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Willa Kerkhoff

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PLAUGE!

Tracking Cholera



By Willa Kerkhoff

Illustration by Rachel Vales

PLAGUE! We think of “ring around the rosy” and men in vulture masks driving carts piled with corpses. Maybe we think about some Firefly style dystopian future when a biologically improbable health crisis has left humanity a race of wise cracking space cowboys and outer belt cannibals. Or maybe we think of that weird *Contagion* movie starring Gwyneth Paltrow. Unfortunately, for history teachers and pop culture nerds alike, pandemic is an issue much more real than a powerpoint presentation or fifty minute TV episode. Sonia Shah, OC ‘90, came to Oberlin on October 27 to deliver a convocation speech telling us why these diseases have tormented the human race for the entirety of our collective memory. And, unfortunately for us, predicting the next pandemic is not a question of if it will happen, but a question of how it will happen and which pathogen will be responsible.

The “how” component of that question has become something of a professional passion for Sonia Shah. She is currently promoting her new book called *The Fever: How Malaria has Ruled Humankind for 500,000 Years*. While back here in Oberlin at Finney Chapel, Ms. Shah delivered an engaging and thoroughly researched talk that proved that each word of critical praise and each award she has earned was quite deserved. After graduating from Oberlin College with a degree in philosophy, Ms. Shah began writing exposes on some of world’s biggest issues. She has tackled

enormous topics such as human drug trials in underdeveloped countries and the history and growth of oil as the fuel for our entire world. Her written works have routinely been described using the phrase “a tour de force”. The TED talks she has given have been viewed millions of times, and her appearances on the radio have brought important awareness to the public. Her focus is global and her views are cross disciplinary, combining elements of social, political, economic, and scientific analysis to give a complete picture of the issues that shape our future. Despite all these lofty achievements, when Ms. Shah took the stage on October 27th, she opened with the personable aside that she felt more nervous on the stage in Finney than she ever felt on the TED stage.

So how do you give a complete and well-reasoned talk on pandemic, on one of the most complex and hot topics of our time? Well, if you’re Sonia Shah, you pick one pathogen and then you start at the beginning. And for cholera, the germ of interest for this particular speech, that beginning was a peaceful, ecologically balanced existence in the brackish waters of the Sundarban in the Bay of Bengal. But once the Imperialist White People, in this case the British, begin constructing rice farms in those waters, cholera began adapting to a new environment: the human body. In the human body, cholera has a much more devastating effect than in its natural environment. People infected with cholera can completely desiccate in just a couple of hours as the bacteria reverses the

functioning of their gut and causes the expulsion of all forms of moisture and nutrients. Cholera began to spread across the Asian continent, eventually reaching Europe. To achieve true pandemic status, cholera would have to cross the ocean to the New World, and that wasn't easy in a time when the trip took over two weeks. But cross the ocean cholera did, and new shipping technologies made that trip even easier.

By the time of Tammany Hall and the Robber Barons, cholera had already caused five fully global pandemics, characterized by the crossing of oceans and the infection of multiple populations. Cholera had infiltrated every cubic centimeter of Manhattan's murky ground water through the expulsion of infected waste, causing a new pandemic based from the city. One particularly nasty story comes from the Manhattan slum Five Points, which was built in the middle of the island on top of a former pond, the only source of fresh water on the island. The pond had been filled with trash and then the slum had been built on top, leading to a source of fresh water easily contaminated by the cesspools and wells from the surface. At this time, a little-known company was tasked with providing water to the island. However, instead of drilling their main well upstream, where cholera waste had not reached, they chose to drill their well directly in the middle of Five Points, saving the money that allowed them to become what they are today. The company specifically responsible for deliberately funneling cholera-rich water directly into the throats of one third of Manhattan's poorest now goes by a different name: J.P. Morgan Chase. Corporate scum right from the start.

What, then, are our current concerns? Well, to start with, our global economy now allows more contact across oceans than at any time in human history. Thousands of flights crisscross our world, and we pack more densely into our cities even as we stretch our chainsaws further into the untouched regions of this world. It is not surprising, therefore, that the last sixty years has seen the appearance or return of over three hundred deadly pathogens with the capacity for pandemic-scale devastation. The most headline-worthy in the recent years have been Ebola and Avian flu, both of which have sparked media frenzies and local violence in affected areas. It takes a lot to get from a new pathogen to a pandemic, though. It has to be able to infect humans, for one. It needs to find a place to amplify, a reservoir for growing in number. And even after all this, "we don't take



these things lying down", to quote Ms. Shah. We put political safeguards and medical solutions in place. We mobilize and target the source of our fear, misguided or not. The only time when pandemic can fully take hold is when all of these fail. Maybe we can take that as a source of comfort, but history tells us we should not feel complacent. So does Sonia Shah. In her work, there is an opportunity to learn about the world around us and change the habits of our history into the hope for our future. ●

“In the nineteenth century, cholera struck the most modern, prosperous cities in the world, killing rich and poor alike, from Paris and London to New York City and New Orleans. In 1836, it felled King Charles X in Italy; in 1849, President James Polk in New Orleans; in 1893, the composer Pyotr Ilyich Tchaikovsky in St. Petersburg.”

-Sonia Shah, *Pandemic: Tracking Contagions, from Cholera to Ebola and Beyond*