Doorways

NE corner

N. from 1.735 to 2.20

E. 2.20

SE corner

E. 2.775

S. 2.25

Mosaic: typical section

"colonnade rested on continuous stylobate wall"

Correction for Catalogue

c 609 - S 684 = not from S-18-K
I 321
as mistakenly done through an error in basket tags. Photo S 236

c 600-I 320 = correct catalogue number = Photo S 239 = frag. of marble relief with horse & rider inscribed ΕΑΟΥΛ.

South Apse trench 1. Surface. 29-6-39

POTS: Red varnished ware
Late C
Late D
Coarse ware.

Surface over NE angel. 9-7-39

1. c529-A349 Frag. of carved marble slab with Geometric design. Photo No. 5145b
2. c530-A350: Frag. of carved marble slab with part of cross. Photo 5166b
3. c541-S648: Frag. of marble relief with headless male figure.
4. c542-S649: Frag. of marble figure with robed figure.
5. c543-S650: Frag. of marble relief with figure of apostle(Peter)
6. c544-S651: Frag. of marble relief with fish on one side and bincranium on other.
7. c545-S652: Frag of marble relief with tig
8. c546-S653: Frag. of marble relief with running horse.
9. c547-S654: Frag. of marble relief with Seashell.
10. c548-S655. 2 Frags of marble relief with figures a-b,
11. POTS: 2 Red varnished sherds.
Coarse ware

MARTYRION: SURFACE SOUTH END. 9-7-39

POTS: Sherds red varnished ware.
Coarse ware.

SURFACE EAST OF MARTYRION. 7-7-39

POTS: Few caorse sherds
Late B, Late C
Rim of small marble bowl
Frag of revetment

MARTYRION. EAST END SURFACE. 9-7-39

POTS: Few sherds red varnished
1 sherd late A
Much coarse ware

ARCHITECTURAL FRAGS,

c512-A344: cross c513-S629: figure.
c514-A345: carved geometric ornament. c526-S363: Figure & Greek key border.

.....

SURFACE: 9-7-39

ARCHITECTURAL FRAGS.

c508-S628 : Frag. Part of body of Lion.
c509-A342 : Running tendril.

.....

SURFACE SOUTH END. 9-7-39

ARCHITECTURAL & SCULPTURE .

c505-S625: Frag. of marble relief with animal legs.
c506-S626: " " " Human figure.
c507-S627 : " Head of Christ.?.

.....

MARTURION. SURFACE OVER SOUTH EXEDRA. 11-7-39

Sculpture frags.

c555-S656 : Preciouse stone
c563-S660 : Figure of monster
c564-S661 : Geometric ornament
c565-S662 : ~~Fish and water~~ Cross

.....

SURFACE SOUTH EXEDRA 12-7-39

SCULPTURE:

c566-S663: Marble relief top of amphora.
c567-S664: " " with dolphine
c766-S766: " " " bird (Eagle?)
c814-S814: Cornicopiae, dentilated molding and volutes.

SURFACE SOUTH EXEDRA 13-7-39

INSCRIPTION: c600-I 320 Greek inscription

SCULPTURE: c601-S676: Geometric ornament
O.K. ΣΑΥΛ c603-S678: Draped figure. Marble relief.
c604-S679: Marble relief with head of Lion
c605-S680: " " "body of animal
c606-S681: " " running animal
c607-S682: " " body of bird.

MARYRION FROM SURFACE SOUTH EXEDRA. 14-7

SCULPTURE: c765-S765Man picking grapes in rinceau.

ROCK PILE IN CENTER OF CHURCH. 14-7-39

SCULPTURE:c762-S762: Frag of marble relief with body of animal.
c762-S763: Frag of marble relief with Lion attacking antelope.
c764-S764: Frag of marble relief with eros i rinceau.
c687-I 329: Frag of marble slab with greek i inscription.
c751-S751: Frag of marble relief with man driving ass.
c752-S752: Frag of marble relief with 2 man.
c753-S753: Frag of marble relief with standing figure.
c754-S754 Frag of marble relief with Lynx running in rinceau

FROM ROCK PILE IN CENTRAL OF CHURCH. 14-7-39

c756-S756: Frag of marble relief with tail animal.

c758-S758a-c. Frags of marble relief with crawstep border & plants and animals in rinceau.

c759-S759: Frag of marble relief with Lion attacking animal.

c760-S760: Frag of marble relief with head of horned animal.

c761-S761: Frag of marble relief with nimbed and draped figure.

IN EARTH UNDER ROCK PILE: 18-7-39

c688-I 330: Frag of marble slab with Greek inscription.

c689-I 331: Frag of marble slab with Greek inscription.

c720-S720: Frag of marble relief with springing leopard.

c721-S721: Frag of marble relief with dog sprining to right.

c722-S722a: Frag of marble relief with swimming boys.

c723-S723. Frag of marble relief with forpow of animal.

c724-S724: Frag of marble relief with dolphin.

c725-S725: Frag of marble relief with hand grasping object.

c727-S727: Frag of marble relief with crosed humain legs.

c728-S728: Frag of marble relief with head of rabbit.

SURFACE EAST SECTION: 18-7-39

c700-S710: A371 Left corner of inner face of marble frieze block with figur of sheep.

c701-A372: Upper part & frag of capital.

FROM ROCK PILE IN CENTER. 18-7-39

c704-S711: Frag of marble relief with peacock(?) & stylized foliage.

c705-S712: Frag of marble relief with head and shoulder of angel.

c706-S713: Frag of marble relief with forepart of fish.

c715-S715: Frag of marble relief with walking male figure & tree in backgr-ound

c716-S716: Frag of marble relief with tail of dolphin.

c717-S717: Frag of marble relief with draped male figure.

c718-S718: Frag of marble relief with foot of quadruped.

c719-S719: Frag of marble relief with fish.

c726-S726: Frag of marble relief with hindquarters of animal.

c729-S729: Frag of marble relief with draped figure and floral border.

c730-S730: Frag of marble relief with draper

c731-S731: Frag of marble relief with reclining animals. (?)

c732-S732a-b. 2 frags of marble relief with running lion.

c733-S733: Frag of marble relief with 2 men and dog.

IN ROCK PILE IN CENTER. 18-7-39

c734-S734: Frag of marble relief with head of bird.

c735-S735: Frag of marble relief with animal's foot.

c736-S736: Frag of marble relief with drape figure.

c737-S737: Frag of marble relief with leopard in rinceau.

c738-S738: Frag of marble relief with male figure in Phrigian costume.

c739-S739: Frag of marble relief with drape

c740-S740: Frag of marble relief with drape

c741-S741: Frag of marble relief with body of ostrick.

c743-S743a-b: 2 Frags of marble relief with running dog.

c744-S744: Frag of marble relief with drape standing male figure.

c745-S745: Frag of marble relief with nimbed head(?)

c746-S746: Frag of marble relief with anima in rinceau.

c747-S747; Frag of marble relief with horse

c748-S748: Frag of marble relief with dog or leopard.

c749-S749: Frag of marble relief with Archi ectural subject.

c750-S750: Frag of marble relief with nimbe head.

c755-S755: Frag of marble relief with armored horse.

IN EARTHN UNDER ROCK PILE IN CENTER. 19-7-39

c540-S647: Frag of marble relief with Greek key border & ox(?)

c675-S695: Frag of marble relief with cross in double pearl circle.

c676-S696: Frag of marble relief with leopard sprining.

c678-S697: Frag of marble relief with head of dove.

c679-S698: Frag of marble relief with robed figure wearing pectoral with cross.

c671-S691: Frag of marble relief with Greek key panel & 2 panels with figure

c680-S699: Frag of marble relief with ostri

c682-S700: Frag of marble relief with body of animal(?)

c691-S701: Frag of marble relief with body of animal

c692-S702: Frag of marble relief with horse

c693-S703: Frag of marble relief with part of humain figure.

c694-S704: Frag of marble relief with body of running animal(Dog?)

c695-S705: Frag of marble relief with leopard(?)

c696-S706: Frag of marble relief with shell

c697-S707: Frag of marble relief with body of animal.(?)

c698-S708: Frag of marble relief with head of figure holding club.

c699-S709: Frag of marble relief with head of Christ(?)

c742-S742: Frag of marble relief with Geometric border.

IN EARTH UNDER ROCK PILE IN CENTER. 19-7-39

c784-S784: Frag of marble relief with lower part of draped male figure.
c785-S785: Frag of marble relief with bird.
c786-S786: Frag of marble relief with xxxxxx feet of two draped figures.
c787-S787: Frag of marble relief with draped arm, leaf & roundel.
c788-S788:A379: Right inner corner of marble frieze block with reclinning gazelle to right.
c789-S789: Frag of marble relief with nimbed figure wearing pectoral with cros On back part of relief with dolph
c790-S790: Frag of marble relief with fishin scene(?)
c742-S742: Frag of marble relief with Geometric border.

BEHIND APSE OF TRIBUNE: 23-7-39

c672-S692:A368:Frag of marble frieze block with mountain goat resting beside pool:
c673-S693:A369: Left corner of inner face of marble frieze block:
c674-S694:A370: Frag of inner face of marble frieze block.
c722-S722b. Frag of marble relief with swimming boy.
c791-S791:A380: Left corner of inner face of marble frieze block with rabbit running to left.
c792-S792:Frag of marble relief with eagle standing on head of ox.

BEHIND APSE OF TRIBUNE. 23-7-39

c793-S793a: Frag of marble relief with bear attacking ox.

c794-S794: Frag of marble relief with forepart of duck.

c797-S797: Frag of marble relief with body of bird.

c798-S798: Frag of marble relief with bumped buffalo.

BEHIND APSE OF TRIBUNE. IN WEST EXEDRA: 25-7-39

c612-S686:A362: Inner face of marble frieze block with feeding sheep.

c611-S685:A361: Frag of marble frieze block joined to c572-S669:A357

MARTYRION. SURFACE. 29-7-39

c767-S767: Frag of marble relief with leg of mail-clad night.

c768-S768:A378: Inner face of marble frieze block with sheep(?) to left.

c783-S783: Frag of marble relief with Archi ectural subject.

c815-S815: Frag of marble relief with Sea-shell.

SURFACE NORTH EXEDRA. 31-7-39

c769-S769: Frag of marble relief with three goats with one head.

c770-S770: Frag of marble relief with dolphi

c771-S771: Frag of marble relief with draped figure.

c772-S772: Frag of marble relief with cornuc pia, dentil & valute border and figure of angel.

c773-S773: Frag of marble relief with drapery of one figure and part of head of another

SURFACE NORTH EXEDRA. 31-7-39

c774-S774: Frag of marble relief with frag of drapery & acanthus shoot.

c775-S775: Frag of marble relief with leaping goat.(?)

c776-S776: Frag of marble relief with right foreleg of ox.

c777-S777: Frag of marble relief with horse

c778-S778: Frag of marble relief with forefeet of running animal.

c779-S779: Frag of marble relief with sheep in roundal.

c780-S780: Frag of marble relief with forepart of running animal.

c781+S781: Frag of marble relief with drape joined to c819-S819:

c782-S782: Frag of marble relief with baske like objects.

c823-A381: Frag og carved marble window grille.

SURFACE NOTHEAST EXEDRA. 2-8-39

c670-S690a-d. 4 frags of marble relief with man combating wild animal and architectural background.

c793-S793b. Frag of marble relief with bear attacking ox.

c799-S799: Frag of marble relief with warrior wearing Phrygian cap and holding shild & spear.

c702-A373: Capital of marble colonnette

c703-A374: Part of capital of marble debase Corinthian colonnette.

c800-S800: Frag of marble relief with foot of cloven-hoofed animal.

c801-S801: Frag of marble relief with front feet of two animals.

SURFACE NORTHEAST EXEDRA. 2-8-39

c802-S802: Frag of marble relief with nimbed and bearded head.

c803-S803: Frag of marble relief with lower part of draped figure walking to right.

c804-S804: Frag of marble relief with leaf molding and two human feet.

c805-S805: Frag of marble relief with column and ladder of Simmon Stylites.

c806-S806: Frag of marble relief with draped figure.

c807-S807: Frag of marble relief with hind-quarters of animal resembling pig

c808-S808: Frag of marble relief with dolphin

c809-S809: Frag of marble relief with hind-quarters of animal.

c810-S810: Frag of marble relief with nimbed head.

c811-S811: Frag of marble relief with top of animal's head.

c812-S812: Frag of marble relief with head o ox in rinceau.

c813-S813: Frag of marble relief with bird sitting in next.

c824-A382: Frag of carved marble window gril

c825-A383: Frag of Corinthian Capital.

MARTYRION SURFACE. 4-8-39

c711-A375: Part of large windowblown Corinthian Capital.

c713-A377: Corinthian Capital:

c MARTYRION SURFACE CLEANING UNDER WATER Level

c795-S795: Frag of marble relief with roundel & head of bird.

c796-S796: Frag of marble relief with Sea-serpent.

Personal Diary Antioch 1939

Sunday, August 13

Arrived in Beirut from Famagusta on Greek steamer alongside S/S Ecaterinon. Went to see Capt. Kuhne & Louis & paid Louis old bar bill + interest = £2. Did town in evening with Kuhnes, saw him off with Steve _____ whose girl Mary _____ was sailing. Steve & I then to Café Française.

Monday, August 14

Awakened by Odette Lavenon & Capt. _____'s wife. Then saw Lassus who is here at the Metropole. Daulatly called & with him to Jesuit University of Beirut to see Père _____ about Byzantine Congress. Then to hotel for beer with Daulatly & Steve Lassus & all to Mt. for big beer lunch with Capt. _____. Tight as a tick & barely made bus to train at Tripoli where had beer supper in sleeper & bed.

Tuesday, August 15

Aleppo in bright white Aug. light & heat with hangover. Town dead. Cab to Antioch. Vichy water & jitters. Home looked good. Seleucia Symposium cemented & in view. Unpacked & slowly came to life but weak & jittery & saw vision at night.

Wednesday, August 16.

Pulled out of tail spin & went severely on wagon & began daily q.T.s & conferences. Organized program for division. Took up matter of division with Rupi Tekan new director of Antioch Museum. Also called on Vali & French consul.

Thursday, August 17

What must be accomplished =

Division: something difficult & definite every day
French consulate & questions & permit for
drivers after division.
Mardyrion finish & paper for Byz. Congress
Finish & close field work, reports & letters
Pack up expedition. To French consulate.
Message to have confidence but not to forget in
good fortune.

Friday, August 18

Arranged for Glidden's departure with
them; saw Teban; division started in Ankhara
Telephoned American Embassy & sent long
telegram to Ambassador Mc Murray.
Finished letter to C. R. Morey about whole
situation. Strong guidance

Saturday, August 19

Continued routine work awaiting
McMurrays reply.

Sunday, August 20

Unsatisfactory telegram from Mc Murray.
Ephesus Salamis docket in order. To Seleucia

Monday, August 21

Cabled news of accident & plans to C.R.M.
Wrote plans to Serapis, Ira, Miss Av. =
Determined to stay here at all costs & finish
the job (i.e. division), then take air plane
Tripoli - Paris & then Queen Mary.
Made division of sculpture

Tuesday, August 22

Made division of all material, finishing
with mosaic division in afternoon.

Wednesday, August 23

Became convinced that it was necessary
to go to Ankhara to see division through.
Saw French consul & departed via Alexandretta.
Glidden to train with me.

Thursday, August 24

Breakfast on train. To Embassy to leave note, then to Hotel Ankara Palace, then to Foreign Office where had first interview with Feridun Erkin, then to Ministry of Education where had first interview & met Dr. Hamit Kosay & with him to his office. He very antagonistic to excavation & whole idea of division. All this before noon.

Then got in touch with Embassy, called Joe Brent, called at French Embassy.

Dinner with Embassy official & a Mr. Spear in a badly decorated joy spot.

Friday, August 25

To Foreign Office in great huff over Kosay & raised a ruckus enlisting Fr. Embassy in our behalf. To Kosays office but he out & attitude cold. In despair. To Temple of Augustus at 2:30. On return had obsequious telephone call from Kosay. Pressure from Foreign Office worked. He most courteous & sweet & took me on sight seeing tour of Ankara & said he & his assistant Remzi Ark would go with me to Antioch to see excavation & make division & that all would be sweet between us. We made our wagon lits reservations & then he took me to School of Archaeology & their excavation of a Roman bath & then to museum & Hatti Exc. I in high state of elation & thanksgiving.

Called Joe Brent to give him dope & asked him to send information to C. R. M. by cable. Brent informed me that war imminent & may break in 3 or 4 days. Called Am. Embassy & said good bye to excellent chap in Fr. Embassy. Then to dinner where much merriment in subdued dining

Room. British worried about last train to Europe. Packed & to station early where met Ramsi Erik or Arik & recognized him as the sly power & obstructionist behind Kasay. Long visit with them in Hotel Then train to Alexandretta.

Saturday, August 26

En route, lunch, changed trains. No car at Alexandretta & took Tepi after waiting in café, arriving Antioch at dinner time. Deposited Turks at Hotel & then to stores. Telegram asking for car had not arrived.

Sunday, August 27

Sight seeing tour of Amuk in A.M. Seleucia in P.M.

Monday, August 28

The big day. Turks visited FHQ, had division.

Tuesday, August 29

Finished signatures & all the business with the Turks. In afternoon sorted photographs & packed our material.

Wednesday, August 30

Took Turks to 13-R & then bid them good-bye. They promise permit & expect at once, having telegraphed Ankara for same.

Thursday, August 31

Packed & made all ready for expecting division worried about good faith of Turks in sending immediate permit.

Friday, September 1.

Very worried about permit. Called on Veli about same & then sent telegrams to Feridun, Am. Emb. & Hemit Kasay.

Saturday, September 2

Morning of despair & then felt confidence that will get division in Beirut & arrive home O.K. Worked on martyrion lectures for Big. Congress but strong feeling there will be none.

Sunday, September 3.

Good work day in Selencia, returned in mid afternoon to late dinner & found that war had started. To 15-M & finished up; then telephoned Palmer in eve. who told me about war & got me place on SS Excalibur sailing Sept. 10. Had me relay message to Mrs. Brent sailing on same boat with her children.

Monday, September 4 thru Wednesday.

Burned up wires desperately about division permit, but no results.

Thursday, September 7

Called on Veli, finished packing & left Antioch with truck full of records a little after noon 3 P.M. with Adib; George Salita driving. Arrived at Latakia in evening & saw big John who was running Latakia Hotel. Then ran into war regulations & spent long time getting permits to travel & lights blued over for blackout regulations. Then on in diffulty with poor lights, all bridges guarded; late supper at poor Arab restaurant at Banias; Tripoli at 1 A.M. & tea. Then long pull to Beirut with George falling asleep at wheel. Finally arrived at Hotel Metropole in blacked out Beirut at 3 A.M. but guard there & Hotel closed & Unger in concentration camp. Go to Beirut Palace with Adib. Slept few hrs. poorly.

Friday, September 8.

Up & shaved off mustache, much business & business with Palmer & Debtes.

Saturday, September 9.

Palmer called with cable from Am. Emb. Ankara that permit had been granted. Great relief & quiet evening in Thanksgiving.

Succeeded after gt. difficulty in selling our stuff on boat.

Sunday, September 10.

Last minute shopping in A.M. Farewell cocktail party to consulate at St. George at noon. Late lunch with Adit & Hank Pearson at Australian Bar. Farewell to Jolly's & Naimes at English Club. Then to boats where greeted Ira & Gene Kelley. Visited in evening after sailing with Mrs. Grant.

Monday, September 11

Nelson Glueck boarded boat at Haifa.

Tuesday, September 12

At Alex. with Ira & Bill Farrell. Then in Athens Thursday (?) with Nelson, Ira And finally

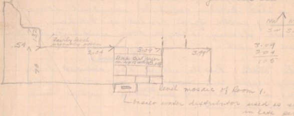
Saturday, September 16

Cable from Adit that all division safely in Beirut.

recopied

Room 1 = Walls

Facing N wall is rock cut with large rock cut



Notes on stairway:

Original stair rock cut with first riser .28 above level of pavement of Room 1. First tread above this riser is .60 wide. Next riser is .21 which brings you up to level of Room 4. At a later time ^this original partly cut out & ~~another~~ another stairway ^was made over this by laying in ^rubble over old stairway ^where left & building up with rubble where gone. Serving as first step is a reused basalt water distributor turned upside down making a step with riser of .20 & tread of 36. Between bottom of water distributor & pavement is a fill of .04 of dirt.

(Dimensions of distributor = .485 x .36 x .16
hole in center .22 x .07)

Next step up has 1 reused trimmed stone & 2 pieces of rubble. 2 pieces of rubble are held up to ~~lev~~ level of top of reused water distributor by rubble beneath while reused trimmed stone rests directly on water distributor & makes riser of 17 & tread of 30 (Stone = 40 x 30 x 17). Next step up is a poorly laid one consisting of 3 pieces of rubble forming a low riser of .065 & tread of .31

Next step is laid on level of floor of Room 4 ~~&~~ makes riser of .30 & tread of 22.

Room 4 seems to have been used as a kitchen & the rock cut floor drains toward the door instead of the rock cut drain in the N W wall; hence may have dammed up stairway to force water toward drain & prevent it from running down

on mosaic floor. On other hand original inhabitants may have purposely drained the kitchen in this way so that kitchen could be scrubbed down & running water from conduit in kitchen continued flowing through door until Triclinium cleaned as well.

[Bidrus]

E Wall: Rubble which has ~~almost~~ been entirely ripped out except for few stones which are set in mortar of fine ^clust sand & white lime. Grest on rock cut.

S Wall: Small section (.60) at SW corner is rock cut. Rest seems to be a sleeper wall of large untrimmed rubble to the uneven edges of which the mosaic pavement of room 3 comes & one section of the edge of the pavement of Room 1 also ~~overlaps~~ comes out over the edge of the rubble fill forming an uneven ~~to~~ edge to the pavement. ~~They wall may have (been a) sleeper wall with columns on it - place of 2 small cols. ...~~ one of possible places is section of live rock cut with 2 rect. dowels .04 [.07 x .07] <.23> [.07 x .08] .06 also

W. Wall is rock cut in sloping mountain side. 2 holes in rock seem to have been filled with rubble.

S-17-F, House 1. Recipes

House 1

Room 4

1. W. wall = Rock cut opening for order in upper N end of W. wall 9 round drain for stone in rock cut floor at middle of W. wall.

+1.82 highest of N. wall.

3. E. wall = Partly rock cut with few rubble fills where rock eroded. Rock cut scoop of entrance into Room 5. Also level section at top of rock cut wall for window or simply as footing for rubble wall to rest on.

+1.95 at NE corner

2. S. Wall = N. wall of Room 1

+1.32 top of floor 1. N. Wall = Rock cut. Fill in eroded section = .58 wide = rubble + black fine sand + lime as S. wall Room 3.

Room 5

N. wall = Rubble + mortar of black, finely sifted sand + lime giving gray color. Like same appearance. Exactly same mortar as in S wall of Room 3; in construction of bed for mosaics of Rooms 1, 2 + 3 as indicated in sketches of construction. This rubble wall is .72 of width cut + occurs only at E end + W. end of same wall is rock cut. to height of .92 above highest pt. + 1.07 above floor. rock cut floor + .62 wide.

E. Wall = of Room proper i.e. not counting entrance vestibule with rock cut stairs. Destroyed except for small section at N. end where partly rock cut + partly rubble. This rubble wall preserved in only small section but it is set in mud and at same time makes bond with rubble section of E end of N. wall which has the typical gray mortar. This gray mortar so far seems to be used only on the N + S sides of the House + under mosaic pavements - i.e. in places where run off water from mountain made strong water proof walls necessary + under pavements where drainage desirable. On E + W walls where run off + exposed to sun + streets necessity for waterproof wall was not so pressing. Hence may be an indication that mortar walls were expensive + substituted mud wherever could. Width of wall = .78 N + .15 stone floor of Room

of also under Room 1.

recopied

Room 5 (continued)

S. wall = rock cut footing only preserved = 57 wide and c. 26 at highest preserved points. A wide section at W. end cut down as for sill of a window = 1.51 wide. This cut down section is over the small ~~one~~ natural cave in N wall of Room 6.

W. wall = E. wall of Room 4.

Floor roughly leveled by cutting in rock cliff. Only this live rock remains. Natural hole from bottom to natural rock cave below.

Possible use = sleeping room.

Less probable = court since area behind (N.) could have been used for this + not enough sleeping rooms. But good argument for court = steps + entrance vestibule to E.

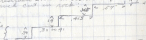
Sketch of Room 5 to show NE corner at join of N wall + E wall. with entrance vestibule to E.

Stair three very check E wall of building = {1.19 : rubble + mud.

No clear indication of street level at entrance to vestibule preserved. What may be indications =

(1) At NE corner just to N of entrance corner limestone quoins set in mortar on found. set off at -.22 from top of quoins. Set off = .04 m. Below foundation set off is another course of mortar but + rubble to -.40 from top of quoin after which foundations are in mud. (2) Building opposite has a kind of foundation set-in at +.40 from street in front.

Dimensions of preserved stairs in vestibule from top to last preserved cut in rock:

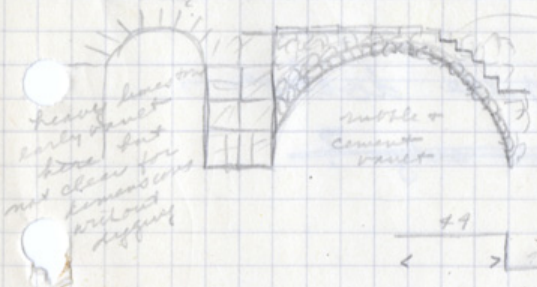


Entrance Vestibule: N. wall = wider than N. wall of Room 5. at N.W. corner = ca. 1.02 m according to best preserved indications. Mud + rubble + bonds with rubble masonry behind (N) of it. Steps down rock cliff where lost to NE corner of bldg. which is still well preserved. NE corner = 1.22 wide at E face along N-S street where corner quoins of quadrated limestone still preserved. These are roughly dressed: .28 x .59 x .22 + are set on edge. Set in characteristic fine black sand + lime but rest on rubble + mud foundation (at N. end -.28 from top). Hence another idea about construction. Characteristic mortar used throughout in superstructure but only occasionally in foundations where mud mostly used.

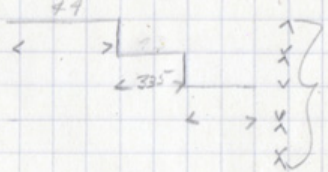
Diff. to get preserved width of N. wall 1.21 where steps down cliff

SW. Dock Vault = Mercury Vault. (Mercury actually found at 5. yard.) (1)

Front N section of dock pier is heavy limestone masonry for distance of ca 5.15 m from front. Beyond this point support for vault is rubble & cement and of arched rear of vault constructed. Masonry of heavy limestone const. is too cracked & eroded for accurate idea of original constr.



limestone pavement & limestone steps on top of rubble & cement deck.



treatment of cement joints at back of each tread for water proofing to water will not get into weaken vault & step from top of pave. to under.

heavy limestone pavement at top well laid but very cuts of paving blocks & big joints or just eroded.

Back sea wall repped out Tee.

Lose rubble & mortar const. not related. Cutting in top of big masonry wall to

N. -06.

On dock:

Is there diff in water level between masonry dock + vaulted dock?

~~Is the ceiling in top of masonry dock for gang plank~~

how dock width tie up with ancient ships?

~~Is S. dock the end of the dock?~~ ~~Fence steps down to water edge?~~

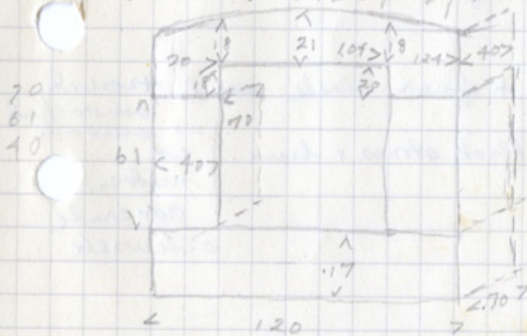
NE Vault of dock

Built against face of ~~dock~~ vaulted sea wall construction with sluice in center of dock vault of vault. Dock vault bonds in with sea wall & built at same time. All vaults are barrel vaults Dock vault constructed of rubble + broken building debris of marble, limestone, serpentine. No trace of surfacing.

V

Harbor wall

Constructed by series of vaults. Aphr barrel vaults were built the vault was filled with ~~masonry~~ rubble + concrete masonry except for opening .82 wide x 9.3 high. This opening is best preserved under NE ~~Dock~~ but all harbor vaults have them. Opening is formed by stone lintel short section of which forms jamb on each side. Then jambs of roughly quadrated limestone blocks & stoop of limestone block.

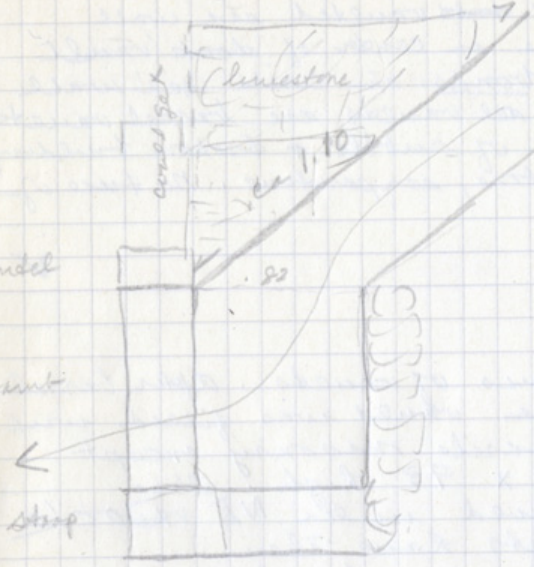


~~Taking top of stoop as a base the~~

The top of the stoop runs back flat for .70 + is there met by vertical face of rubble to height of .62 m from top of this vertical face of rubble a ~~stoop~~ chute runs back on a gloop probably to the top of the ancient ground level & leads to a drainage shute to the sea. The harbor level of the sea chute to top of stoop in opening as indicated by ancient wader line.

At inside of (facing) L. jamb (N) is round

hole q at right joint is also hole so perhaps these drainage chutes coved be closed.



to another layer of gravel smooth + pulverised etc.

Top of NE Dock vault = level with pour of rubble & concrete ca .20 thick in 2 layers.

cement .075 a cement floor of lime + finer black sand. trowel smooth

rubble + concrete to level .20 use varied top rubble + gravel of black stones + lime. as smooth + modern concrete sidewalk

rubble + concrete construction of vault = tile or brick reused and frags rubble marble revetment etc.

Harbor vaults 2

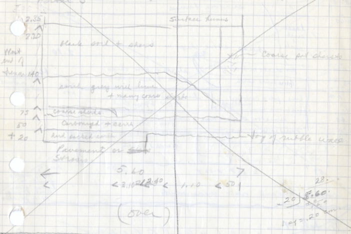
Those exposed are badly weathered but some as well preserved as under NE Dock vault On level with tops of crowns of vaults is course of masonry limestone blocks which have some sort of cutting + trimming as Harbor portals + Market Gate. Some reused. Above this course was another course of masonry which has since been plundered. Behind this course is a row of reused limestone blocks some with base mouldings as of column bases, all sizes + shapes some trimmed + some rough. A sort of sea wall parapet of reused limestone building material.
Cutting in limestone coursed masonry at top of vault as recorded on A.A.S drawing.

Material of vaults:
Grey + white coarse grained marble &c. frag
Serpentine col. frag.
Serpentine revetment or pavement +
White + grey marble revetment +
White marble frag of col + cornice.

Harbor vaults + above parapet wall seem latest period of habitation during which reused even building material of IV cent? To judge from parapet. Or parapet may have been V cent. addition on top of IV cent + vaults.

Portals

Stratification against Portal wall just NE of Portal 5



(over)

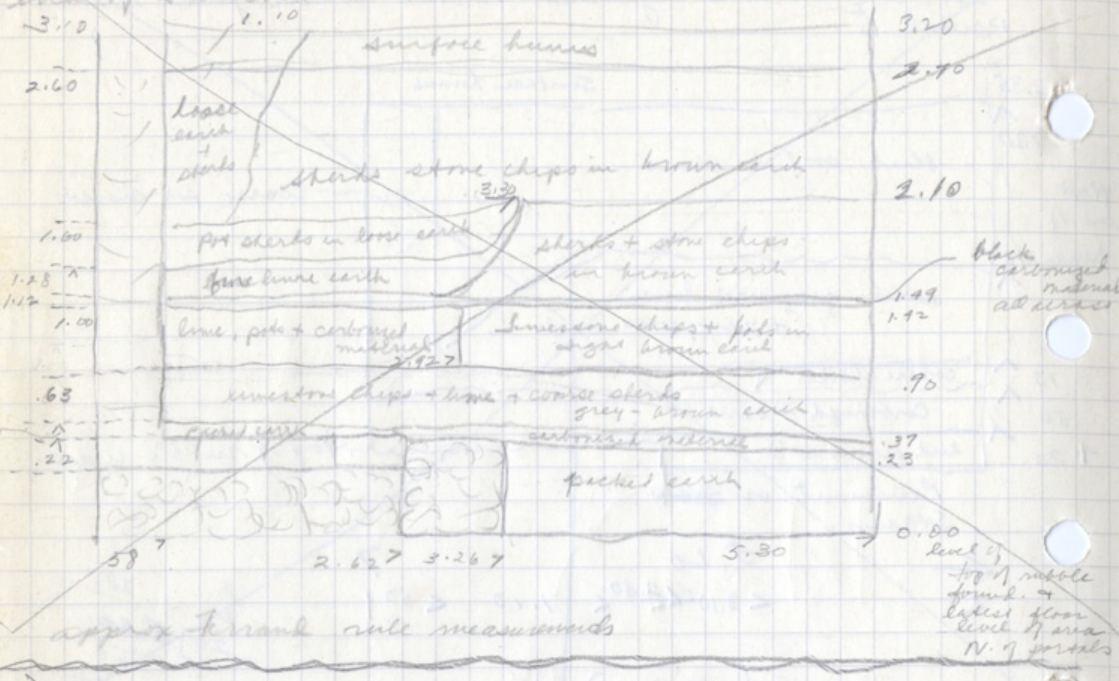
Portal 2

Foundations + superstructure + early walls essentially same as Portal 1. Foundation set off in front of portal more neatly made + regular = .26 & .32

I, b. N transverse wall also has large found set off = .25 + .27 + this steps out more + is later than found. wall under portal. However, under this transverse later wall is foundation of transverse wall which in contemp. with portal, both with it. See above for back of transverse S[illegible] (back + in deep sealing) Large foundation wall ‖ + this under later rubble wall ‖ to portal wall. But not found of col. since it is not exactly ‖ to portal wall but runs in toward it at S end, correct statement referring this under remarks in Portal 1 By col. mean large col. in front of original portal structure.

Portal 3 - same - except so-called C[illegible] wall is almost missing with portal wall. 2 pieces of limestone pavement of later tel are preserved.

Stratification against Portal wall at SW end of trench.



approx. 1 crank rule measurements

Portal 4

Pavement of latest level of habitation preserved & left in place since we have complete below pavement record in front of this & portals.
Typical dimensions = .52? x .52? x .06.
Sometimes cut to fit unless .61 x .42 x .06
ref. to course brick like .51? x .50
Typical Syrian masonry →

Covered drain

Portal 5 much same — 2 late transverse walls
2 contemp. " "
covered drain at your N. of portal
" drain in front

Pavement = heavy black stratum of dust & lime & sherds = at least 35 cm probably more.

Portal 1 continued

Most of stoop which was also foundation stone is missing.

Foundations consist of single course of ~~of~~ large l. blocks 69 x 71 x ?

Pilasters & door jambs rest directly on this foundation course which is also door stoop. Stones smoothly hammered but roughly dressed (unfaced) with drafted stone edge with teeth .006 apart (hollow (teeth) & 1.6 cm apparently .01 to .05 [illegible].

Below foundation course was foundation trench filled with rubble & hard mortar of fine dark sand & lime making grey in color. Rubble very irregular in size; roughly coursed & irregular in width. Greatest width of set-off between rubble foundation & limestone foundation .26; narrowest .11. Rubble foundation to stereo.

Bonding in with this rubble foundation of the portal wall are rubble & mortar foundations which ~~run~~ run out at right angles from the portal wall just under the pilasters. These run out to but do not bond with wall of heavy rubble & mortar parallel to rubble & limestone foundation of portal wall.

The foundation walls at right angles & bonding with rubble foundation wall of portal is at same level ~~as~~ & probably goes out to tie into a rubble ~~wall~~ foundation for sleeper wall on which was a colonnade in front of portal wall with cols. opposite to pilasters of portal wall. However, large ~~[illegible]~~ rubble wall near the portal wall is carried to a greater height that rubble walls at R.A. (about + 30 cm) & does not bond. Problem of whether this large rubble wall is found. of original colonnade cannot be solved until pavement of latest use is removed since it ~~[illegible]~~ & later walls cover part of the large rubble foundation wall.

Under stoop & to SW of it is small section of rubble wall on screes of bed rock which does not bond with any of these & does not seem to be related in any way with them.

Above all rubble foundation walls is a late wall of rubble construction but not for foundation which runs along front of colonnade with spur walls at R.A. across to portal wall in front of pilasters.

I, a Rubble of broken limestone + reused but roughly trimmed limestone blocks + field stones + bricks in light sand + much lime [illegible] white color & binding material. This = latest period of habitation when portal was filled with reused masonry, 2 sections of architrave (?) broken; + limestone rubble. Hence portal [illegible] wall at this time not used as an entrance to anything but as small shop or dwelling — probably a shop since there are so now of them. But

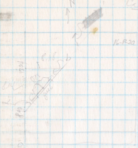
II Behind portal walls debris of collapsed building fills area almost up to modern ground level. Hence [illegible] area of city by time of this late period of construction must have become a shambles filled with collapsed masonry (earthq. 1458?) & people rebuilt in only area open to them = this [illegible] portico structure with colonnade in front of it which probably faced an open court (close to the sea?)

Masonry of superstructure: Surface badly eroded but seems well trimmed with stone cutting + fitting of IV cent. Tyre work = large limestone blocks of irregular [illegible] dimensions, hence often irregular coursing + [illegible] of individual stones to fit together where course lines are broken, well quadrated & with regular faces but not dressed to a smooth face — marks of teeth stone adze left. Edges fit close & with no binding material nor dowels

16 O/R. (1)

Calculation of ∠ of gulli with

C. dashi



$\tan \angle b = \frac{17.04 - 8.90}{8.18} = \frac{8.14}{8.18} = 44°57'$

$\tan \angle x = \frac{8.18}{8.14} = 45°8'$

log 8.14 = 0.9106244
log 8.18 = .9127533
0.9978711

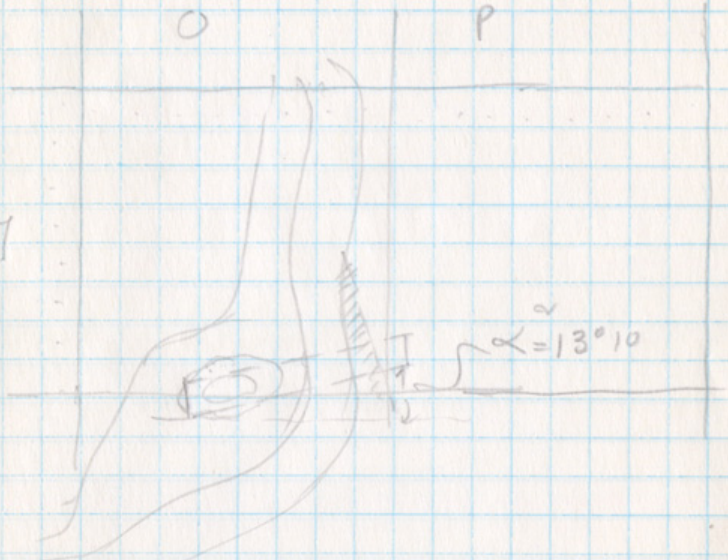
log 8.18 = 0.9127533
8.14 = 0.9106244
0.0021289 = 45° 8'

Roth Royce

No, please send me

Surveying Notes

Study for location of Tunnel in 17.0
(Clayton Riccela -)
1937



length of tunnel 100 miles
width = 12 miles

175

Plotted in ground

List of Plans sent
to Princeton. July 29, 1937

Plans Antioch 1932-1936. T.P.
" " Daphne " " T.P.
Antioch & Daphne — T.C.

Field Drawings

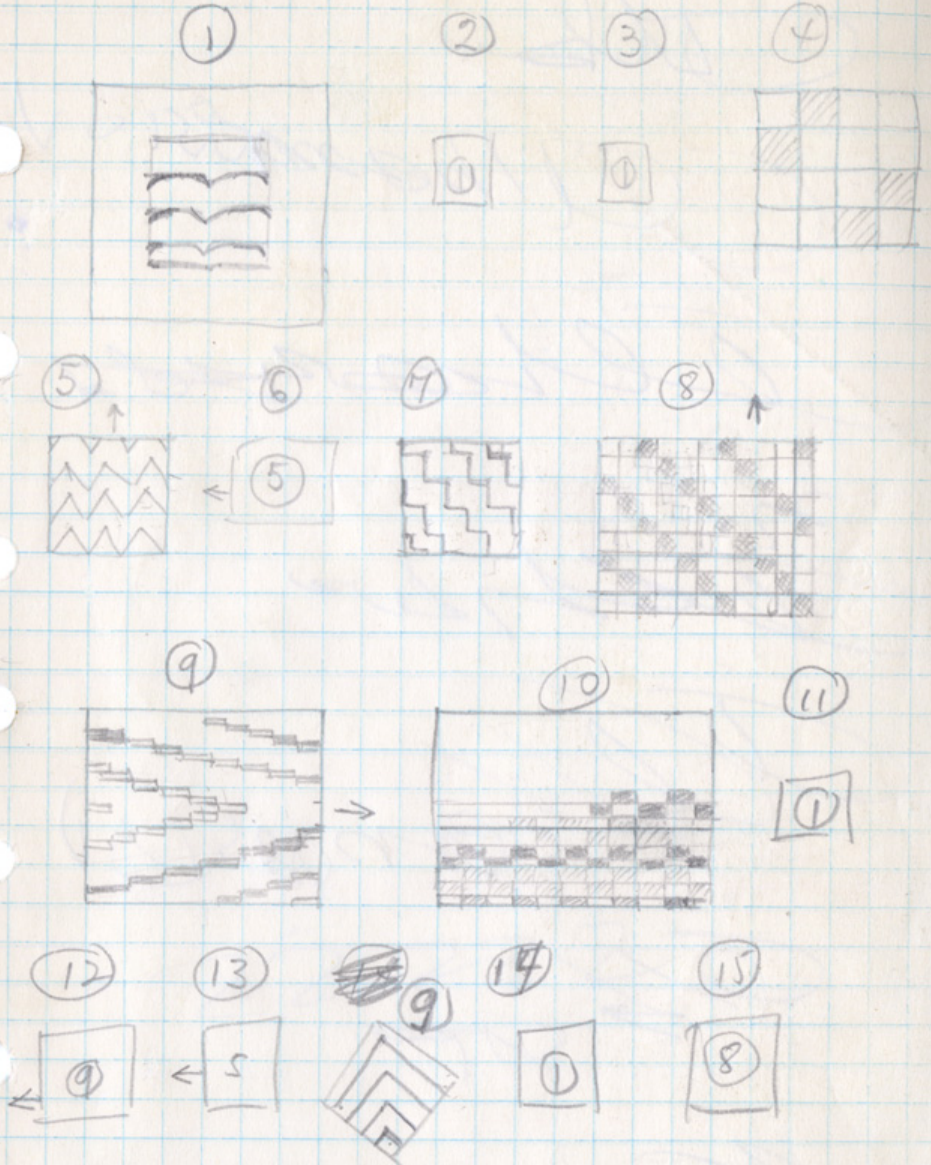
Antioch. 20-B 63, 6. N.P.

Daphne

D28, D29, D30. N.P.

D, 20, D21, D22, D22 T.P.

T.P.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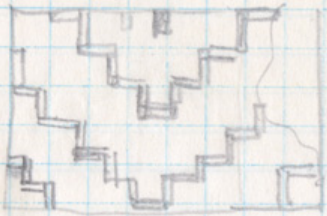
Transgression

16



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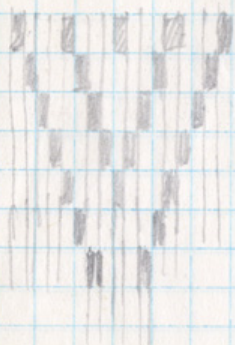

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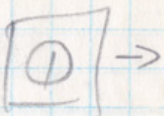

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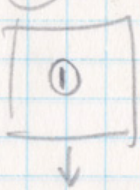

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3 rows in belo

3

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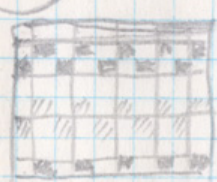

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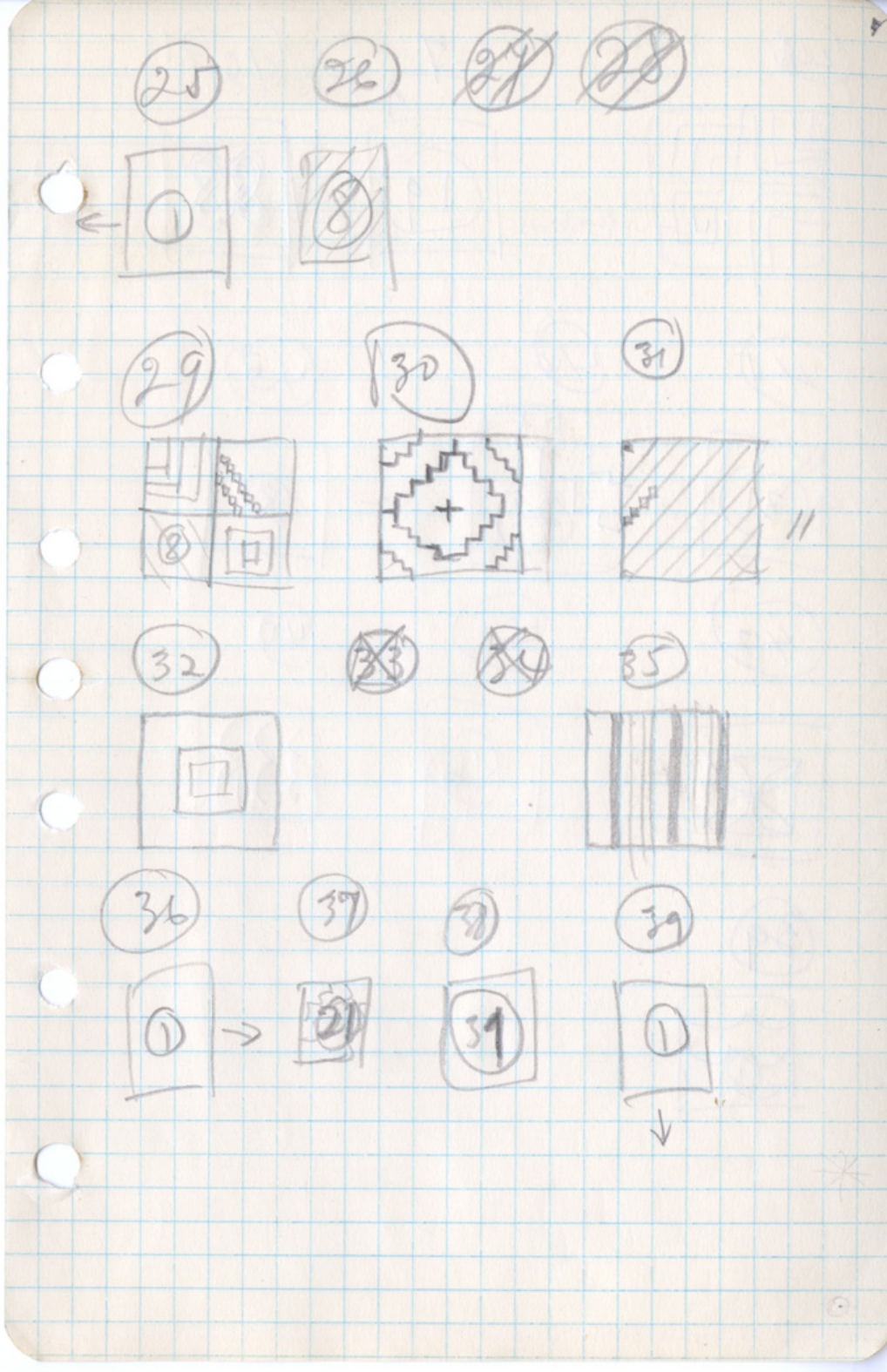
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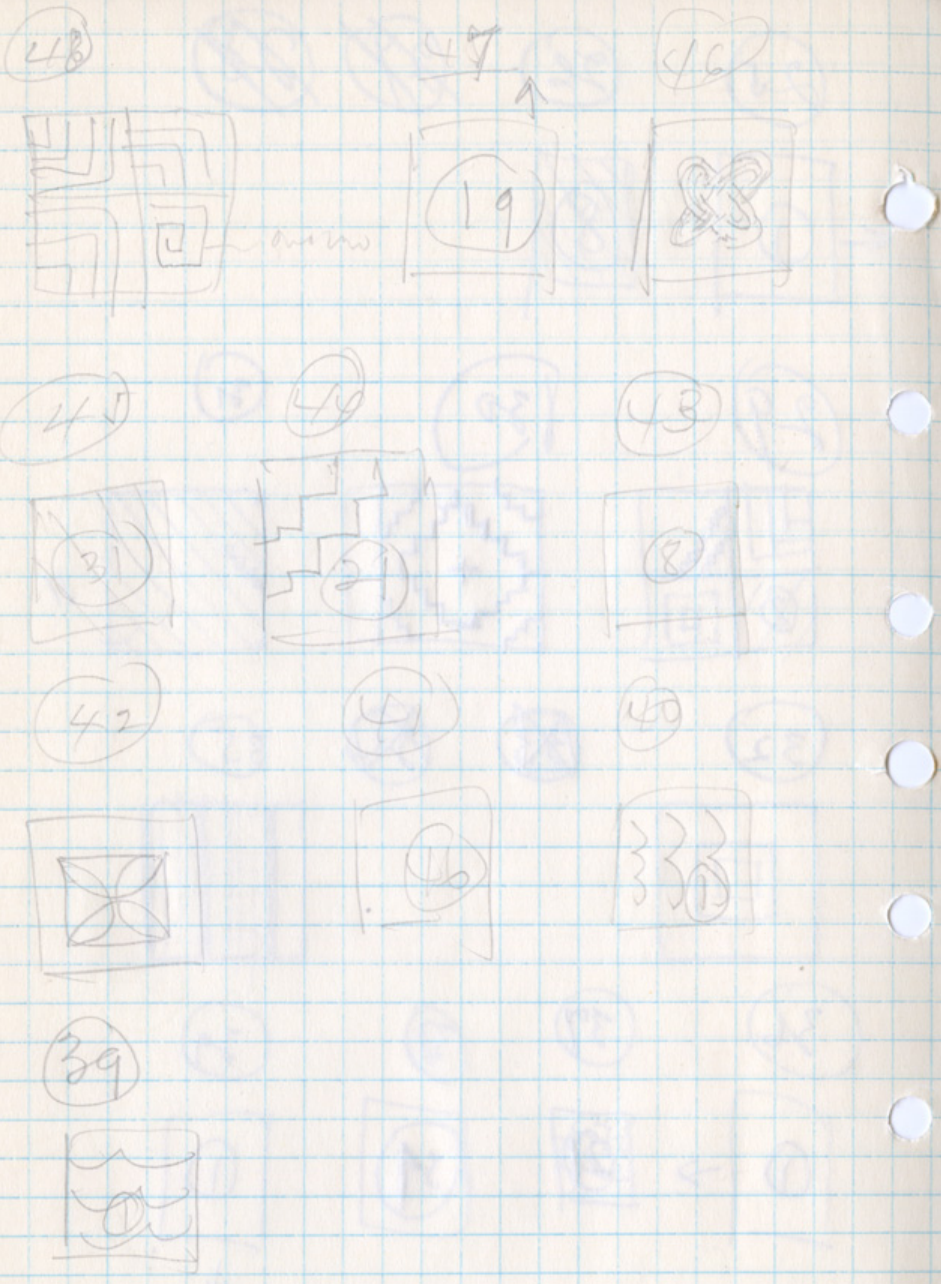
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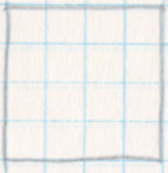

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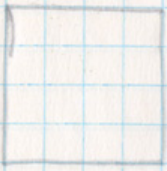

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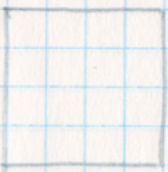

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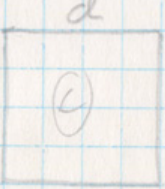
a

b

c

d



e

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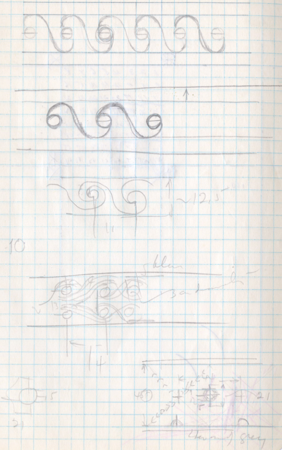

~12,5
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blue
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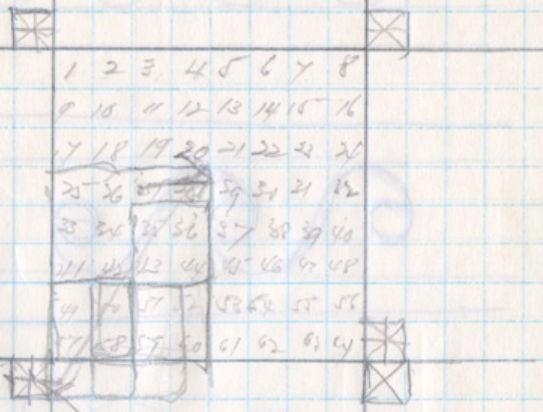
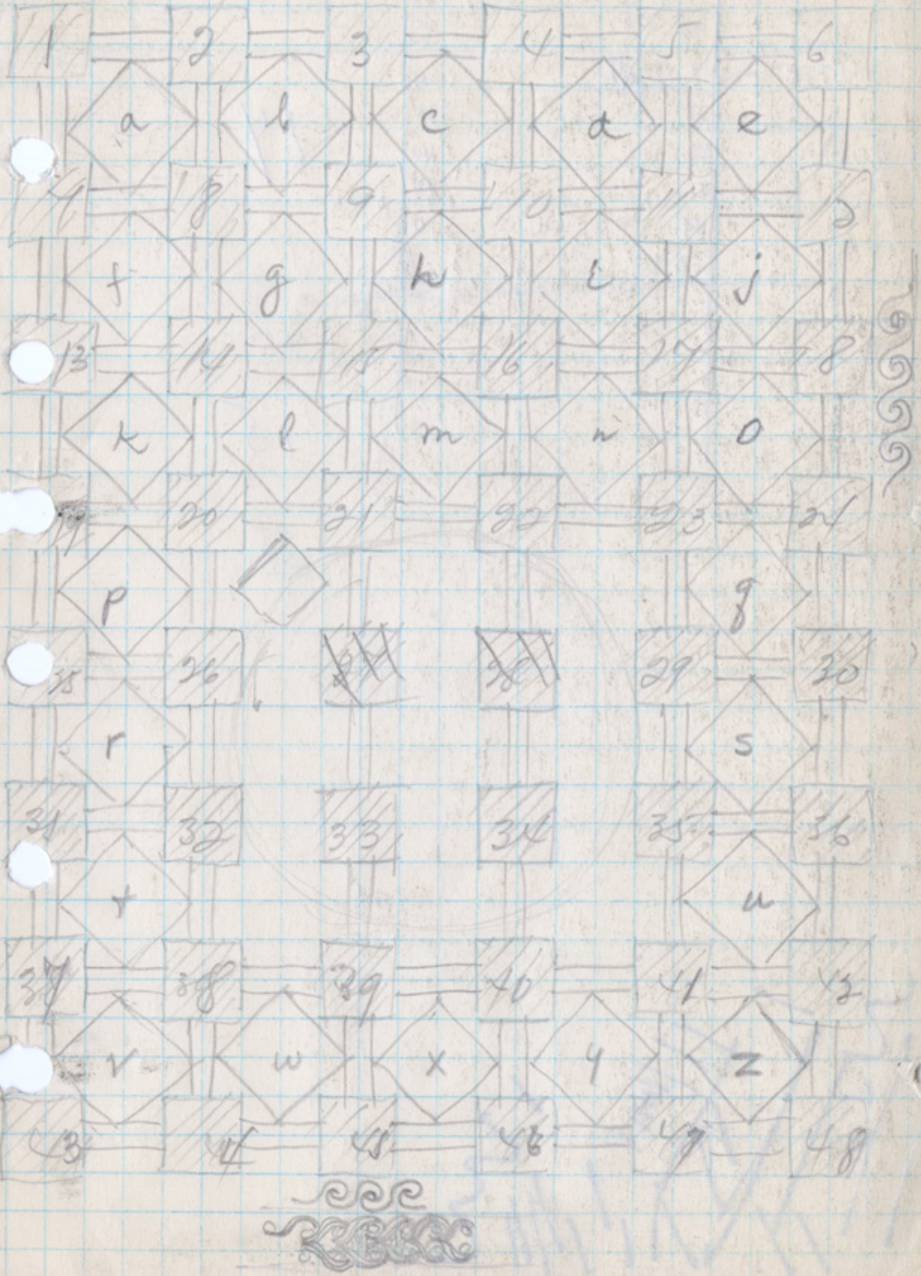
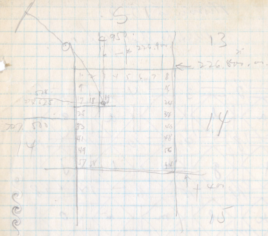

1 2 3 4 5 6 7 8
9 10 11 12 13 14 15 16
17 18 19 20 21 22 23 24
25 26 27 28 29 30 31 32
33 34 35 36 37 38 39 40
41 42 43 44 45 46 47 48
49 50 51 52 53 54 55 56
57 58 59 60 61 62 63 64

150 -

Mosaic in 10-Q.

Work by Flat Stitch





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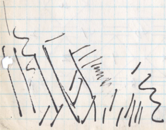
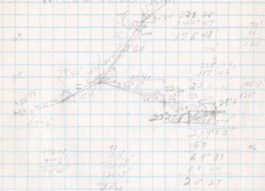


Calculations of coordinates in Daphne.

April 3, 1937.

NARKICOC mesa



$\sin 7°6' = \frac{x}{71.38}$; log 71.38 = 1.8535940

log 7°6' = 9.0920337

$\cos 7°6' = \frac{y}{71.38}$; y = 10.9454177 = 8.819

x = log cos 7°6' = 9.9966570

log 71.38 = 1.8535940

x = 1.8500510 = 70.80

log sin 10°18' = 9.2523729

log 75.02 = 1.8751771

1.1275500

y = 13.41

log cos 10°18' = 9.9929444

log 75.02 = 1.8751771

1.8681215

x = 73.81

∴ Coordinates of S_1 = $y - 8.82$

$x = -70.80$

Using as origin

P_3

$S_2 = y - 8.82$ $\quad x = 70.80$

13.41 $\quad 73.81$

-22.23 $\quad -144.61$

$\sqrt{3}$

$\log \sin 20' = 9.5340517$

$\log 104.40 = 2.0187005$

$x = 1.5527522$

34.95

$\log \cos 20' = 9.9729858$

$\log 104.40 = 2.0187005$

$y = 1.9916863$

98.104

S_3 $\quad y - 22.23$

98.10

120.33

$x - 144.61$

44.95

189.56

S_4

$\log \sin 30°27' = 9.7048348$

$\log 20.88 = 1.3197205$

1.0245553

$y = 10.58$

$\log \cos 30°27 = 9.9355434$

$\log 21.88 = 1.3197205$

1.2552639

$x = 18.00$

S_1

$= 120.33$

10.58

$y = 130.91$

189.56

18.90

$x = 207.56$

S3

log sin 30 = 9.6989700
log 104.40 = 2.0187005
1.7176705 - 3
52.20

log cos 30 = 9.9375306
log 104.40 = 2.0187005
1.9562301
90.41

S_3 - y - 22.23
+ 52.20
y + 29.97 ✓

x - 144.61
- 90.41
- 235.02 ✓

S4

log sin 20° 27' = 9.5433103
20.88 = 1.3197805
1.8630408
y = 72.95

log cos 20° 27' = 9.9716791
20.88 = 1.3197805
1.2914596
x = 19.56

y = 29.97
19.56
49.53

y + 30.07
47.30
+ 103.22
+ 37.37

x - 235.02
19.56
- 254.58

235.02
7.30
242.32

S

log sin 28° 26' = 9.6730319
log 24.53
1.0627274
11.55 = x

log sin 28° 26' = 9.9453810
log 24.53 = 1.3896275
1.3352285 = 21.40 y

S x - 254.58
21.68
- 276.13

y + 37.37
+ 58.77

358 96
97
11.06
61 54
3 28 06

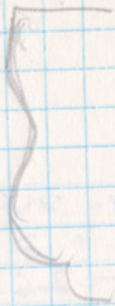
logs 12° 48' = 9.3442688
24 53 = 1.3896975
10.7351663
5.4734

12° 48' 9.9890711
24 53 = 1.3896975
1.3787686
23.92

St

x - 242.32
+ 23.92
- 266.24 ✓

y + 49.53
- 5.43
44.10



11 Early Ionic capital palmette ⟨in te spiral⟩ without volutes?

~~vegetable type~~

Part of an Ionic capital? a ~~bracket~~ [inserted: or bracket]. A fragment of ornamental decoration.

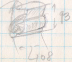
Resembles capital from Delos, except that ~~the~~ spiral has reversed direction.

Rather good carving. Blue [inserted: dark] limestone [inserted: or slate].

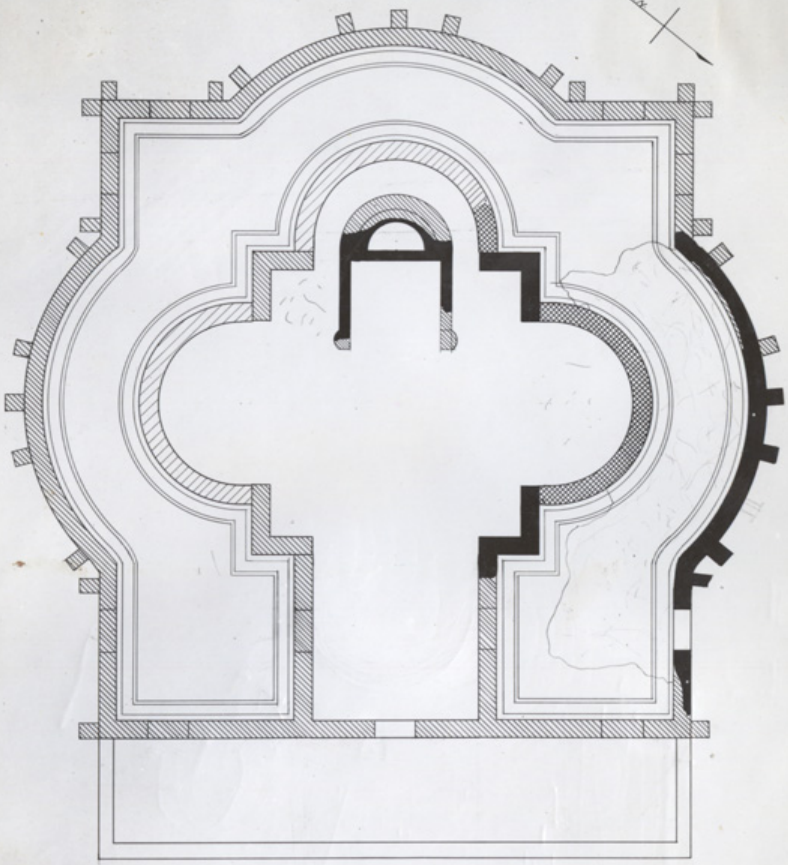
Part of spiral missing. Flute of spiral has 9 mm width and at center has a nail, probably for decoration ~~[illegible]~~ [inserted: tied] 5 mm diam. ~~[illegible]~~ Under flute of spiral a four leaf palmette develops from the ~~bud~~ ~~which~~ [inserted: the latter] disappears with the spiral.

Back side has nail ~~[illegible]~~ impressions for attaching on other part of capital or a wall.

Battered surface to insure binding.



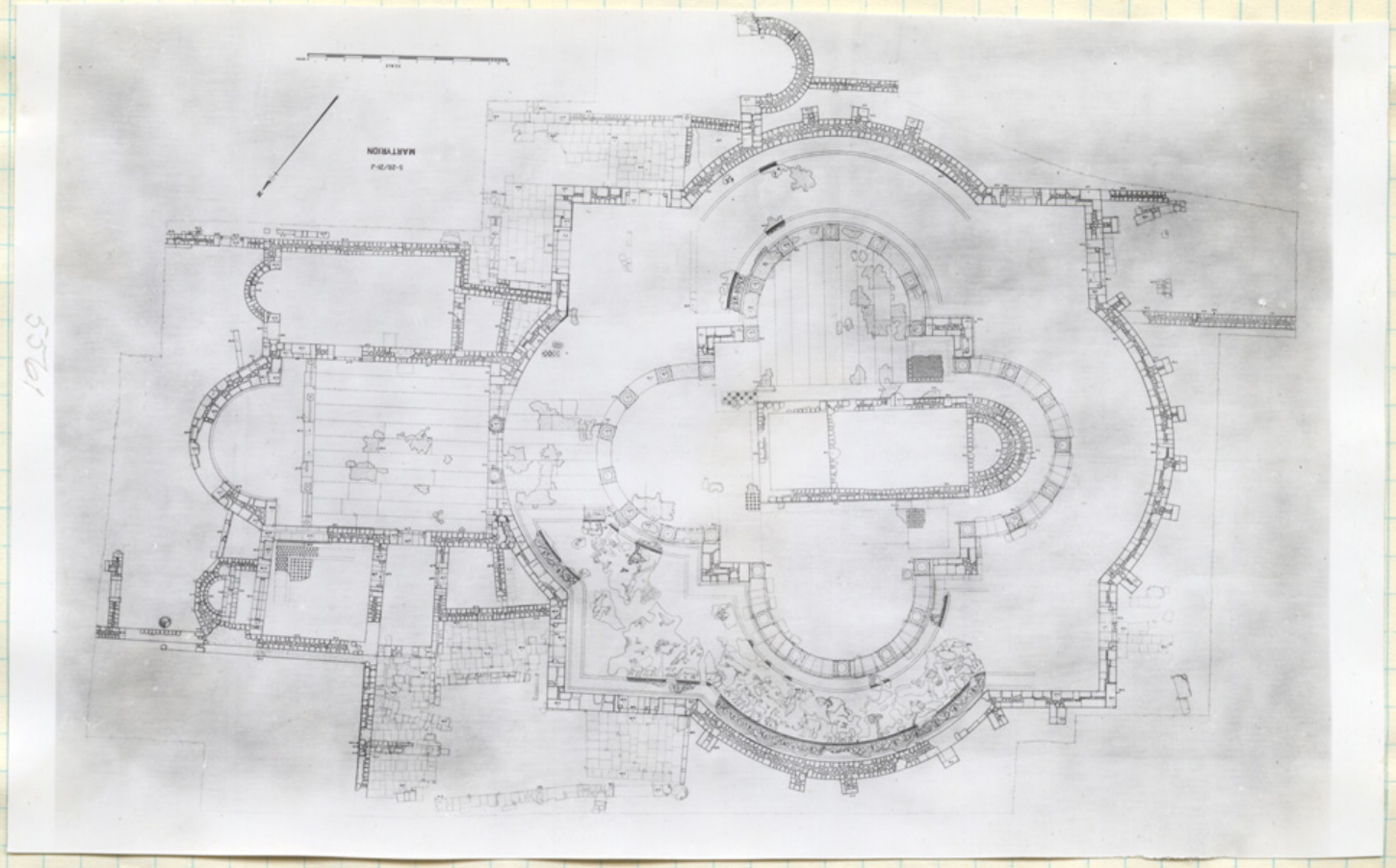
h = 93
w. 44
t. 108



S-20/21-J

TENTATIVE RECONSTRUCTION

0 3 10 metres


MARTYRION

Patriarch Macarius in 1652 saw in Seleucia the church of the first woman martyr. Ste. Thekla; her body is buried there.

Theophanes A.M. 5983 p. 135
"Church of Ste Thekla existed in year when Palladios was bishop." (A.M 5983 in Theophanes' chronicle of the years (?) = 491 A.D.

Index of Christian Art "Thekla of Seleucia c. 343. Saint (Nov. 20, 30) ~~Martyred~~ Martyred with Anna of Seleucia & others. Buried in Seleucia. Often confused with Thekla of Iconium.

Thekla of Iconium (I-II cent.)
All the acts of St. Thekla are fabulous. According to Tertullian, they were composed by an Asiatic priest to do honor to St. Paul. St. Jerome held them as apocryphal.

From Petits Bollandistes. Vol. XI. Sept. 23.
Thekla, daughter of pagan parents in Iconium in Lycaonia; the wealthiest & most desirable girl in town; engaged to be married, but renounced contract & took Christ as her eternal spouse. Sold her jewels in order to bribe jailer to see St. Paul in jail in Iconium. St. John Chrysostom (d. 314) wrote or preached that Thekla gave her jewels to see St. Paul while his listeners had not the courage to give an obol to see Jesus Christ.

Thekla then followed St. Paul to Seleucia

where a native of the place tried to kiss her in the street & she tore the cloaks off his back. The man accused her before the governor, and she was put to fire at the stake, but a great deluge put out the flames. Then she was exposed to beasts in the amphitheatre, but they would not touch her. The next day she was tied to bulls to be torn to pieces but the ropes broke. Then she was thrown into a ditch filled with serpents but remained unattacked. After that she jumped into a pond filled with seals & dolphins to baptise herself. All the sea monsters in the pond died when she jumped in.

St Zeno of Verona (4th cent.) wrote about the ditch episode, & when her deliverances moved the people of Antioch (sic) gave her an audience during which she said she placed all her confidence in Christ. The governor freed her & she hurried after St. Paul. Later returned to Selencia where she converted many to the church. Finally she ~~~~ retired to a ~~cave~~ cave on Mt. Calamon where she died at age of 90.

In art she is represented amongst other scenes as
1) seated in an area & surrounded by wild beasts sleeping or reposing around her.
2. placed in the middle of a fish pond.

Referred to as a Roly pantomonkye.

Consult:
Repertoire des sources historique du moyen age, Ulysse Chevalier, Paris 1907 (Picard)
cols: 4401 - 4402

Petits Bollandistes concerning her cult:

Cult is very ancient + illustrious. St. Gregory of Nazianzus (d. 389) went to Seleucia as an act of devotion to visit her tomb. Saints Marana + Cyra, recluses at Berea in Syria (both women died ca 445) went to visit the church of St. Thekla in Isauria.

Pilgrims came from all parts to Seleucia where God performed great miracles. At the 7th Oecumenical Council the Bishop of Seleucia praised her tomb.

Martyrs in torture prayed to God to deliver them as he did Thekla from fire, beasts + other torments. Her deliverance figured in prayers + it also figured in the service prayers of her church.

Zeno, Emperor of the East (474-91) built at Seleucia a superb temple in her honor in recognition that he had recovered the empire by her help.

Thekla's body first buried in Seleucia; now in the cathedral of Tarragone dedicated to her name.

Keck "She is certainly an important figure judging by the 4th c. references to her; the 5th cent. count of the two recluses" — "Had a shrine before Zeno's church, as might be expected." Look up his reference for this.

Stands in high honor by church = placed immediately after the Apostles

of Christ. Called the first spiritual daughter of St. Paul. She was the first female martyr (or rather neo-martyr). She is the apostle & evangelist of her sex.

Look up:

Church in Hadrian's Hdn. Athens
P.B.S. Rome. XI (1929) p. 66.
Wiegand. Byz. Zeit. 33, 1933. p150

Cf. Ecochard's theory.

Exterior dy. of Sel. Mart. is approx. 29.00 m. across from side to side (not including towers)

Compare with central type churches listed by Ecochard & supplement by Apamea; Diabakir; new Bosra etc.

Mosaics

Certain details of drawing & modelling which go into Islamic art: drawing of eyes giving effect of rivets; modelling of bodies as repeated flat ovoid planes (H. Glidden says may find parallels in Baghdad School of miniature painting of XIV century)

Gerasa
City of the Decapolis A.S.O.R. New Haven
Mosaics by F. M. Biebel 1938

"Any discussion of the subject matter of East Christian Art must take into account the combination of religious and non-religious elements which existed during this period. St. Nilus protested against this practice at the beginning of the fifth century when he wrote to Olympiodorus the Eparch begging him to abandon his plan of decorating his church with "the hunting of all kinds of animals, in such a way that on the land are seen extended nets, hares, deer, the other animals in flight, and the eager hunters spiritedly pursuing them with the hounds; and upon the sea lowered nets, which catch all kinds of fish and are hauled up on land by the fishermen's hands" suggesting instead scenes from the Old & New Testament which would serve as books for those who could not read." 35

35. W. Smith & H. Wace, Dictionary of Christian Biography, 1887, Vol. IV., p. 44.; Migne, P.G., Vol. LXXIX, Ep. 4, 61, col. 577.

Guyer on Rusafa Martyrion

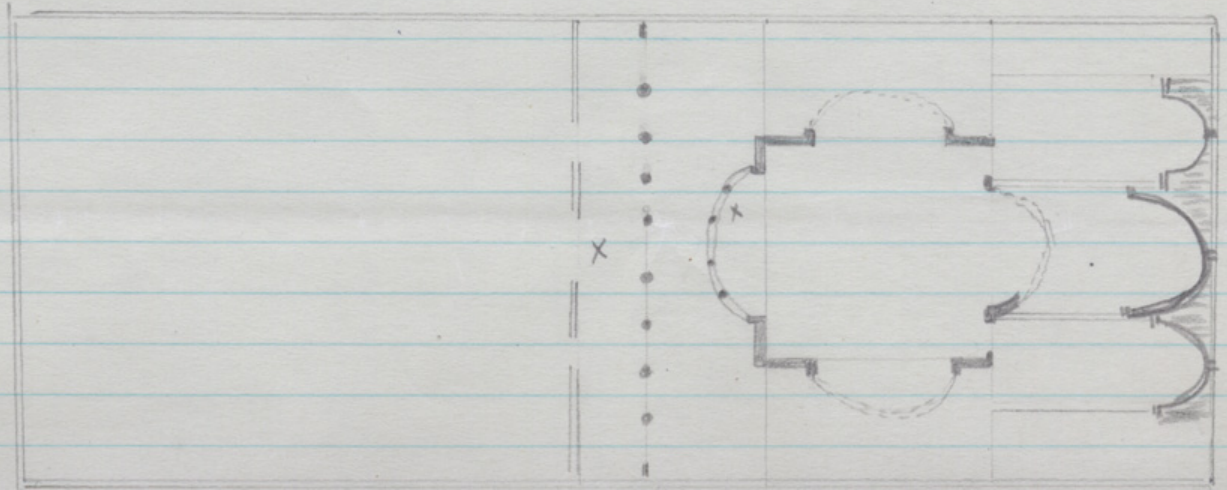
"Vom Wesen der byzantinischen Kunst"
in Münchner Jahrbuch der bildenden
Kunst, N.F. Bd. VIII (1931) fig. 3, p. 104.

Reconstruction of exterior elevation.
Central tower; also East towers.
Fig. reproduced in (SA) NA 2750 W. 12
vol. II p. 101

Martyrion at Corycus in Cilicia.

from

Monumenta Asiae Minoris Antiqua, II, 1930 by
E. Herzfeld and S. Guyer
(here they are again!)



Reference Prothesis & Diaconicon.
Butler (Smith), E. C. S. p. 175.

All Syrian churches have sanctuary to E; all have two main divisions of a nave & sanctuary (sanctuary = presbyterium) Many, even earliest, have chambers on either side of the sanctuary to which the names of prothesis & diaconicon have been given.

Prothesis = room in which the priest & the deacon performed the preparation & preliminary oblation before the Liturgy

Diaconicon = sacristy: for sacred vessels & where the clergy vested.

No rule as to which side of the presbyterium these chambers should occupy

Prothesis in Syria: usually on S. side with larger entrance & also a doorway in the outer wall.

Opening between the nave & the sanctuary is a broad arch which Butler calls the chancel arch.

The prothesis & diaconicon with 3 exceptions (Northern Dana; il-Anderîn; Umm it-Tuwênch) always open upon the nave; occasionally one, rarely both of them, was connected with the sanctuary by a narrow doorway. But there is a group of churches, mostly of the VI cent, in the 'Alâ which for some liturgical reason, had lateral openings connecting both chambers with the space directly in front of the apse.

The opening between the diaconicon & the nave is almost invariably a square-headed doorway with a stop for a door opening inwards, while an arch, not capable

of being closed, is often substituted for the practicable doorway between the nave & the prothesis.

Crowfoot, Churches at Bosra & Samaria - Sebaste: "..... but it is difficult to identify the other with a prothesis chapel because neither of the two opens directly into the "nave" (ambulatory), and the modern type of prothesis chapel only came into regular vogue later when the Great & Little Entrances were introduced into liturgy in the time of Justin II" p. 17

Notes from Butler's (Smith). Early Christian Churches in Syria:

p. 20:

"The apse was enclosed in straight lines giving the exterior a trapezoidal plan."

Cf. p 20 also paved passageway like yours, ill. 12; text p. 19.

Prothesis = contained an altar upon which the faithful deposited their gifts = S. side
Lowrie, Monuments of the Early Church p. 126.

Diaconicon = vestry = N.

But both are interchangeable

Desiderata as writing up, Spring 1940

① Need to have scaled drawings of posts for altar balustrade before apse of E choir.

② Drawings & photos of every scrap of architecture, many of which stored in Antioch with no chance to record at end of season because swamped with work.

③ Dig below water at E end
to check construction of baptistery & see if this was originally laid out to correspond with irregularity of S. apsidiol; or if S. dependency was originally constructed like baptist. as short spur wall leading nowhere now & corresponding to similar wall tied to apse of bapt. would indicate.
to dig out piscine wholly
to follow around foundations & check all joints
to look for earlier floor levels everywhere; design, below all extant floors
to turn over sleeper blocks of altar balustrade for inscriptions
But for all of this would need a good pump & an elaborate drainage system.
Any indication of bases for applied exterior colonnade on apse of E. choir?

④ Photographs needed

More of baptistery + details

Details of exterior of walls

SW - NW corners

E. ambulatory wall S of semct. portal.

East apse = details of N. side

Pavement outside E portal in NE angle

Princeton

① Ask Downey about possibility of
Ø6 inscription on E. choir col. base
being of date (505 or 457 A.D.)

Ans.: possible but improbable unless find
example of same.

Seleucia Earthquake

526 A.D. Malalas says also
destroyed Seleucia

528 A.D. also did damage since
it is recorded that emperor sent
funds for reconstruction of Antioch,
Seleucia & Laodicea.

References to Consult

Crowfoot, Churches at Bosra and Samaria-Sebaste. Brit. Sch. of Archaeol. in Jerus., Supplementary Paper 4 (1937). Issued by the Council at 2 Hinde Street, London, W. 1.

Sedlmayr, H. in Byzantinische Zeitschrift, Vol 35 (1935), p. 48 (Bosra referred to as one of the "unschatzbare Urkunden noch nicht genug ausgewertet") Crowfoot p. 2

APX. ΔΕΛΤ. VII, 1921-1922 p. 137 re central choir in Church of St. Jean. Ephesus Fig. 7.

Byzantion XIII (1938) pp 180-181 review of Lassus' church.

Armenian Architecture
Baxters summary in Byz. Arch.
Dalton
Strzygowski etc.
Rice

Gertrude Bell: The Thousand & One Churches

Sedlmayr, H. Kunstwissenschaftliche Forschungen, Berlin. 1933. This with his above (B. Z., 35, 1935) Crowfoot calls illuminating articles on vaulting. He does not criticize Butler's restoration however.

Periodical Literature to Look up: Churches only
From the Art Index Jan. 1929 - Sept. 1932

Meriamlik und Korykos; zwei christliche ruinenstätten des rauhen Kilikiens, by E. Herzfeld & S. Guyer. Reviewed by K. Conant in A. J. A. 35: 357-8 July 31. Good

Early Churches in Syria, Butler, Smith reviews
Cicerone 22 pt 23-24: 616 D'30
Parnassus 3: 51 Mr '31
Burl. M. 58: 206 Apr. 31
Speculum 6: 477: 479 Jl. 31

Churches at Jerash by J.W. Crowfoot, review:
Roy. Inst. Brit. Arch. J. 53, v39: 147-8 D'33

à travers les villes mortes de haute Syrie by J. Mattern. Review A.J.A. 38: 623-4. O 34

Eine reise in Syrien. D. Krencker J.D.A.I 49; Arch. Anz. col 265-87 '34

Die Brotvermehrungskirche von Et Tabga by A.M. Schneider. Review A.J.A. 39: 639-40. O'35

Churches at Bosra & Sam.-Seb. by Crowf. Review
J.H.S. 58: 287-8 '38 no good.
R. Archéol. 56 v. 13: 188 Ja. 39

Roy. Inst. Brit. Arch. J. 53 v. 43: 761-2 May 23, 36
Strzygowski Domes & Quadrival Plans.

Dear Sandy: 20 Dec. '37

Another addendum for Selevia. Theophanes, A.M. 5983. p. 135 line 21 ed. de Boor, under the last year of Zeno (A.D. 491) records that Palladius, who became bishop of Antioch in this year as successor to Peter the Fuller, was a presbyter of the church of St. Thecla in Selevia (this church, or a church of Th., is mentioned in the journey of Macarius, A.D. 1652). At least this shows that Selevia was still more or less functioning in 491.

Merry Christmas. D. Wilbur somewhat hesitantly sends greetings, recalling your last meeting with him.

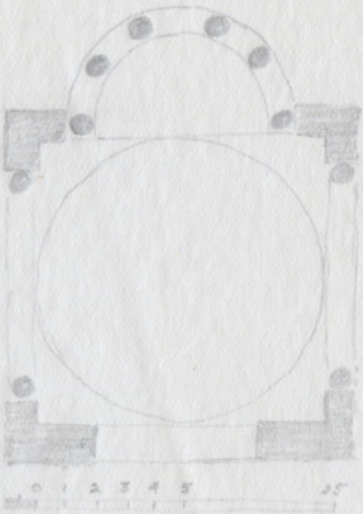
G. D.

Periodical Literature on Apamea

Les ruines d'Apamée de Syrie. F. Mayence
Brussels Mus. Roy. Bul. s 3 v1: 50-2 Ms. 29
La Première campagne de fouilles belges à
Apamée. F. Mayence. id
Brussels ditto s 3 v. 3: 23-6 Ja '31
La deuxième campagne de fouilles belges à
Apamée. ditto s 3 v. 4: 42-5 Ms. '32
La troisième ditto s 3 v. 5: 1-6 Ja '33
La 5e salle d'Apamée. F. Mayence v. 5 50-7 My 3
La quatrième ditto s 3 v 7: 2-10 Ja: 35
La Ve ditto s 3 v 8: 1-13 Ja 36
La VIe ditto s 3 v 10: 97-113 s 38
Les fouilles belges à Apamée. S. Besques. id
Beaux Arts p. 6 Apr. 14, '39

Bulletin de l'Institut français d'archéologie orientale (Cairo) tome XI (1914), pp 217 - 231 + pls. III - XII

Alep. Madrasa al-Halawiyya



La Madrasa al-Halawiyya à Alep by

Max S. Dunger

Notes on La Medrasa al-Halawiyya à Alep by S. Guyer in Bulletin de l'Institut français d'archéologie orientale, tome XI (1914) pp. 217-231 + pl. III-VII
Princeton lib. DPA 2200 .Z33 fifth floor manuscript

Good for slides of plan + details of arch. for Wellesley course if needed.

Notes: tradition (local) associates the building with Empress Helen claiming she built it + that it was formerly the Cathedral of Aleppo. But cannot accept this Constantinian date of the origin without proof because in the Orient all churches considered as early are attributed to this empress, the renowned founder of churches. Must substantiate by research + study of the decorative forms + construction, and by the group or monuments to which it is attached.

Book on style

Capitals of columns + pilasters: Corinthian order, recalling still ancient art in many details. Leaves of col. caps are in 2 ranges of 8 leaves each; between the top leaves the stems of the acanthus ~~[illegible]~~ divide + curve to the right + left in the top of the leafage, as seen in many capitals of the VI cent. in Syria. The composition as the decorative character of Byzantine sculpture. The naturalistic beauty of the isolated leaf is not sought, but as emphasized, but rather the effect of the ensemble and the acanthus leaves are only the means of decorating the capital as completely as possible (footnote reference to Riegl, Stilfragen, Berlin 1893, pp. 272 ff.). This tendency to a decorative style is found throughout the Med. region from the V cent., + produced 2 new forms of acanthus in Byz. art. = the acanthus with small notches or scallopes + the acanthus with large ones to fill better the surfaces to be decorated.

Date

Here a similar style is evident. The notches of the leaves are elongated to reach those of the next one & leave no empty space. The structure of the leaf presents peculiarities strange to the ancient style = the contours are notched & have not the delicately curved lines of preceding caps. Play of light & shade strongly contrasted. Compares & dates with Kalb Louzeh & Kalat Siman but misdates both these monuments in the VI cent.

Publishes interesting documents about the church & restores it as a domed basilica (3 domes) with apses at each end.

Refutes possibility of central plan because of presence of ancient walls & documentary evidence of Christian cemetery which would rule against it. (But this must be examined again on spot & excavation made! I believe it is martyrion like Seleucia & Apamea. Also date needs reconsidering, V or possibly IV.)

Notes on Crowfoot's Bosra Cathedral. 512/513 A.D.

Churches at Bosra and Samaria - Sebaste by J. W. Crowfoot, C.B.E., F.S.A.

Supplementary Paper 4 (1937). Brit. Sch. of Archaeol. in Jerusalem.
Issued by the Council at 2 Hinde St. London W.1

~~Introductory observations~~

I The Cathedral at Bosra

1. City of Bosra.

70 miles South Damascus; fringe Hauran desert

106 A.D. Trajan made it capital of Roman province of Arabia after conquering Nabataean kingdom of Petra.

Oldest remains = Nabataean I cent. A.D.

On caravan route Arabia → Damascus → coast. Fields fertile: wealthy: trade + agriculture

Remains of enormous markets, baths, temples, reservoirs, gates.

Christianity early: bishop in 3rd cent.; Origen visited twice; also some martyrs.

Bishop Titus wrote polemic against Manes now lost

Archbishop Julianus, builder of cathedral of Bosra.

Muslims captured VII cent. few mosques + 1 bath

Crusaders failed to capture: city abandoned gradually, resettled about 50 yrs. ago.

2. Previous Work on Cathedral.

Brünnow and Domaszewski, Die Provincia Arabia, 1909, III, pp. 30 ff. quote relevant passages in works of early travelers who describe cathedral = Seetzen; Burckhardt, Richter, Buckingham

With publication of M. de Vogüé's "Syrie Centrale" in 1865 Bosra came to occupy important place in Early Christian Architecture. Vogüé is father of scientific study of the church. which visited 1862: notes admirable; drawings good but plan admittedly not accurate.

E. Guillaume Rey, Voyage dans le Haouran, 1863, text, p. 179, Plate IV. made first French expedition (before de Vogüé) in 1857 + published the first plan. Scale is wrong but in other respects is more accurate than the other plans that have been published. Reprod. by Fergusson, A History of Architecture, 1867, II, p. 307. Rey's text is too brief to be of value.

American Expedition made photographs in 1875 before walls seriously damaged. Now in possession (reg.) Professor Moulton of Bangor, Maine.

Inscription: The inscription recording the circumstances of the building was in original position over central door at this time.
Published with excellent commentary by M. Waddington, Inscriptions Grecques et Latines de la Syrie, 1870, no. 1915. (Republished by Brünnow) = Cathedral was dedicated to the glorious martyrs Sergius, Bacchus, and Leontius, when Julianus was

archbishop, in the year 407 in the 6th indiction. The year 407 of the Bostran Era began March 22, 512, and the 6th indiction began September 1 of same year, so church was finished between Sept. 512 + March 513.

S. Sergius martyred under Galerius at Rusafa.

S. Bacchus also under Gal. at Barbalissus in Commagene: both Roman soldiers + both commemorated Oct. 7.

S. Leontius martyred under Hadrian (?) at Tripolis, Syria. commem. June 18.

Archbishop Julianus = distinguished piety: expelled by heretic ~~Bishop~~ Patriarch of Antioch, Severus for refusing to ~~recognize~~ receive his synodal letters. Severus appt. by Anastasius after whose death Julianus returned to Bostra.

Condition of cathedral in Vogüé's time = outer walls + sections of clerestory; chancel arch; roofs over E. chambers; late chapel in front of old chancel; cemetery in church.

All roof supports of central area gone: how was it covered = great problem until Crowfoot's expedition. Area = 36. m. Conjectured reconstructions = M. de Vogüé: dome 19' in dia. carried on 8 great piers like dome on S. George + Ezra only 30 miles away.

Brünnow: some modifications of de Vogüé but purely conject. as summar. in Holtzinger, Handbuch der Architektur 1909, Part II, vol III, 1, pp. 142-3.

Butler, P.U.A.E.S. Div II, p. 281 claimed he saw base of a composite pier under the N. wall of the late chapel at the

Evidence of Butler's plan denied by Crowfoot.

bottom of a kale made by peasants in rubbish. Butler published measured drawing of dis which was gien of an octagon much larger than that suggested by Vogüé & over it Butler erects dome 26. m in dia.

Herzfeld. Jahrb. d. Preuss. Kunstsemml., XLII (1921), pp. 119-21 critized on basis that proposed piers were too slender to carry such a big dome. Then compares bldg. with Dome of Rock, Jerusalem suggesting that at Bosra also, to span width, must have been second ring of supports, carrying a small timber dome in the middle with 2 aisles running round it. Admittedly conjecture

Creswell, B.S.A.J. Supp. Paper 2, 1924, pp 21 ff.; Early Muslim Architecture, 1932, I, pp. 72-4 Follows Herzfeld but makes modifications to bring plan even closer to Jerusalem.

Watzinger, Denkmäler Palästinas, 1935, p. 136. Endorses criticisms of Herzfeld & Creswell.

Crowfoot discovered little Bosra at Jerash = Church of S. John the Baptist, ded. 532 = central portion of roof carried on four cols but in other respects like Bosra of Crowfoot, Churches at Jerash (B.S.A.J. Supp. Paper 3), 1930, p. 21. This discovery determined Crowfoot to search for evidence in Bosra Cath.

3. The Expeditions of the British School.
Describes present condition which is bad.
First Ex. May, 1934. Soundings for Butlers pier revealed nothing. Negative results all around; describes excavation.
Second Exped. March, 1935. in NE quadrant Describes area excavated; ten-house, graves, late walls, etc. Details of architecture out of place. Discovery of what appears a conscious falsification of Butler in reporting pier: p. 89 footnote 1 on p. 8. Discovery of pier ~~[illegible]~~ ? beginning of ~~the~~ colonnaded exedra as drawn of p. 7 fig 1.
Problem of Bosra solved by discovery of angle pier in NE corner of a central sq. and segment of a semicircle described on the east face of this square. Plan restored & revealed that ~~side~~ base of exedra on S. side had been uncovered in 1934 but was not understood. Cols. of exedras were on pedestals.
"Originally there were four semicircular colonnades in the middle of the church arranged in the form of a quadrefoil or tetraconch, with four columns in each colonnade standing on high pedestals."
Voussoirs found from an arch span 12. m = arch between the piers of the central square

4. Reconstruction of the Building
"The Cathedral must have stood, like other great churches of the time, in the middle of a large precinct which certainly enclosed an imposing establishment still standing a few metres to the east" Butler says episcopal palace; Chief room built on trefoil plan probably designed by cathedral architect.

Precinct may also have included basilica now standing, ca. 60 m. N. of plan Brünnow, more accurate than Butler. Cathedral isolated in precinct. Doors on all four sides; 5 at W; 3 on N + S; 2 on E leading to palace. No signs of porches or porticoes against walls; no trace of narthex at W. end.
Absence of W. narthex + multitude of doors were features of churches at Jerash: cf. Crowfoot, Churches at Jerash. p. 10.

Ground Plan

Classical in balance + symmetry but indifferently set out. Doors grouped in middle of 3 outer walls; width = width of opening into chancel; spacing of exedra colonnades corresponds to doorways. Basic unit or module = 1/4 of the central ~~space~~ area or a sq. with a side of 20 feet. Whole bldg. 6 units long N-S; outer radius of colonnades = side of 1 unit; openings into exedrae = the diagonal ①

Plan carelessly set out: S. side longer than N. (1.40 m). Therefore east wall on S. side of chancel set askew in order to abut on the pilaster in SE corner room.

Exterior

Reproduced in pl. I C: height of walls + clearstory; disposition + dimensions of doors + windows are based partly on extant remains, partly on older records; shape of central lantern + pitch of roof conjectural.

Small blocks convenient to handle; outer face of the walls carefully squared + ground to a smooth surface. Masons marks prove that taken from some earlier building. Coursing

① Chancel = 2 units; length of SE chamber = 2 units.

regular. Little carved detail. Stones from classical entab. laid as cornice at E. end. No mouldings round doors & windows. This simplicity = late classical trait of. Crowfoot, Churches at Jerash p. 37.

Interior

Height of quadrefoil colonnade approx. that of Detweiler's restoration (Pl. 2 b) = 7.60 m. Cols. are plundered II cent. 9 = 9 × lower dia. Restored architraves & arches conjectural. Like arcades in Aqsa mosque at Jerusalem & Umayyad mosque in Damascus.

Clearstory

All restorations but Herzfeld assumed an upper gallery on the level of the clearstory. Crowfoot is confident that Herzfeld is right = no clearstory gallery. A gallery if it existed would presumably have stood above the crown of the exedrae, which is nearly 9. m above floor of bldg., & the roof of the gallery could not have been much higher than the top of the clearstory windows, which are only two meters above the top of the exedrae. Hence proportions of such a gallery, as well as floor plan the supporting quadrefoil colonnades would necessitate, seem proof that no gallery existed. Also number of windows. These = more than 50 & so ridiculous for a gallery only 3' high, but fine for pouring light down into nave which otherwise would be poorly lighted. Hence well lighted: ambulatory from side; central area from clearstory.

Roof.

Greatest conjecture in past; now solved. Barrel vaults over chambers of east end;

Conches over exedrae; wooden roof over central square because piers less than meter thick & lighter than walls of east chamber on ~~ambata~~ exedral & hence roof which rested on them must have been of wood.

Other wooden domes or roofs: Herzfeld (l.c. p. 121) assumes ~~earlier~~ original dome at Ezra was of ~~st~~ wood like the earlier dome over the Asastasis at Jerusalem, or the new church of Justinian at Jerusalem described by Procopius, and the later Dome of the Rock. M. de Vogüé saw holes for ~~beams~~ wooden beams in the wall of the clerestory at Ezra (or Bosra = not clear from Crowfoot's wording). Combination of timber roof over nave with conches of scoriae (light slag, volcanic) was apparently the system at Jerash — Crowfoot, Churches at Jerash p. 22. Anastasis at Jerusalem, Watzinger, D. P. p. 131. For vaulting or roofing of = Sedlmayr, Kunstwissenschaftliche Forschungen (Berlin.) II, (1933

" B.Z. 35 (1935)

at Bosra no ~~ef~~ evidence to show shape of lantern or roof over center. Mosaics in Mosque Ommayad show bewildering variety to chose from.

Paving.

No trace left: Crawfoot believes of slabs of marble & stone. Frags. indicate slabs ca 25 cm. sq. in pattern like St. Theodore, Jerash.

Wall Decoration

Walls inside were not smoothly dressed like those outside: were doubtlessly heavily plastered & painted; in places may have been revetted but no plug-holes now visible. Older travelers saw several frags. of fresco including Virgin with outstretched hands (orans) at end of apse (Seetzen, Buckingham, Porter, Vogüé), but only considerable piece left is on S. wall of chancel & of late period when late chapel in use: 13-14 century. Reproduced pl 9 a, b.

Restores glass mosaics for upper part of walls & soffits of arches as in Dome of Ommayad. But found no glass tesserae.

Carved Detail

Taken from earlier bldgs. = Antonine

2 entablature blocks as brackets under the chancel arches; also archivolt above entrance to chancel (Vog. p. 66, fig. 2)

Pedestals for cols. ill. fig 2. of period?

Bases of good Attic type on octagonal plinths.

Caps. of careful Antonine work; the acanthus strongly marked.

East Chambers

5 at E, of which central was sanctuary or chancel. Apse of sanctuary was polygonal outside, the 5 walls forming 3 sides of a decagon and two half sides (Butler) = inside 9.20 m.

Original floor destroyed; no trace of altar, synthronus, or chancel rails. On analogy of contemp. churches at Jerash, synthronus may be placed against

wall of apse, the altar on the chord, the soleá in the rectangular space west of the altar, the chancel rails between the soleá and the circle of the nave. Chancel lit by 3 large windows at E. end.

Rooms on either side next the chancel were primarily passage: doors in all 4 walls; to E go to Epis. palace. Roofs of barrel vaults. Corbels which Crowfoot could not understand.

SE corner room ends in apse with a niche at either side: arch in front of apse.

NE corner room probably same.

Both above not later additions as Butler thought.

Use of SE & NE corner rooms: perhaps chapels with altars but such are rare in East (4 in church of Theotokos on Garizim). Crowfoot = more probably sacristies, offices, vestries, treasuries. One may have been diaconicon but diff. to find prothesis chapel because neither of two opens directly into nave (?), and modern type of prothesis chapel only came into regular vogue later when the Great & Little Entrances were introduced into the liturgy under Justin II

pro. a dia.

5. Some Conclusions

Significance: ① large congregational church built on centralized plan in one of wealthier cities of Syria; ② no other large centralized church about which we happen to know so much.

Fallacy = centralized plan is as characteristic of East as long basilical plan is of West. This not true says Crowfoot: in early days

there was little difference between E. & W. in matter of church planning = 9/10 of larger churches in Greece & Syria before the time of Justinian were of ordinary long 3-aisled basilica type (plans collected by Sotiriu, ref. Crowfoot p. 18, n. 2 & Butler)

Memorial churches (martyria) and baptisteries were often built upon a centralized plan in both areas (E & W), but for congregational purposes the basilica was the favorite. Cf. Dehio & v. Bezold, Die kirkliche Baukunst des Abendlandes, 1892, I, p. 20 "Von den jetzt als Kirchen verwendeten früh-christlichen Zentralbauten (soweit sie nicht unter byzantinischen Einflusse entstanden sind) lässt sich denn auch in keinen einzigen Falle die ursprüngliche Bestimmung zur Gemeindekirche unzweifelhaft nachweisen."

** Centralized church plans in Palestine & Syria:

Jerusalem

Anastasis: large segments of wall survive but little known about early plan.

Church of Ascension } little known.
Church of Virgins Tomb }

Tell Hum } ground plans only of round bldgs.
Beisan }

Viranshehr - not properly excavated

Church of Theotokos on Mt. Garizim: unpublished

Apamea - unpublished

Antioch

Constantines Octagonal Church: little known

St. Babylus: Antioch II

Kalat Simen: under debate.

St. Simeon near Seleucia: unpublished

Comparisons with Other Remains of Ancient Architecture

A. Plan of Wall around nave (i.e. ambulatory)

Plan of walk around nave, the circle inscribed in a sq with exedrae in the corners & niches on either side of grouped doors goes back to late Hellenistic or early Imperial period. Also rooms sq. externally & round or octagonal inside with exedrae in corners are fairly common, especially in baths.

(1) early domed example: Forum Baths, Pompeii
(2) Tempio di Siepi, Campus Martius, Rome
Rivoira, Roman Arch. p. 154, Fig. 153
(3) Baths of Trajan & Caracalla
(4) South Baths, Bosra Butler, P.E. p 261
Crowfoot, Rev. 112
(5) Cathedral Bosra =
First dated church in which plan occurs.
(6) Ezra: without niches op. cit. (Crowfoot, 112
(7) Jerash. (Crowfoot, this ms, Plate 11 c) flanked by parecclesia
(8) SS. Sergius & Bacchus: flanked by parecclesia (n.b.
(9) Hagia Sophia, baptistery
(10) Exception Mir'ayeh: round nave not enclosed in a square & projection of rooms on either side of the chancel makes awkward angle.

Commentary = a secular plan taken up for a short time by church builders, characteristically elaborated with niches in Syria, & then generally dropped. In most of above bldgs. the room in question is flanked by others & the convenience of a plan with square outer walls is obvious; & at Bosra convenient for adding Episcopal palace (?) to E. end. At Mir'ayeh, projections at east end are awkward. In many of above there was a dome & this system makes transition to dome easy before genl use of pendentive.

N.B. Van Millingen, Byz. Churches in Constant., 1912, P. 63

Comparison with Other Remains of Anc. Arch. cont'd

** B. Quadrefoiled colonnades in cavetto.
Prototypes occur in classical bldgs.

① Piazza d'Oro, Tivoli: sinuous & sophisticated
Robertson, Gk & Roman Arch. fig 134

② Tetranymphon, Jerusalem, Hadrian?
Problematical.
pro: Weigand, B.Z., 23 (1914-19), p. 179
Vincent & Abel, Jérusalem, II, pp 10, 11
Contra: Watzinger, D.P., p. 84

③ Church of IV cent., Hadrian's Stoa, Athens. Here 11e
Church: Sisson, P.B.S.R. XI (1929), p. 66
Sotiriu, (N.B.) p. 174.
Against as church: Weigand, B.Z. 33 (1933), p. 150

④ Martyrion (VI cent) Conyeus, Cicilia
Herzfeld & Guyer, Mon. Asiae Min.
Antiqua, II, 1930, pp. 126-150
Outside city walls & apparently this type

⑤ San Lorenzo, Milan (here 11f)
Delbrueck, J.A.I., 28, 1913, Anzeiger, p. 132
↓ establishes the Christian origin of this much reconstructed church.

⑥ Apamea: Martyrion.
Plan not yet published mentioned by M. Mayence, Bulletin des Musées Royaux d'art et d'histoire, Jan.-Feb. 1936. p. 7.

⑦ Ta'lul, 526 A.D. supposedly same.
Butler (Smith), E.C.S. p. 166; not excavated. Crowfoot thinks plan too small & so had roof supports like small churches Jerash

⑧ Aleppo
not mentioned here but cf Ecochard.

N.B under B ③ above: Αἱ χριστιανικαὶ Θῆβαι τῆς Θεσσαλίας καὶ αἱ παλαιοχριστιανικαὶ βασιλικαὶ τῆς Ἑλλάδος, Athens, 1931

Basra 14

(9) Rusafa: Spanner & Guyer, Rusafa, 1926, pp. 56 f
References of my own = Palmyrena, by Alois Musil of index; Butler, E.C.S. vol 4 [Seleucia Pieria Untitled]
10 Church of Mary, Diyarbekr-Amida Strzygowski, Amida, 1910, p. 192. miss D. Bell's plan.

Later became popular in Armenia; went as far as
(10) ~~Church of Mary, Diyarbekr-Amida~~ Kalaat Seleucia
Strzygowski, Die Baukunst der Armenier und Europa, 1918, I, pp. 108 f., and II pp. 486, 774, et.
Seleucia Rusafa. Both undated.

Commentary = Bosran architect tried to show his originality by combining A and B, but not happy result. In all great quadrefoiled bldgs above with exception of Armenia, there are bays in the outer walls corresponding with the semicircles of the quadrefoil with much better effect. In Bosra & Armenia, the quadrefoil & circle neutralize each other. Finer development of quadrefoil motive = Rusafa & Diyarbekr-Amida.

**** C. Position of Chancel (altar & sanctuary)

The position of the chancel in an opening on the east side of the ambulatory links Bosra with church of Theotokos at Garizim & the two centralized churches at Jerash & Ezra. Also Seleucia Pieria

Quadrefoiled bldgs at Athens, Corycus & Apamea & all Armenian churches: the chancel occupies east lobe of the quadrefoil & open colonnade on this side is replaced by a solid wall which in effect sacrifices nearly a third of the ambulatory as far as congregation concerned.

Original placing of chancel in S. Lorenzo not known but has open colonnade on all 4 lobes (hence probably like Seleucia)

Andreades in Kunstwissenschaftliche Forschungen, Berlin, I (1931) p. 87 on placing of chancel off the east side of ambulatory at Bosra: argues that the chancel which contains the altar is of supreme significance in Christian worship, & that it should therefore occupy the place on which the strongest architectural accent falls, instead of being buried in an annex to the ambulatory (and ℄ as now known in Bosra & Seleucia) divided from the accented center of the building by a colonnade. Argument is a serious one & probably for this reasons chancels were placed in east lobe at Apamea & in Armenia

Problem of central area raised by above. What was in the center of Bosra Cathedral? Crowfoot says might obviously have been occupied by a shrine with relics of the saints to whom the church was dedicated as to be expected in an ordinary centralized memorial building.
But Crowfoot thinks more likely the central area was occupied by the ambo or pulpit which was used both for reading & preaching. In Jerash the ambo is placed close against the chancel screen on the S. or Epistle side of the central chancel door, but at Hagia Sophia it was in the middle of the church, & the site of the Holy Sepulchre in the church of the Anastasis, Jerusalem is described by Photius as the place of the ambo (ἐμβῆναι τόπον: quoted Vincent & Abel's Jerusalem, II, p. 236.: in the Anastasis was in consequence on the south side of the chancel rail as at Jerash: see quadation from Eutychius, l.c. p. 244).
Center of church recognized therefore

as proper place for an ambo & Crowfoot suggests ambo for Bosra: practical reason of placing preacher in middle of hearers. Crowfoot says against Andreades case that sanctuary at Bosra was well lighted & not off in dark recess.

D. Clearstory

May have been common characteristic of larger Hellenistic thaloi. Many windowed clearstory a striking feature here; but after all on a transfere to the circular plan of the regular lighting system adapted for long basilicas. Ancient clearstories nowhere are destroyed except for representations such as at Boscoreale (Creswell. Early Mus. Arch. I, Figs. 305, 306)

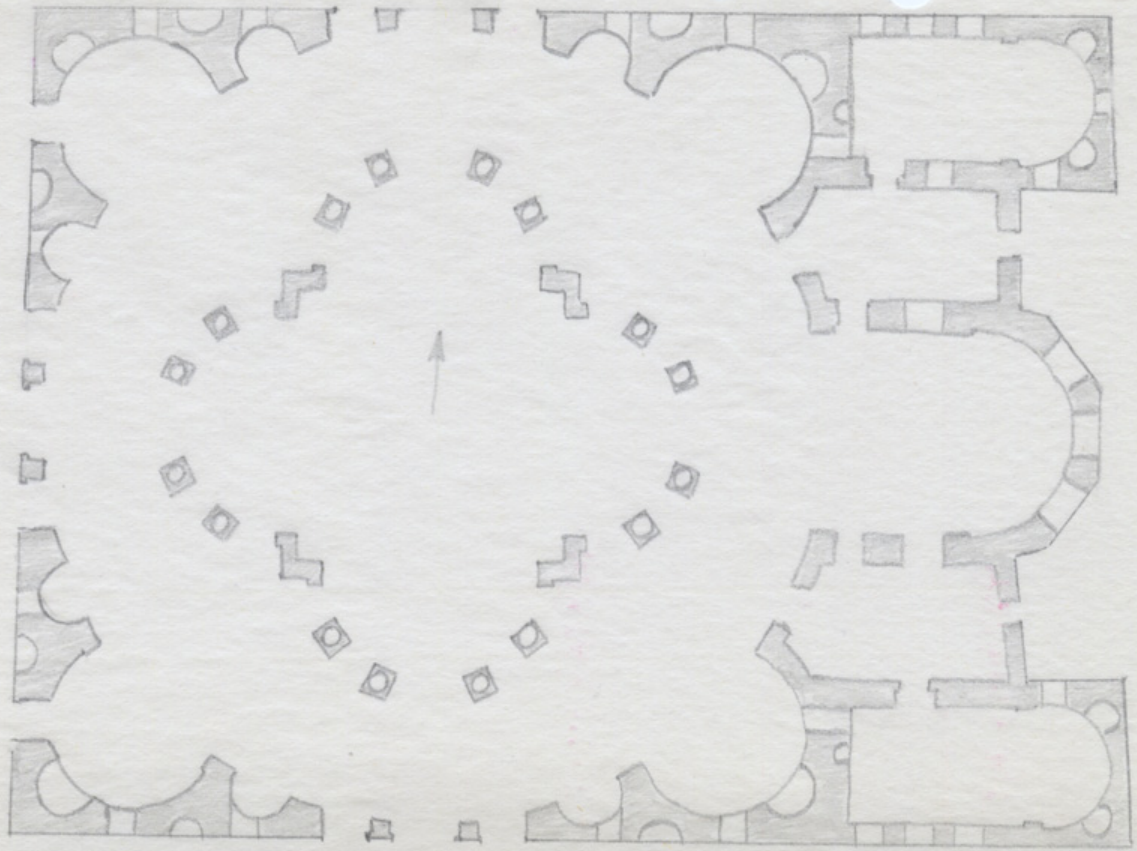
E. Stonework:

Purely local. Horizontal courses fairly reg.

Summary

New discoveries at Apamea & Jerash (C, Sebaste Pre
show plan of Bosra as not exceptional. Of a type not uncommon in Palestine & Syria. Nothing specifically Roman or Byzantine in the style; nothing related to older Orient. Style is clearly derived from classical architecture as practised during later Empire in great cities of Hellenistic East. At Bosra, Jerash, Dome of Rock old architectural detail is reused in an appropriate way to serve some functions for which it was originally designed. Old classical tradition still alive: there was, in fact, still a great future before it. Points to great mosques.

Finis



BOSRA CATHEDRAL

0 5 10 15 20

Domes & Quadrefoil Plans: The Earliest Combination, by Josef Strzygowski, in Journal of the Roy. Inst. of Brit. Arch. Third series, 43rd (1936) pp. 761-2

¶ 1: S. Lorenzo, Milan = one of most charming & puzzling churches of the west. Rebuilt during baroque period. Old foundations show it was a combination of a dome with a quadrefoil plan; i.e. a bldg. of the eingestellte Vierpasskuppel type = 4 piers in corners of a sq. carry a dome which is buttressed on the apes by four colonnaded apses. Each of 4 piers here = composite group of 3 piers & are further strengthened by the sq. rooms set diagonally on the ~~sq~~ corners of the bldg. The outer walls joining the corner squares are set out on a flat curve which corresponds to the curve of the internal columned apses.

¶ 2: In this bldg. it is only the combination of dome & quadrefoil which is characteristic of the type. Armenian examples show that the character of the piers & the plan of the outer walls may vary. Compares S. Lorenzo with church of Zwartnotz, near Etchmiadzin, on Ararat in Armenia built near the palace by Catholicus Nerses III. (641-661); excav. at instig. of Strzg. & detailed account in Die Baukunst der Armenier und Europa, p. 108 f. with note on p. 774 re S. Lorenzo. Essential difference = outer wall of Zwartnotz is round or 32 sided, has quadrefoil. But the ~~cy~~ eingestellte Vierpasskuppel (dome with inner quadrefoil) is the same. Inner dia. of Zwartnotz = 33.73 m. with 4 dome piers massively built in an M shape. The corner sq. rooms have parallels in

Armenia – e.g. corner towers in ruin of Bana (op. cit. pp. 122 ff.) "In Armenia the dome with quadrefoil was widely distributed, & we can see there how quadrefoil bldgs. with domes, circular galleries or triforia evolved out of simple quadrefoil bldgs." San Lorenzo = an isolated example of a type which we can trace developing through regular stages in Armenia." In op. cit. p. 775 points out a connecting link in so-called Red Church at Perushtitza, near Philippolitis (sic!), Bulgaria.

¶ 3: "What we have in this type is the logical culmination of a development which was completed not in the Med. area but in the Persian East in connection with the sun-dried brick buildings of the Mazdaistic fire temple. In Iran there may well have been halls for state assemblies with such domes & quadrefoils which were normally temples, somewhat like Church of S. Vitale in Ravenna. S. Vitale in his Asiens Bildende Kunst = Persian caps. & mosaics = typical Iranian fire temple + state assembly hall; smaller & more elaborated with 4 apses on diagonals between the apses on the axes & hence is 8 lobed; also has triforia as did state assembly halls.

¶ 4: In view of above discussion recent discovery at Bosra of gt. importance, etc.

¶ 5: Summarizes Crowfoot's article, mentioning that interior dome (sic, contrary to Cr. belief) is slightly larger than Zwartknotz (ca 36 m.). Also ~~differs~~ differs from Zwartknotz & Milan in ~~having~~ being inscribed in sq., having four corners filled with horse-shoe shaped niches; entered by triple doorways in apses. Says problem of dome(!) now settled: ground plans proves it

Strzygowski in R.I.B.A. Journal: (3)
was a "dome & quadrefoil (eingestellte Vierpasskuppel) type." (remark = this seems good for wooden dome argument of Smith against lantern theory). May hope to find someday in Iran the origin of the Syrian building as well as Armenian. To do this necessary: to excav. & pub. surviving fire temples for remains of Mazdaistic temples & sun dried brick domes. Dome = dominant feature of all Christian East up to present; Hellenistic basilica = dominant in west as adapted by Roman church.

6: Calls attention to Crowfoot's Churches at Jerash. Asks for further excavation at Bosra for epis. palace. Advertises his own L'Art chrétien primitif de la Syrie which is just appearing without benefit of Crowfoot's discovery.

Stoa of Hadrian, Athens.

Central Building within the Court

from B. Papers of the British School at Rome, vol. XI article "The Stoa of Hadrian at Athens" by M.A. Sisson. p. 50 ff.

Part III The Central Building in the Court.

A. Description of actual state

B. Reconstruction

C. Style. Date

D. Purpose

1885

The central part excavated by Greek Arch. Soc. of Athens + published "Πρακτικὰ τῆς ἐν Ἀθήναις Ἀρχαιολογικῆς Ἑταιρίας, 1885, p. 13 f. + plan; 1886, p. 10 (Kumanudes) Church of Megale Panagia was demolished revealing what was left of earlier central structure.

A. Built on site of the reservoir, in the center + on the axis of the stoa, + was afterwards incorporated into church of Megale Panagia demolished in 1890.

Consisted of central hall, 50' sq. on E side of which was an apse 28' in dia.. On N. S. + W. sides were semi circular recesses 24' in dia. surrounded by colonnades behind which were aisles 12' wide enclosed by concentric outer walls 3' 3" thick. Floors of aisles were covered with mosaic.

At W. end = vestibule with side chambers containing stairways?

Excavation report says marble slabs were found in S exedra but no trace remains. NB Same scheme as Seleucia.

Mosaics = black, white, Blue, pink + yellow of tesserae 1/2" thick sq. laid on a bed of mortar composed of ground brick + lime.

N. aisle = interlacing circles with border of interlacing leaves

S " = series of radiating panels, containing alternately scales + intersecting circles.

Colonnade: unfluted, vary in size; two stand on bases while a third has none. Caps = Ionic. Attic base in situ = 2'5" sq., 12" high & designed to support a column with a diameter of 2' below the apophyge

B. Reconstruction: see to refer to article.

C. Style, Date.

For similar construction & mosaics cf. references given p. 70 On basis of mosaics = just before 400 A.D.

D. Purpose

"A comparison of the plan with certain others closely related to it in form, the widely distributed geographically, shows that it was almost certainly a church (see Plans, Plate XXVI.)"

Compares:

Fourth century church of San Lorenzo, Milan

Strzygowski, Klein Asien, p. 211

Von Sybel, Christliche Antike, ii. p. 313 & plan

Holtzinger, Die Altchristliche Architectur, p. 102, note

Monneret de Villard, Boll. d'Arte, V, 1911, p. 271

Drawings by Sangallo, others.

Originally San Lorenzo consisted of a square central space with segmental colonnaded recesses & aisles on all four sides. Similarity is striking: also San Lorenzo probably not domed because would require awkward squinch arches. Probably founder, S. Ambrosius introduced the type from the East in the fourth century. it may bear some relation to the Octagon of Constantine at Antioch (Eusebius, Vita Const. iii. 50)

Adrianople = IV cent.? Choisy

Choisy, Histoire de l'Architecture, Vol II. p. 41 says originally had sq. space with semicircular

recesses + galleries on all four sides. The square hall was later covered by a dome carried on four piers.

Church of S. Pastiska near Philippopolis

Etude of the Nat. Mus. of Sophia, Obp. 9, Fig. 9, p. 30. ~~IX~~ cent. + Roman survival of the type to later times. Domed.

Rusafa (Sergiopolis) Syria, "martyrion"

Sarre + Herzfeld, Montashefte für Kunstwissenschaft, II (1909), p. 103.

Church with semicircular apse + recesses about a central rectangular space. Believed to be tomb-church of the martyr Sergius, and to date from the VI cent. (Sic!).

Notes on central choir in St. Babylas, Antioch II, pp 36 ff. **Reference Central Choir**

Consisted of two parts: one rectangular surrounded by a balustrade the foundations of which in brick were found in several places; the other rectangular, forming a sort of apse at the west of the rectangular platforms. Of the apse only a trace remains but it seems that was paved with blocks of marble or limestone perhaps forming a semicircular bench.

Then refers to Butler (Smiths), Early Christian Churches listing examples of central choirs (Butler calls exedras):

List of Syrian Churches with Central Choirs
Kharab Shems, E.C.S. p. 32 ill. 31 IV cent
Kalota, E.C.S. p. 67, ill. 68-492 V cent
Dêrés, 2nd church, AAES II, no. 205 IV cent
El Firdjeh, E.C.S. p. 161, fig. 173 VI cent
Mirayeh, E.C.S. p. 215, fig. 216

Butler-Smith on Central Choirs. E.C.S. p. 214, note 393.

p. 214-215

Butler = highest preserved in any church is one course .55 m. high & of about same thickness. The diameter of the semicircle is a little less than that of the chancel arch. Front wall has gateway in center which is on a line that evenly bisects the nave at the center of the middle intercolumniation. Mentions that there is a large space between the front wall & the chancel, a smaller space between apse & west wall of the church & a narrow passage on each side between it & the supports of the nave arcade.

At Mirayeh (ill 216 p. 215) top of wall had holds for a rail or screen. Interiors &

exterior of examples seen by Butler paved with stone or mosaics.

" Smith's note (393, p. 214). In Sergios Basilica at Resafah (N. Spanner, S. Gerger. Rusafa, Tafel 17) in middle of nave was uncovered a choir - Smith corrects Butlers exedra to Chair -. Chor at Resafah consisted of rectangular platform (10. m long x 7. m. wide x 1.30 m. high) which was mounted by a flight of steps at the E. end facing the sanctuary, and was terminated at its W. end by a much lower semicircle only .80 m high. Along the sides of the rectangular platform were narrow vertical grooves in which were set red marble pillars that probably formed a balustrade, by means of panels between them, along the top of the platform. These pillars had plinth blocks, bases, channeled shafts & acanthus shafts. The exedra which seems to have had no obvious relation with the higher, rectangular platform, had a moulded face of polished marble around its curved sides which dropped down in two steps, on both sides, where the semicircle abutted the platform. The top of the semicircle had 2 semi-circular benches of solid masonry, a meter wide & about a meter apart, of which the outer bench was the face of the semicircle rising above its marble floor; and in the center was a semicircular platform of the same height as the two benches, or low walls. Although Gerger suggests that the exedra was merely a raised platform for a statue of St. Sergius, it seems more likely that it was a semicircle of seats. Certainly not a mere addition to the rectangular platform since it was

a feature in V & VI century churches in Syria. It is the rectangular platform which is odd in Syrian architecture, as Prof. Butler found no evidence of such a platform in front of any of the semicircles. It is to be noted that the Resafa semicircle, without the platform, is placed in the nave at relatively the same position as the other Syrian semicircles, which have space in front of them for such a platform. Whether the raised platform at Resafa was an exception, or whether in the other Syrian churches there had been platforms of rectangular shape in front of the semicircles, it is impossible to say. But the Resafa example makes it clear that all the Syrian semicircles (exedras) were either choirs or parts of choirs."

MUSJ = Mélanges de l'université Saint-Joseph, Tome XXII (1939).

PP. J. Mattern, R. Mouterde et A. Beaulieu, S. J. — Dair Ṣolaib. I. Les deux églises. II. Mosaïque prophylactique. Le décor.

(above copied exactly)

Reference altar in center of Église A. tracing in your notebook.

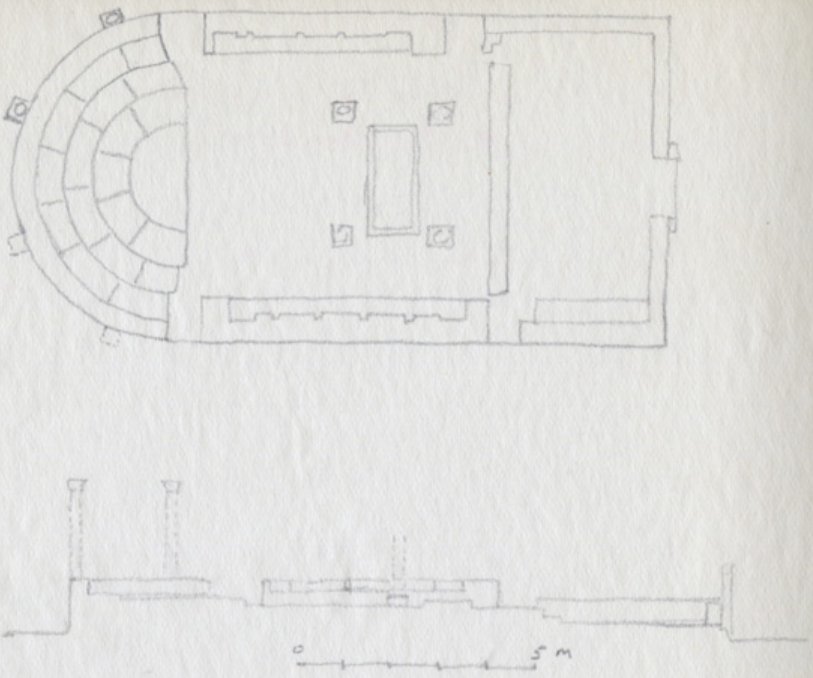
Position on plan = Pl. I
View = Pl. XI, 1.
Detail of plan of altar = Fig. 1, p. 13.

Description p. 12 = a large flat stone (2.88 × 1.92 × .30) of curious form. Six cuttings for bases of colonnettes for which fragments found that fitted the colonnettes exactly. The asks question is it in situ? and is it an altar.
p. 13 says "it is true that it is large & de forme inusitée. But the discoveries of Lassus in S. Sergius & Resafa & especially of the St. Babylas in Antioch attests the presence of the altar in the center of the edifice & in the midst of the congregation (but Lassus considered his theory mistaken when he saw Seleucia martyrion with apsidal sanctuary as well as altar & considered B. Smith's attribution as a cardinal chair correct). In the other churches of Syria, the altar would have been constructed in the "tribunas", or "chœurs", qui se remarquent en pleine nef. Or, la Qoubbe Prenne n'a pas dû voyager beaucoup dans l'édifice — it occupies the point in full view of the

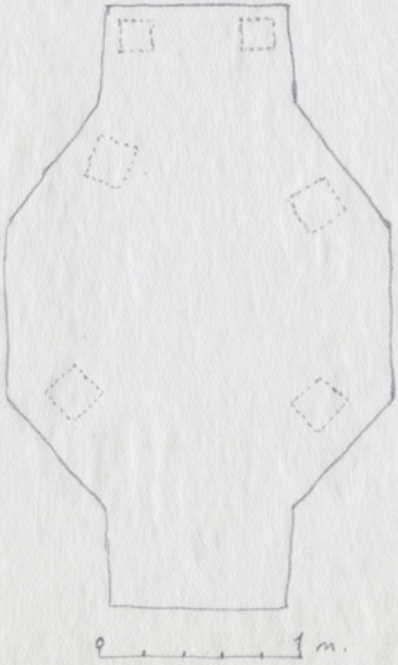
nave. Perhaps served as base for cols. supporting roof over saints tomb? Perhaps an ambon① but most probably an altar②.

Ambon = R. P. de Vaux, Revue Biblique, XLVII, 1938, p. 231 from Ma'in in Transjordania.

Altar in middle of nave - IV cent church at Tyre & Jerusalem - P. Batiffol, Rev. des sc. phil. et théol., 1939, pp. 65 sq.



Plan & elevation of Central Choir of St. Sergius, Rusafa. (Lassus, Antioch II p. 37



Dair Solaib. MUSJ. Tome XXII (1939) p. 13, Fig 1.

Wooden Roofs & Domes in Syria

Considerable evidence of wooden roofs over central structures in Syria, some of which were certainly domical in shape. K.O.C. Cresswell, "Early Muslim Architecture" suggests that wooden dome originated in Syria.

1) 2 A.D. Gaza, Marneion (Cresswell, op. cit. p. 71, note 13, p. 83; G.F. Hill, Life of Porphyry, Bishop of Gaza, by Mark the Deacon.
Mark describes its destruction in 402 A.D. "for the shape of it was round, being surrounded by two porticoes, one within the other, and in the center of it was a dome (κιβώριον) puffed out or swollen, and rising on high (Cresswell, p. 84, n. 3)." The roof was of wood, for Mark describes the fire & the burning beam which fell on the tribune who was superintending the work of destruction. No reason, as Rivoira & Cresswell do, to assume it was conical rather than domical.

2) 335 A.D. Jerusalem, Holy Sepulchre (Cresswell, p. 84).
Fact that all subsequent domes were of wood & Eutychius describes the burning of it by the Persians makes its wooden construction almost certain. All early representations show it with fully revealed dome.

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3) Nyssa, Martyrion (Kleinasien. Abb. 62)

4) Jerusalem, Church of Ascension before 378 A.D. Cresswell, p. 76

6) Jerusalem, St. John the Baptist
Revue archeologique V. series
1920, p. 83

7) Jerusalem, Tomb of the Virgin, VI cent.  Cresswell-
p. 77 = V cent.

3) 328 - 363 A.D. Nazianze (Birnbaum "Die Oktagone von Antioch, Nazianze und Nyssa." Repertorium für Kunstwissenschaft, XXVI (1913) p. 195. Gregory describes as having wooden roof over central octagon with an opening at the top. Gregory uses the word οὐρανός = cupola. None of the translators have thought it possible to have a dome of wood.

4) Fourth century. Antioch, Church of Constantine, Domus Aureus. (Birnbaum, op. cit.).
Malalas describes its destruction in the earthquake of 526.
Evagrius (VI. 8) describing earthquake of 588, says "many buildings were destroyed when their very foundations were thrown up, so that everything about the holy church fell to the ground, only the hemisphere being saved, which had been constructed of wood from Daphne by Ephraemius after it had suffered in the earthquake under Justinus." (526) (Ephraemius was not the architect but Comes Orientis at the time) "It was

Quot. continues without break

tilted towards the north by the earthquake which followed (1) so that it received bracing timbers; these fell, through the violence of the shock (2), when the hemisphere settled back and was restored to its right place as though it were set there by a rule."

(1) under Justinian in 526
(2) in 588

Eusebius, Vita Constantini, III, 50 says nothing of the dome, but only describes the octagonal plan.

5) 380-88, Antioch, Martyrion of St. Babylas. Lassus, Antioch-on-the-Orontes, II, p. 34.
May have had a wooden dome over central square. Lassus says a pyramidal ~~dome~~ form, but no evidence for shape. (Burials)

6) 379-394, Nyssa, Martyrion (Birnbaum, op. cit. p. 207; Kleinasien 62)
Gregory of Nyssa in letter to Bishop Amphilochius, "Above these eight apses ... the octagon will rise. The pine cone which rises from this will be cone-shaped, the vortex (curvature) reducing the shape of the roof from a plane to a sharp point (wedge)."
"It is especially to give attention to the point that some of them (workmen) shall know how to build domes (eilêsis = vault, arch, domes) without frames (centering) for I have learned that when this is done it is steadier than if it rests on supports; the scarcity of wood,

indeed, leads us to this plan, namely that the whole structure shall be roofed with stones, because there is no wood suitable for roofing in these regions"

This letter gives no proof as to how the octagon was actually roofed, but does prove that wood was the common material for domes, even tho Gregory wanted stone, and that in Gregory's mind the shape of the roof was that of the pine cone which was the wooden form he wanted made permanent in stone.

7) 378 (before) Church of Ascension Jerusalem. Cresswell. p. 76.

8) Fifth century. Tomb of Virgin
raised above

9) ? Church of St. John, Baptist, Jerusalem
raised above

10) Fifth century. Kalat Siman, Great Octagon.
Krencker

attempts proof that octagon above column of St. Simeon was covered with a wooden roof.
But Evagrius says the octagon was hypaethral, altho he may be referring to an opaion.

11) Fifth or sixth century, Kalat Siman Baptistery.
Everyone agrees that high octagon

of the clearstory had wooden roof of some shape. Has stone corbels for timbers.

12) 7th century. Etschmiadzin, Cathedral. Lebeos, History of Heraclius, Macler trans., p. 77, tells how in 618 the original dome of wood was replaced by a stone one. Actually he says, "took away the timber roof." but John Katholikos in 10th century says "timber dome."

13) 512/513, Bosra Cathedral.
Crowfoot, Churches of Bosra & Samaria-Sebaste; Herzfeld, Jahr. d. Preuss. Kunstsamml., XLII (1921) pp. 119-121; Sedlmayr, Kunstwissenschaftliche Forschungen, II (1933); same B.Z. 35 (1935).
It has been proved that Butler was wrong in restoring a conical dome, like present one over Zorah Cathedral. Herzfeld says it must have been a wooden dome like that of the Dome of the Rock; Crowfoot insists it had a wooden roof, probably pyramidal, because he found no evidence of either brick or stone in the débris.

14) 515, Zorah
Butler accepted the present conical dome as original, even though it seems impossible to believe that it could have resisted all the earthquakes & has the appearance of having been built on to an existing structure.
Wulff (Altchristliche und Byzantinische

Kunst, p. 253) considers it a later addition; Crowfoot (Churches at Bosra & Samaria - Sebaste, p. 13) insists that original must have been of wood; Herzfeld (op. cit., p. 121 says wooden; and de Vogüé (Syrie Centrale, p. — speaks of holes for beams.

15) 526, Tal'at. (Butler, Early Churches of Syria, p. 165) thinks it had a dome of brick, but the size & thinness of the walls makes this highly unlikely.

16) VI, Il Anderin (Butler, op. cit., p. 169) without any evidence restores it with a conical dome copied from Zorah.

17) VI, Rusafa, Martyrion
Sarre & Herzfeld, Arch. Reise im Euphrat- und Tigris Gebiet, II, pp. 28-38;
H. Spanner & S. Guyer, Rusafa, 1926, pp. 29-30.
Alois Musil, Palmyrena (American Geographical Society, Oriental Explorations & Studies No 4) pp. 156-157, 170-171, 303-308.
Pyramidal roof of wood.

18) VI, Rusafa, Central Church
All op. cit. & Butler, op. cit. p. 170, fig. 182.
Restoration by Herzfeld shows wooden cupola of pyramidal form.

19) 464-465, Gerasa
Church of the Prophets, Apostles & Martyrs.
Crowfoot, Gerasa, p. 191
Probably a "timbered lantern," "though a light dome of volcanic scoriae is not inconceivable." The solid walls of the chambers in the four corners suggest towers roofed with domes as

suggested by the 7th century mosaic at Khirbet Mekhayyat (Pl. XXXV, c).
"In Gerasa, as in other places in Syria, bricks and tiles were not used." p. 187 ?!

20) 531 Gerasa, St. John the Baptist.
Crowfoot, p 193. "the dome or lantern, which was almost certainly of timber."
"No fragments of volcanic scoriae were found on the floor of the central part of the church." p. 244.

21) 616-628, Jerusalem, Anastasis
Cresswell, p.———.
Original dome had been restored by the monk Modestus. Eutychius tells how the Patriarch Thomas (807-820), when the Qubba fell, sent to Cyprus for cedars & pines, introducing the timbers in place of those erected by Modestus. He then covered both sides with plaster & finished exterior with lead.

22) 685-705. Jerusalem, Dome of the Rock.
Cresswell, fig. 10.
Here was a bulbous dome of wood, built originally with three sections, which could not have been invented by the Arabs who had no such tradition & were entirely dependent as conquerors upon Syrian craftsmen. Moreover the structure follows very exactly, even to the design of the mosaic floor, Syrian models. At this time the Arabs had not conquered Persia, but immediately throughout Syria & Egypt adopted the wooden, bulbous dome for their mosques, indicating conclusively that there must have been

building
a long tradition of wooden domes, or there would never have been such a florescence of them.

23) Eutychius (Pococke ed. II pp. 272-3; Clermont-Ganneau, Recueil d'archéologie orientale, III, pp. 89-90) tells how Kâlid al Walid was so anxious to copy certain features of Christian churches that he carried off from a church at Baalbek the dome (qubba). Clermont-Ganneau thinks this refers to the qubba of a ciborium, but if we recognize the existence of wooden domes on Christian churches it may have been the external dome.

Wood Roof on Central Buildings in Iran

In his Altai-Iran, Asiens Bildende Kunst, and Alt Slavische Kunst, Strzygowski raised the question of a central Asiatic tradition of small wood construction by means of corbelling at the corners which he never developed beyond a general statement.

We have the presumption that shelters were at first made of pliable materials with partitions & surfaces made of skins, matting & fabrics. This type of shelter was closely allied to the tent which was common in Persia in Seleucid times. Can see the influence of the tent or hung shelter on the brick architecture of Asia. Strzygowsky, Asiens Bildende Kunst, p. 167 shows how a circular brick shelter is built in Tienshan.

Also in central Asia we have evidence of an architecture of small wood construction discovered by Sir Aurel Stein. Considering the importance of wood in the early architectures of China, India, Egypt, Asia Minor it now seems possible that this wooden architecture may have originated in Asia, or at least been influential there ~~it~~ in its transmission. But we are dealing with an important factor of which we know very little.

In India the ancient Sankrit literature while vague & brief gives the impression of a primitive construction in wood & assigns chief importance among all craftsmen to the carpenter-builder. The lack of an bldg. remains suggests wood, while the evidence of Megasthenes, Ambassador of Alexander to the great Indian court (Strabo, XV.) and Arrian (Indica, X.) is further valuable evidence since they describe city walls of wood.

Valuable evidence comes from the Buddhist bas reliefs & rock-cut temples, III - II cent. B.C. Vaults & octagonal domes are all corbelled ~~out~~ with development of stone cutting at time of contact with the west (Foucher, Les Bas-reliefs Greco-Bouddhiques de Gandâra, pp. 116-117, 125-6. In Kashmir region, 8th century, have pyramidal lantern roof, or double roof, sometimes with corbelled dome, also corbelled corners. Foucher, p. 143; Ferguson, figs. 283, 288, 295. Effect is very much like Armenian churches & wooden synagogues (Tukomarski, "Wooden Synagogues of Eastern Europe," Burl. Mag. Jan. 1925. But impossible to say

whether this wooden tradition was indigenous or introduced by Iranians, or Mongols from China or Nestorian Christians.

What it does prove however, is that behind stone forms, such as we see in Armenia lies a wooden tradition; that over much of Asia from Caspian to China was a tradition of roofing a square room by small pieces of wood laid across corners [Pavlitzky, Holzbund (or Holz und) Stein Kirche in Ukraine] with stone survivals of it in the stone tombs of Kertch, etc.

The evidence does suggest that the Persians knew the tradition of corbelling corners in wood. Hence when they took over dome, they passed rapidly from wooden squinches to arched squinches which became Sassanian squinch (Ribat-i-Safid).

Summary

A. Syria.

1) Many central churches in Syria, all with mortuary significance or implication, which could only have been roofed with wood, & no reason from the archaeological evidence not to assume a domical form for some of these roofs.

2) Domical form was well known in Syria from at least 2nd century A.D.; in this region the stone cutters probably evolved the pendentive; & there was a symbolic or traditional association of dome with tomb or mortuary shrine; we have free-standing cut stone domes which were copied from something; & there is some documentary & representational

evidence for the use of free-standing domes of wood.

3) If we can assume a tradition of wooden domes, which had symbolic significance & could have been given a monumental form structurally, then we have to attack problem in a new way. The problem of the dome in Iran centers around its monumental form & its "Sassanian squinch."

4) In the 8th century when the Arabs set up an Islamic society in Syria they could not have gotten the wooden dome from Arabia or from Persia both of which countries were lacking in wood timber. Furthermore it is contrary to all precedent & expectancy to imagine that they had craftsmen who could either invent or build such a complicated form. Yet they used both the wooden & the cut stone dome on their mosques & tombs, & the idea of the domical "Shiekh's tomb" as a shrine persists in Egypt & Syria. Where then did they get the idea & the methods of constructing wooden domes? The only answer seems to be, Syria.

5) In fact we can imagine a theoretical development of the wooden dome from the conical roof, covering a concealed dome, for which it becomes desirable to find an exterior expression.
cf. dome Isphahan. Strzygowski, Asiens Bildende Kunst p. 420 Fig. 437.

B. Iran

In dealing with the Iranian dome, ~~for which~~ we must keep in mind the

interrelations between Iran & Persia & ask the following questions.

1) How did the Sassanian squinch develope? — in wood or brick or stone?

2) Is Strzygowski's explanation of its origin satisfactory? Strzygowski Asiens Bildende Kunst, p. 183-184.

3) When & how did the Iranians get the idea of a monumental dome? If it was part of their Iranian origin why do we find no indication of it in Achamenian or Parthian architecture? Was it first developed on their fire temples & transferred to their palaces? Does wood enter in? Did Sassanian have wooden, domical shrine idea as result of Indian influence.

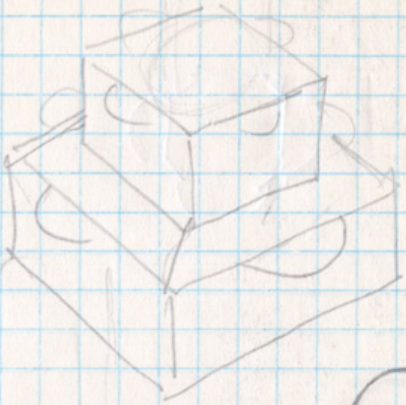
4) Is it possible that its use in Iran has more than one origin: a) a primitive house shelter in wood associated with shrine of sacred fire? b) a wooden form in Syria connected with shrines which was first adopted as a wooden form on Parthian fire temples, but later, because of scarcity of wood was translated into brick? c) & then in Sassanian period was put on palace to show divinity or greatness of king & perhaps because of its form, suggested an early Iranian tradition of the canopy of heaven, the divine umbrella, etc.

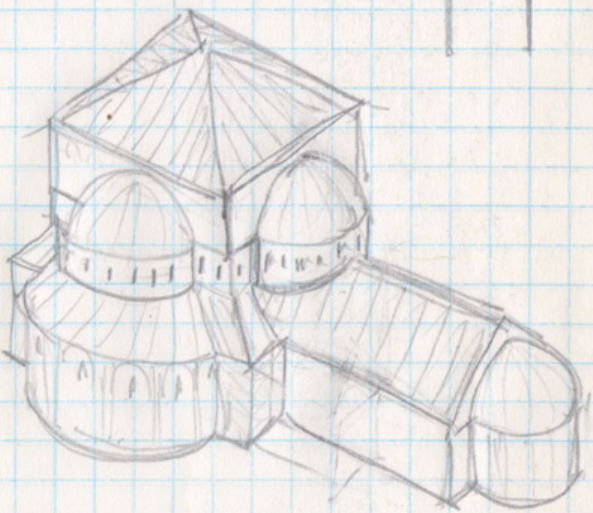
5) Did the dome come to Iran direct from Syria at the hands of a) Syrian artizans, b) Nestorians & Jacobeans, c) prisoners of war, d) or Iranian craftsmen?

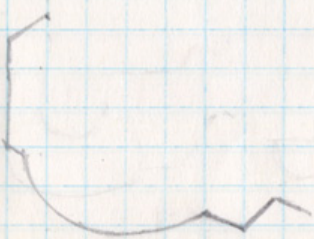
6) Have already suggested that Armenian domes imply a wooden origin plus probably an influence from brick architecture of Iran.

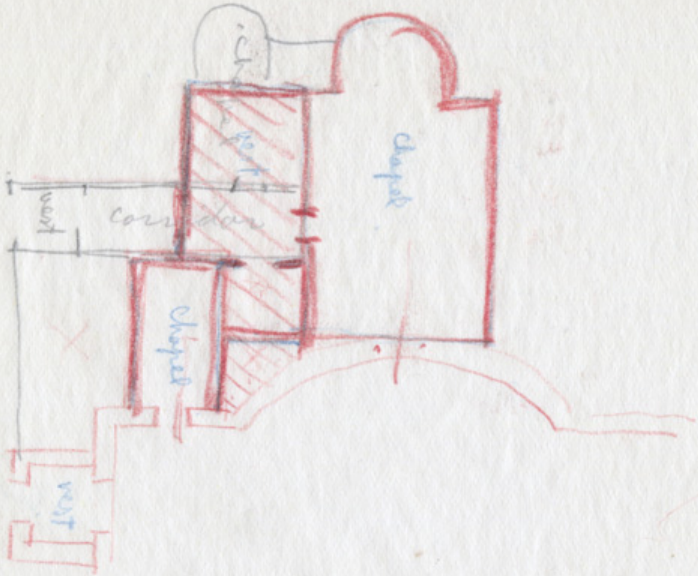
7) If dome was so essentially Persian why did Ardish use it at Firouzabad in a concealed form, Shapur I not use it at Ctesiphon & only at Sarvistan in V century A.D. does it appear in monumental form.

8) Must not use 1 theory to prove another





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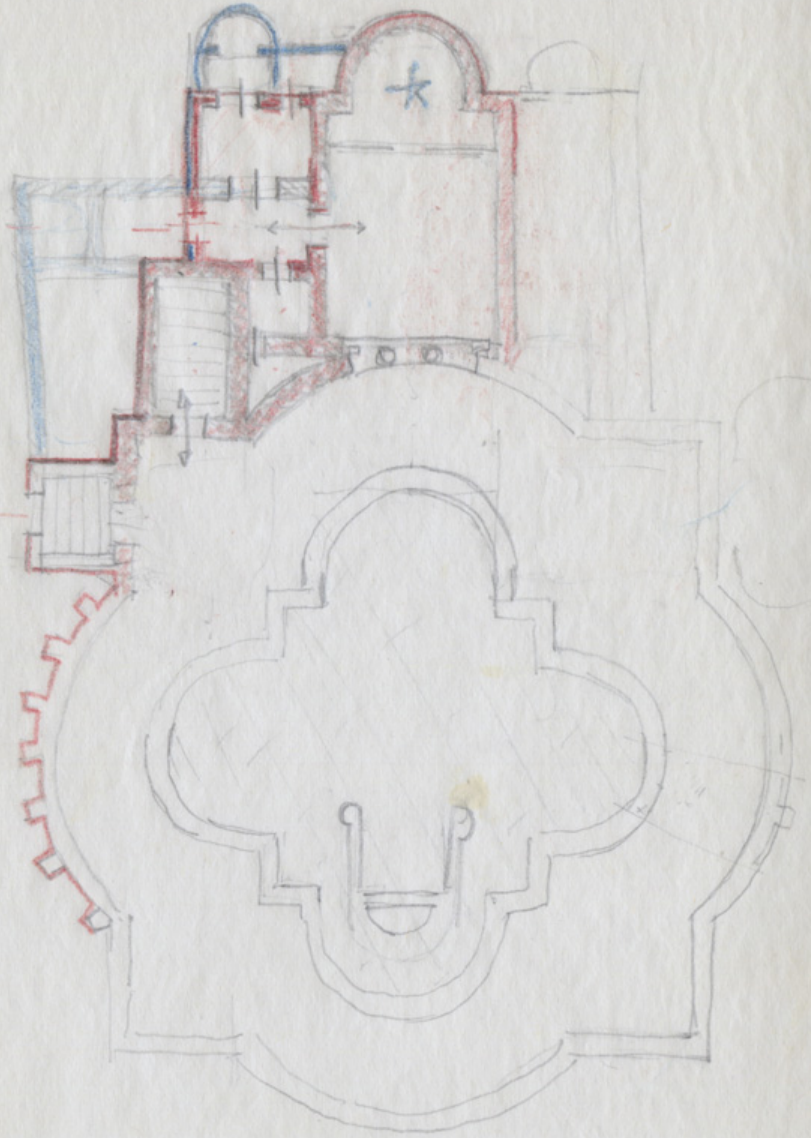


Note of incidental find of mosaic:

S-20-J

In land of Hana Kubrushian (= farmer from Cyprus) in S-20-J (SW corner), along path to harbor. Digging irrigation ditch in garden between mulberry trees came on mosaic pavement at .40 m below surface of ground. 13 Aug, 1938

Uncovered small section of & found badly broken = rinceaux border + grapes.

Developed further from Sunday, 14 August through Friday, 19 August with small crew working among trees & uncovered semi-circular aisle(?) (= apse?) paved with mosaic representing procession of animals & birds + trees; rosettes & plants.

Construction = inner wall of semi-circular structure large limestone blocks of irregular dimensions; some wedge shaped, dressed down with fine-toothed adze, laid radially to center.

Mosaic Pavement:

Border = outermost section broken.

Then between 2 rows of black = sinoean within which are grapes, birds & fowl. Colors of sinoean: stems are dark violet, dark brown & grey & greyish violet; leaves are dark green, black, greyish violet, also some yellows.

SURFACE OVER MOSAIC. 12-8-38
COINS: Cb4337

SURFACE on TOP OF MOSAIC FLOOR. 20-8-38
COINS: Cb4446
POTS: Some Hellenistic red varnished and Roman to Late B
1 stamped cup. b739-P 2431
LAMP: 2 Roman Antioch group VI
MARBLE: fragment of relief decoration
/: b740-S 555

SURFACE OVER MOSAIC. 22-8-38
COINS. Cb4481

Rough notes on various wordings for general description of plan.

The church is of the central type with an interior arrangement of four semicircular exedrae projecting from the sides of a square (of which only the angles were marked) In the center is a large rectangular choir with an apse which occupies the west exedra. The exedrae are open and bear colonnades that give access to an encompassing ambulatory which repeats the pattern of the form of the central unit (which follows the outline of the central unit). The wall of the ambulatory forms the exterior wall of the building which was ornamented with an applied colonnade.

———"———

The church is of the central type with an inner quadrefoil formed by colonnaded, semicircular exedrae. Within the basic square of the quadrefoil is a large choir with an apse that almost fills the west exedra. Around the exedrae is an ambulatory partaking of the same form of the quadrefoil so that the exterior of the church displayed curved walls on each side.

———"———

The church is of the central type with an interior quadrefoil formed by four colonnaded, semicircular exedrae around which was an ambulatory with an exterior wall following the same curvature. Foundations for traces projecting from the exterior wall indicate that this was ornamented with an applied colonnade. In the center of the church is a large rectangular choir, etc.

———"———

The church is of the central type, the basic elements of which consisting of a square within a square, although only the angles were built up in the actual construction. Four colonnaded exedrae project from the sides of the inner square, forming a quadrefoil; around the exedrae and within the angles of the outer square is an ambulatory (which follows the plan of the central unit).

General Description of Plan as Uncovered.

The church is of the central type, the basic elements of the design consisting of a square within a square, and a projecting eastern choir.
Only the angles of the squares were built up in the actual construction, since semicircular, colonnaded exedrae were projected from the sides of central square, forming an interior quadrefoil, and an ambulatory was placed around this following the same plan, so that the exterior walls of the church were curved between the angles of the outer square.

General Description of the Elements

Angles of the Central Square:

The SE + SW angles are the best preserved (photo 5507 for SE, 5515 for SW). These are constructed of limestone blocks carefully quadrated but not dressed to a uniform smoothness: the tool used for finishing them was a stone adze with teeth ca. .002 wide & ca. .0035 m. apart.

General Observation on Plan

Period I: Naturally this period represents the architects church. As originally conceived and designed it is a well balanced, harmonious plan presenting an interesting and logical solution of the central type church. The projecting eastern sanctuary appropriately balances the central square plus the western exedra.

It seems to be an imperial church designed by a court architect not conversant with the local peculiarities of the Syrian church plan which almost invariably include 2 side chambers (prothesis & diaconicon) flanking the sanctuary, and probably a central choir or altar. However, when the church was reconstructed these Syrian features were added.

Another interpretation may be advanced: that the building was not designed as a church but as a mausoleum (or some other structure) and that it became a church only after its reconstruction when the side chambers & central choir or altar were added.

Note placing of portals: as though to be placed in the center of a precinct accessible from all directions. Therefore architect did not design it for this particular spot where at least one of the doors seems not to have been used; but perhaps there is an extensive garden to the north in

which he supposed the church would be set; then, for some reason it was shifted to the S. near the S. wall of the town.

Note on Periods of Pavements.

Period I

Mosaic of ambulatory

Marble floor of E ambulatory laid E-W.

Marble floors of N. + S. exedrae laid N-S.

Marble floor of E. exedra laid E-W.

Marble floor of cendral section laid E W + extending into W exedra.

Period II.

Then when built cendral choir, took ups a line of marble slabs along S. side + fitted S. side of Chapel flush to it. But impossible to make this same adaptation on N. side because would involve too wide an apse to make adjustment into W. exedra. Therefore, put in a new marble slabing which is not of same type nor does it fit so well.

Opus sectile in angles in baptistery.

Check this by tracings restoring all floors of all periods.

Check floor levels of each church carefully.

S-20/21-J. Martyrion

General notes before complete cleaning & final cleaning.

① On the east side of the building is a small rectangular structure of an earlier period which was partly rebuilt & incorporated into the plan of the later church. In its original plan this small building formed a single architectural unit: the west end had a straight façade in which was the entrance, the end bowed out in a large semicircular apse. A small section of the original wall is preserved on the south side of the apse revealing this as constructed of carefully quadrated blocks of limestone. The thickness of the walls would permit only a covering of wood & tiles.

2 } NO

Then ~~at~~ a large embellishment to this simple monument was added to the west end, in the form of a large, central type church. At this time most of the walls were rebuilt and the floor level raised ~~~~ - facts which indicate a considerable passage of time.

① Better beginning = the original building of the preserved complex of structures on the site was a small rectangular

2. No! Eastern shrine & martyrion built together at one time & then rebuilt after destruction

(+ some)

A doorway was opened into the north wall giving access to a series of new rooms which ended in an apse (or apses) flanking the larger apse of original building.

The west facade was removed and rebuilt into a wide entrance portal opening into the east ambulatory of the ~~large~~ church on its E-W axis.

The church was designed with four large exedrae opening out of the sides of a central square. Around the exedrae was an ambulatory separated from the exedrae by six Corinthian columns, some of which were of the NO [bases too small] 'wind-blown' type. Within the W. exedra, directly opposite the ~~small~~ original structure to the E, was a small rectangular tribune with an apse at the west end. The central area, the exedrae, & the nave of the original struct. were paved with marble laid in opus sectile; the ambulatory and the apse of the original building were paved with mosaic.

(then to description of mosaic?)

Details
Dependencies
Doorways.

S-20/21 - J. Martynion

Notes on S. exedra & ambulatory.

Elements = exterior wall of ambulatory; pavement of ambulatory; colonnade between exedra & ambulatory; pavement of exedra; angle walls of the central square between S exedra & E exedra, and S exedra & W exedra.

Exterior wall of ambulatory:
constructed of irregular limestone rubble set in hard light grey mortar of fine sand & lime. Thickness measures .92 to .975 in various places. Rubble is fairly carefully laid; sometimes like masonry appareil with joints broken but not smoothed nor struck; where rubble is irregular an attempt has been made to fit irregular like polygonal masonry.

Bonded into the wall are bases for columns of an applied exterior colonnade. There are three of these in the central section of the wall as recorded on the field plan. The dimensions of these from

E-W = <.90> 2.07 <.867> 1.82 <.837> <2.93>

.945 .855 .88 .77 .75 .85 .75 .73

W E

3. 2. 1.

= Spur wall to S. apsidal.

Spur wall to S. apsidal:

This is placed within the ambulatory wall as shown in red but does not actually bond with stones of ambulatory wall as do exterior bases or corbel tables. It seems constructed as an afterthought &

i.e. after wall was built a section wide enough for the insertion of this wall was torn out & this spur wall built into the break; then small rubble was fitted into the remaining section of the ambulatory wall — in short, this spur wall was tied into the ambulatory wall after the ambulatory wall had been constructed & is therefore later than ambulatory wall, which makes apsidiole also later.

On inside of ambulatory wall are four rectangular pieces of marble revetment = ca. .30 x .20 x .02 coarse-grained grey. These may not be in position since there is ca. 3 to 4 cms. of dirt between them & wall.

There is no trace of the exterior treatment of the wall.

Just beyond the join (rubble bonds in center) of the exterior ambulatory wall and the S. side of the W. angle is a large limestone block trimmed for the E. jamb of a door. This rests on a well-dressed limestone block which has been dressed as a threshold with a door sill & door socket. But no other trace of a door remains, the wall continuing in a construction which combines rubble & roughly quadrated blocks of limestone. Problem = ① was this door actually ever completed and later walled up; or ② was the door designed in plan & begun but not completed? Ans. = ① because construction is poorer within position of former doorway which was probably walled up after construction of S. apsidiole between S. ambulatory & city wall blocked up access to this portal. At time of walling up of doorway the well-dressed threshold was removed for reuse, leaving only E. section which was held down by E. jamb & subsequent puntrimmed rubble.

Notes on S. exedra & ambulatory (continued).

This is an interesting reflection on stone masons who was given the job of walling up the door; he substituted a rough limestone block & gained a well-dressed one. Remaining section of threshold finely worked with adze whose teeth were .005 wide; all dressed with coarser-toothed adze .003.

Just beyond the join of the exterior ambulatory wall & the S. side of the W. angle of the building is a wide portal corresponding to one in similar position on N. side.

Pavement of ambulatory

Originally of mosaic like N. ambulatory but only a very small piece preserved in middle of central section and a small part of the rinceau border preserved at the E. end of the colonnade.

Colonnade between exedra and ambulatory.

Between the ambulatory and the exedra was a colonnade of seven marble columns: one on the N-S axis of the exedra and three of each side of it.

Each column had a foundation consisting of two blocks of roughly quadrated limestone, between which were sleeper walls of rubble. The column bases had square plinths (ca .75 x .75) above which was a large torus, a small torus, a scotia, a small torus, finally a large torus to the top of the base which was ca. .61 m in diameter. A fragment of a shaft of blue-gray & white marble was found here & also a battered Corinthian capital of the same material which Lassus would date in the VI century although he would not hesitate to date this ca. 490.

Between the columns the sleeper wall was surfaced with a mortar of lime & black sand in which were fragments of marble revetment. This mix was trowel smoothed & then received a marble floor of which that between the last 2 inter-columns of the E. side is preserved. .81 m. wide. The S. side of the sleeper wall is neatly laid in an arc which makes a perfect join with the remaining section of the border of the mosaic. But the N. side of the sleeper wall is not neatly trimmed into an arc & the pavement of the exedra comes up over the edge of it (from 1/2 to 2.5 cm) to make a neat semi-circular join with the pavement of the inter-communication. Both pavements have sunk considerably showing that the earth was not carefully rammed.

Pavement of exedra

The exedra was paved with slabs of marble: 1.77 x .92 x .035 is dimension of only completely preserved one = large-grained white + grey + veined. This marble runs to the S. wall of the tribune.

Southeast Angle: inner wall

of photos, of construction + plans + elevations

Construction of wall of inner angle = .88 x .60 x .54 is largest + best preserved block here but the construction is well preserved up to a height of +.87 m above col. base at E. end of colonnade.

Construction is of large limestone blocks carefully quadrated but not dressed; trimmed with stone adze with teeth .002 wide + ca. .0035 apart. Joints were close - but no trace of binding material left; joints were broken. Blocks are of no regular size + space is adjusted by insertion of narrow stone .165 m face + .60 m height which is a feature of late masonry. Wall has irregularly placed holes in masonry for revetment hooks.

As fill in center of wall within faces is a rubble + cement fill = fine dark sand + lime = hard.

Southeast angle: outer wall.

Construction is of rubble, well laid on faces & with fill of small rubble & cement of fine black sand & lime. In south wall is a threshold of well-trimmed blocks of limestone. Threshold is 2.23 x .69 with an exterior sill of .21; sockets 19 x 14 (E) each end. Outside of this portal is a limestone pavement 4.18 wide, across which is an E-W earthquake crack that has heaved up the pavement.

In E wall is also a portal (not cleared to base).

Important note: at edge of rock pile over SE angle of S exedra picked up frag. of marble with horsehock rider in relief inscribed Paul= EAOYA = perhaps St. Paul & important for identif? Better remove rock pile 12/7/39 copied from previous graphite notes.

S - 20/21 - J. Martyrion.

East apse & dependencies. (1)

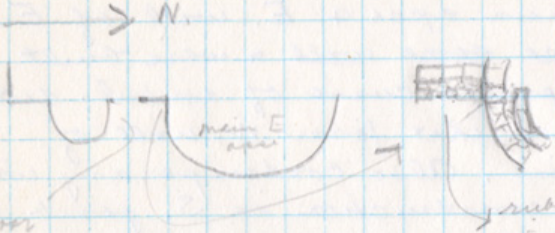
Outline for notes.

W. wall of main apse & E. wall of E. ambulatory are same wall & were built at same time: proof = curve of ambul. cut on same stones that form W. wall of main E. shrine. Also contemporary with this original construction is S. jamb of the large double-in-antis portal; & also S. col. base of portal with ΦE on top of base at E. edge. Corresponding col. base missing but position marked between post holes of balustrade. Note cuttings for post holes of balustrade & sketch cuttings between cols. as marked on sketches & plan.

N. jamb has been entirely reconstructed in rubble & hard cement of fine dark sand & lime; this laid on top original masonry wall of ambulatory & E. shrine.

N. & S. corners of W. wall of main E. shrine: all data at present available point undoubtedly to fact that as originally constructed the church had only the main E. apse and not the two side aisle dependencies which added later. Evidences: all along even rabbet N. wall the walls of dependent rooms are laid against & do not bond with inbuilt construction; at E. end of N. wall at join of baptistry wall & main apse the construction does not bond with original construction of main E apse but laid against it & of diff. material (rubble concrete while apse of good limestone with rubble concrete fill); also at W.

end of S. wall of main apse construction of S. dependencies is obviously later + does not bond; at E. end of S. wall of main apse is conclusive proof the S. side aisle added later:



Only check left would be to dig below water level for foundations but in view of overwhelming evidence left above ground seems certain that original church had only single apse + that 2 side aisles depend. were added later.

N. wall of main E. shrine = rubble construction with well-finished rubble + cement of lime + fine dark sand. Door in N. wall as noted on plan. Impressions on top of wall at E. end of uncertain purpose.
At E. end N. wall as reconstructed bonds with baptistery wall which is thus contemp. with reconstruction; but this is laid over + does not bond with original construction of apse masonry of which runs under this later concrete + rubble.

E. apse wall = finest quadrated limestone blocks of grey shade carefully trimmed + laid with rubble fill = like W. ambulatory. Wide recessed tiles. At SW end original construction remains + poor late rebuilding of S. wall laid against it.

S-20/21 - J. Martyrion.

East apse + dependencies. (3)

S. wall of main shrine: late poor rubble reconstruction = rubble + mud + old mortar etc.

Walls revetted with marble of which few frags left along bottom of N. wall

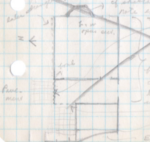
Floor in front of apse = slabs of marble as in S. exedra.

Foundation for altar screen across apse irregularly cut + mal-trimmed + some reused blocks (examine latter next year). Post holes as cut + bases which are stored at Antioch but no time to draw this year.

Floor of apse = surface destroyed; only remaining evidence is line of small brick tiles along NE side; probable late.

Later: scrap of imbricated mosaic at SE corner.

North Dependencies = Baptistry



of sketches + plan; getting smaller + outer note: exedra = 1/2 hexagon. additions + rear E = much later.

Late wall on top of earlier wall with door.

All these walls are contemp. with bond or these similar mortar + construction; dotted walls are later. Dotted line = late wall, which rests on pavement. Other walls to N. also later.

N. retaining wall of main E. shrine

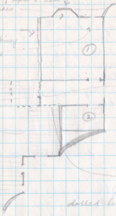
E. amb. wall

S-20/21- J. Martyrion.

East apse + dependencies (1)

Note 1/2 hexagon; addition to rear of apse = late

See sketches



Must consider possibility of all N + S units as of same period (except obviously later additions) even with lack of bond + variation in construction.

Late wall on top of end of wall marking end of pavement = entrance in the earlier wall over which later wall is built.

Late wall

dotted lines = late walls.

(1) Baptistry = contemp. with rebuilt N. wall of main E. shrine + walls bond.

(2) Contemporary with baptistry; walls do not bond with N. wall of E. shrine; has marble floor laid on top of heavy limestone pavement which was originally put in angle outside N. + S. walls of main E. shrine + E. ambulatory. The actual construction does not change much from baptistry = mortar much same but rubble not so carefully laid + more bricks used to chink. This seems identical in construction to S. dependency corresponding with baptistry. However probably S. apse + baptistry are contemp., even tho construction a little different. = checked [illegible] S. apse constructed later than baptistry.

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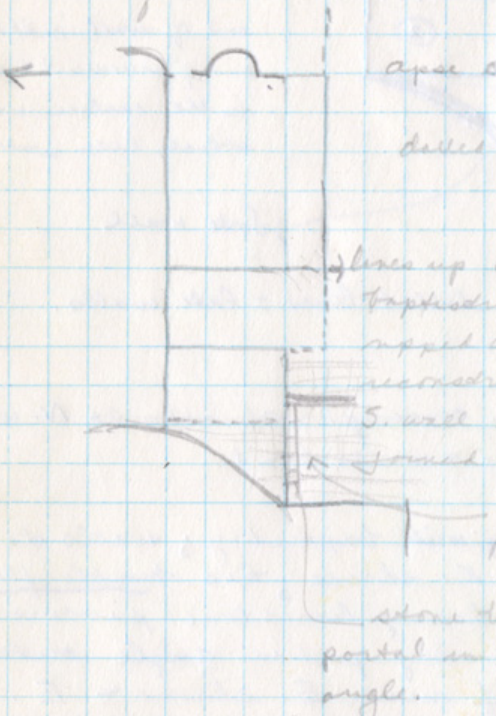
East Apse & dependencies (5)

South Dependency - later?

Poor rubble construction, rebuilt in late period, but where original construction is preserved this seems similar to North Dependencies.

Impossible to check by digging found because of water table.



Problem: were N & S dependencies all constructed together, or was trapezoidal block first, & later other units. Seems more logical all done together except later walls in spite of lack of bonds & disjunct differences in construction.

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Outline

North Ambulatory + Exedra.

Outer wall destroyed to foundations = rubble + concrete.

Mosaic bed:

cubes = .01

cement = .03

marble = .12 - .14

Exedra sleeper wall cut to foundations.

Col. base at inner NW angle set + not in position.

Limestone blocks at NE angle, below foundations, use not clear.

Frag. mosaic in NE inner angle = Part tree of shades of violet + green + grey-green; + to green is leaf of unicorn in tablets.

East Ambulatory + Exedra.

Outer wall destroyed to floor level except at S. jamb of entrance to E. apse.

Inner wall with colonnade as noted with frag. of pavement within. Col. bases = course-grained marble.

Pavement of exedra = marble slabs.

Pavement of ambulatory = marble slabs to entrance opposite entrance to E. shrine.

To N. of this = mosaic pavement, left in situ due to decision of Turkish Director General of Museums that mosaics must remain in place. This frag. has concave border with scrolled buds + grapes in tablets, grey + black.

Frags. of rosettes, tree, birds + animals in color scheme of violets, greys, blacks + reds. Best preserved = group of horse, peacock + bird; + tree unit for tailed sheep. Was covered with sand in attempt to preserve.
To S. in corresponding position is frag. of t + w opus sectile pavement.

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{ drums? are cut thru ambul wall at S. apse & choir

Outline.

W. ambulatory + exedra.

Note fine construction of original wall which is preserved here. Note drains through wall. Always a low wet place; foundations not deep & rest either on gravel or bed rock.

Traces remains of ambulatory pavement.

Exedra wall has strengthening at 2 col. bases which may explain limestone blocks at E. end of N. ct. wall.

Exedra occupied by W. end of choir. Around it are traces of opus sectile pavement in d. grey, red + white marble.

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Outline

Exterior angles:

NE. In N. wall = 2 portals with heavy limestone pavement in front + large col. base in NW corner of pavement. At N. of pavement is late property wall of reused material, poorly built + not in line; has opening opposite pavement. This seems main portal = nearest main N-S street leading from port + market to market place in nearby city wall.
In E wall, also double portals which were rendered useless by addition of later constructions; also limestone pavement outside of these.

SE. In E. wall is wide single door with limestone pavement outside + stone benches on N + E sides of this.
In S. wall also wide single door with E-W earthquake fissure.
Access to back doors from walled road leading E. to main E-W street to Market Gate. No indication of entrance in this wall to small chapel outside S. ambulatory. Further excavation must be made here, around chapel to connect it with rest of monument.

SW. In S side = walled up door.
In W. side = single door, with frag. of limestone pavement + walled roadway leading to W. important to follow for lower city plan. Masonry in this angle preserved but badly shaken up by earthquake.

NW. Single portals in brick dado and section of frame outside W. one. Wheel road ⇒ N. Masonry of single well preserved = original.

Interior angles as drawn + photographed.

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Chair

Earliest extant construction is W. apse which is constructed like the baptistry & S. ambulatory & hence dates with first main reconstruction. No element of extant construction is like original church walls in method of construction or material but is exactly like baptistry construction.

Within this apse wall has been added later a great mass of poor small rubble to greatly thicken its walls — possibly for vaulting or dome? or for seats?

Original apse was open & walls finished with cornice moulding carved on interior with arms etc as ex. seen to P.U. from division.

N & S. walls do not bond with apse walls but are poor late construction. Section of S. wall has mortar like 1st apse wall. But in general whole construction is very poor & is later.

Division wall at E end bonds with S. wall but not with N.

Floor level of E section + floor level of exterior.

Summary:

Original apse was contemp. with 1st major reconst. = baptistry.

Rest of walls do not bond with this & are poor miserable efforts of late reconstruction.

Revetted with marble.

Evidence says no choir in original monument.

Problem = do late walls follow orig. plan = probably

— on account of similar mortar in some sections of these walls.

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Note:

Frags. of W. blocm cor. capx. over W. ambulatory but probably out of position

Building periods:

I. Central unit + single eastern apse + mosaic pavements + marble floors ?

II General reconstruction in some cases from ground up was in S. ambulatory + E. stirne.

Additions: ① N. + S dependancies to main E. stirne.

② Chapel off S. ambulatory.

Chapel outside S. ambulatory is same matdn + construction as Baptistry. Wall adjoining its apse is Byz.

S. ambulatory wall rebuilt at some time. Mosaic south ambulatory = frags of animals + rodents + niches for but completely destroyed.

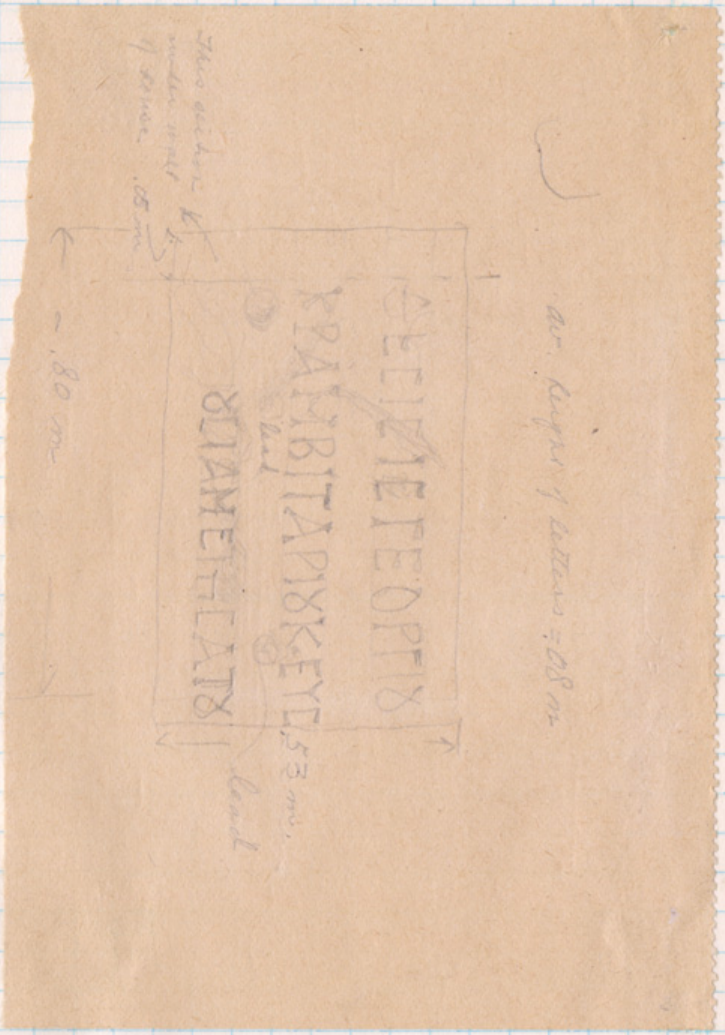
Covering = abundance of roof tiles found around bldg. for purpose.

Many reused ancient blocks seen in original construction.

(from Sk. II, p. 8

12/7/39

Inscribed limestone block (yellowish white) used as threshold in house in approx. 5-22-J. Will try obtain when owner comes down from mt. for grape harvest



Marble Forum

E. colonnade: Earliest Cols + bases: Cor. Ca. II. A.D.?
Opus sectile pavement late?
Near opus sectile is
SE corner barely laid bare
many early marble caps but badly destroyed
Behind colonnade = large fill of débris
~~of mixed material~~ of sand
against a wall of reused masonry
of limestone + limestone cols.
good place to clean for statues +
also under but of fence guard.
The débris faces a core of cast
concrete + large limestone rubble.

N. colonnade massively late with some fairly well
preserved Cor. columns + caps
of IV cent.?

W. Colonnade also massively late.
At S. end small section of wall
behind col. laid bare with
masonry of header + stretcher
~~of II~~
~~of S~~

S. colonnade Dug only at E + W ends; W. end
better than E + here a few
early remains

Center not cleared.

Best possibilities for late + probably poor
late antique architecture + sculpture.
Would excavate center + S colonnade
also trying to E; and dump toward
Sea. Easy to clear; probably quick
results.