowledge—intentionally or accidentally—of the other alternatives. Well-known examples of that subgenre include the 1934 short story “Sidewise in Time,” by Murray Leinster, where a certain knowledgeable Professor Minott plays that role, and the 1962 novel *The Man in the
High Castle, by Philip K. Dick, where a character named Juliana stumbles upon that revelation.

In “The Celestial Plot,” that bridging role is played by the character of Dr Carlos Alberto Servian, who, by interacting indirectly with an alternative version of himself, comes to learn of the existence of a strange alternative Earth in which Wales never existed and the reign of Carthage persisted for much longer period and therefore exerted a far greater influence. Servian’s friend Captain Ireneo Morris, through his accidental journeys between the two alternatives, becomes a conduit of that information. His Welsh heritage plays an important part in the story, given that in the alternative Earth he is stranded without an origin. Fanciful as the concept of alternative realities sounds, the concept has been addressed in serious scientific discourse, as well as in fiction. In the mid-twentieth century, modern physics introduced a number of speculative notions about connections between disparate parts of the universe or parallel strands of reality. These hypotheses emerged from two of the mainstream sub-disciplines of physics: general relativity and quantum mechanics.

The notion of parallel universes in general relativity dates at least as far back to 1935, when Albert Einstein and Nathan Rosen introduced the concept of an “Einstein-Rosen bridge:” a mathematical extension of what is known as the Schwarzschild solution that provides a connection to another part of space (73). Einstein and Rosen’s intention was to remove mathematical irregularities, called singularities, from the original solution. In the 1950s and 1960s, American physicist John Archibald Wheeler rechristened the former a “wormhole” and the latter a “black hole,” referring to a kind of tunnel or dead-end respectively (Halpern 2017, 254). That is, by extending a black hole to another part of space one transforms it, in theory, from a dead-end into a kind of a tunnel. Unfortunately, Einstein-Rosen bridges, also known as Schwarzschild wormholes, turned out to be unstable to matter. Nothing physical could actually move through such tunnels without disturbing their delicate
structure. Like an inexperienced spelunker triggering an avalanche and being stuck (or worse) inside a cavern, the mere gravitational impact of entering matter would collapse such a tunnel and trap the material within it. Woe to space travellers who encountered a Schwarzschild wormhole; if they tried to enter they would be crushed immediately as the entrance collapsed.

It was not until the 1980s that Kip Thorne, a former student of Wheeler, along with his student Michael Morris, derived stable, traversable wormhole solutions (Morris and Thorne 1988, 395). Employing a kind of hypothetical material with negative mass, called exotic matter, such wormholes would have solid openings that, in theory, would permit interstellar shortcuts or even connections to other universes. Note that these would require enormous amounts of matter to construct, far beyond current capabilities. Yet, perhaps an advanced alien civilization could build one and use it as a spatial link between remote regions of space.

Inflationary cosmology, developed around the same time by physicists Alan Guth, Andrei Linde, Paul Steinhardt, Andreas Albrecht, and others, posits a way parallel universes could have emerged in the distant past from rapidly expanding “bubbles” in a primordial cosmic “bath” (Linde 1986, 399). Each bubble developed from fluctuations of an energy field that precipitated explosive growth of that region, leading ultimately to a separate universe in its own right. Hence, our own Big Bang derived from one such bubble. The collection of all growing universes—inaccessible to each other—is called the multiverse, a term first used (in the present-day sense of an array of universes) by Michael Moorcock in his novel “The Sundered Worlds,” which originally appeared in a 1962 issue of Science Fiction Adventures and was published in 1965 as The Blood Red Game.

In quantum mechanics, other models of parallel strands of reality emerged in the mid-twentieth century: first, in the “sum over histories” approach of Richard Feynman, developed
in the 1940s, in which particle interactions involve a blending of different possibilities (Halpern 2017, 114), and secondly in the “many worlds interpretation” (so-named by Bryce DeWitt) of Hugh Everett III, in which reality bifurcates each time a quantum measurement is taken. In the latter, observers are constantly splitting into near-replicas—with each version experiencing distinct quantum outcomes. Hence they are living in parallel universes—not in actual space, but in a kind of abstract space of possibilities.

Another notion of parallel universes, involving replicas or near-replicas of Earth and our region of space, predates general relativity and quantum mechanics, and is based simply on atomism and statistics. If the universe is infinite, but the number of distinct elements is finite, it is bound to repeat itself in time, in space, or both. The analogy is that of an infinite array of monkeys with an infinite number of keyboards, but a finite alphabet: by pure chance they would be bound to type all the works of Shakespeare again and again. Or imagine an infinite game of draughts—the arrangements of the pieces would also be repeated throughout the checkerboard again and again. Suppose, by pure chance, there is a near-replica of Earth somewhere in the universe. Statistically, it would likely be extremely far away from us—too far to reach by ordinary spaceflight. Yet imagine, by marvellous coincidence, that a wormhole shortcut linked our Earth with an alternative Earth. We would hypothetically be able to travel through the wormhole and visit our near doppelgangers. We would then be able to compare how history transpired in each world.

Of course, Bioy Casares could not have known about traversable wormholes of the Morris-Thorne variety, Hugh Everett’s speculative notions, or the inflationary multiverse—each decades in the future—when he wrote “The Celestial Plot.” However, it is possible that Bioy Casares had learned anecdotally about Einstein’s 1925 visit to Argentina, which had been well-publicized at the time. While there is no known record of his attendance at any of Einstein’s talks in Buenos Aires (Bioy Casares was only ten years old), it is conceivable that
he had heard about them from others, or read about them in the press. It is also possible that a general knowledge of the flexibility of Einsteinian and quantum physics (and conceivably specific knowledge of the Einstein-Rosen bridge solution, without an awareness of its instability) might have suggested to him the possibility of such connections. Most likely, the bridges in his story (which we will call wormholes for convenience) emerged as a plot device for him imagining links between real Earth and alternative Earths.

In terms of how such alternative Earths are engendered, Bioy Casares’s source is clearly the works of the nineteenth-century French revolutionary Louis August Blanqui, who developed a concept of parallel earths called *Eternity through the Stars* (*L’éternité par les astres*), while imprisoned in Fort du Taureau, a fortress in the English Channel. In Blanqui’s construct, human lives are lived again and again with slight variations on alternate earths in different parts of space. One might distinguish Blanqui’s vision with the notion of eternal return, proposed by Friedrich Nietzsche in 1911, which transpire on this Earth but again and again in time (Nietzsche 73) In other words, while Blanqui’s repetition is spatial, Nietzsche’s is temporal. Finally, one might contrast both of these views with the Hindu construct of cyclical time that involves inexact cycles of creation and destruction. In this eastern cyclical notion of time, different characters and histories emerge in each era, albeit with similar struggles of good and evil.

It is likely that Bioy Casares learned of Blanqui’s ideas through the writings of his close friend and countryman Jorge Luis Borges. Borges made use of cyclical time, parallel histories and near-identical Earths in many of his stories, including “The Library of Babel” (1941), “The Garden of Forking Paths” (1941), and many other fictional works. In his noted essay, “Circular Time” (1936), Borges details his profound interest in the concept of eternal return. Comparing different ideas of cyclical time, he remarks: “Of the […] doctrines I have listed the most well-reasoned and complex is that of Blanqui, who like Democritus packs not
only time but interminable space as well with facsimile worlds and dissimilar worlds.”
(Borges 2000, 226)

Central to “The Celestial Plot” is the question of how observers interact with the realities they are observing. Morris’s actions in some sense create multiple Servians, along with alternative versions of society. Reality and observation thereby exhibit a symbiotic relationship, with each affecting the other. That symbiosis stands in contrast to the classical Newtonian view of an objective reality, characterized by parameters such as space, time, and momentum coordinates for which any accurate measurer would agree. Newtonian physics evolves on its own without a need for observation. Moreover, if two observers travel at constant speeds relative to each other (called “inertial frames”), the physical effects they notice are identical.

All that changed with two modern physics revolutions of the early twentieth century: relativity and quantum mechanics. Consider Joseph Kolecki’s insights about the role of the observer in modern physics: “In the 20th century, physics was forced into the position of re-evaluating the role of the observer, both in relativity and in quantum mechanics. In relativity, the absolutes of Newtonian physics were banished, and observations obtained by observers in different frames of reference became all that was available. These observations were linked through a system of coordinate transformations” (Kolecki, n.d.). A system of coordinate transformations is used when something shifts (for example, when an object rotates, moves, or speeds up). For example, if you tilt a bookshelf, you might express the vertical positions of the books with new coordinates relative to the new angle. While such rotations of spatial axes in Newtonian physics preserve the lengths and durations of objects, Hermann Minkowski showed how space-time rotations could transform length into duration, and the converse (Minkowski 1909).
Quantum mechanics offered the additional wrinkle in which an observer’s choice of apparatus could affect an experimental outcome, such as in the famous double slit experiment, in which deciding to measure the position or velocity of a light source passing through two slits yields different results. Einstein and others were baffled by this situation, arguing that it demonstrated that quantum mechanics was incomplete. In the Many Worlds Interpretation, an attempt to rectify this conundrum pioneered by Hugh Everett, the observer “splits” during the observation into multiple copies, each with a different outcome. The subsequent degree of bifurcations is philosophically daunting, yet it makes it possible for observers to be part of the universe’s quantum state, rather than remain artificially separated from what is measured.

Such embedding of an observer within the observed reality is precisely the situation of Dr Carlos Alberto Servian, whose story is the lynchpin upon which the rest of the tale hangs. The way to understand Servian and the variations of his character is to consider the way he treats knowledge and information through reading, collecting evidence and analysing it – in short, the way he carries out a scientific experiment. It would appear almost from the beginning of his narrative that he knows much more than he is prepared to share upfront. One of the first indications of this knowledge is a supposed secret message that Servian is trying to convey to Morris in the hospital. He says, “do not forget: in-fi-ni-te-ly small doses” and leaves saying that he was “satisfied with my small victory” (Bioy Casares 1990, 150). One might imagine such “infinitesimal doses” of information being akin to data leaking through “microscopic wormholes” (Gribbin 1993, 233; see also Halpern 2017, 179). Of course, by the time Servian writes this narrative, he already knows what happened to Morris, so his attempt at sending Morris a coded message is him trying to hint to Morris that what is going on is on a very small scale and widespread: infinitesimally small in size and infinitesimally large in number, like multiple universes connected by tiny wormholes.
The information that Servian holds back later becomes vital to our understanding of the events. He proposes two openings for the story, starting with the way he reacts to the news of Morris’s court martial: “with surprise and indifference” (Bioy Casares 1990, 145). While the latter is an expected reaction, since he knows Morris will not be there, it is not as clear why he should be surprised. The Servian from the world where he disappears with Morris is indifferent since he already knows that the court martial will not happen. The news of Morris’s court martial comes from the world(s) where Morris is a military man accused of espionage (the NW-world) or treason (the W-world). Servian is surprised that Morris is still in a world where he is being accused and did not escape to another world even though he knows how (or, at least, subconsciously finds a way). This invalidates the story that Morris tells, because in his version of the story he did escape. So, Servian can be both surprised and indifferent: as far as Servian sees, Morris escapes but keeps coming to the worlds where he is in danger. In the world where Morris is not in danger (the U-world), Servian is an episodic character; when Morris’s career and life are threatened, Servian is firmly on his side as a narrator or, at least, a significant protagonist.

However, Servian’s reaction to Morris’s court martial is the second way that he proposes to start his narrative. The first possible start of the story is an old Celtic legend from the world where the Celts existed (so, Wales exists there, too) – the W-world. This is the world of myths and legends, with no evidence of scientific knowledge or explanation of the supernatural. The second possible start picks up the theme of the absence of science, this time by “refuting Astronomy” (ibid., 145). Then, in the third potential opening, this conflict is addressed by first choosing science over the supernatural, and then reconsidering the supernatural as a possible explanation of what will happen: “This does not mean that I reject the supernatural; I most certainly do not refute the allusions or invocations made in the first paragraph” (ibid.). Servian tries to explain what happened by using science while calling up
the legends of the Celtic patron saint of horses Epona (Rees and Rees 1961, 45; Ross 1967, 224), the Carthaginian goddess Tanit (Cartwright 2016, n.p.), and the occult practices.

Servian’s reading habits – which represent the foundations of his scientific knowledge – are revealed best in his ex-libris and reading plan. The ex-libris, glued into “thousands of volumes” by Servian’s long-suffering niece, contains the sentence “Know thyself” and an image of Servian looking at his reflection in a mirror through a magnifying glass (Bioy Casares 1990, 147). The sentence is an ancient Greek maxim “gnothi sauton”; as Andrew Scholtz notes, “along with mēden agan (“Nothing to excess!”), [the phrase is] often treated, as a defining byword of ancient Greek culture and thought” (Scholtz 2006, 1). The maxim in the ex-libris appears three times: in Greek, Latin, and Spanish. Villate suggests that the image and the three statements “provide a clear example of subjective split” (Villate 2003, 127), with the accent on subjectivity and therefore the Lacanian conflict between “satisfaction and frustration of desire” (ibid., 129). However, we would argue that the three versions represent, in Servian’s mind, two pillars of intellectual capital: Ancient Greece (the maxim in Greek) and the Roman Empire (the Latin version of the maxim) – with Servian using this capital by reading in a methodical and systematic fashion (the Spanish version of the maxim).

Servian thinks that the image on the ex-libris – of himself, studying his own magnified reflection – is partly responsible for making his niece see him as selfish: “she had gotten into a habit of calling me selfish. I blame some of it on my ex-libris” (Bioy Casares 1990, 147). Servian’s image in the mirror is reversed, so Servian is effectively depicted examining his “other self.” He is pictured using a magnifying glass to examine something that is not as visible or obvious when seen with a naked eye – a small detail, a blemish, or a subtle distortion of some kind. Servian’s niece points at his reflection in the mirror when asking if he knows “who is the only person he is interested in” (ibid.) – not him, but his
reflection: another Servian, perhaps his “astral me” (“yo astral”) from an alternative world (ibid., 79).

The phrase “it portrays me” (in Spanish, “me retrata” - literally, “it reproduces me”), which is used to denote copying or photographing, further suggests the existence of many Servians in many worlds. A different verb could have been used, such as “it depicts me” (“me pinta”): even though there are many copies of the same picture, there is only one original. But if we follow Blanqui’s line of argument, there is no original, just variations: “there aren’t any proper originals – that is, one doesn’t precede the other according to date – rather, there are various types” (Blanqui 2009, 53; emphasis in the original), and all the worlds exist simultaneously. Apparently in opposition to the maxim, Servian is not trying to know himself. He is trying to figure out what other Servians are like – almost like him, but not quite. Subtle differences, rather than fundamental similarities, intrigue and excite him: as he notes, “perhaps I enjoy the idea that I can experience something that the other Servian, in his good fortune, has not” (Bioy Casares 1990, 180).

Servian sees himself as “always methodical”, which he understands as being “[submerged] in dark activities” like a mad scientist (“we appear mad, […] or selfish” (ibid., 147)), in which case “methodical” refers to scientific exploration or scientific method, which leads to the formulation of a scientific theory (see Ellis 2014, 15). Servian’s reading plan is a testament to his methodical nature. It presents a logical reason for avoiding being bogged down by “thoughtless and rash production of books” and, at least, appearing to have encyclopaedic knowledge. His reading interests include philosophy, French literature, natural sciences, and “ancient Celtic literature, in particular from the country of Cymru [Wales]”; medicine, Servian’s main occupation, is there too, but it appears ad hoc in his reading plan without disrupting it (Bioy Casares 1990, 173). It would therefore appear that medicine is not of primary importance to Servian, since he may not necessarily see himself as a doctor in the
traditional sense, but a practitioner of a different form of healing: homeopathy. In the 1930s in Argentina, homeopathy was accepted by only a small number of doctors, distanced from “alternative therapies” but outside traditional medicine (González Korzeniewksi 2010, 43). An analysis of the history of Argentine homeopathy from the journal Homeopatía of the Medical Homeopathic Society of Argentina (now Medical Homeopathic Association of Argentina) concludes that “during the early years of its existence, the discourse of Homeopatía was characterised by similarities with the foundational myths” (ibid., 37).

The mythical nature of homeopathic discourse can be seen both in the Society’s “foundational myth” and the way Christian S. Hahnemann, founder of homeopathy, was presented in the Society’s publications. Servian’s interest in myths echoes this. Before Lieutenant Kramer arrived at Servian’s office with the news that Morris wanted to see him, Servian had just finished learning about the occult: “I was particularly interested in spells, apparitions and disappearances” (Bioy Casares 1990: 173-4). After learning about the occult, he was going to read about politics and sociology (ibid., 174). The order is somewhat tongue-in-cheek: politics and the occult arguably both represent humanity’s dark side. But there is no apparent opposition in the order of subjects given, nor is there a particularly clear link between these disciplines.

By paying equal attention to multiple – and often mutually contradictory – areas, such as science and the occult, Servian attempts to combine his knowledge of both to explain what happened to Morris. One of the ways that Servian proposes to start the story is by “refuting Astronomy” (ibid., 145); perhaps he alludes to Blanqui’s negation of Pierre Laplace’s astronomy (see Salet 1926). Blanqui’s work is, of course, central to the understanding of Servian’s interpretation of what happened to Morris. All critical analyses of the story to date focus on multiplicity of storylines, narrators, and worlds. Servian’s reading Blanqui’s book Eternity through the Stars both in the NW and W-world produces the same results – he
realises that Morris has gone from one world to another. However, his interaction with the book goes beyond this self-evident realisation. The only time Servian quotes directly from Blanqui’s book, he chooses a paragraph that does not exist:

There probably are infinite identical worlds, infinite worlds with slight variations, infinite different worlds. What I’m writing right now in Fort de Taureau I have written before and will write for eternity, on a table, on a piece of paper, in the dungeon, that are completely the same. In the infinite worlds my situation will be the same, but there may be variations in the reasons for my imprisonment or in the eloquence or tone of my writings. (Bioy Casares 1990, 177)

This can be compared to Blanqui’s text:

Any and every astral body whatsoever thus exists in an infinite number throughout time and space; and not only under one of its aspects, but in such a way that it can always be found at every second of its duration–from its birth to its death. All beings spread across its surface–big or small, living or inanimate–share the privilege of this perennial existence. The Earth is one of these astral bodies. Every human being is thus eternal in all seconds of his existence. What I write at this moment in the dungeons of Fort de Taureau I will have written for eternity, on a table, with a pen, in my clothes, in circumstances that are completely alike. And so it is, for each. (Blanqui 2009, 56-7)

Servian’s quotation is an approximation of Blanqui’s paragraph, which does not mention “variations”, for example, “the reasons for my imprisonment or in the eloquence or tone of my writings” (“en la causa de mi encierro o en la elocuencia o el tono de mis páginas,” Bioy Casares 1990, 177), but focuses on exact repetitions of the same scene. Servian’s version of the quotation from Blanqui is more applicable to Servian’s own writing as he recognises that his style changes from the story to the letter. This change indicates that a variation of Servian
wrote the letter that Morris received; another variation wrote the story that narrator X received – and both Servians are trapped. One is trapped in a house with a niece who expects him to be interested in her and in a routine he does not seem to be enjoying; the other is equally trapped in his house (while he is ill: “I thought with some envy about that astral me, locked up in his house, just like me” (ibid., 180)) and looking for some distraction from boredom.

Servian’s conversation with Morris while Morris is telling the story starts to reveal what Servian thinks happened to Morris. When asked if he waited outside or inside the church, Morris says that “he was not bothered about the details” and that the church was “like any church” (ibid., 162). However, his “memory” of the church changes after Servian reads Blanqui’s book and goes to investigate. Afterwards, as they return to the subject of the church, Servian asks Morris if he saw another symbol next to the cross and prompts Morris to “remember” a trapezium crossed by a line with curving points: “I asked him if the church he had visited had another symbol next to the cross […]–Maybe,–he muttered,–something like...–A trapezium?–I suggested.–Yes, a trapezium,–he said with certainty.–Just a trapezium or with a line across it?–That’s it!–he exclaimed.–How did you know?” (ibid., 176). The image is of the Phoenician and Carthaginian fertility goddess Tanit (known in the Roman mythology as Juno).

However, it remains unclear how Servian discovered that the absence of Wales and the flourishing of Carthage were the foundation of the differences between the two worlds. If his discovery was triggered by the nurse’s unusual name, it is surprising that a similar name (Lieutenant Colonel Mendizábal, one of Morris’s friends in the W-world (ibid., 156); in the NW-world Mendizábal says he does not know Morris (ibid., 157)) did not act as a trigger. The combination of the nurse’s name and her strong desire to help Morris may have
prompted Servian to take a closer look at her character and actions, including giving Morris a ring with a symbol of Carthage on it (the horse’s head).

The way that Servian conveys his discovery to Morris is dubious. On the one hand, he sees himself as a person of method, so his approach to examining data and reporting findings should include observational and experimental support (Ellis 2014, 15). Servian’s making Morris believe that he is in the NW-world goes against this principle because there is no testing it – it is Servian’s statement that Morris accepts without any recourse to supporting evidence. This is reminiscent of what Paul Ricoeur called the “retroactive realignment of the past” (Ricoeur 1984, 67; also see Carpenter 2010, 676). After a story is read once or several times, the surprise of the plot is replaced with the expectation of the episodes leading to the end of the storyline. The linear progression of the plot is no longer applicable since the reader knows the outcome before (re)reading the story.

By now, Servian has already prompted Morris to follow his lead when it comes to remembering his experience. First, when talking about the nurse, Servian suggests that Morris was trying unsuccessfully to remember what the nurse looked like (Bioy Casares 1990, 168). Later, Servian finishes Morris’s sentence about thinking if he was dreaming when he woke up in the military hospital for the second time (ibid., 169). The two instances make it look like Servian is trying to tell Morris that his experience was a dream—or, at least, so improbable as to be dream-like. By the time he writes it all down, he already knows it is not a dream, just a different reality; however, Morris may not be ready to accept such an interpretation even from his friend, so Servian is slowly preparing Morris for the explanation, subtly making him reach the conclusion that Servian has discovered.

One of the main items upon which the explanation of another world hinges is Idibal’s ring. When the ring first appears (in the package to narrator X), the ring is aquamarine and
has little value (ibid., 143-44). Later, when Idibal gives it to Morris, it is made of stone, glass or diamond (aquamarine looks like blue diamond: shiny and transparent), and the body of a goddess is not mentioned, just the horse’s head. Finally, when Morris shows it to Servian, the latter thinks that the ring is very valuable (ibid., 170). This time, it is made of stone of “vivid transparency” (no colour mentioned) and the goddess is there, along with the horse’s head. In terms of monetary value, aquamarine costs about $100-$300 per carat; diamonds are far more valuable, at about $1,400 per carat at the time of writing (International Gem Society 2018, n.p.). However, the ring’s real value is in it being from another world. To Servian, the ring proves that Morris was “in another world: none of the experts I’d asked recognised the stone” (Bioy Casares 1990, 178). If this Servian’s world does not have aquamarine, this would explain the statement. Morris sees the ring as valuable because it reminds him of Idibal; he keeps it in “in a safe place” (ibid., 170), so it comes as a surprise when he appears to have lost it at the end of Servian’s story. We learn about the ring being lost when Servian says so (ibid., 181), but the ring was in the package that Servian will send to narrator X, so Servian must have taken the ring from Morris to force him to join in on the escape plan. Servian wants to use the ring to prove the existence of other worlds – so, his real mission is not to save Morris, but to collect evidence to back up the scientific hypothesis outlined in Blanqui’s book, which Servian is now so keen on proving.

When Morris talks about the letter he has supposedly received from Servian, Servian states three times that he has not sent anything and does not know anything about the books or the letter, which suggests the existence of several Servians. There is another Servian in the NW-world – the NW-Servian – whose only appearance in the story is the letter he sends to Morris. The very formal opening sentence “I acknowledge the receipt of your letter of the 16th” (“Acuso recibo de su atenta del 16”, ibid., 172) indicates that the NW-Servian does not know Morris. Since the NW-Servian does not know Morris, he would not know that “no
book has ever interested Morris in the least” (ibid., 173), otherwise he would not have sent him the books. It is possible that the NW-Servian, having realised that Morris is not from his world, sends the books through Morris to his other self, who is then expected to figure out the same answer. If there are worlds that are “slightly different” then any Servian would be fundamentally interested in reading – the difference will be in what is being read and when. Ultimately, every Servian in every world would stumble across Blanqui’s book, but in some cases it might be too late, in others too early, and in some the book would not have been read at all if it clashed with Servian’s reading plans.

The NW-Servian is sending the books “as a sign of understanding” of Morris’s situation (ibid., 172). However, Morris is not interested in Servian’s explanation, even though Servian’s letter indicates that the books will explain what happened. Morris does not bother reading them while still trying to figure out what is going on. If the NW-Servian is using Morris as a conduit to another Servian, this suggests that he thinks there is a “wormhole” between the two universes and information leaks between the two – he may be hoping that another Servian will pick up this information through Morris, since Morris and Servian appear to be connected in every universe, either by chance or through friendship.

The NW-Servian receives Morris’s letter late because of “a telling mistake in the address” (“un sugerente error en la dirección”, ibid.) – it was sent to “Owen Street.” However, since the NW-Servian should not know about Wales, he would hardly see the error as suggestive – more likely, he would see it as simply an error. It may imply a fundamental problem of Morris not being from the same world. On the other hand, it suggests specifically that Morris is from the world where “Owen” (a common Welsh family name) is a normal, expected thing. This means that the NW-Servian is aware of the W-world somehow – not just the fact of another world with a different street address for Servian, but another world with Wales in it. We can take this interpretation as an illustration of information being able to
travel between the various realities, similar to the theoretical physics concept of leakage of information via microscopic wormholes (Gribbin 1993, 233). Conceivably, certain “constants of nature” persist in all versions of reality. If Wales is a “constant of nature,” then it would exist in every world: in some, it will exist in physical form; in others, it will exist as an absence of itself. But there is always a Wales in one way or another, either by adding “Owens” to, or by removing “Idibals” from, the world.

Another “constant of nature” is that all Servians that we encounter in the story are looking to “escape” their routine and to pursue their scientific interests: the application of the method, in-depth reading, and seeking proof for a hypothesis. Everyone around him changes but Servian remains the same doctor, stuck in a rut in every reality. In the W-world, he does not like his situation; in the NW-world, he does not seem to mind it; in the U-world, all we know is that he is a doctor. We extrapolate that he knows Morris (since he recognises Morris as his friend when the latter is hospitalised in Buenos Aires). Yet we cannot surmise if he is similar to the other two, since there is no evidence either way. But he is still a doctor, while Morris becomes a smuggler and Kramer becomes a captain, narrator X knows things he did not know before, and so on. Servian is the only constant in the story, linked by a tenuous bridge across parallel realities.

Having examined “The Celestial Plot” by Adolfo Bioy Casares, we have identified commonalities between its thematic structure and the role of the observer in quantum physics. We have shown how the character Dr Carlos Servian serves both as the bridge between various parallel worlds in which he travels, as well as an observer recording aspects of those worlds, through a kind of measuring process based upon the general principles of scientific method. The embedding of the observer in the system being observed, as we have noted, is antithetical to the orthodox interpretation of quantum mechanics, but rather foresees, in some ways, Hugh Everett’s Many Worlds interpretation in which the measurer bifurcates along
with the system itself, but always with slight variations to accommodate different quantum outcomes of each world. In addition to anticipating a possible resolution to the measurement problem in quantum mechanics, we have shown how the story reflects the speculations of nineteenth century thinker Louis Blanqui, whose notable *Eternity through the Stars* speculates about parallel realms, and reveals that in fleeting moments we might become aware of all the roads not taken. In short, “The Celestial Plot,” serves as a remarkable transitional piece, reflecting the evolution of the notion of parallel worlds from the abstract visions of Blanqui and works of speculative fiction to the serious consideration of the actual possibility of bifurcation in the later ideas of Everett.
Works Cited


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1 The original Spanish quotations from “La trama celeste” have been translated by Victoria Carpenter. All other quotations, unless specified, have also been translated by Carpenter.

2 Barcia points out this discrepancy by referring to Servian’s quotation as “an alleged translation of Blanqui’s text” (Bioy Casares 1990, 177, n. 192).

3 Jacques Derrida explores the absence/presence phenomenon in depth in *Of Grammatology* (1967), where he posits that “there is nothing outside the text” (there is no outside-text; “il n’y a pas de hors-texte”) (quoted in Bell 2018, n. p.). As Amanda Bell notes, “Through the examples of speech and writing, Derrida demonstrates that it is impossible for signification to be absolutely present. In doing so, he proves that only through mediated forms like language can one access signification” (Bell 2018, n. p.).