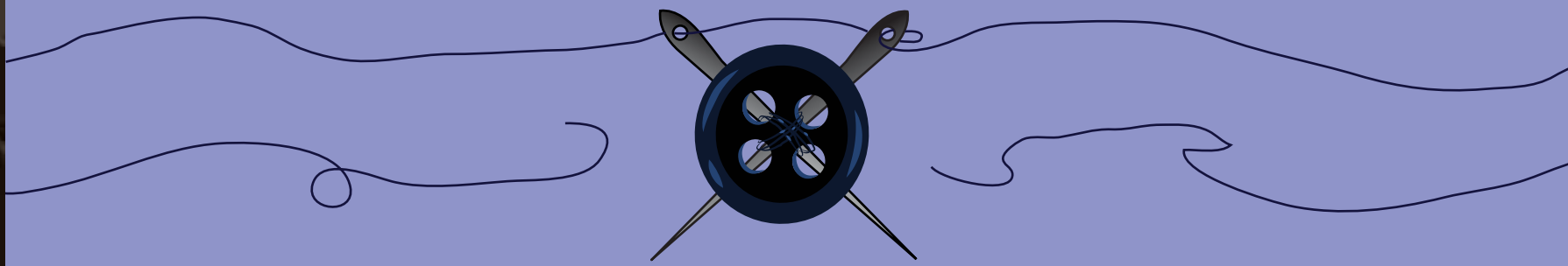


# Coraline Book Cover

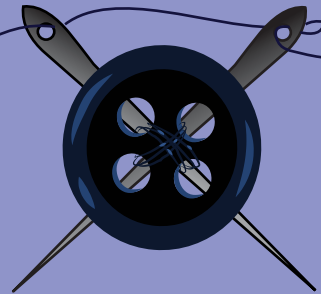
By: Rachel Roberts



For my book cover project I decided to pick the book/ film "Coraline". This book and feature stop motion film has been one of my favorites ever since it came out. Alluring me with childish fantasies of other worlds, and then capturing my soul with the twisted dark reality of it all. Through this process, I have not only revamped the original cover style through my own, but also re-designed the logo type, color scheme, theme, and more (including an article cover based on parallel worlds and theories. Not only do I feel like I have captured the childish, yet dark theme of the book, but also the uniqueness of a child's imagination in traveling to another world that seems so much more perfect than our own.

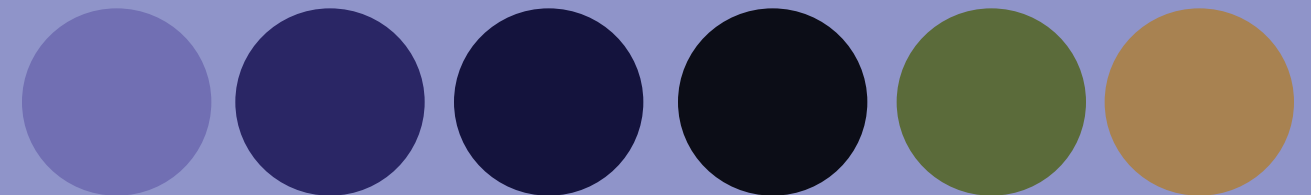
Inside this overview, you will find the "re-creation" of "Coraline" and seeing the process to how I've re-designed her character and world. This overview will include detailed sketches, logo designs, an article, final sketch, and then the final design to the overall project. In creating this process, it allows myself and others to see my creative process on how I come up with such imaginative designs.

# Getting into the Mood

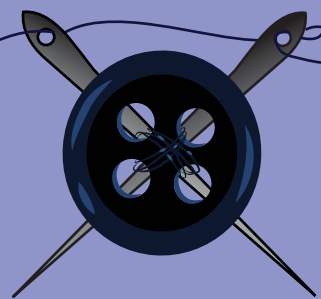


For the overall theme and mood of the story “Coraline” I had to create something that had this dark and sinister tone unearthing from the background of a child’s life. To do this, I gathered a few reference photo’s from online to give me an idea of how to create this illusion I was needing to capture.

Below, I also worked out a few color schemes and combinations that might also work to create this dark, yet fantasy styled cover that I needed to achieve. These colors consist of a variety of blue’s (since this is Coraline’s main color scheme), green (as seen in many transistions between her world and the next), and then a few earthly tones to create that nostalgic wooden texture that becomes prominent in the original book cover.



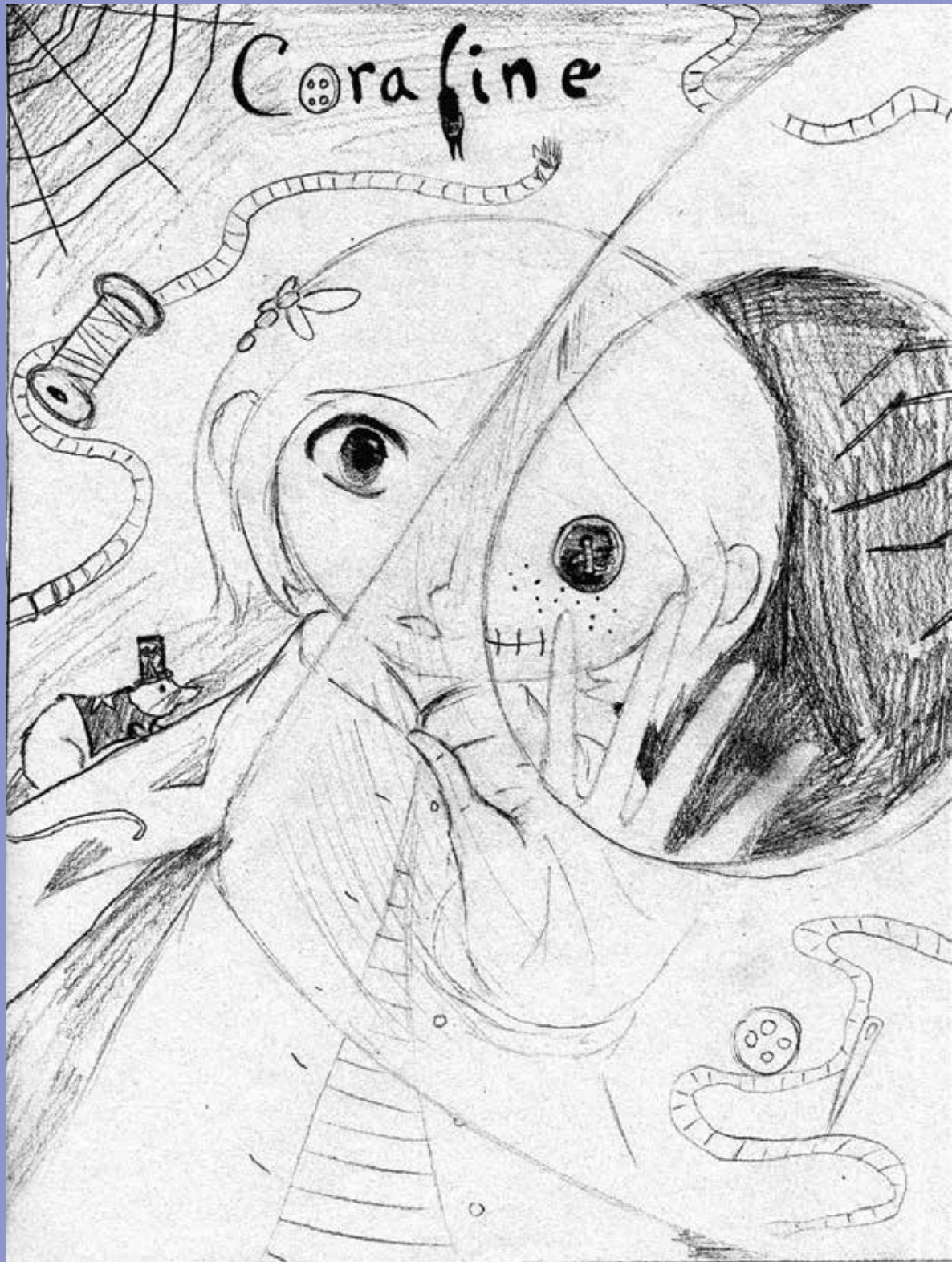
# Rough Sketches



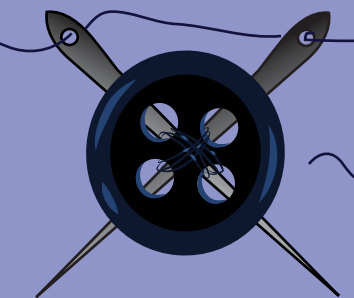
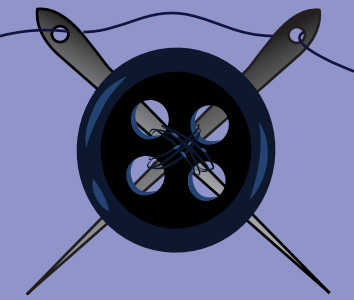
These are a few sketch concepts I came up with while trying to create a book cover and/or monochromatic for the story "Coraline". In most of these, I tried keeping the idea of the doll that the belldame uses throughout the story, as well as the key to the other world and even a spider web to hint at the fact that the belldame was a type of spider-like insect creature in both the book and the movie. And of course I kept the button idea throughout each concept in order to keep the ambiguity theme of the overall dark plot and its significance towards Coraline.



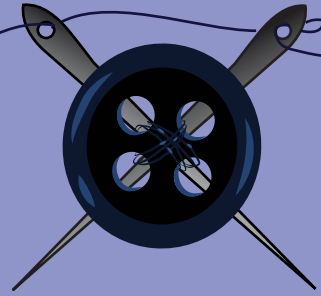
# Final Monochromatic



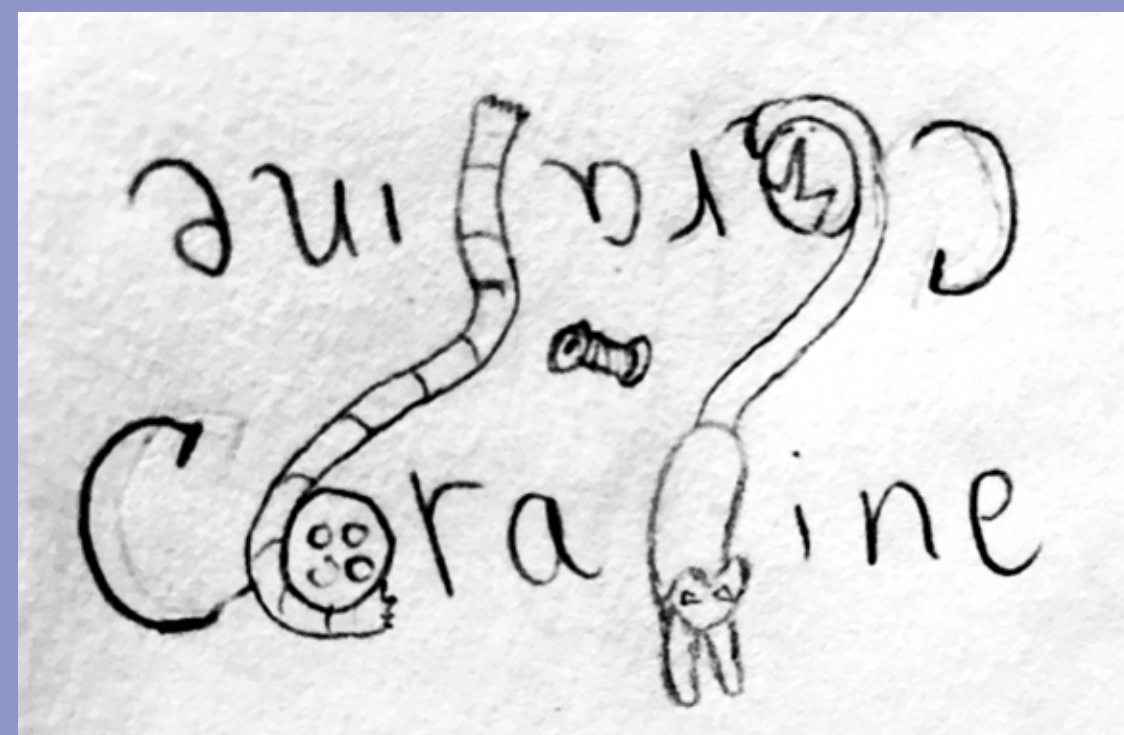
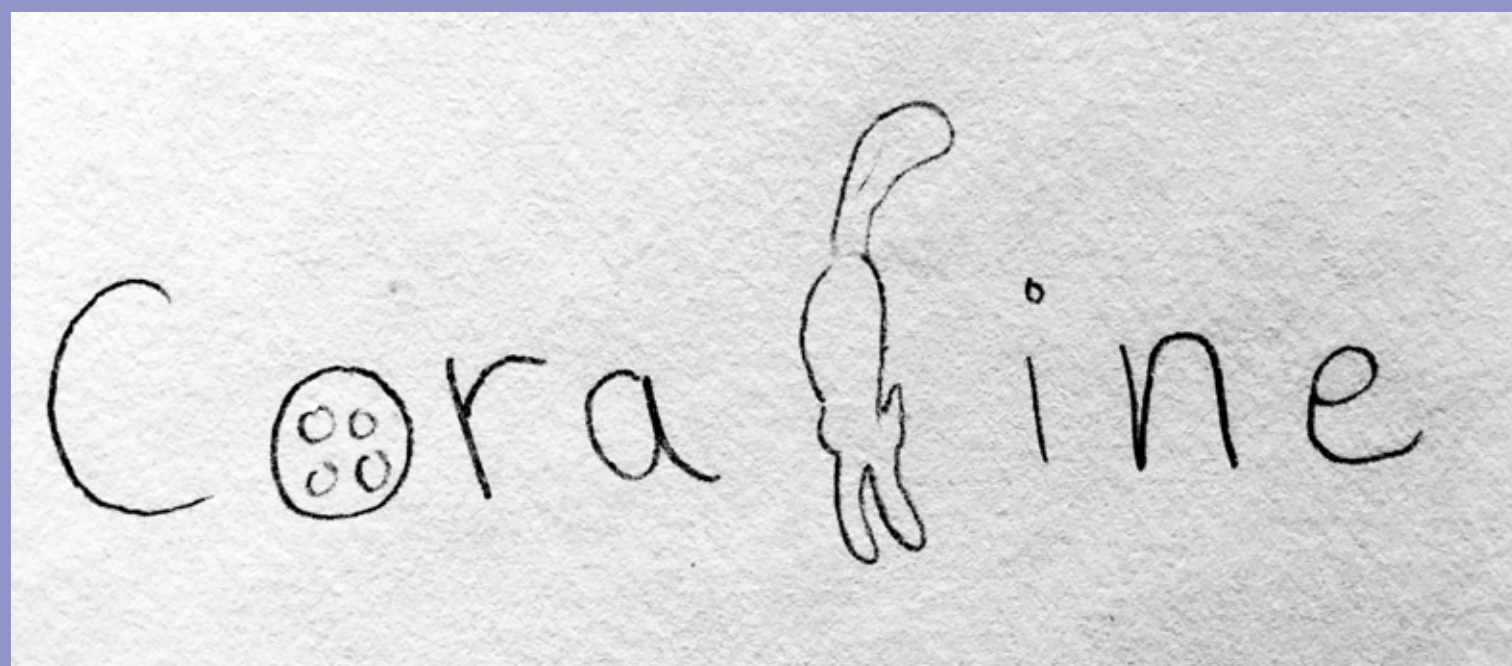
This is the final product for the monochromatic piece using a variety of blue shades and tints. Also included is the original logo type for the movie version of "Coraline". This concept came from the idea of Coraline looking through the view finder and her alternate doll self is shown .



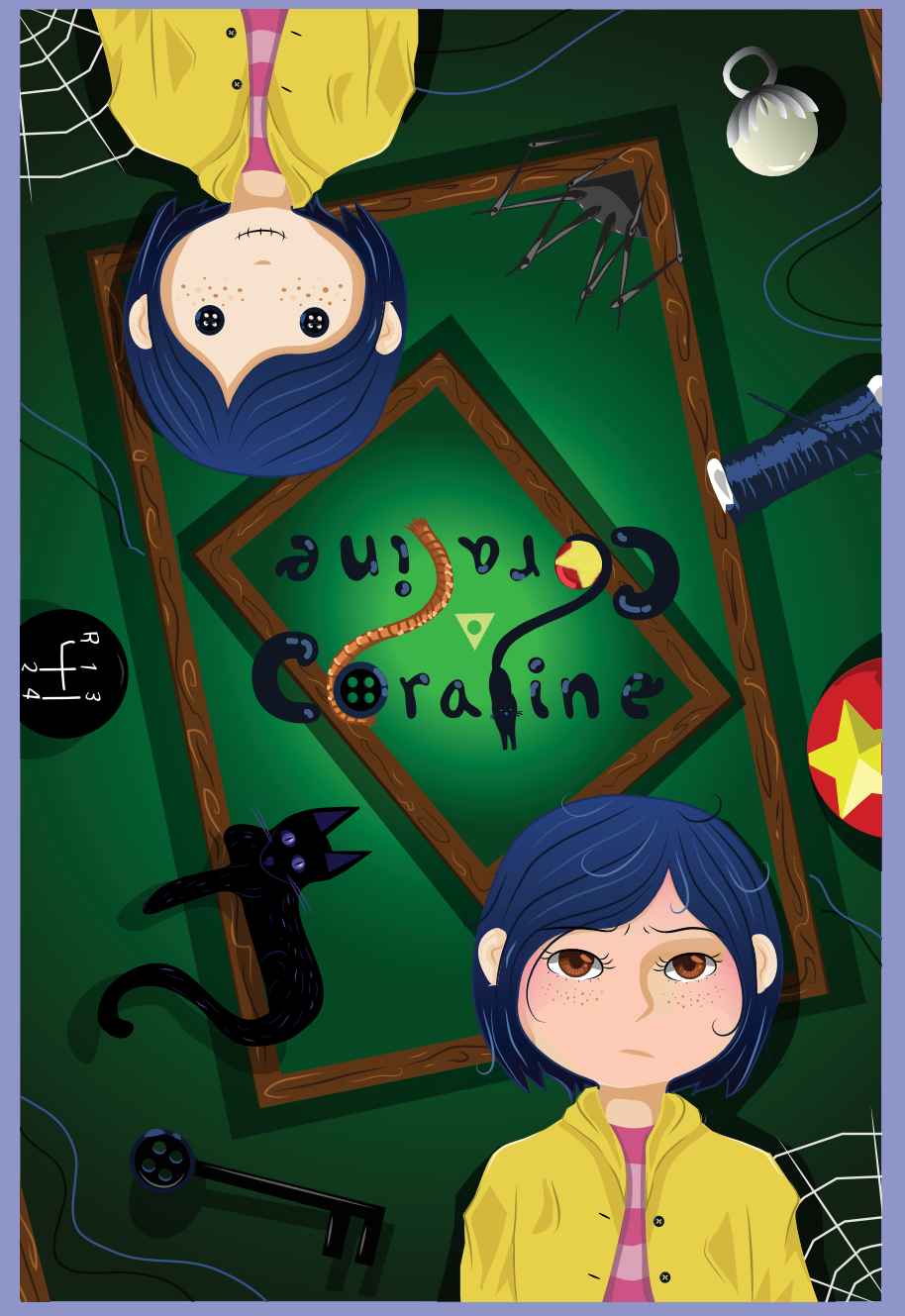
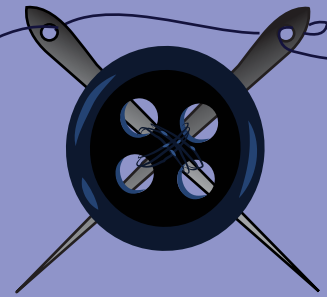
# Book Cover Sketches



# Typography Designs



# Final Book Covers (Rough)



# Article Reference & Sketch

By Max Tegmark

## Parallel Universes

Not just a staple of science fiction, other universes are a direct implication of cosmological observations

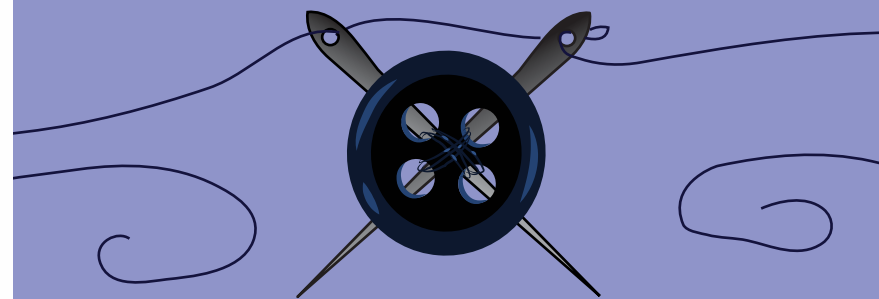
### Is there a copy of you

reading this article? A person who is not you but who lives on a planet called Earth, with misty mountains, fertile fields and sprawling cities, in a solar system with eight other planets? The life of this person has been identical to yours in every respect. But perhaps he or she now decides to put down this article without finishing it, while you read on.

The idea of such an alter ego seems strange and implausible, but it looks as if we will just have to live with it, because it is supported by astronomical observations. The simplest and most popular cosmological model today predicts that you have a twin in a galaxy about 10 to the 10<sup>28</sup> meters from here. This distance is so large that it is beyond astronomical, but that does not make your doppelgänger any less real. The estimate is derived from elementary probability and does not even assume speculative modern physics, merely that space is infinite (or at least sufficiently large) in size and almost uniformly filled with matter, as observations indicate. In infinite space, even the most unlikely events must take place somewhere. There are infinitely many other inhabited planets, including not just one but infinitely many that have people with the same appearance, name and memories as you, who play out every possible permutation of your life choices.

You will probably never see your other selves. The farthest you can observe is the distance that light has been able to travel during the 14 billion years since the big bang expansion began. The most distant visible objects are now about  $4 \times 10^{26}$  meters away—a distance that defines our observable universe, also called our Hubble volume, our horizon volume or simply our universe. Likewise, the universes of your other selves are spheres of the same size centered on their planets. They are the most straightforward example of parallel universes. Each universe is merely a small part of a larger “multiverse.”

By this very definition of “universe,” one might expect the notion of a multiverse to be forever in the domain of metaphysics. Yet the borderline between physics and metaphysics is defined by whether a theory is experimentally testable, not by whether it is weird or involves unobservable entities. The frontiers of physics have gradually expanded to incorporate ever more abstract (and once metaphysical) concepts such as a round Earth, invisible electromagnetic fields, time slowdown at high speeds, quantum superpositions, curved space, and black holes. Over the past several years the concept of a multiverse has joined this list. It is grounded in well-tested theories such as relativity and quantum mechanics, and it fulfills both of the basic criteria



of an empirical science: it makes predictions, and it can be falsified. Scientists have discussed as many as four distinct types of parallel universes. The key question is not whether the multiverse exists but rather how many levels it has.

#### Level I: Beyond Our Cosmic Horizon

THE PARALLEL UNIVERSES of your alter egos constitute the Level I multiverse. It is the least controversial type. We all accept the existence of things that we cannot see but could see if we moved to a different vantage point or merely waited, like people watching for ships to come over the horizon. Objects beyond the cosmic horizon have a similar status. The observable universe grows by a light-year every year as light from farther away has time to reach us. An infinity lies out there, waiting to be seen. You will probably die long before your alter egos come into view, but in principle, and if cosmic expansion cooperates, your descendants could observe them through a sufficiently powerful telescope.

If anything, the Level I multiverse sounds trivially obvious. How could space *not* be infinite? Is there a sign somewhere saying “Space Ends Here—Mind the Gap”? If so, what lies beyond it? In fact, Einstein’s theory of gravity calls this intuition into question. Space could be finite if it has a convex curvature or an unusual topology (that is, interconnectedness). A spherical, doughnut-shaped or pretzel-shaped universe would have a limited volume and no edges. The cosmic microwave background radiation allows sensitive tests of such scenarios [see “Is Space Finite?” by Jean-Pierre Luminet, Glenn D. Starkman and Jeffrey R. Weeks; SCIENTIFIC AMERICAN, April 1999]. So far, however, the evidence is against them. Infinite models fit the data, and strong limits have been placed on the alternatives.

Another possibility is that space is infinite but matter is confined to a finite region around us—the historically popular “island universe” model. In a variant on this model, matter thins out on large scales in a fractal pattern. In both cases, almost

all universes in the Level I multiverse would be empty and dead. But recent observations of the three-dimensional galaxy distribution and the microwave background have shown that the arrangement of matter gives way to dull uniformity on large scales, with no coherent structures larger than about 10<sup>24</sup> meters. Assuming that this pattern continues, space beyond our observable universe teems with galaxies, stars and planets.

Observers living in Level I parallel universes experience the same laws of physics as we do but with different initial conditions. According to current theories, processes early in the big bang spread matter around with a degree of randomness, generating all possible arrangements with nonzero probability. Cosmologists assume that our universe, with an almost uniform distribution of matter and initial density fluctuations of one part in 100,000, is a fairly typical one (at least among those that contain observers). That assumption underlies the estimate that your closest identical copy is 10 to the 10<sup>28</sup> meters away. About 10 to the 10<sup>92</sup> meters away, there should be a sphere of radius 100 light-years identical to the one centered here, so all perceptions that we have during the next century will be identical to those of our counterparts over there. About 10 to the 10<sup>118</sup> meters away should be an entire Hubble volume identical to ours.

These are extremely conservative estimates, derived simply by counting all possible quantum states that a Hubble volume can have if it is no hotter than 10<sup>8</sup> kelvins. One way to do the calculation is to ask how many protons could be packed into a Hubble volume at that temperature. The answer is 10<sup>118</sup> protons. Each of those particles may or may not, in fact, be present, which makes for 2 to the 10<sup>118</sup> possible arrangements of protons. A box containing that many Hubble volumes exhausts all the possibilities. If you round off the numbers, such a box is about 10 to the 10<sup>118</sup> meters across. Beyond that box, universes—including ours—must repeat. Roughly the same number could be derived by using thermodynamic or quantum-gravitational estimates of the total information content of the universe.

Your nearest doppelgänger is most likely to be much closer than these numbers suggest, given the processes of planet formation and biological evolution that tip the odds in your favor. Astronomers suspect that our Hubble volume has at least 10<sup>20</sup> habitable planets; some might well look like Earth.

The Level I multiverse framework is used routinely to evaluate theories in modern cosmology, although this procedure is rarely spelled out explicitly. For instance, consider how cosmologists used the microwave background to rule out a finite spherical geometry. Hot and cold spots in microwave background maps have a characteristic size that depends on the curvature of space, and the observed spots appear too small to be consistent with a spherical shape. But it is important to be statistically rigorous. The average spot size varies randomly from one Hubble volume to another, so it is possible that our universe is fooling us—it could be spherical but happen to have abnormally small spots. When cosmologists say they have ruled out the spherical model with 99.9 percent confidence, they really mean that if this model were true, fewer than one in 1,000 Hubble volumes would show spots as small as those we observe.

### Overview/Multiverses

- One of the many implications of recent cosmological observations is that the concept of parallel universes is no mere metaphor. Space appears to be infinite in size. If so, then somewhere out there, everything that is possible becomes real, no matter how improbable it is. Beyond the range of our telescopes are other regions of space that are identical to ours. Those regions are a type of parallel universe. Scientists can even calculate how distant these universes are, on average.
- And that is fairly solid physics. When cosmologists consider theories that are less well established, they conclude that other universes can have entirely different properties and laws of physics. The presence of those universes would explain various strange aspects of our own. It could even answer fundamental questions about the nature of time and the comprehensibility of the physical world.



# Parallel Universe

By: Max Tegmark

## Is there a copy of you

reading this article? A person who is not you but who lives on a planet called Earth, with misty mountains, fertile fields and sprawling cities, in a solar system with eight other planets? The life of this person has been identical to yours in every respect. But perhaps, he or she now decides to put down this article without finishing it, while you read on.

The idea of such an alter ego seems strange and impulsive, but it looks as if we will have to live with it, because it is supported by astronomical observations. The simplest and most popular astronomical model today predicts that you have a twin in a galaxy about 10 to the 10<sup>th</sup> to 28<sup>th</sup> meters from here. This distance is so large that it is beyond astronomical, but that does not make your doppelganger any less real. The estimate is derived from elementary probability and does not even assume speculative modern physics, merely that space is infinite (or at least sufficiently) in size and almost uniformly filled with matter, as observations indicate. In infinite space, even the most unlikely events must take place somewhere. There are infinitely many other inhabited planets, including not just one but infinitely many that have people with the same appearance, name and memories as you, who play our every possible permutation of your life.

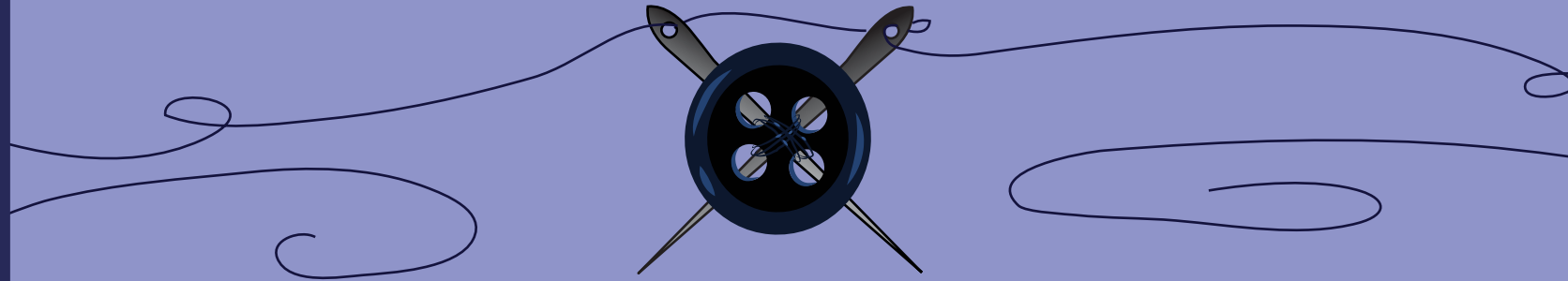


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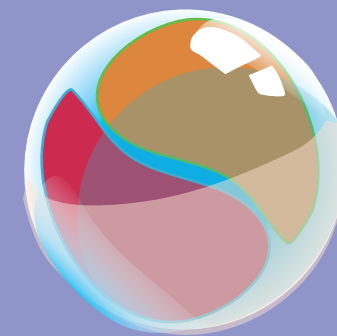
You will probably never see your other selves. The farthest you can observe is the distance that light has been able to travel during the 14 billion years since the big bang expansion began. The most distant visible objects are now about  $4 \times 10^{26}$  meters away - a distance that defines our observable universe, also called our Hubble volume, our horizon volume or simply our universe. Likewise, the universe of your other selves are spheres of the same size centered on their planets. They are the most straightforward example of parallel universes. Each universe is merely a small part of a larger "multiverse".

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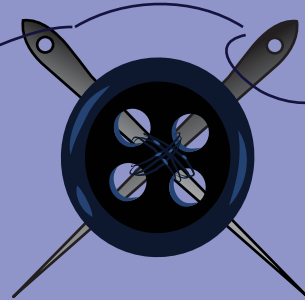
# Final Article



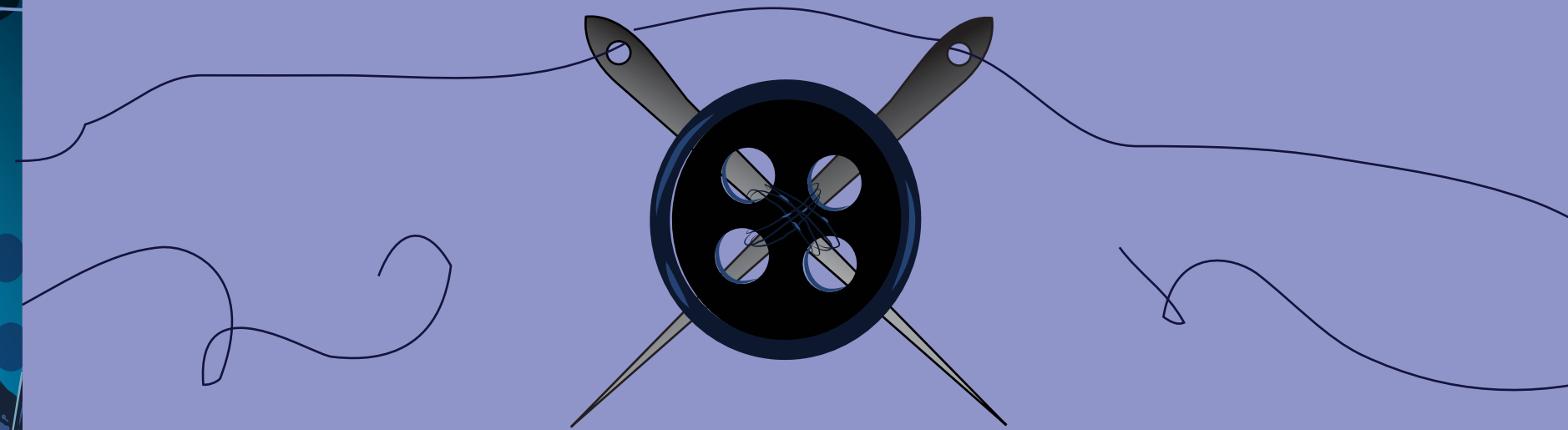
For the final article design, I chose an article about parallel universes, since the theme covers "Coraline" throughout her journey in the story as well as added the cat in her final design. The piece included gradient shadows/highlights, as well as a few harsh light and shadows in her overall design. The key I kept in her design as I added it inside this warped bubble shape as Coraline travels through this alternate world. As for the main color scheme, I kept the consistent colors of blue, while using the green as an overall highlight to tie together the piece as she transitions between these different worlds (Even the reflection in her eyes showcase a green tint). As for the article itself, all copyrights are reserved to Max Tegmark who created the idea for this topic.



# Final Design Layout



# Final Cover



In the completed version of the “Coraline” Book cover, I finally added the authors name in the same blue shade color as the title and had it available on both sides to further develop the “flipping” aspect of the cover. I also fixed a few small issues with the rounded objects in the top right corner by adding more highlights and making the star shape more spherical. As per the overall concept, as I mentioned before, I wanted to keep the idea of Coraline going between different worlds and how that has an effect on the book by adding it to the design of the cover. I also included the button key as well as the cat that can go between worlds like she does. The spider webs and mechanical needle hand both symbolize who the bell dame truly is, while the thread and needles are a node to the puppets that are seen throughout. Finally, the 3 objects in the top right corner are the 3 ghost eyes that Coraline goes to find in the second half of the story. As for the spades in the background with dots surrounding it gives you a clue to the garden area and how it is set up, with the spade being the trowel and the dots representing each of the people that Coraline encounters both in her world and in the other mother’s realm.