Potential impacts of AI to the architecture...

AI will have a huge impact on professional service industries like architecture. AI has the potential to exponentially broaden the scope of our ability to provide services both by eliminating duplication through automation and expanding problem solving through leveraging artificial intelligence processes.

Today, we are at the beginning of this journey and I do not believe we are leveraging true AI yet in the industry. The field itself is in its infancy and the design and construction community is not known for being at the forefront of new technology revolutions.

Definition of “architect” and AI...

The definition of what an architect is has been changing over time. The traditional definition of architects being “master builders” has not been true for our industry for a while now. I believe that architects now specialize in being “master collaborators” as well as trusted advisors to our clients. In that light, I don’t see AI replacing the role of the architect, only enhancing it.

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How much time per day do you spend doing non-technical / repetitive tasks (creating forms, documents, file admin, timesheets etc.)?

Source: Conor Gantly, Project Dissertation for the Degree of MSc in Construction Management at City University of London

Do you think AI will disrupt the construction industry?

Source: Conor Gantly, Project Dissertation for the Degree of MSc in Construction Management at City University of London
Architects are typically both the big picture people (able to see how many unrelated things are connected) as well as the highly detailed technical experts. If AI can drive some of the minutiae of technical detail in many fields, then architects could drive the big picture thinking those fields even if they are not technical experts in the same.

Changes in the production of architecture...
This change is hard to predict currently. We are at a time of great experimentation and AI technology itself is still maturing in many ways. As I mentioned, in the short term I see automation and the gathering and availability of big data as driving changes in design and construction right now. These technologies can be considered as precursors to artificial intelligence in that AI will need data to anticipate solutions and use automation to deliver these solutions to us.

Expectations & foresights...
I foresee the design and construction sectors ability to serve a much larger population across the globe as the biggest change to our industry. New construction methods like 3D printing will allow us to build more rapidly and the use of AI will allow us to rapidly customize our design intent and address local needs of our clients in a more nuanced and thoughtful way.

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AI & sustainability...
The impact of AI on sustainability can be tremendous if we direct our resources appropriately.

We already know how to design high performance, energy-efficient buildings but are unable to execute this on a large scale due to cost and labor implications. As AI and new construction technologies mature, we will be able to build these high-performance buildings at a lower cost making them more widespread.

We can also drive the use of AI in the initial planning or restoration design process helping us optimize the use of existing building stock helping us build a more sustainable world.

Essentially, AI will allow us to multiple our expertise and talents in fundamental ways, it is up to us as architects to decide what to magnify.

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When do you think we will see AI implemented meaningfully in the construction industry?

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<th>Timeframe</th>
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<td>Now</td>
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