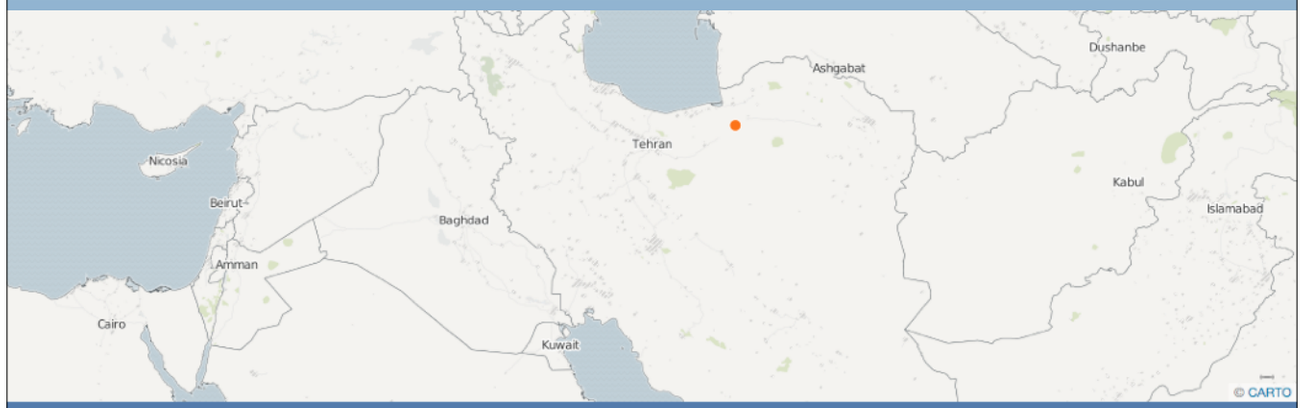
Recreating Context:

3D Graphing Treasure Hill excavations at Tepe Hissar, Iran



Narges Bayani

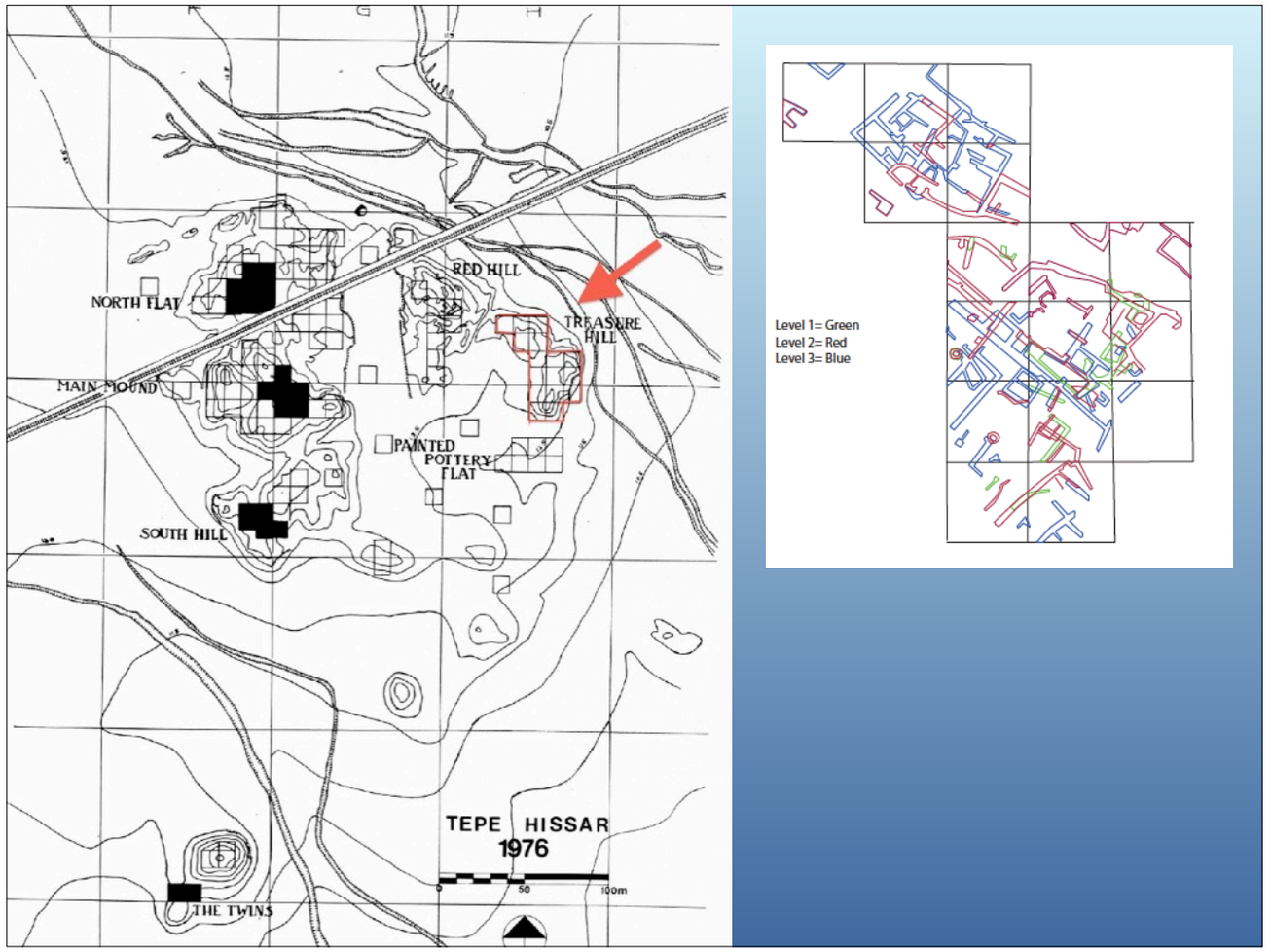
-chalcolithic - Bronze Age site
-the type-site for ceramic chronology of NE Iran

-excavated originally in 1930s by the Penn museum

-mostly published

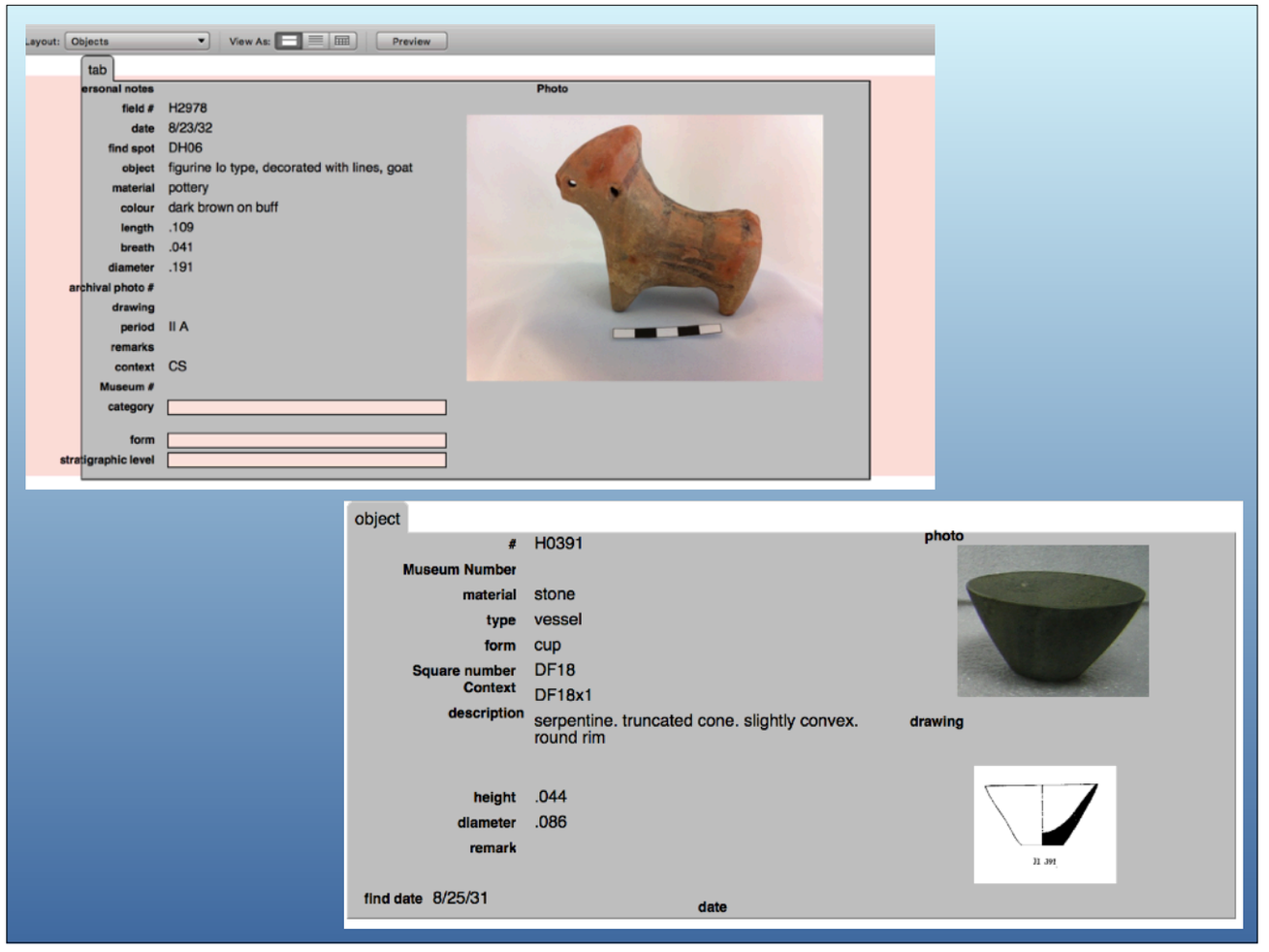
-a second expedition in 1976 revisited parts of the site,

-cleared out some of discrepancies and questions raised from earlier exc.



-did not deal with the area of Treasure hill
-remained largely unpublished and unstudied.
-specifially, very little stratigraphy was recorded. dating is based on the cermic gravegoods of the burials.

-records in Penn Museum archives
-digitized now
-but still impossible to draw much information in the current unrelated state of the records.



so I wanted to see if using descriptive records of excavation preserved in the file dsurveyor's notebook hleped put the burials into a logical relative stratigraphy:

we know what sq they excavated in any given day, and at whats depth they were excavating. we also know that they gave an ordinal number to discovered burial within each sq.

Layout: Burials | View As: | Preview

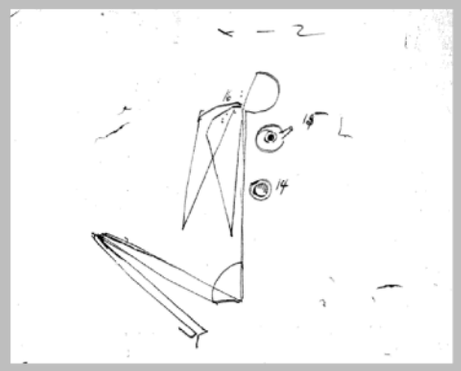
burial

square	CH87
Original burial #	CH87x2
Burial Manner	C.T.
Findspot	top layer D. !.40
find date	
Body Position	lateral right
head position	lateral right
Arms Position	both flexed in front of chest
Hands position	close together both curved towards chin
Legs position	contracted
Feet position	right pulled up , left pulled up and pressed
direction	
Preservation	bad
Sex	
Age	
Mortuary Gifts	1.(4295) ? cup (dis) remains lose beind vertebrae? 2. (4296) grey ??? 3. (4297) beads of lapis and ? necklace
period	IIIC
my dating	IIIC2
level	
floor	
elevation	1.40

Remarks

Museum cat. #

Photos



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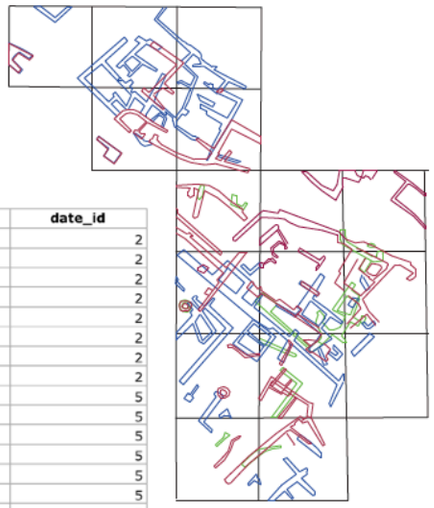
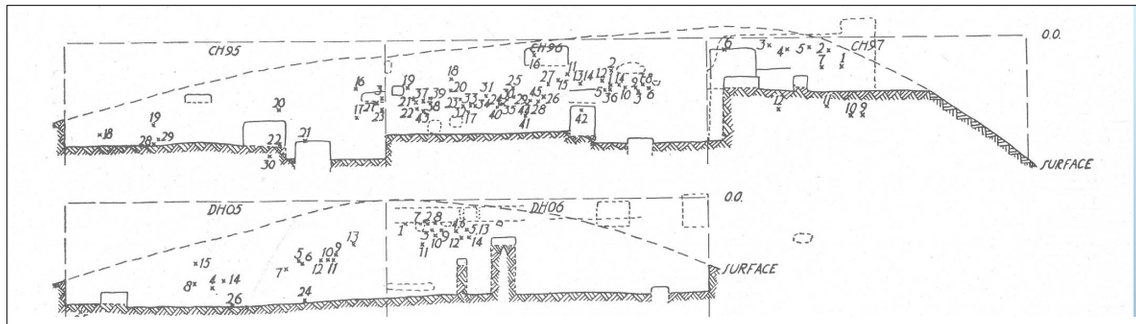
goals of the project

- recreate the process of excavations on Treasure Hill in 1931-32 in 3D graphs
- place the recorded burials into the recreated 3D sequence
- suggest original contexts/stratigraphy for burials

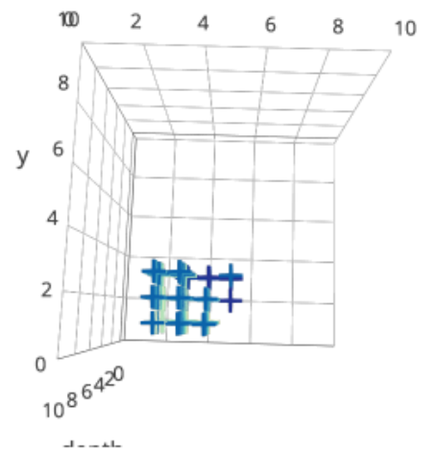
Point	square_id	x_start	y_start	depth	Date	date_id
DH_06_NW_start	DH_06	3	2	0.9	08/18/1932	2
DH_06_NE_start	DH_06	4	2	0.9	08/18/1932	2
DH_06_SE_start	DH_06	4	1	0.6	08/18/1932	2
DH_06_SW_start	DH_06	3	1	0.6	08/18/1932	2
DH_06_NW_end	DH_06	3	2	0.4	08/18/1932	2
DH_06_NE_end	DH_06	4	2	0.4	08/18/1932	2
DH_06_SE_end	DH_06	4	1	0.1	08/18/1932	2
DH_06_SW_end	DH_06	3	1	0.1	08/18/1932	2
DH_06_NW_start	DH_06	3	2	1.6	08/21/1932	5
DH_06_NE_start	DH_06	4	2	1.6	08/21/1932	5
DH_06_SE_start	DH_06	4	1	1.75	08/21/1932	5
DH_06_SW_start	DH_06	3	1	1.75	08/21/1932	5
DH_06_NW_end	DH_06	3	2	1.45	08/21/1932	5
DH_06_NE_end	DH_06	4	2	1.45	08/21/1932	5
DH_06_SE_end	DH_06	4	1	1.6	08/21/1932	5
DH_06_SW_end	DH_06	3	1	1.6	08/21/1932	5
DH_06_NW_start	DH_06	3	2	2.8	08/22/1932	6
DH_06_NE_start	DH_06	4	2	2.8	08/22/1932	6
DH_06_SE_start	DH_06	4	1	3.1	08/22/1932	6
DH_06_SW_start	DH_06	3	1	3.1	08/22/1932	6
DH_06_NW_end	DH_06	3	2	1.65	08/22/1932	6
DH_06_NE_end	DH_06	4	2	1.65	08/22/1932	6
DH_06_SE_end	DH_06	4	1	1.95	08/22/1932	6
DH_06_SW_end	DH_06	3	1	1.95	08/22/1932	6
DH_06_NW_start	DH_06	3	2	3.18	08/23/1932	7
DH_06_NE_start	DH_06	4	2	3.18	08/23/1932	7
DH_06_SE_start	DH_06	4	1	3.5	08/23/1932	7
DH_06_SW_start	DH_06	3	1	3.5	08/23/1932	7

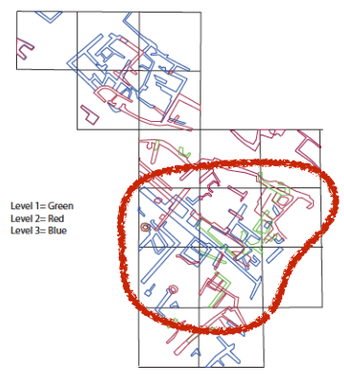


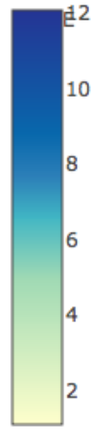
-a simplified view of the dataset from the field surveyor’s notebook.



1932 excavation process of Treasure Hill, Tepe Hissar







-using plotly graphing tools, I can now create a snapshot of each day of excavation, and what was being excavated in each day in each sq.
-the result is a 3d section of the sqs
-by joining the two datasets (burials and their content, with excavation data) I can suggest a range of depth for each burial. effectively re-creating a relative stratigraphy.
-I can run all kinds of queries

-my next step is to visualize these burials as floating dots inside their relative context.