



Modelling Arabic Urban Cores using CityEngine

workflows & strategies

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 - Middle East Master Planning
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Introduction

- What do I mean by Arabic Urban Cores?
- Context: Iraq
- What am I trying to achieve?
- What is important?
- You cannot model everything.
- Choosing the correct tool.
- The strategy and workflow
- Rule Extracts
- A quick CityEngine demo
- Lessons Learned
- Thank you

What do I mean by Arabic Urban Cores?

- Arabic Speaking Countries?
- Arabian Gulf?
- In this presentation my experience working in the Arabian Gulf area and specifically on Iraqi City Master Planning Projects will be the context.
- However, the workflows and strategies talked about here are applicable to other contexts

Cairo, Egypt



Bastaki, Dubai, UAE



Jibla, Yemen



Context : Iraq

- My Experience working on our Iraqi Projects

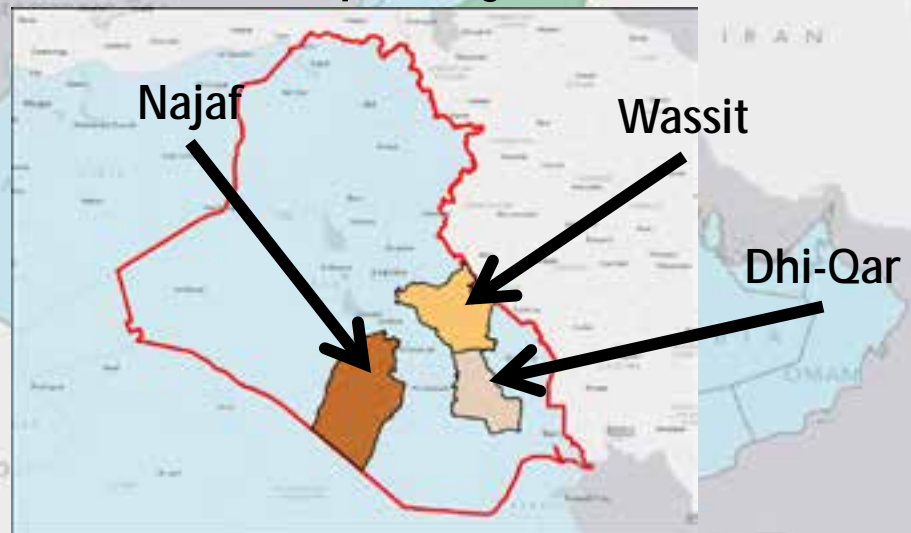
- City Master Plans

- Nasiriyah, Dhi-Qar
 - Kut, Wassit
 - Hayy , Wassit
 - Nu'maniyah , Wassit

- Urban Renewal

- Kufa, Najaf

- All have had varying levels of detail even the master plans had 'detailed studies'



Kufa, Iraq





What am I trying to achieve?

- Visualisation
- Analysis
- Static imagery
- 3D interactive model





What is important?

- After deciding what the model is for and what medium we are using. You must figure out what elements of any 3D model will be important.
- These will be your *geo-specific* elements of a model.



You cannot model everything.

- Buildings – yes
- Roads – Yes
- Pavements/Sidewalks – Yes
- Rooftop accessories - Maybe
- Cars – Maybe
- People – Maybe
- Signs – Maybe
- Cables? - NO

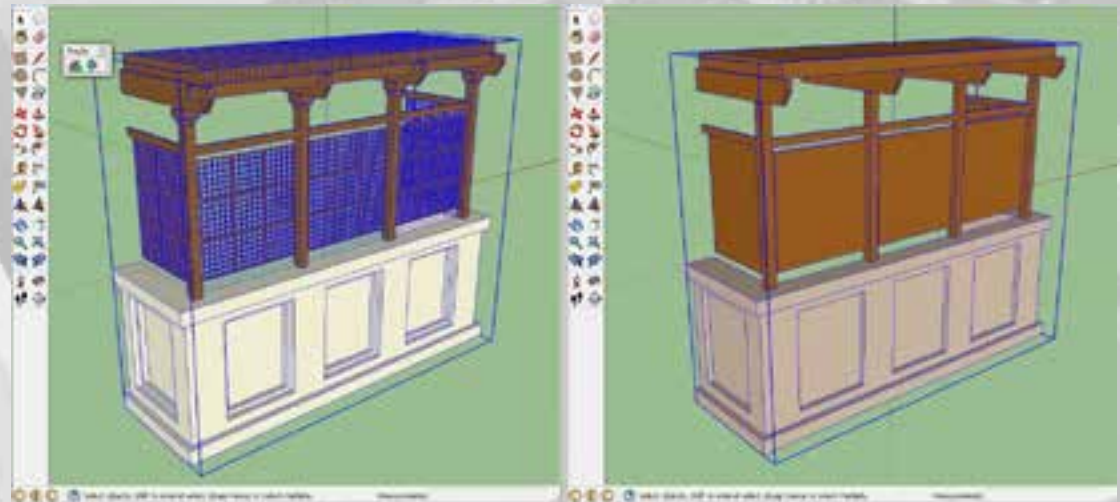
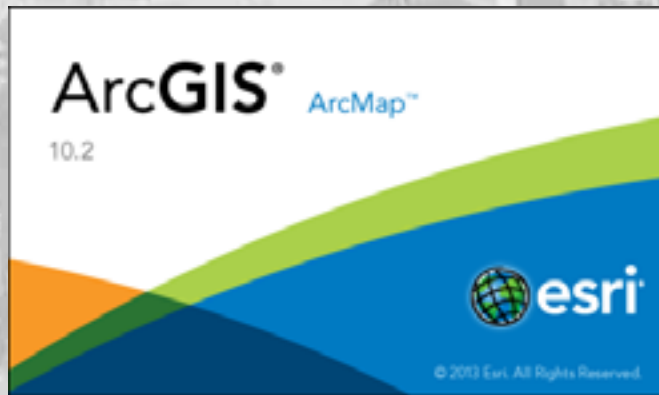
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Choosing the Correct Tool

Esri CityEngine

- CityEngine for the big urban block modelling
- SketchUp for modelling the detail
- ArcGIS to organise and create the 2D data



AUTOCAD



The Strategy and Workflow

- Decide on purpose of model
- Choose create geo-specific details to model
- Collect data together 2D and 3D assets
- Have real world photographs in front of you when coding.



Rule Extracts

- 'Toggle' is your friend
- Default to detail being off especially on large urban areas!
- Rules can be used to reflect underlying landuse data not just a realistic looking model.



A quick CityEngine demo





Lessons Learned

- Textures are not as important as you think they are.
- Choose your *details* carefully.
- Use your time wisely
 - Don't spend 3 days modelling a watertank!



Thank You

about.me/elliiohartley

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