## The Fox 17

Chapter 17: The Devil's Advocate - (3)

Joseph couldn't contain his excitement as he greeted them one by one. But when he faced Laplace, he couldn't help but clench his fist discreetly and mentally berate himself just like modern-day science students facing difficult questions on an exam paper. They'd gaze out the window in frustration and make a wish upon a passing shooting star.

Years ago, Joseph never had the chance to berate Laplace, but now that this troublesome fellow stood before him, Joseph couldn't resist extending a warm welcome. "Mr. Laplace," he said, "I've read some of your works, and they have provided me with a lot of inspiration. It's such a stroke of luck to meet you!"

While saying this, Joseph extended both his hands for a handshake, just like a president greeting another world leader, giving a firm grip before pulling Laplace's hand towards him abruptly. Laplace stumbled and nearly tripped.

"Laplace, it's an honor to meet you. I have so many questions I'd like to ask you, such as..." Joseph continued speaking with a broad smile, all the while biting his lower lip and using all his strength to squeeze Laplace's hand.

"Ah... Mr. Bonaparte... Mr. Bonaparte... You really are... Why don't we sit down first and talk slowly," Laplace managed to say as he struggled to pull his hand back.

"Oh, Mr. Bonaparte, let's sit down and have a chat. You're too enthusiastic; you might have hurt poor Pierre's hand," Lavasse quipped, observing Joseph's exuberance. However, he stopped Joseph from further squeezing Laplace's hand.

"Huh?" Joseph feigned surprise and quickly released Laplace's hand. He began apologizing profusely, "Mr. Laplace, I'm so sorry, I got too carried away. I'm just so excited to meet you. Are you alright? Did I hurt you?"

Laplace shook his right hand to ease the discomfort and said, "Mr. Bonaparte, how do you have such strength?"

"Pain and hatred grant me strength," Joseph thought, but he said, "I often help Father Jacques with carpentry work, so my hands might be a bit strong."

"Well, it's more than just a bit strong," Laplace commented, "But let's not discuss this now. You see, we've read your paper, and both Mr. Fourier and Mr. Condorcet appreciate it a lot. However, your paper attempts to challenge a widely supported theory with many experimental observations. This is a significant matter, and everyone feels it's better to be cautious. Mr. Fourier, Mr. Condorcet, and some other gentlemen hope to discuss some aspects of your paper with you..."

"To be honest," Condorcet interjected with a gentle smile, "Joseph, your paper is of high quality, unlike many we've seen in recent years. Your mathematical tools alone might win you the competition. But your conclusions are disputed by some, at least Coulomb and Monge aren't very fond of your conclusion. They are on their way here and may have a lot of questions for you. Be prepared."

"Mr. Condorcet, you can just call me Joseph," he replied. "I've considered this issue before writing the paper. Frankly, I was worried that I might be wrong when I reached that conclusion. I wrote this paper to discuss the matter with others."

"Ha-ha, young people these days are really something," Laplace commented. "Joseph, are you prepared? Well, don't be nervous; actually..."

Before Laplace could finish his sentence, the door to the small living room swung open.

Joseph saw several more people entering, and he quickly stood up. Everyone else followed suit. Leading the group was Louis-Philippe, Duke of Orleans, whom Joseph had met once in a caf. He was followed by two men in military attire. One was older, in his fifties, while the other was slightly shorter, with a tanned complexion and a pair of intense eyes.

"Duke, you're here too?" Condorcet said.

"Oh, Mr. Condorcet, I was passing by and intended to visit Monge. He mentioned something about this place, and it turned out that this 'Bonaparte' causing a stir is someone I know, a young fellow named Joseph, just like me," Louis-Philippe said as he walked over, shook Joseph's hand, and added, "Joseph, it's really you."

Laplace stared at their hands, but before he could react...

"Ah, Joseph, the last time I met you, I thought France would have gained another playwright, not a mathematician. But it seems that not everyone agrees with your ideas, especially Mr. Coulomb and Mr. Monge. They are on their way here, and they probably have many questions for you. You should be prepared," Louis-Philippe commented, taking a seat.

Monge was straightforward and immediately asked, "Mr. Bonaparte, in your paper, you posit that light is a transverse wave. Your mathematical derivations are impressive, but have you considered the characteristics that such a medium, or the 'ether,' would need to have if light were indeed a wave?"

Joseph had prepared for this question, as the controversy over the existence of the "luminiferous ether" was one of the main arguments used by supporters of the particle theory against the wave theory in future history.

"When it comes to the ether's properties and the speed of light, I've thought about it," Joseph began. "I proposed an experiment to measure the speed of light more precisely. Considering the Earth's constant motion, the ether should be in motion relative to it. Therefore, the speed of light might be different when measured from different directions..."

"More precise measurement of the speed of light?" Condorcet became interested.

"We could use a rotating octagonal mirror," Joseph explained. He was referring to the Michelson-Morley experiment, a relatively simple method with good accuracy.

While Joseph outlined his experimental idea, he picked up a piece of paper and a pen, sketching the design of the necessary equipment. Joseph was accustomed to creating three-view drawings, a common practice in the future, which made his diagrams more intuitive and easier to understand. But as soon as Monge saw his drawings, his eyes widened.

"Mr. Bonaparte, where did you learn this drawing technique?" Monge asked.

"What?" Joseph was surprised, thinking this technique was common. But upon seeing Monge's stern expression, he realized that perhaps this drawing method didn't exist in this era.

"I just drew it by myself, thinking it's more intuitive and easier to understand. Is there a problem with this?" Joseph asked.

Monge thought for a moment and replied, "Mr. Bonaparte, you probably... no, you definitely don't know that I've been using a similar drawing technique for almost twenty years. But because it has significant military implications, and I believe that, given your intelligence, you can understand this, it has been kept strictly confidential. It's only taught at military academies, and every officer who learns it must swear not to disclose the technique. I once expressed that perhaps it wouldn't take long before others independently discover similar techniques, much like how Newton and Leibniz separately developed calculus. However,