Reflection on Third Study Trip to Wangdong Bridge NG Tsun Yu BEng (CivE) III

This was the third time I joined the taskforce to Wangdong and it was rewarding as the previous two trips.

The third trip to Wangdong was to study the local way to construct simple suspension bridge, which will be the bridge form of the to-be-constructed "new Wangdong bridge". The team paid visits to the site of the bridge and 4 other suspension bridges and these visits are fruitful – we all learnt a lot from the local practices, which worked perfectly fine, but without any clumsy annoying engineering calculations.

"Our taskforce probably has more people than the workers and they would have made the bridge during the time we were studying on its feasibility....." jokes one of our teachers; and it was not even wrong: what they need are 3 workers and 2 months to make the bridge, which the Mindge taskforce had involved more than 10 members and discussed the matter for the past half a year. Then I asked what is the worth of an engineer: If a craftsman could rely on his intuition and produce something equally good, then why would there be engineers, who would probably not participate in the constructions.

To answer this question, we must clarify this situation described by our teachers that we seemed to have a lot of "useless" people around. The members we involved are mostly students and they had absolutely no practical experience in a construction site, let alone the local practice in a remote village in Guangxi - And this is the reason for our indecisiveness and incapability. We were too reliant on quantifying every small details of the bridge but often we would be stuck in the process and we had no way to acquire these numbers once we were out of the site. But in fact, with real site experience, these worries were completely useless as the past experience says a deck of 5cm thick would work, then it would definitely work in the next construction too. Not that we spent one morning to observe from that blurry photos taken in the site and try to match its strength from the internet and spend another afternoon to calculate the thickness required to take that force.

Looking back to our university study, we seldom got the chance to see the real engineering practices. In this case, we are probably no better than a craftsman when it comes to real construction. Therefore, after this trip, I had positioned practical experience in a even higher priority in my "to learn list" and would try to look any chances to gain myself useful knowledges.