Modelling Arabic Urban Cores using CityEngine workflows & strategies

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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 mode 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
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
Choosing the Correct Tool

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

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