What stories should we tell? What should we make the objects of our tales? If in the end we are technology’s storytellers—narrators mostly of industrial capitalism—around what characters and events should we spin our yarns?

Beginning in the mid-19th century, critics, philosophers, and social theorists—from Friedrich Nietzsche to Max Weber, from Franz Kafka to Michel Foucault—told a similar story: society was going through a process of secularization, rationalization, disenchantment. Rationality hollowed out culture’s traditional moorings in magic, mystery, and holiness, leaving only grayness in its wake. We had become locked in what Weber called the “iron cage of reason,” which came with many benefits but also took its toll. Standardization, bureaucracy, and the tyranny of forms and paperwork threatened to undermine life’s very meaning, a threat that Nietzsche termed “nihilism.”

Perhaps human minds simply rebel against this development. After all, our popular culture is full of zombies, dragons, wizards, superheroes, and spacemen. At night, when people return home weary from a day’s work, many of them immerse themselves in fantasy and fairytales. If our days are made of disenchantment, many, in imagination, still embrace magic.

These magical tales take many forms, several of which emerged at the same time as the disenchantment story, that is, in the late-19th and early-20th centuries. During this period, Western industrial nations experienced an unprecedented—and probably unrepeatable—moment of technological change. These changes were often celebrated as near miracles, what Leo Marx and David Nye have described as the “technological sublime.” Writers dramatized their changing material conditions, particularly by venerating inventors. A cult of invention emerged in popular culture, and a wide variety of publications, including magazines like Popular Science and Popular Mechanics, turned great makers, like Edison, Tesla, and Bell, into folk heroes. Corporations harnessed this image-making. From auto shows to General Electric’s House of Magic to the industrial musicals of the 1950s and 1960s, companies put innovation on stage and screen.

The historians and journalists who have written the history of technology grew up in this culture, and it is not surprising that they have fallen prey to and repeated its clichés. In his history of the history of technology, Technology’s Storytellers, the Jesuit priest John Staudenmaier emphasizes how such history has tended to focus on invention and innovation, not on the many other aspects of human life with technology. Staudenmaier accuses the grossest histories of technology of being “Progress Talk,” a Whiggish narrative that emphasizes inexorable technological improvement, including the betterment of human life and the rising standard of living. Staudenmaier gestures towards Disney’s EPCOT Center as a prime example: “At Disney, General Motors, Exxon, General Electric, and others teach a corporate version of technological history. EPCOT attracts fifteen to twenty million patrons every year, all willing to endure long lines and high prices while being indoctrinated in a
relentlessly smiling contempt for past technological achievements together with the invocation of a sanitized, inexorably beneficial, technological future. Such is today’s most popular transmutation of the Enlightenment dream of progress.” Fittingly, some people talk about the “Disneyfication” of history. A central characteristic of such Progress Talk is that it erases the history of human suffering in favor of a vision of inexorable technological improvement. In this way, politics, including the politics of technology, begins when we bear witness to suffering in a culture that would rather forget it.

Staudenmaier wrote most of his reflections on the moral dimensions of technology between the 1980s and the early 2000s. Since that time, Progress Talk has become Innovation Speak. The obsessions with technological novelty is the same only now it is pitched in the jargon of innovation. Walter Isaacson’s The Innovators: How a Group of Hackers, Geniuses, and Geeks Created the Digital Revolution is an exemplary product of the moment. Isaacson begins his story with Ada Lovelace, who some consider an important early thinker in computing. Lovelace’s father was the poet Lord Byron, and Isaacson’s tale plops us down in the era of Romantic literature. As he writes, “Ada had inherited her father’s romantic spirit, a trait that her mother tried to temper by having her tutored in mathematics. The combination produced in Ada a love for what she took to calling ‘poetical science,’ which linked her rebellious imagination to her enchantment with numbers.” What Isaacson never reflects on is that his narrative in this book (and his other works) reproduces the Romantic image of the individual genius who ushers marvels into the world. His rendering of Lovelace and others—“romantic,” “rebellious,” “enchantment”—recapitulates so many clichés and adds a sheening gloss to our dominant ideology.

Of course, this obsession with magical technological change expands far beyond the bounds of historical writing. It is not surprising that science fiction is and has been the genre of the age. While some forms of science fiction—especially so-called hard science fiction—focuses on what can be plausibly imagined given our current scientific knowledge, “technology” in these stories often amounts to little more than magic. Moreover, the most popular kinds science fiction are what is known as “science fantasy,” tales like the Star Wars franchise that give not a single hoot about plausibility. Technology in such tales can lead to destruction or salvation, but its roots—while rationalized through hand-waving—are miraculous.

For example, in the film, Interstellar (2014), the people of Earth face a prototypical environmental apocalypse. Crops are failing. Dust storms ravage the Midwestern farmhouse where the protagonists live, including a young girl, Murphy, and her NASA-pilot-turned-farmer father, Cooper. Murphy believes that there is a poltergeist moving things in her bedroom, a belief her family members try to disabuse her of, that is, until Cooper realizes that there is a pattern to the movements and that someone is trying to communicate to them in binary. Cooper soon has an opportunity to join a team that is leaving Earth and flying through a wormhole in the hopes of finding a new home for humanity. A drawback of this trip is that time moves much more slowly for Cooper, so while he is on his voyage, Murphy grows into adulthood, eventually becoming a scientist who works on Earth’s environmental problems. Finally, Cooper, now through the wormhole, hooks up with a near-mystical race of creatures, who may or may not be humans from the far future. Cooper has some kind of realization that he wants to communicate to the humans back on Earth. Through a not terribly surprising twist, we find that it is Cooper who has been attempting to communicate with his daughter. In a dramatic moment full of spine-tingling music and vague pseudo-scientific ramblings, Cooper
uses binary to tell his now scientist daughter how to save the world, and the film ends on a more or less happy note.

But here’s the thing: what precisely Cooper tells Murphy is left a complete mystery. That mystery is a structural necessity. If we knew what Cooper told Murphy, we could save ourselves. The film simply asks us to take it on faith that such a discovery awaits us. But, of course, there is no such magic bullet technology that will save our asses sitting just over the horizon. Yet, the idea that there could even be such a thing perfectly aligns with the tech-centric ideology coming out of places like Silicon Valley.

In 2014, the writer Sam Frank went to California to interview libertarian types who hang out around Silicon Valley, many of whom idealize Peter Thiel, a co-founder of PayPal and head of the companies, Palantir Technologies and Mithril Capital Management. Frank found that Thiel and these libertarians “take it on faith that corporate capitalism, unchecked just a bit longer, will bring about an era of widespread abundance. Progress, Thiel thinks, is threatened mostly by the political power of what he calls the ‘unthinking demos.’” In other words, our salvation lies in the hands of experts, scientists, engineers, inventors, innovators, the kinds of dreamers envisioned in Interstellar, the kinds of individuals romanticized in Isaacson’s The Innovators.

The Maintainers calls all of this into question. By focusing on the mundane, the everyday, and all of the labor of upkeep necessary just to keep things going, we are called back to the ordinary and difficult present, away from the otherworldly, glittering future. As the co-organizers of this conference have emphasized repeatedly, the study of maintenance and repair is not new. We have been influenced by several thinkers and scholars, including Ruth Schwartz Cowan, David Edgerton, Kevin Borg, Chris Henke, Steven Jackson, and several others. The Maintainers is not an innovation; it’s a space for having a discussion that, for a slew of reasons, seems pressing and important.

One goal of the conference is to ask, once we have de-centered innovation, what kinds of stories should we tell? As I just said, we already have a tradition of maintenance studies to give us some idea of what such stories look like, but with focus and imagination, we can find ways to tell many more. For sure, we will discover many (types of) tales untold.

Largely because I am a father who spends a fair amount of time telling stories, reading picture books, and watching films and television shows made for children, I have also been asking myself, where do we find stories about maintainers in fiction and popular culture? I firmly believe that science fiction, with its focus on new things, has shaped the history of technology, in part by making individuals interested in the topic. (Shocker: many historians of technology are geeks who love science fiction and even teach classes about it.) If science fiction has played this role in invention/innovation focused history, where do we find the equivalent for The Maintainers?

Thankfully, there are such stories. For a recent example, I strongly recommend Kim Stanley Robinson’s Aurora, which is almost a kind of The Maintainers manifesto. The novel begins from the same obsession with exoplanets and starting over that undergirds Interstellar, but it fundamentally challenges that mindset. The story focuses on the inhabitants of a ship who are headed to distant planets to attempt to start a new society. I’m not ruining much by saying that this doesn’t go well, and ultimately they are forced to turn around and return to Earth. Yet,
what the book mostly examines—in a dramatic and compelling fashion—is all of the kinds of repair, maintenance, upkeep, and improvisation necessary to sustain this society in the stars. In the end, the book calls us to take care of what we have here on Spaceship Earth instead of dreaming about literally escaping its problems. In a similar vein, I have also found myself returning to classic works, like Studs Terkel’s *Working*, which features Terkel’s interviews with people about their ordinary labors. Yet, as many people have observed, the turn to maintenance studies is ultimately about the ethics of care. For example, it is sad and ironic world where technophiles drool over unboxing videos of overhyped consumer electronics on YouTube while our national infrastructure falls apart. *The Maintainers* reminds us of the importance of caring for what we have, rather than focusing on the yet-to-be. In a recent insightful essay, science and technology studies scholar Michelle Murphy argues that the ethics of care have their pitfalls—for instance, feel-good celebrations of care often obscure the difficult, joyless work women do as health workers—yet the notion of care remains unavoidable and essential.

For the rest of this essay, I will argue that we find a moral tale of caregiving in a perhaps unexpected place, the story *Mary Poppins*. P. L. Travers’ 1934 novel, which introduced the character to the world, contains a number of insightful episodes about caregiving, but here I will focus solely on the 1964 Disney film, largely for the delicious irony: Nearly every other product Disney put out, like *Our Friend the Atom*, celebrated a sterilized vision of technological progress and capitalist achievement. In some small ways, *Mary Poppins* pushes back against this all too easy vision, even if, unsurprisingly, it does not offer a truly radical alternative.

*Mary Poppins* tells the tale of the eponymous nanny who comes to stay with and, ultimately, saves the Banks family. The banker, George Banks, and his somewhat distracted, suffragette wife, Winifred, are too busy for their rambunctious children, Jane and Michael, whose bad behavior has driven away a string of nannies. After the children get lost chasing a kite, the fourth time they have disappeared in a week, the family loses yet another nanny, and they advertise for a new one. A slew of applicants line up outside the family house, but they are blown away by a mysterious wind (the gale of creative destruction?), and Mary Poppins floats down from the sky, holding her umbrella.

Just after Mary Poppins takes the job, she amazes the Jane and Michael by pulling a series of large objects from her too-small, seemingly empty carpetbag. The kids get excited. What’s going to come next? But Poppins somewhat disappoints them by saying they are going to play a game—cleaning their room. While using magic—a kind of telekinesis—to pick up, she sings the famous song, “A Spoonful of Sugar”: “In every job that must be done, there is an element of fun. You find the fun and snap!, the job’s a game.” The song itself is meant as a “spoonful of sugar,” which “helps the medicine go down.” It’s an ode to the pleasures of ordinary labor and upkeep. But on its own, the song is naïve and Pollyannish. First off, there isn’t an element of fun in every job that must be done. Moreover, it’s not clear what the tune’s message is. As the historian Dan Holbrook said to me, Poppins’ powers can be seen as a kind of magical Taylorism. Perhaps Poppins helps the family by instituting domestic scientific management. Only by examining the film as a whole can we be sure that maintenance, rather than an ethic of control, is at the center of its vision.

After the room cleaning, Poppins leads the children on a series of adventures, including jumping through a sidewalk drawing into a magical land, where she teaches them the word
“supercalifragilisticexpialidocious,” and taking care of a man whose laughter and jokes have caused him to rise to the ceiling, where he is stuck. Father George believes that the children are having all too much fun, however. Poppins suggests that what the children need is to understand their father’s hard work, and she tricks George into taking the children to the bank the next day. Yet, while she is putting the children to bed that night, she warns them, somewhat obliquely, that perhaps their father cannot see beyond his own nose, that his obsession with banking blinds him to reality, including lives of the poor. She sings a song to the children about a homeless woman who sits on the steps of a church near their father’s work, asking for alms, which she uses to feed pigeons. The woman’s refrain is “Feed the birds, tuppence a bag.” Poppins explains that her words mean, “Come feed the birds, show them you care, the young ones are hungry, their nests are so bare, all it takes is tuppence from you.” The birds clearly stand in for the poor generally, and Poppins insists that the saints and apostles of the cathedral smile down on the woman.

The next day, the children go to work with their father, and Poppins was right: he has never taken notice of the bird woman. Their father and his associates sing a song to the children about the benefits of investing money, including all of the profits that can come from investing in the British colonies. They tell Michael that he should open an account, beginning with the two-pence he has in his pocket. But Michael wants to give it to the bird woman. An argument ensues, and Michael ends up yelling, “Give me my money!” The customers milling about here this and think there is a shortage of cash, causing a run on the bank. Chaos breaks out, and the children flee.

In an alleyway, the children bump into Mary Poppins’ friend, Bert, who is a jack-of-all-trades. That day, Bert is working as a chimney sweep, a Maintainers’ role if there ever was one. After all, un-swept chimneys caught fire and, thus, required constant upkeep. Having fled their father’s banking world, they now enter Bert’s chimney sweep world, soon joined by Poppins. “You might think a sweep’s on the bottommost rung,” Bert explains to them, but he goes on, “Chim chiminy, chim chiminy, chim chim cheree! A sweep is as lucky as lucky can be.” As opposed to their father’s myopia, Bert and Mary take the children to the pinnacle of a rooftop where all of London can be seen. It is only through the eyes of a maintainer that the glory of the whole can be made out. This adventure comes to a crescendo when Bert joins other chimney sweeps for a long dance. “Never a reason, never a rhyme, step in time, step in time.” The sweeps join together in act of solidarity, togetherness, and pure joy. The dance for dance’s sake stands as the culmination of Poppins’ message.

Now all of this is silly, childish, and totally ridiculous. As Arwen Mohun details in her book, *Risk*, chimney sweeping was hard, dirty, terrible work, and chimney sweeps were likely in tough competition with each other, not prone to joining one another in dance. Moreover, the film ends on a too easy note. The father, George, is converted to Poppins’ view. He remains a banker, but he has become a kinder, humanized capitalist who has set his priorities straight. He flies a kite with his children, and umbrella-in-hand, Poppins floats of into the skies. The ending subverts nothing. It is completely safe. But what else would you expect from a Disney movie? Yet, if the reading I have spelled out here is anything close to right, *Mary Poppins* asserts that the most important thing in life is an ethics of care, that we can only see the world with clear eyes if we choose to value one another, and that an essential way of doing this is by undertaking underappreciated and *undervalued* mundane, ordinary labor.
What I mean to ask, again, in the baldest, simplest way possible is, what stories should we tell? What values are embedded in the tales, for instance, that we recount to our children? I know so many young people who are literally all fucked up and tied in knots because their parents and elders have told them that they must get STEM degrees, that they must be innovators, that they must be “game changers,” “thought leaders,” “entrepreneurs,” and a host of other hollow buzzwords attached to contemporary self-identity, which they use to litter their Twitter profiles. These are the only stories these young people know how to tell; they tell them of themselves, or try to. But what are our true values? What are we trying to do? How can our yarns, include our histories of technology, embody care? How can we provide alternative narratives to act as a kind of counter-weight to innovations’ hegemony? All of these questions remind us of something quite basic: that we are technology’s storytellers, and that we must take responsibility for that act.