

Minerva is a complex organization with a singular animating mission: to nurture critical wisdom for the sake of the world. Every aspect of our institutional design is meant to reinforce that mission. That is true on many levels when it comes to our global rotation. To understand the design of the global rotation we need to first define what critical wisdom is and then understand how it is best nurtured.

Wisdom is best defined as the appropriate application of practical knowledge in novel contexts. Knowing what to do when faced with a familiar situation in a known context is just memory, sometimes requiring a degree of analysis. The kind of wisdom that most people are familiar with is intuitive wisdom — one gathered accidentally over years of making similar mistakes that helps build mental reflexes on how to identify common aspects of those situations and apply them when faced with new contexts. Critical wisdom, on the other hand, is conscious. It brings to bear systematic thinking deliberately to situational analysis. With practice, critical wisdom becomes intuitive but unlike commonly acquired wisdom, critical wisdom can be explained because it originated as a conscious taxonomy.

One can be forgiven for thinking that attaining mastery of HCs is the point of a Minerva education. Though depth of mastery (eg attaining 4's and those ever elusive 5's) is necessary it is by no means sufficient. The heart of a Minerva education, the key to critical wisdom, is the ability for original transfer—learning when is the appropriate time to apply which HCs and how to apply them especially in contexts not encountered before. Transfer is the holy grail of education, but it is also a bit of a black hole as far as research is concerned.

Unlike much of the rest of Minerva's pedagogical and curricular design (Fully Active Learning, Systematic Formative Feedback, spaced deliberate practice, scaffolding) that has decades of repeatable solid research behind it, the research about transfer shows little more than that transfer is not mastered in any educational system that we know of. The only evidence of how to achieve transfer occurs "in vivo"—by realizing that the wise become wise by a large variety of experiences. It therefore stood to reason that by recontextualizing HCs deliberately, initially explicitly, then implicitly, and then by providing a wealth of opportunities to recontextualize in new environments, that transferable skills can be taught effectively. A substantial part of that recontextualization occurs during the four years of study at Minerva as students apply HCs not only across cornerstones but throughout the curriculum—the more diverse the course selection the better. But a very different kind and critical recontextualization occurs through the global rotation.

Fields of study have formalized approaches to interrogation of knowledge. Processes that physicists use to make discoveries in physics are well documented as processes that historians undertake. Even when there are rifts in certain fields (e.g., continental vs. analytic philosophy), they develop their own taxonomies. One of our great innovations at Minerva is that the Habits and Concepts that we teach can be applied relatively clearly in all of these circumstances with sufficient practice in transfer. Cultures, however, do not have such a well-defined playbook—indeed it is oftentimes difficult to understand what cultural context people find

themselves in. As you interact with people in San Francisco, what cultural context are you operating in? Are there universal American values at play (e.g. freedom of expression) or does it matter who you are interacting with in San Francisco (e.g., libertarian tech employees, second-generation Russian-Americans from the Richmond District, a group of friends from the LGBTQ community that just moved here from the American Midwest)? Cultural context is crucial in understanding how to apply most HCs, not only the HCs related to interpersonal interactions.

Take, for example, #rightproblem. In practically any of the contexts commonly found in San Francisco, getting to an understanding of #rightproblem is, assuming you know how, a straightforward approach. In general, American culture assumes that direct conversations can be had about problems and, especially in San Francisco, a solution orientation is pervasive. Now assume that same approach in Seoul and you may be in for a rude awakening depending on who you are collaborating with. The likelihood of causing offense by such a direct approach is substantially higher not only in pointing out a problem but in the presumption of your ability to solve it. In Hyderabad, the approach will likely be vastly different once again. In some cultural contexts, even the acknowledgement of the existence of a problem runs counter to norms. Even though these changes stem from interpersonal interactions, the ability to deploy non-interaction HCs rely on those modalities.

Sometimes we get feedback from students that they are frustrated with the cornerstone curriculum because we don't give enough time to go in depth. If our goal was to teach students how to allocate water or to think through if computers can think then they would be correct. But that is not our goal. Our goal is to help students attain a depth of mastery of the HCs while ensuring a breadth of applications of them. Therefore, "shallow" explorations of topics that are sufficient to apply HCs are all that are necessary for us and going deep in content actually is counterproductive for our educational goals. Similarly, we often hear students complaining about the length of time we stay in a given city. Often, just as students get their bearings in a city they realize there are only three or four weeks left until they have to move to the next location. That is exactly by design.

The reality is that the incremental value of eight months being spent in Hyderabad versus four is minimal in order to become an expert in the various cultures that have come together in that location. I remember attending a conference in China where a renowned American China scholar nearing his seventieth birthday deeply offended pretty much the entire room and his hosts by forgetting that he was no longer in Boston but in Beijing and not just mentioning three of the "4 T's" but being highly derisive of the Chinese government in the process. He has spent nearly fifty years studying China and yet I needed to apologize to the conference organizers on his behalf (only because his presentation was so embarrassing that as a fellow American I felt a duty to do so). As demonstrated by this case, expertise is a long and often times elusive road and a matter of months will not provide substantial gains in that process—especially compared to the mindset shifts that better transfer can provide in that same time period. What we best hope for is that students have as many attempts as possible to see how when cultural contexts change, assumptions that they may have held as given will likely change as well. The largest

number of such attempts that we could fit into our program is seven—and for those truly enterprising individuals, ten if they independently spend each summer in yet a different context.

To choose the rotation itself, we had to take into account a number of considerations:

- Generic City Requirements (namely)
  - Stable power & Internet infrastructure
  - Safety (low violent crime/murder rates)
  - A diverse city with a critical mass of cultural, political, business, and social activities/organizations
  - The right kind of housing in a vibrant and easily navigable part of the city
  - Affordability is ideal (especially given the cost of our home base)
  - Globally prominent
- Country-Level Political Situation
  - Free and open access to the internet
  - Academic freedom
  - A stable judicial system
  - Welcoming to a large number of citizens of other countries (ideally as close to universal as possible)
- US F1/OPT/CPT Issuing Authority
  - Starting and ending in the United States
  - A solid (full year) foundation in the United States
- Variety/Global Coverage
  - Once the above are satisfied how do we provide as many different cultural, social and religious contexts as we can
- Thematic Arc
  - Finally, what educational progression can the cities mirror for students

I hope that most of the above are self explanatory. The thematic arc is worth delving into, however, as that may not be apparent. I will do that as I walk you through the choices we made and the alternatives we considered.

San Francisco is our home base but there were other contenders. Cities that were easy to eliminate included Los Angeles (too diffuse), and Chicago (unpleasant weather, somewhat dangerous) and many other less prominent cities. Washington DC had some appeal but was not as dynamic as San Francisco and New York City would have been prohibitively expensive (Housing costs would have been roughly 75% higher than in San Francisco). San Francisco also provides students a grounding in an ideal optimism—as Kayla Cohen (M19) once said, “in San Francisco the question isn’t if the major institutions of the world will reform but how.” That positive assumption of change, the start-up mentality, is one that we want to start your journey in.

After starting up, ideally you experience growth and all the hurdles associated with it. Seoul and Hyderabad offer two parallel stories of growth in the face of existential rifts. Seoul grew its population by more than 10X in forty years topping 10M inhabitants by 1990. Though population stagnated since, South Korea's economy continued to expand at very healthy rates ever since, rising from the poorest country in the world on a per capita basis after World War II to be one of the richest today. Hyderabad, too, grew from a population of 1M inhabitants in 1950 to 10M today—in contrast with Seoul that growth has been constant and is predicted to continue. Though India was a richer country on a per capita GDP basis than South Korea was in the 1940's it grew much more slowly over the years, though today, India is catching up. Seoul is situated a short distance from border that divides the Korean peninsula whereas Hyderabad was the southernmost state in India with a Muslim majority that decided to stay in India rather than becoming a part of Pakistan. What are all the other parallels and differences of these two cities? Why did those factors manifest themselves? What can one learn from the other?

Berlin and Buenos Aires represent two starkly different models of maturity as capitals of their respective countries. If you were to take a time machine back to the beginning of the 20<sup>th</sup> Century and had selective knowledge of the future, you would be hard pressed to bet against Buenos Aires's prosperity compared to Berlin's. At the turn of the 20th century, Argentina was already one of the 10 largest economies in the world, was the beneficiary of an enormous immigration boom, had natural resources among the richest in the world per capita, and Buenos Aires itself was not attacked by any foreign power in the ensuing century. Germany on the other hand was not one of the 10 largest economies in the world at the turn of the century, was ground zero for two world wars, suffered from a historical episode of hyperinflation, and then saw a forty-year period when the world's two largest nuclear powers divided the city in half. Yet today, Berlin is arguably the most important cultural, political, social, and entrepreneurial city in Europe where Buenos Aires continues to struggle to live up to its enormous potential. How did this occur? What futures do these cities hold? Will their potential be realized or will external or internal events intervene once again?

Lastly, you have London and Taipei, cities that represent two stories of fallen empires that faced collapse and rebirth and are now struggling with their place in that context. The British empire was the largest in world history whereas the long string of Chinese dynasties arguably represent the longest period of dynastic rule of any place on earth. London's fortunes declined with the British Empire's collapse in the 20<sup>th</sup> century, only to recover and thrive over the past thirty years—though now they are on the brink of Brexit and a potentially devastating self-inflicted wound. Taipei was the refuge of the Kuomintang—in many ways the successor of dynastic China—after the Communist revolution. Taipei itself is dealing with implications of its decisions to either sever or bridge relations with its continental neighbor. Can you get a better understanding of how London relates to Europe and Taipei relates to China? What kinds of insights does this provide for the coming decades? As an alternative, we hope to continue to offer a year stay in Hong Kong through our partner at the Hong Kong University of Science & Technology—specifically as a place where these two empires had the greatest joint overlap.

How do the lessons of a fall and rebirth resonate with personal journeys as well as future endeavors?

Some of you may remember that there were other cities in previous iterations of the global rotation. At one point we were planning on going to Istanbul before that country's suspension of academic freedom, upending the independent judiciary, and other regressive policies. That also precipitated the move from Bangalore to Hyderabad which provided some exposure to both the Hindu and Muslim worlds. We also evaluated Johannesburg, Cape Town and Durbin—eliminated because of high violent crime rates—and did a site visit to Accra as well as Dakar—eliminated due to unstable infrastructure. Kigali continues to increase in global prominence and may be ready in a few years to be considered as part of the rotation. Conversely, India's visa issues for both Pakistani and Kosovar students is troubling and unless we can resolve those issues we may have to reconsider South Asia, as difficult as that would be to miss out on.

Minerva is designed for a very select group of individuals—ones trained to make decisions of consequence, decisions that will impact the lives of others more than they will impact their own. The imperative to optimize your capacity for critical wisdom is paramount and for that transfer is key. Enabling transfer is not easy, and it certainly isn't comfortable. Over time, we have increased the emphasis in our messaging around how difficult Minerva is—both academically and experientially, specifically to deter individuals from joining Minerva if it will be too strenuous for them. We have received an enormous amount of feedback about the global rotation from students as well as staff but there is no majority (or even plurality) consensus on what would be a better model. Though there are myriad more reasons behind every city, the sequencing of the cities, and even the locations within them, I hope this overview gives you sufficient context as to why we chose the Minerva global rotation as it stands today and why we plan to continue the seven city rotation in the future.