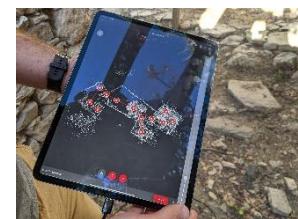
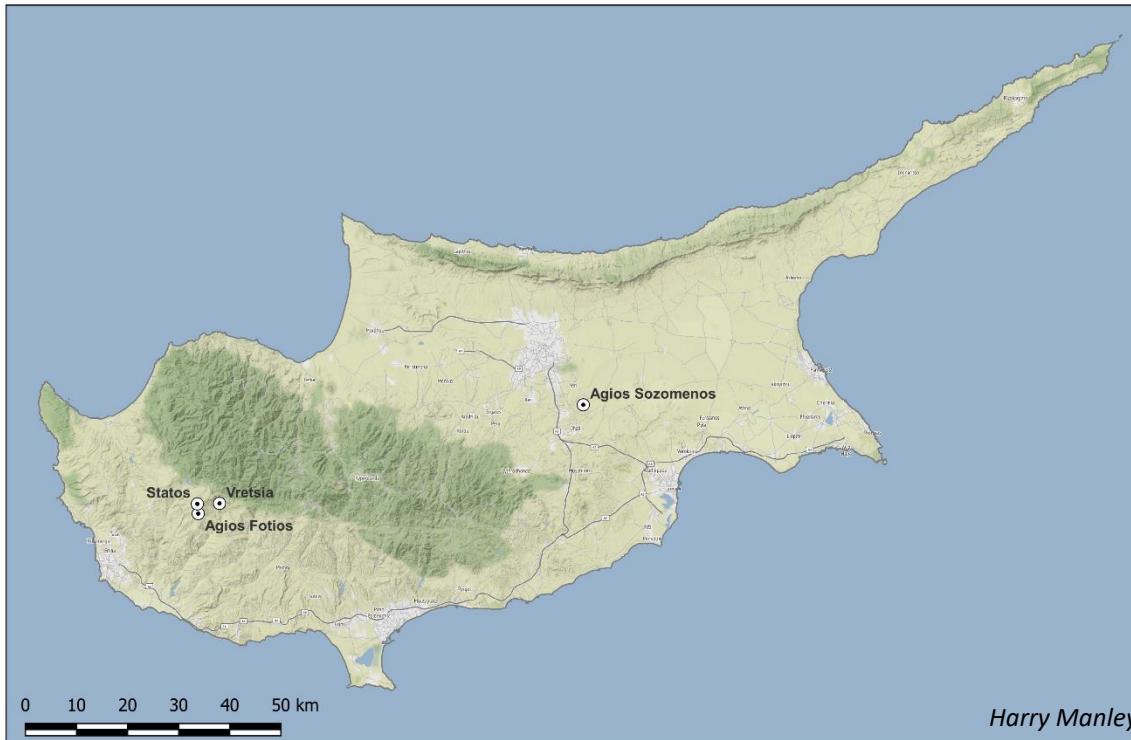


CAVERN Project

Cypriot Abandoned Village Ethnoarchaeological Research for the Neolithic



With thanks to Harry Manley, Sigrid Osbourne and Eleftherios Hadjisterkotis

Cypriot Agricultural Villages



Artefacts from Modern Agricultural Villages



Dates

Established Mid 1800's- early 1900

Abandoned ~1960-1970's

Abandoned due to conflict, natural disaster, relocation to the north

Architecture



Neolithic Comparisons

Mud brick wall

Modern



Agios Sozomenos, Cyprus

Neolithic Çatalhöyük, Turkey



Neolithic Jani, Iran



Neolithic Comparisons

Wood, Reed and mud roof materials

Modern

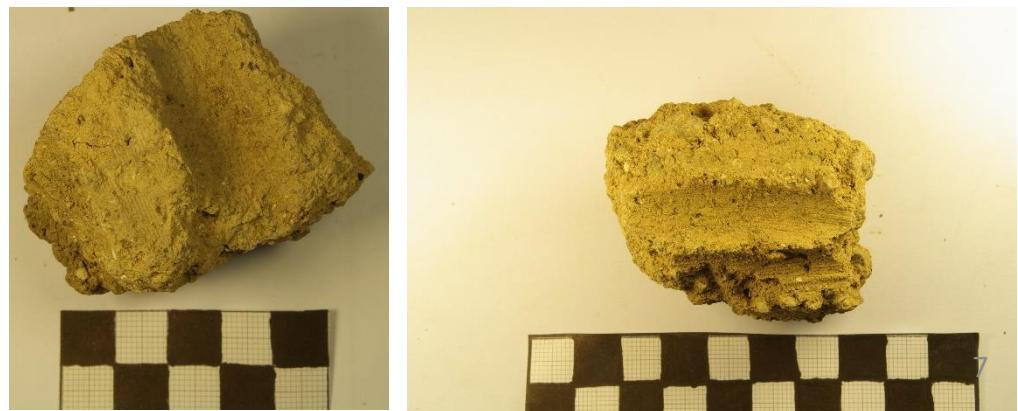


Statos, Cyprus

Collapsed roof beams Neolithic WF16, Jordan



Reed impresses roof mud Neolithic WF16, Jordan



Neolithic Comparisons

Wall niches

Modern



Statos, Cyprus

Niches, Neolithic WF16, Jordan



Neolithic Comparisons

Storage Features

Modern



Agios Fotios, Cyprus

Neolithic storage, Çatalhöyük,
Turkey



Neolithic Comparisons

Wall and Floor Plasters

Modern



Agios Sozomenos, Cyprus



Neolithic Çatalhöyük, Turkey



Neolithic WF16, Jordan



Neolithic Ain Ghazal, Jordan



Neolithic Comparisons

Stone mortared walls

Modern



Agios Sozomenos, Cyprus

Neolithic Beidha, Jordan



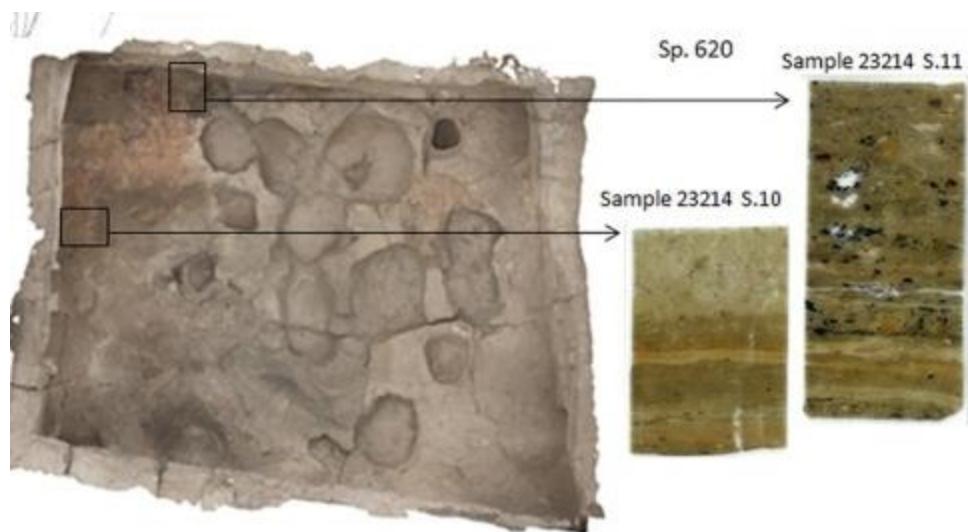
Neolithic Comparisons

Animal penning areas

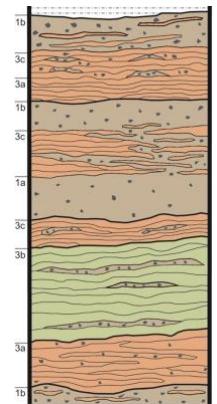
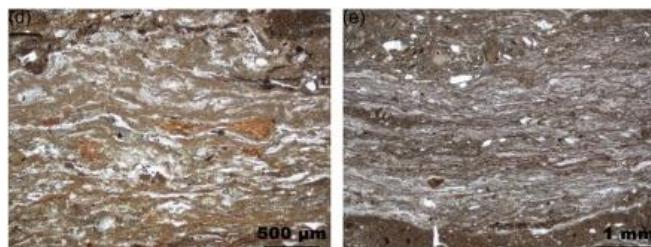
Modern



Vretsia, Cyprus

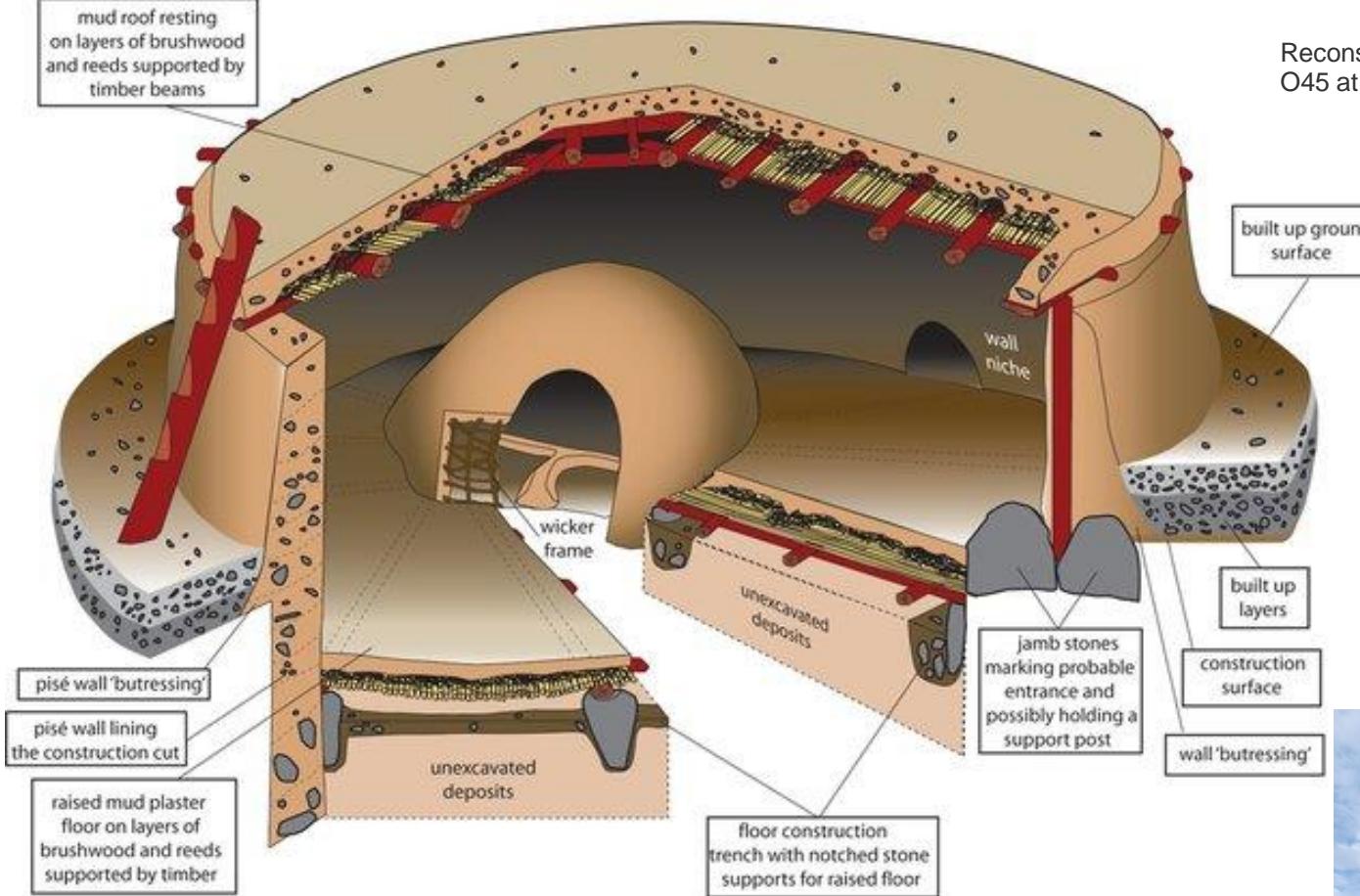


Neolithic Çatalhöyük, Turkey



Portillo, M., García-Suárez, A., Klimowicz, A., Barański, M.Z. and Matthews, W., 2019. Animal penning and open area activity at Neolithic Çatalhöyük, Turkey. *Journal of Anthropological Archaeology*, 56, p.101106.

Reconstruction drawing of structure O45 at WF16, by Darko Maričević.



Research

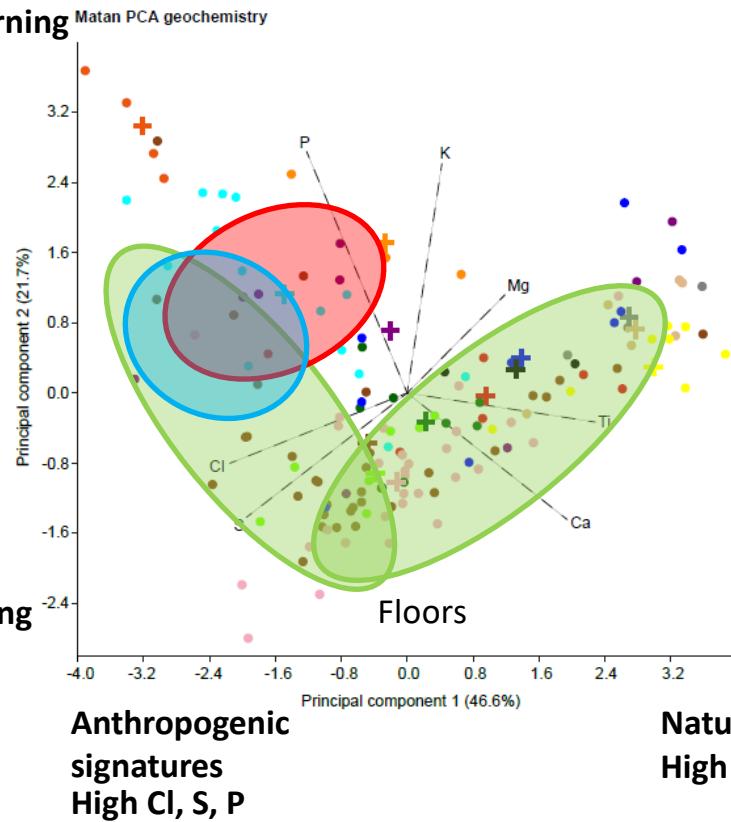
- Comparative reference material
- Ethnography...known information
- Phytoliths
- Geochemistry
- Microscopic signatures of farming, agriculture, sedentary villages



E.g. Ethnoarchaeological Results- Geochemistry

Dr Samantha Allcock

**Animal/burning
signatures**
High P, K



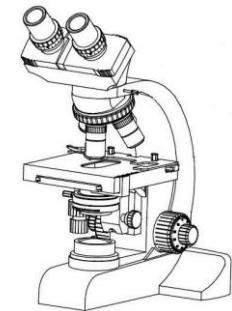
Key:

Animal Occupation	●	External fire installations and ashy deposits	○
Control type 1	●	Floors and surfaces	●
Control type2	●	Hearth make-up	●
External/Courtyard	●	Internal fire installations and ashy deposits	●

Midden	●	Platforms and benches	●
Mortars	●	Floors and roofing materials	●
Plasters and clay features	●	Roofs and roofing materials	●
		Storage features	●



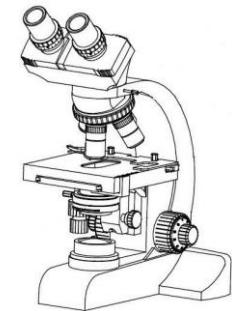
E.g. Phytolith results



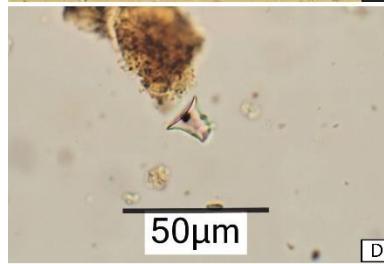
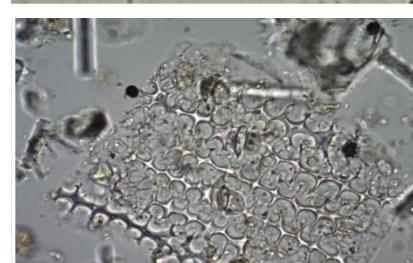
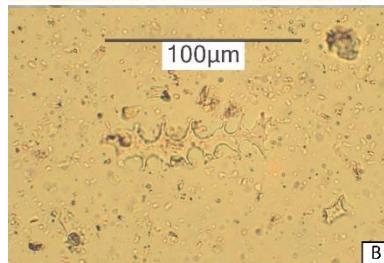
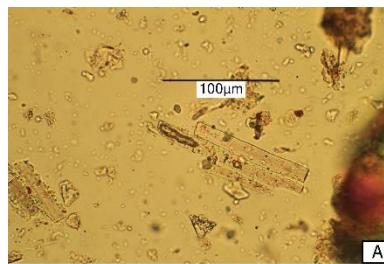
Mud bricks and plasters- Highly tempered



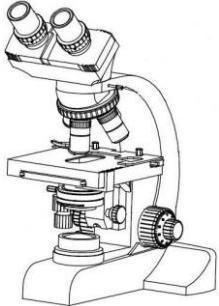
E.g. Phytolith results



Mud bricks and plasters- Highly tempered



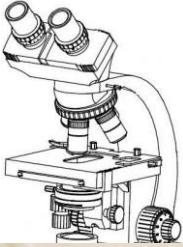
- Grasses, cereals
- Leaves/stems or husks



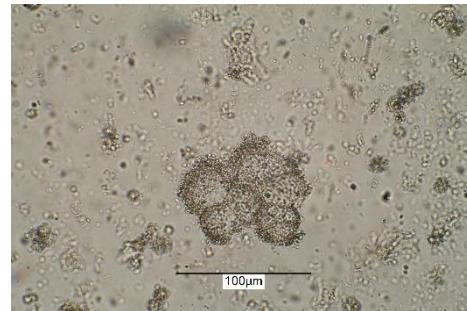
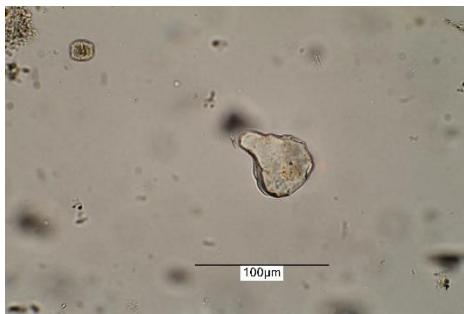
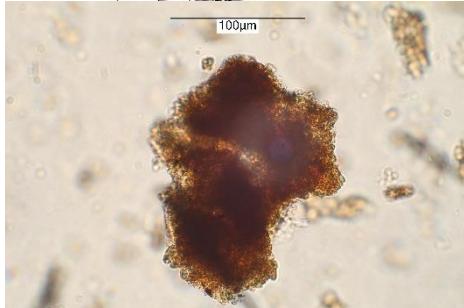
E.g. Phytolith results

Mortars and Roof mud- Not tempered (only water added)





E.g. Phytolith results



Mortars and Roof mud- Not tempered (only water added)



- Trees, shrubs
- Reeds



Landscape Archaeology

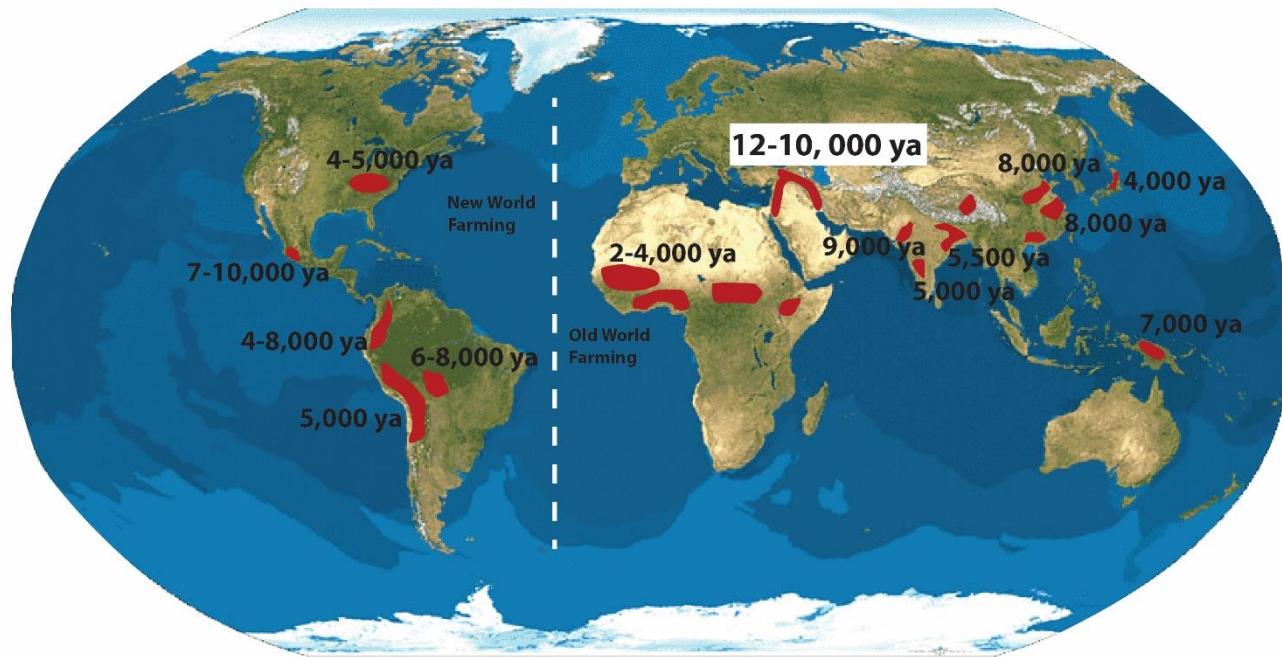


- Resource availability and use
- Raw materials

Ethnography/ Ethnoarchaeology



Why is it important to study farming villages in the Middle East?



The First Farmers.

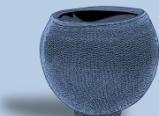
Earliest domestication 12-10,000 ya

15,000 years ago

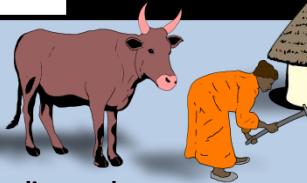
10,000

5,000

0 Present Day



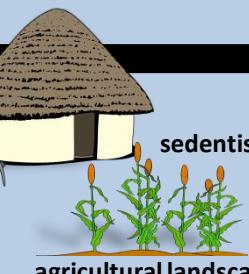
pottery



livestock

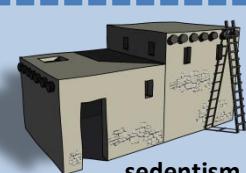


cultivation



agricultural landscape

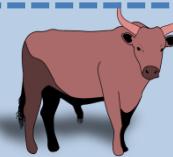
West Africa
(Pearl millet)



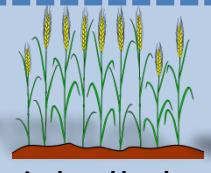
sedentism



cultivation



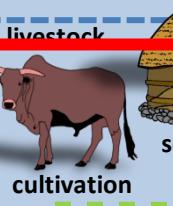
livestock



agricultural landscape



pottery



cultivation



sedentism

Levant Middle/ Near East
(Wheat & Barley)

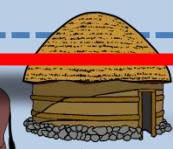
India Savanna
(Millets)



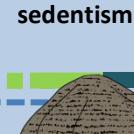
pottery



cultivation



cultivation



sedentism

India Ganges
(Rice)



pottery



cultivation



sedentism

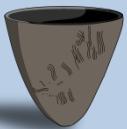


sedentism



agricultural landscape

North China
(Millets)



pottery



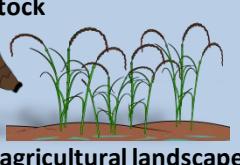
cultivation



sedentism



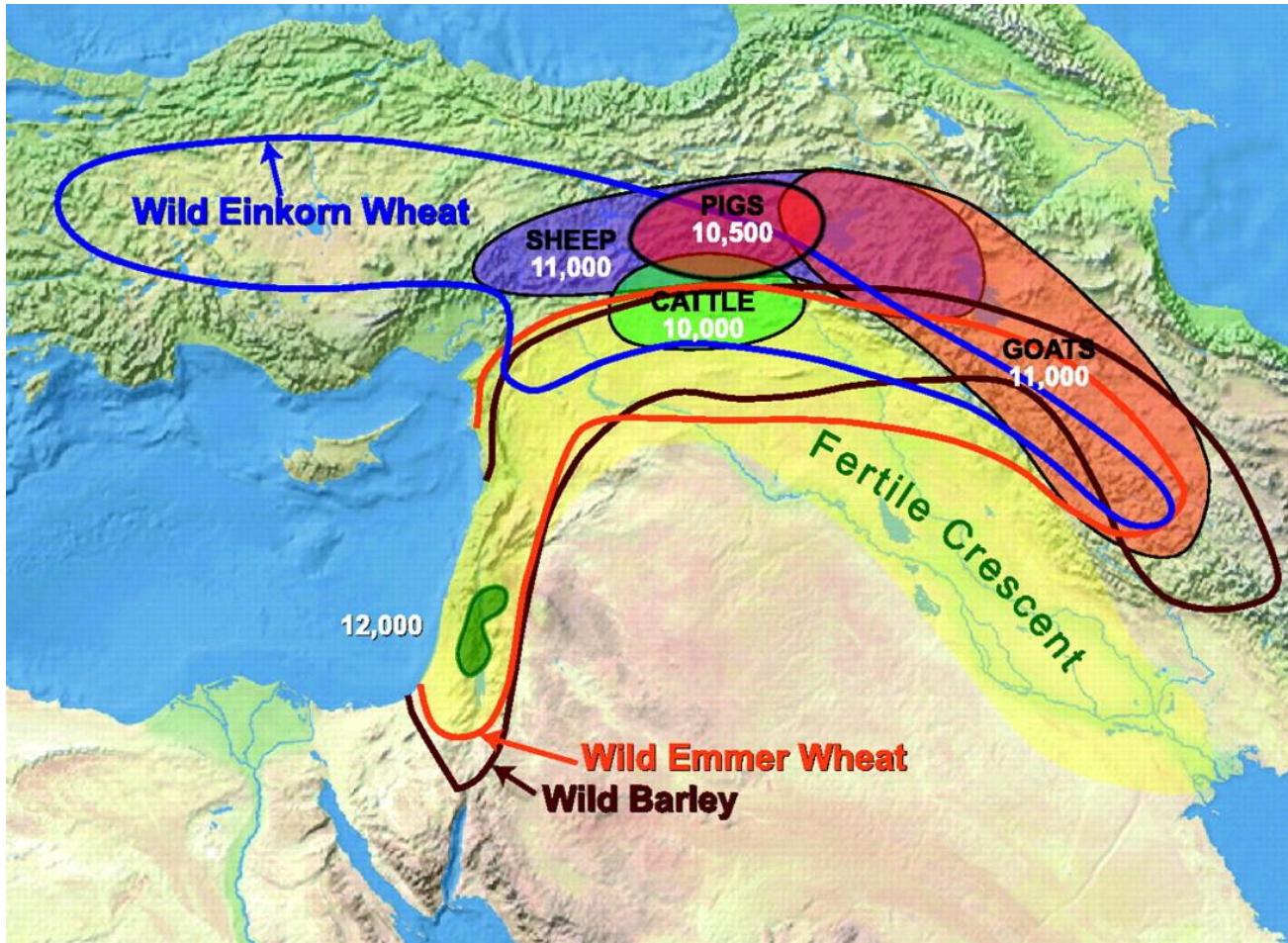
livestock



agricultural landscape

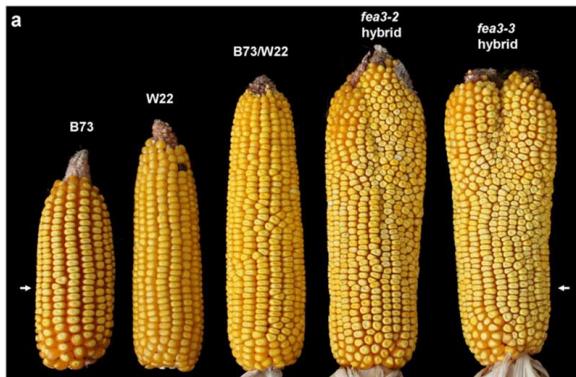
South China
Yangtze
(Rice)

Origins of Agriculture: The ‘Fertile Crescent’



Domestication and Agriculture is important...led to Farming...Civilisations

Agriculture, domestication and farming is a prerequisite for Civilisations



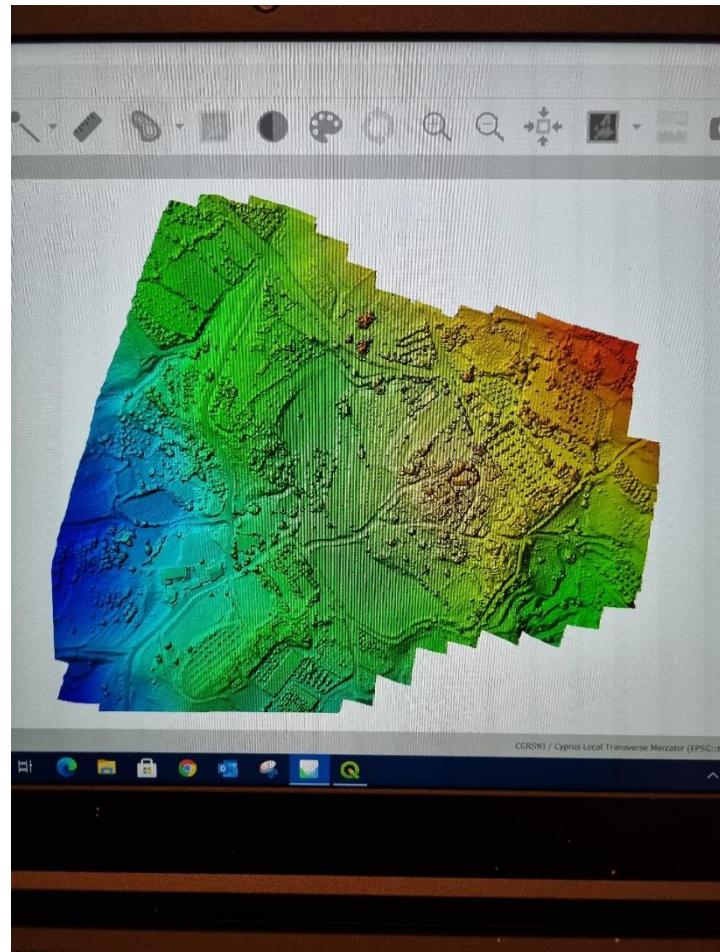
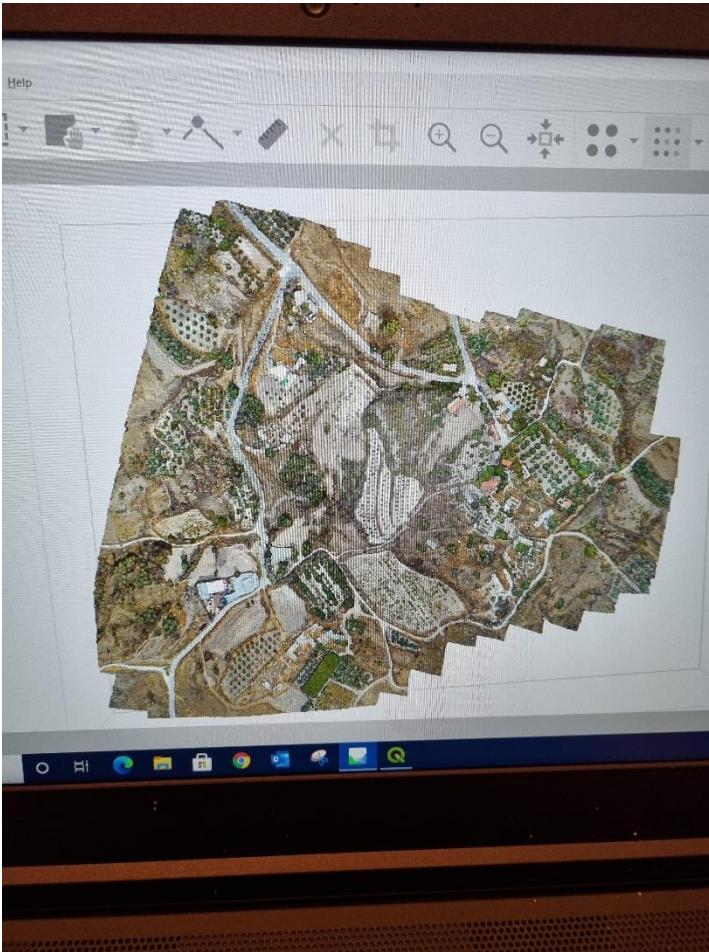
Global subsistence today...

Recording...

Drone Photography
(15 minutes per village)



Plans in the Field

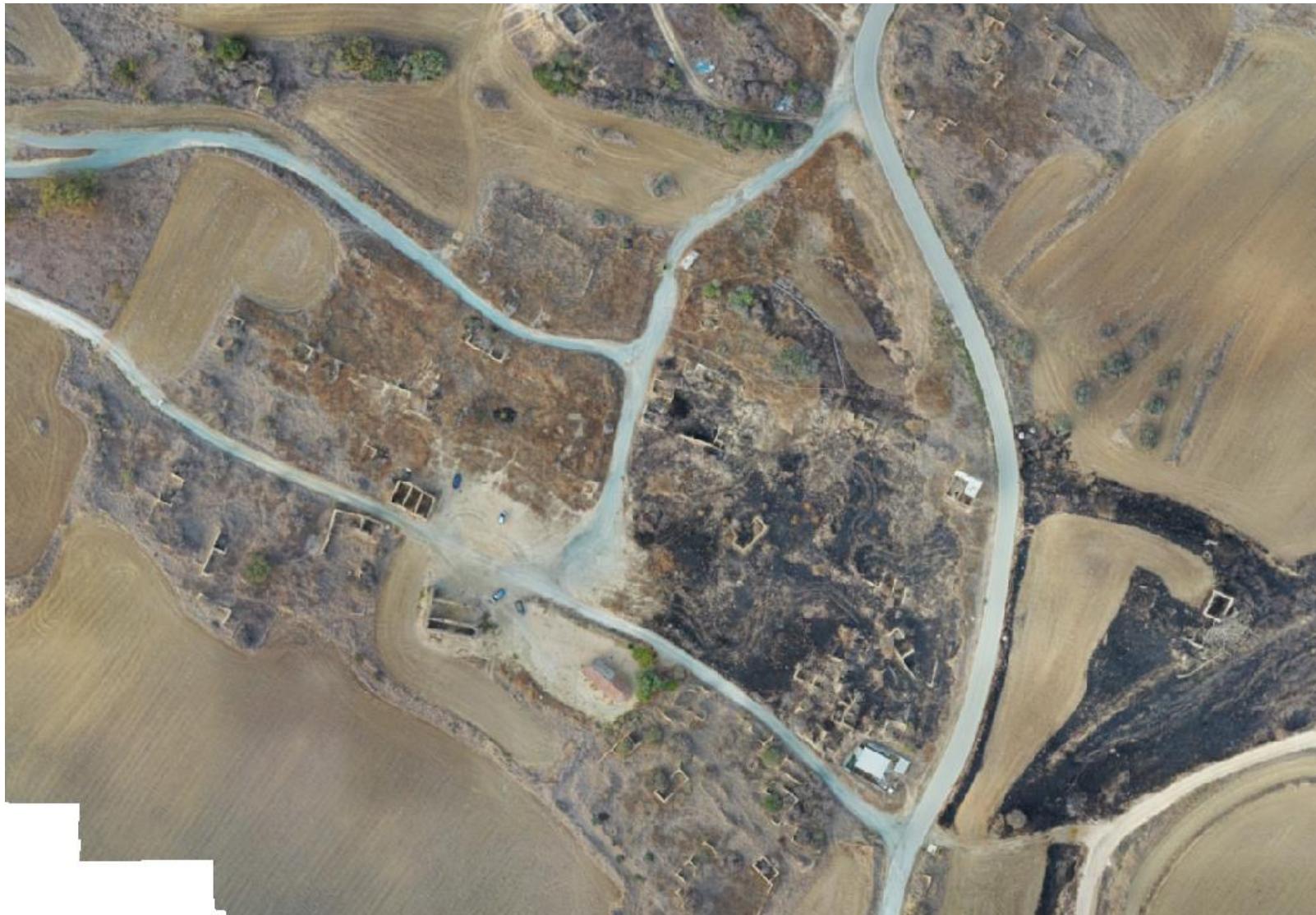


Real time data

Harry Manley

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Village Plan from Drone Photography



Village Plan from Drone Photography

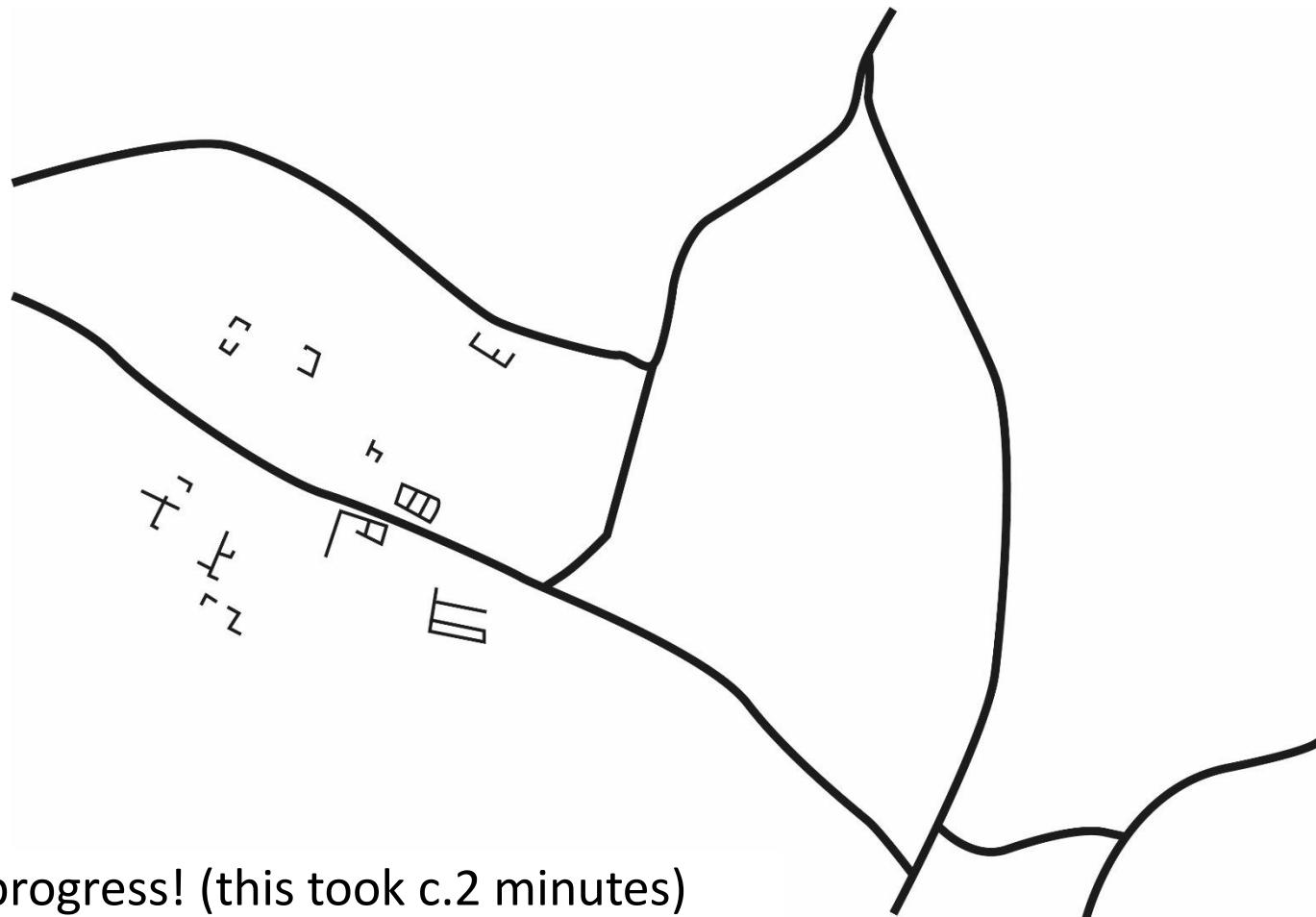
Using GNSS to tie the drone photography into GIS mapping software



Creating a village plan

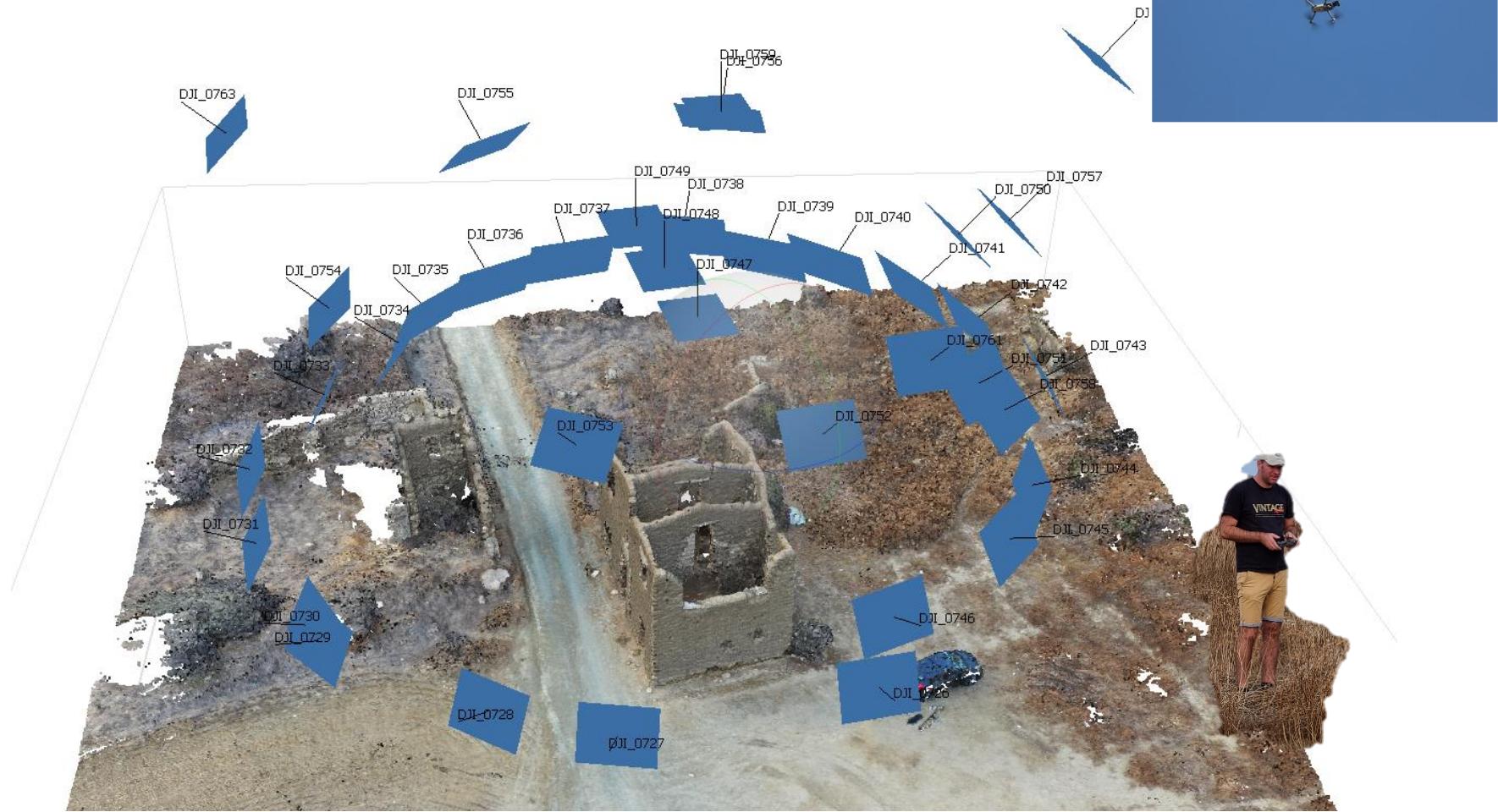


Creating a village plan



Work in progress! (this took c.2 minutes)

High Resolution Images of targeted buildings

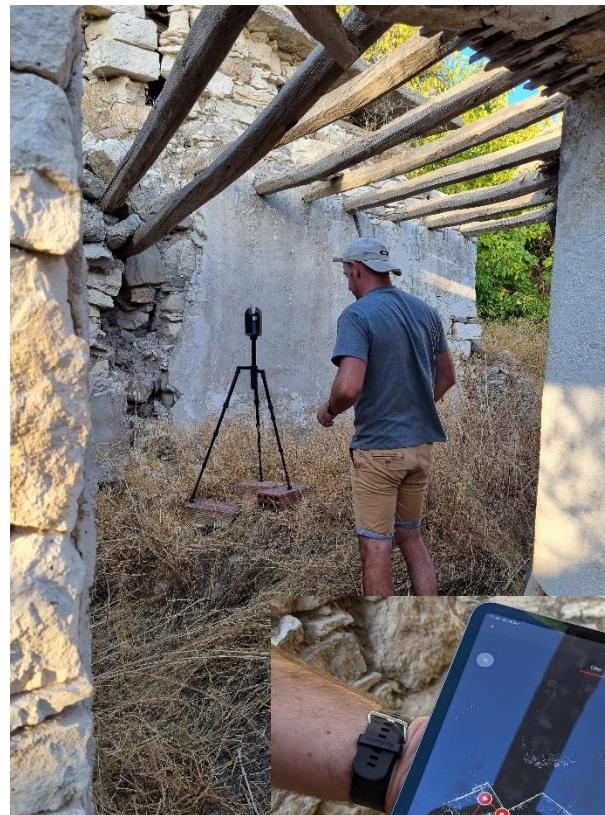
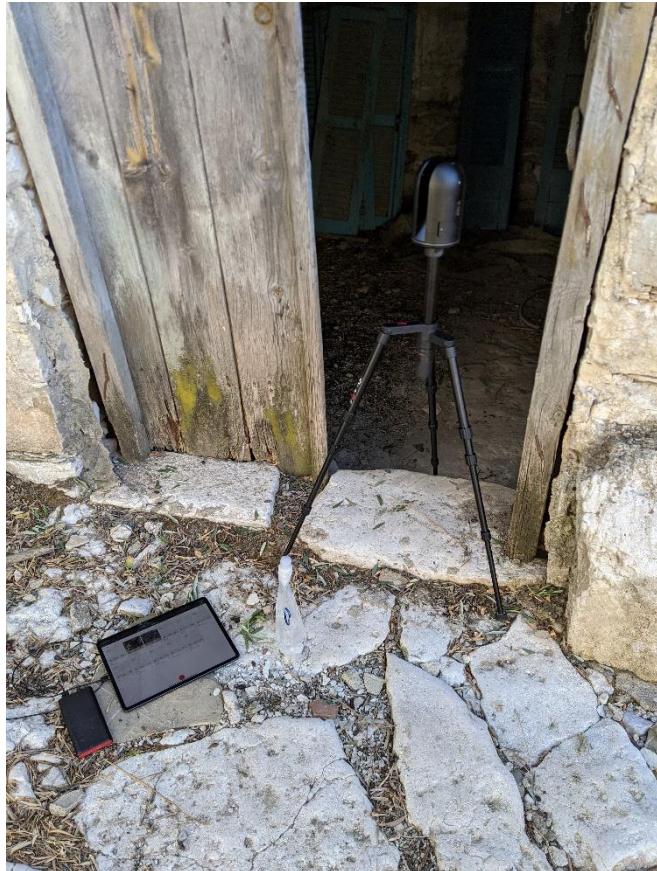


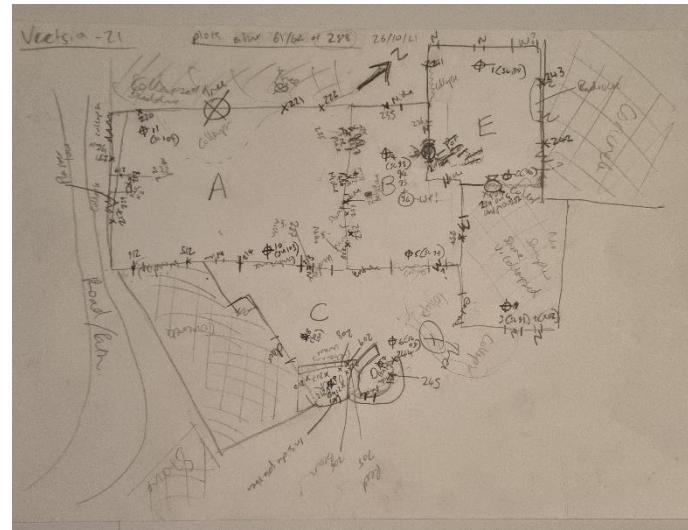
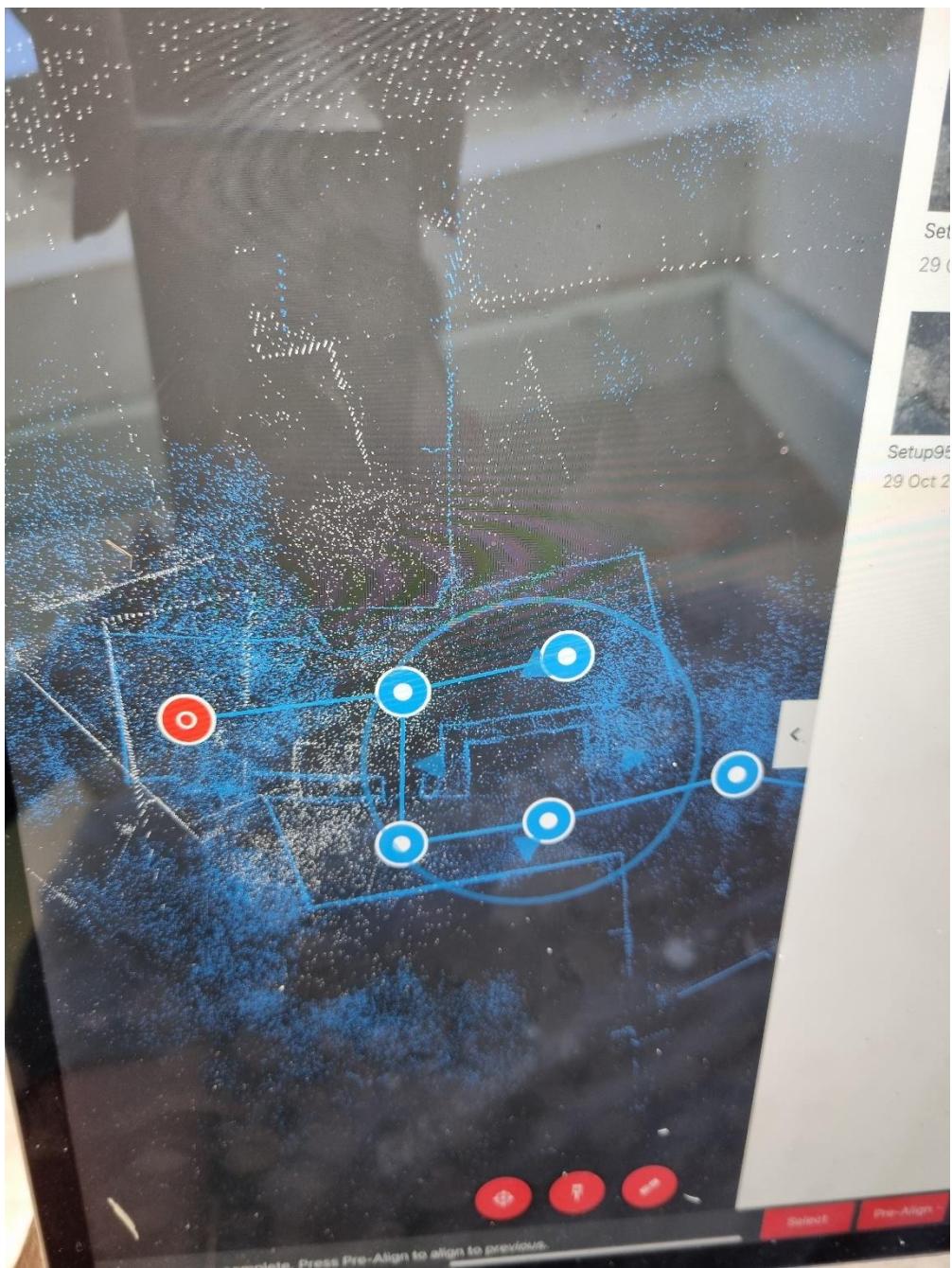
High Resolution Images of targeting buildings



Recording...

Laser Scanning
(1 hour per building)

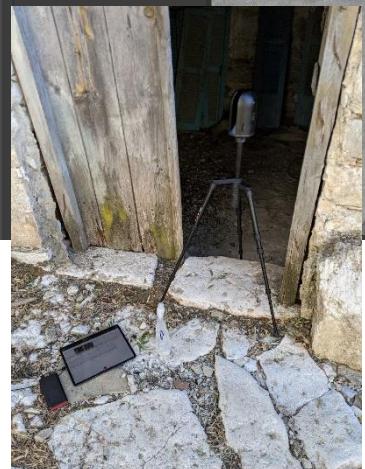




Recording the sampled buildings



Accurate scaled scan of targeted buildings



Accurate scaled scan of targeted buildings



Harry Manley

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Similar Study in Jordan (2014)

- Site plan (10 days)
- House recording...by hand (few hours per building)
- Sampling one village and recording...10 Days

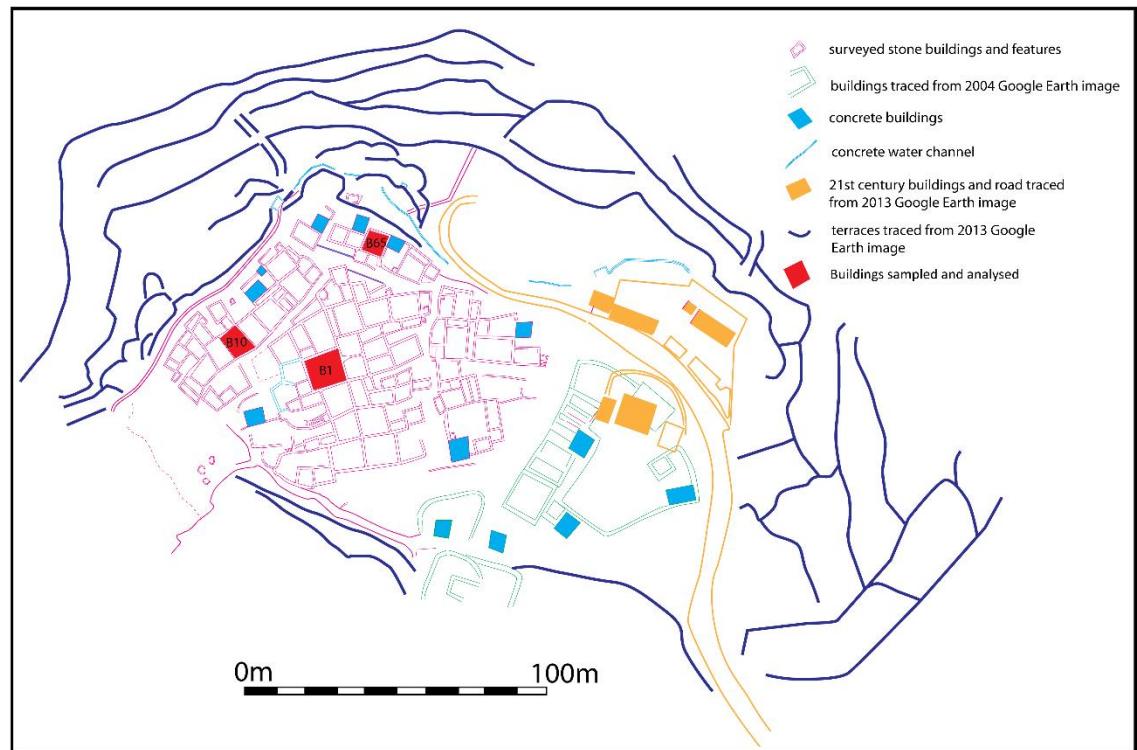


- In Cyprus, 4 Villages in 2 weeks!

<http://www.apaame.org/>

Site Plan

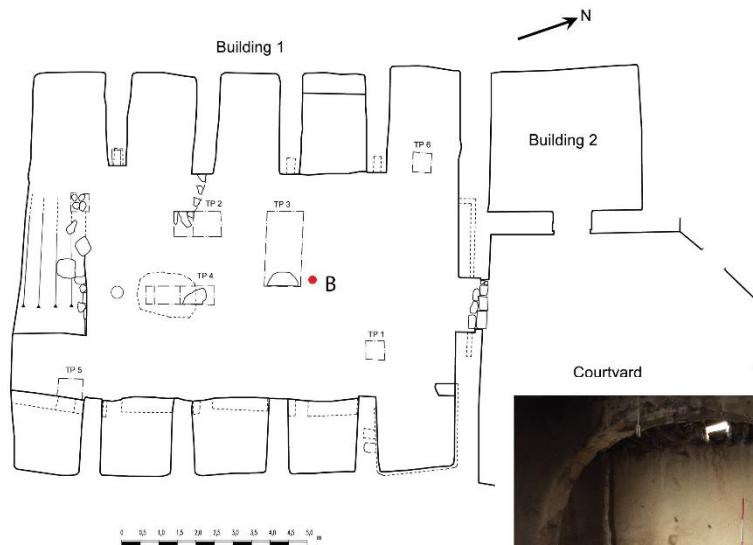
- Planned by hand and photos from helicopter!



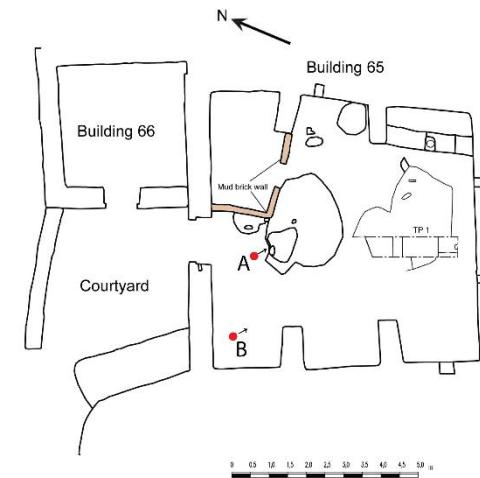
Hand Drawn Plans



Building 1



Building 65



Conclusions

- My research focuses on the **first farmers** in the **Middle East**
- I use comparative **modern agricultural villages** to help investigate **Neolithic villages**
- I use non-visual **Environmental Archaeological techniques** to study the modern comparative villages and the Neolithic archaeological villages
- Utilising **new recording techniques** to collect more **data** and **quickly**...and very **accurately**
- My research focuses on Jordan, Cyprus, Iran and Iraqi Kurdistan

Thanks

- Harry Manley (drone, GNSS, laser scanning)
- Dr Eleftherios Hadjisterkotis (collaborator from the Agricultural Institute in Nicosia, Cyprus)
- Sigrid Osborne (3rd year/ MRes student, BU. Sample collecting and recording)

The Origins of Agriculture

Ancient Peoples and Places

Dr Sarah Elliott

selliott@bournemouth.ac.uk

**Please email me with any questions about any
of the lectures on The Origins of Agriculture.**

**Or if you are interested in Environmental
Archaeology projects**