THE LOCATION AND RECONSTRUCTION OF A BYZANTINE STRUCTURE IN MAREA, EGYPT INCLUDING A COMPARISON OF ELECTRONIC REMOTE SENSING AND REMOTE VIEWING

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ABSTRACT

This paper reports the location and reconstruction of a Byzantine structure in the now buried city of Marea along the shores of Lake Maryut, some 44 km southwest of Alexandria, Egypt. A Pharonic trade center that was occupied until the 16th Century, the city has been long abandoned and lies buried around what formerly was the lakeshore. This paper reports on an applied Remote Viewing experiment in which two Remote Viewers were asked to first locate Marea, and then a buried building within the city and, finally, to describe what would be found within the building site selected, with a particularly emphasis on tile and other decorative material. It also includes a comparison of Remote Viewing data with electronic remote sensing, and geographical data for the same area done independently three years earlier. The comparison is striking because while the Remote Viewers were successfully able to locate a building, including staking out its door, and corners, as well as providing a wealth of reconstructive and descriptive material about what would be found at the site, the electronic remote sensing and geographical analysis produced no suggestion whatever that there was a site at this location. For this reason, prior to discovery, much of the Remote Viewing data seemed extremely improbable, and notably contradicted the informed judgment of an archaeologist deemed by the University of Alexandria to be the leading authority on Marea.

History: The Marea Probe: An Experiment in Applied Parapsychology involving the Location, Reconstruction, and Excavation of a Byzantine Structure - Marea, Egypt. Invited Paper. Annual Meetings of The American Research Center in Egypt. De Young Museum. 14 April 1980. Also presented at the annual meetings of the Parapsychology Association 1980. Proceedings of the Parapsychology Association – 1980.

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INTRODUCTION

Although Marea was occupied and a trade center as late as the 16th Century, today it lies hidden beneath a desert of low semi-arid hills, some 44 km southwest of Alexandria, Egypt.¹ Earlier archaeology has revealed little besides a cluster of foundations as a hint of its past. However, once it was thriving, and the regional capitol when Alexander founded Alexandria in 331 BCE. The name Marea may be derived from the Pharonic word *Per-Mert*, meaning: the country by the lake.² If so, it was an apt name for a lovely city with marble public buildings, situated to catch the breezes along the reed-lined bird-filled shore of Lake Maryut. Both lake and city – the one now vastly diminished, strongly alkaline, and no deeper than four feet at any point – the other abandoned and buried – still possess a certain charm, particularly during the early evening.

The lake served at once as a source of food, a means of transportation, and a place of pleasure, and the town was ideally positioned as a way-stop for travellers going up and down the country. The gentle airs, warm weather and beauty, both natural and constructed, recommended Marea as a tourist attraction. There was also a thriving commercial district, and Strabo describes several canals that emptied into the lake dug to facilitate those businesses.³ The Shediya River, which originated from the Nile at Memphis also emptied into it, and there was access to the Mediterranean via a canal cut through to what became the Western Harbor of Alexandria.

Strabo says the commercial wines of the area were "so good that the Mareotic wine is racked off with a view towards aging it." The vintages really must have been outstanding because almost 300 years later, Athenaeous would echo Strabo's words saying, "The Mariotian wine... is excellent, it is white and pleasant, fragrant, easily assimilated..."

Wine making though was just one of the area's activities. Authorities of the past also extol the virtues of the lake region's olive oil, fish, papyrus and fruit. Perhaps most famous of all though – next to the wines – was the hand blown glass produced in the city. It was so delicate though that few examples have survived intact, and Mareotian glass is amongst the most prized possessions of Alexandria's Greco-Roman Museum.

Although commerce and pleasure were its major contributions, Marea also played a political and strategic role in early Egyptian history. Both Herodotus and Thucydides discuss it at some length. Herodotus speaks of Marea as being a garrison town during the reign of Pharaoh Psamtic I (664-610 BCE), and indicates that it still served a strategic function under the Persians in his time (450 BCE).⁶

At least two royal claims were settled at Marea. According to Diodorus, Amasis (575-526 BCE) defeated Pharaoh Apries and assumed his mantle at Marea.⁷ Soon thereafter, in 525 BCE, Amasis' grandson, Inaros, proclaimed himself king at Marea, and used the city as his headquarters while he fought the Persians under Cambyses.⁸

ARCHAEOLOGY

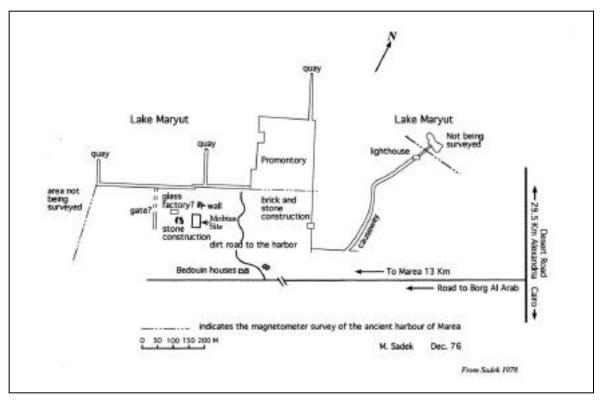
The previous archaeological work relating to Marea is very limited. It begins with Mahmoud Bey, known casually as "El Faliki" ("the Engineer"), an astronomer in the Khedival government. Although a very problematic figure, he carried out one of the first systematic archaeological explorations of Alexandria at a time when much that was ancient still remained relatively intact. His mid-19th Century excavation report describes far more than is visible today. Half a century later Breccia, the first modern archaeologist, examined the area, and his description suggests how much had already disappeared. Fraser, publishing a century after El Faliki touches on Marea, both in his text and in his remarkably bounteous notes, but by then there was little left to see. It is Sadek's work, however, that most concerns us here, because his research is the reason we undertook the Marea experiment.

From 16 November to mid-December 1976 – just three years prior to the work presented in this report -- Sadek, and his team from the University of Gelph searched "the shoreline, promontory and south to the end of the visible remains," seeking evidence of previously undiscovered buried structures. It was a methodical job, using the latest electronic remote sensing technologies, and search methodologies, including aerial photography, topographical survey and, most importantly, proton precession magnetometer. Measurements were recorded on a four-meter grid, 800 meters long by 100 meters wide. Transverses "were made along lines parallel to the lakeshore from west to east at four meter intervals and readings were taken every four meters along the transverses." A plan was produced which indicated that there should be found at the promontory and near the quays "a high concentration of subsurface structures, probably indicating that this was the town center and pointing to the probably existence... of warehouses and factories." (See Illustration One.)

What was most interesting to Sadek was "the grid system pattern of streets running north and south intersected by others running west to east." ¹⁶ Such a grid design is unusual in Pharonic times (Sesostri II and Tell El Camarna, as Sadek notes, notwithstanding) and was apparently constant through all subsequent inhabitations. Sadek reports that his magnetometer exploration produced no layout that did not conform to the grid, and "there is a strong likelihood that this latest level of occupation was based upon earlier

settlements."¹⁷ The report concludes saying, "It is unlikely that anything remains of the structures except foundations."¹⁸

While we were interested in what Sadek found, we were even more interested in what he did not find in his careful search.



M. Sadek surveyed the area three years before the Mobius work using a variety of electronic remote sensing technologies and found a number of constructions, but nothing at the site selected through Remote Viewing.

Illustration One

COMPARISON OF ELECTRONIC REMOTE SENSING AND REMOTE VIEWING DATA

One of the research objectives of Mobius' Egyptian fieldwork was a comparison between Remote Viewing and electronic remote sensing. Sadek's 1976 work offered exactly the comparative dataset we needed to effect such a comparison.

His report provided a completely independent source against which to measure the Remote Viewing data and, thus, made Marea an ideal location for our experiment. Here was a site of sufficient importance that a fairly detailed history of its past had been recorded, a history which could be compared with the reconstructive material produced by the Remote Viewers. Yet one still obscure enough to be *unknown* to all but a few archaeological professionals.

Additionally, Marea was a semi-active archaeological area under the supervision of the University of Alexandria. Thus, an updated historical and archaeological description of the city was available, as well as a clear definition of what was *not* known. Thus, we could begin with a defined problem, and be sure that true triple-blind conditions existed – no one knew the correct answers, only excavation could reveal accuracy -- upon which all could agree. A clear delineation between the results obtained through utilization of Remote Viewing input and Electronic Remote Sensing could be established, and it would be relatively easy to isolate verifiable reconstructive data obtained through Remote Viewing that was previously unknown.

REMOTE VIEWING

Remote Viewing is the demonstrated ability of individuals to describe persons, places, or events from which they are shielded by virtue of space, time, and "blindness" protocols. They do so in much the same way that an eyewitness would. All their senses report; that is they can answer questions that involve smells, sounds, colors, shapes, textures, even tastes. The mechanism of this perception is unknown. The task of the researcher is to structure the interview session in such a way that normal sensory cues are absent, and that intellectual access is eliminated. The researcher in an applied Remote Sensing experiment such as this is blind to the correct information; indeed, by definition, everyone is, that is why the questions are being asked.

Although this process may seem unusual, in fact, researchers are essentially faced with a novel presentation of a familiar engineering problem: searching for a weak signal buried in noise. In the case of side scan sonar, the "noise" is particulate matter in the water, schools of fish and the like; in this instance, normal sensory awareness and prior knowledge constitute the "noise".

The laboratory research most relevant to the work reported on in this paper was that done by Puthoff and Targ,¹⁹ at SRI, International; research which has been subsequently replicated by others, most notably Schlitz and Grober.²⁰

The use of Remote Sensing in archaeology enters the literature some 75 years ago with explorations of Glastonbury Cathedral in England²¹ and continues (albeit infrequently) to surface periodically in research ranging from Poniatowski's in Poland,²² Scott-Elliot in England,²³ Pluznikov in the Soviet Union,²⁴ Weiant's with the Smithsonian at Tres Zapotes²⁵ and Reid's work at Ontario Iroquois Indian sites (which used George McMullen, R3, who also participated in the Marea project).²⁶ All of this exploration, however, was done with very little emphasis on maintaining a controlled protocol with proper blindness. Most important of all the work depended on the input from a single Remote Viewer.

In 1976, the author began developing a consensual methodology using multiple respondents independently and individually responding to the same questions -- in conditions of intellectual and sensory blindness. Each was asked the location of archaeological sites, the description of surface geography, and the description of subsurface, or underwater materials, to be found at that site. This team approach, was designed to help improve the signal-to-noise ratio previously described. The Remote Viewers functionally are the survey instruments, and using more than one on the same site is the equivalent of having multiple electronic sensors – satellite reconnaissance, and magnetometer survey, as examples -- describe an area and then collectively define what is there.

The first use of this consensual methodology in underwater archaeology is to be found in the report on a 1977 experiment series utilizing the research submersible Taurus I. The program was conducted by the Mobius Group in conjunction with The Institute for Marine and Coastal Studies of the University of Southern California. Known as Project Deep Quest, this field project demonstrated that Remote Viewers could describe in detail, from distances of up to 4,800 kilometers, a previously unknown wreck at 92+ meters of depth. ²⁷ In that instance Remote Viewing was successfully able to provide location as well as specifics as to what would be found, an accurate description of the site (including drawings), the cause of the ship's sinking and the approximate period the disaster occurred. All points corroborated by fieldwork, literature review, and expert analysis. ²⁸

PERSONNEL

To carry out this research program six teams were assembled, each having responsibility for one aspect of the research. The specialty teams were:

- 1.) The Historical/Archaeological Team: Fawzi Fakharani, archaeologist, Department of Classical Civilizations, Faculty of Arts, the University of Alexandria and, Mieczyslaw Rodziewicz, archaeologist, Director, The University of Warsaw Archaeological Mission in Alexandria.
- 2.) **The Remote Viewing Research Team:** Stephan A. Schwartz, parapsychologist, Mobius; Beverly Humphrey, parapsychologist, SRI, and Kathi Peoples, Mobius staff support.
- 3.) **The Remote Viewers:** The two Remote Viewers taken to Egypt were, McMullen,R3, and Hella Hammid,R5.

Only McMullen had any experience with archaeology, having worked for some years with Professor J. Norman Emerson of the University of Toronto's Department of Anthropology, and his student Reid.²⁹

Neither viewer had ever been to Marea, and they reported they did not even know of its existence. Until asked about Marea they had no indication that they ever would. Both Viewers were "blind" to the questions before these were presented to them, indeed, did not even know the project was to take place in Egypt. Even had they been working archaeologists, and specialists in Alexandria, it would not have mattered since the questions were, by protocol, outside the corpus of knowledge.

- 4.) The Archives and Records Team: Catherine Dees, historian; Kay Croissant, historian; Karen Winters; field log, David Keith, illustrator, and Jacqueline Kendall, staff support.
- 5.) The Photography Team: Glenn Winters, film camera one; Bradley Boatman, film camera two; Karen Winters, still photography; and, Kathi Peoples camera assistant.
- 6.) **The Audio Team:** Sunny Meyers, audio-film; Osama Salama, audio- film; Stephan Schwartz, interviews.

The Photography and Audio Teams were established so that an unimpeachable real-time audio-visual record of every aspect of the experiment would exist.

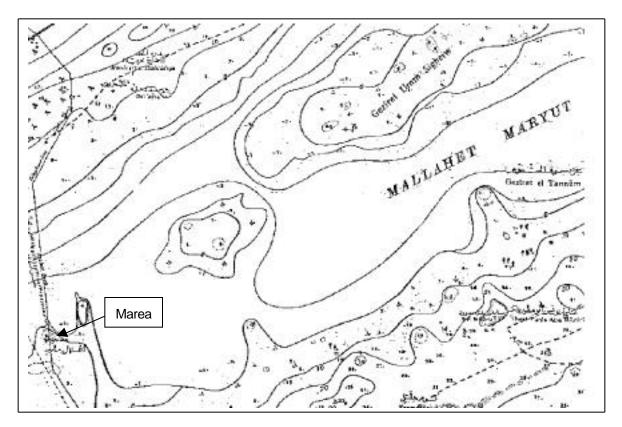
PROTOCOL

Our initial plan had been to follow our standard protocol as previously reported.³⁰ However, it proved impossible to find maps of sufficient detail in the United States to carry out the normal pre-expedition map probe. Once in Egypt a search for maps of Marea, at the government map office, finally turned up a single map in Arabic: *Kreir*, which at least located Marea, although the site at this scale covered less than one centimeter, and was useless for location work. (See Illustration Two) On 10 April 1979, McMullen, R3, and Hammid, R5, were each given a photocopy of the map (done to remove colors that might inadvertently cue) and asked to record whatever impressions they could from it. Later in the day each was independently interviewed, but nothing that could be verified was developed at this point. Each simply reported a general sense of constructions relating to several different cultures and historical periods.

Sheet 92/480 Egypt - Western Desert Province Markay Maryut, scale 1:25,000km

Early on the morning of 11 April 1979, the two Remote Viewers were placed in separate cars, accompanied by a member of the Remote Viewing Research Team. Fakharani, accompanied by a graduate student assistant, as previously arranged, was isolated from the Remote Viewers at this stage and traveled in his own car. The cars, led by Fakharani, moved in caravan until 0830, when all stopped at a site of Fakharani's choosing. Although the exact location was unknown to us it was pre-agreed the stop would be at least 10 km away, and out of visual range, of the overall Marea site.

On the way out in the car, Hammid, R5, unsolicited, reported impressions relating to a tomb and a mosaic.³¹ McMullen, riding in his car, said nothing about the experiment.



Prior to going to the site a photocopy, like this one, of an Egyptian government map was given to each Remote Viewer. All colors were removed to avoid inadvertent cueing. Place names were not an issue since most were in Arabic, which neither viewer read nor spoke. Unfortunately, the scale of the map made it useless for location work.

Illustration Two

Upon arriving at the rendezvous point, the author decided that Hammid should wait with Humphrey, while he and McMullen made the first location attempt. After they had left, McMullen was given the following charge by Fakharani:

- A. Locate the ancient city of Marea: it is somewhere within an area roughly 24 km on a side, a form 576 square km in size (an area roughly equal to one half of the city of Los Angeles). After locating the city, locate a building that has either tile, fresco or mosaic decoration in it.
- B. Within the chosen building locate the walls, the windows, the doors, and the depth at which the floor would be found.
- C. Describe any artifacts or conditions which would be found within the building site.

With this charge McMullen, accompanied only by the author carrying a tape recorder, and followed by one of the two film crews, headed off across the desert. (See Illustration Three)

Fakharani, and his graduate assistant waited at a distance by themselves.



Placed kilometers from a site that no one from Mobius had ever seen, McMullen still seemed to be able to orient himself.

Illustration Three

For the next several hours. McMullen proceeded at a fast pace to walk the spine of a ridge, occasionally moving down its flanks. As was typical of McMullen when in the altered state in which he produced remote viewing observations, was not deterred temperature in excess of 38° C (100° F), nor the strong wind laced with stinging sand and biting Indeed, as he walked his normally pronounced limp disappeared and he became more animated, carrying on

a continual monologue about what he described as a "Bexonine.... culture of grave robbers... people who lived off earlier people's achievements *32

^{*} McMullen throughout the Remote Viewing sessions mispronounced the word Byzantine, just as he said "Potomie" for Ptolemy and "mosiak" for mosaic. Similar mispronouncations were reported by Emerson. He frequently pronounced them correctly in normal conversation.

Most of the disclosures were either untestable, or indefensible against criticism from some ordinary source. Finally, McMullen stopped and said, with considerable emphasis, "Okay, I know where I want to go."³³

McMullen and the author then walked back to where Fakharani and his assistant were waiting, whereupon McMullen knelt in the sand, sketched an outline of Marea as it appears today, and described for Fakharani where the University of Alexandria's dig was located, and what the area looked like.³⁴

(See Illustration Four) Fakharani acknowledged on camera the accuracy of the description.³⁵

The cars were brought up, and the then drove group approximately 8 km to the Marea site. Upon arrival, and continuing over the next hour, as he walked around trailed by camera and sound crews, McMullen provided Fakharani and the author with a reconstruction of the city.



Without ever having seen it, McMullen, left, accurately sketched site for Fakharani, middle, and author, right.

Illustration Four

Much of the material pertained to

specific scenes and individuals of ancient Marea, and was inherently untestable. But much was also very specific and testable. McMullen, for instance, located several new sites. Since these were near existing excavation work areas, they were simply noted by Fakharani for subsequent investigation.³⁶ By prior agreement only a totally unknown site was to be evaluated in the context of this particular experiment.

McMullen was charged again by Fakharani to "locate an important building – one with tile, fresco or mosaic – something representative. It is for you to tell me where to dig." 37

Without hesitation, McMullen proceeded to walk up a hill on the south side of the ancient road. Once there he:

- A. Quickly sketched in the outline of a building with several rooms and stated that the area described was only a part of a larger complex.³⁸
- B. Located walls, one doorway and the corners of the structure.³⁹
 - C. Indicated that the culture which had built this building was Byzantine.⁴⁰

- D. Described the probable depth to the tops of the walls as being approximately "three feet." (.91 m).
- E. Indicated that there would be debris (dropped there after being taken from a different structure).⁴¹
- F. Said that one wall, the west one, would have tiles on it.42
- G. Explained the culture or cultures, which had built or modified the building, and its later use for storage.⁴³
- H. Felt we should come across "a floor" of the structure at approximately "six to ten" feet (1.8 m 3 m), although he confessed somewhat distressed "I can't see the floor." ⁴⁴
- I. Said several colors would be associated with the site, but felt green was the most prevalent, since he perceived it most strongly.⁴⁵

With this Remote Viewing data filmed and recorded, the first Marea Remote Viewing session ended, and McMullen was taken by car some distance from the site.

The next stage called for a repetition of the entire location process, including taking Hammid back to the starting point, where McMullen had begun, to establish a site locale. However, since she had been waiting for over fours in high temperatures and strong desert sunlight and was feeling sick – although still willing to attempt Remote Viewing – it was decided to bring her directly to Marea. Once, there she was taken to the general area of the site and told simply to look down into the ground and describe what she saw. Here again, the emphasis from Fakharani was on locating a building with decorations within it. There was nothing in evidence at the site to cue her to McMullen's

observations, and she was told nothing about them. After walking about for a moment, Hammid walked over to the same area previously selected by McMullen and sat down, accompanied by the author. (See Illustration Five) Almost immediately she began to describe:



Hammid, in hat, sitting atop it, described a strange column or pillar buried beneath her. Note two motion picture cameras recording the scene.

- A. Walls. 46
- B. A sense of several colors but especially "green." 47
- C. "Tiles" possibly "green... on the walls." 48
- D. "A northwest corner" which she outlined.49
- E. A sense of "a bathroom, something to do with baths and washing." 50
 - F. A floor of mosaic tiles, which were of "a smooth polished stone, possibly marble, with color" that she, saw as "being laid in a design."⁵¹
 - G. A sense that this was an important building.⁵²
 - H. A sense that the building beneath her had "more than one room." 53
 - I. Her strongest perception was that of a small "alcove sort of room containing what looked like a "broken column or statue... something round... and free-standing... but not complete." 54

Ending her Remote Viewing session, Hammid said she felt seriously queasy from the heat and sun, and asked to be taken to the hotel in Alexandria. After she left McMullen, who knew nothing of her session, was brought back. This time, he was asked to outline the limits of the building he had earlier



So that there would be no unclarity about exactly where the Remote Viewers meant the dig to be located, as well as to fix the location of corners and a door, McMullen, left, directed the placement of wooden stakes.

Illustration Six

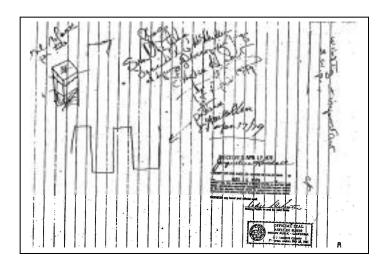
perceived. So that there would be no question of where be meant, he was given threefoot-long wooden stakes. which he used to put a stake at each corner of the still buried building, and a fifth stake to mark what he said was doorway.⁵⁵ (See Illustration Six) second After this Remote Sensing session was completed, McMullen was driven back to It had been Alexandria. previously agreed that the Remote Viewers would not their individual discuss sessions throughout the course of the experiment.

INDEPENDENT ARCHAEOLOGIST PRE-EXCAVATION EVALUATIONS

After the departure of the Remote Viewers, Fakharani and the author went over the data they had provided in detail. Although he had witnessed everything, he indicated that he had not always been able to clearly hear every word. The audiotapes were played back for him, and he was asked to evaluate what they contained. Fakharani appeared to be amused. He stressed that the electronic survey had been unproductive in this area, and he found the idea that Remote Viewing would succeed, where sophisticated electronic remote sensing had failed, preposterous. If there were anything at the location, he said, he believed it would be the Roman acropolis.⁵⁶

Asked to comment on the outline of the walls, he responded that walls could no doubt he found all over Marea. When asked to reconcile this observation with the fact that the electronic survey had not turned up walls at this site, he did not respond.⁵⁷ He reiterated his disbelief that anyone could locate and outline buried walls using Remote Viewing.⁵⁸ He said that although the digging might conceivably uncover walls, if it did they almost certainly would *not* be aligned with the stakes laid out by McMullen. Any structure found on the hill, he said, would specifically be oriented differently.⁵⁹

ADDITIONAL REMOTE VIEWING PRIOR TO EXCAVATION



On a pad of lined yellow foolscap McMullen drew the small tiles he saw, their chalky sub-floor, single color, and pattern. Also note notary's seal.

Illustration Seven

The morning scheduled for beginning the actual excavation, 17 April 1979, prior to leaving the hotel, McMullen volunteered two sketches of Marea as he perceived it during the Byzantine period.⁶⁰

Upon arriving at the site, but before work began, he further volunteered information elaborating his answer to the question concerning the floor he had been asked about, on 11 April. He said it had

continued to bother him because while he could not clearly Remote View any floor at the site he felt:

- 1.) Small tiles would be found at the level of the floor.⁶¹
 - A. These tiles would be marble, smooth on one side and rough on the other. 62 (See Illustration Seven)
 - B. As part of a floor, the tiles had been laid in a chalky subflooring.
 - C. The tiles were square. 63
 - D. The tiles were 5/8s of an inch (1.59cm) across.⁶⁴
 - E. The tiles were one color each. 65
 - F. The tiles at one time had been laid in a colored pattern. 66

EXCAVATION METHODOLOGY

In accordance with the pre-agreed protocol, all digging was to be directed by Fakharani; he had the imprimatur of the University of Alexandria as their expert on Marea, and was a trained archaeologist. By assigning responsibility for the excavation to an outside observer, we sought to avoid any vulnerability to charges that by controlling the excavation we, in some way, might manipulate the outcome. There was a price for this, however. We were working several sites in the Alexandria area, as well as preparing for work in the Eastern Harbor. To accommodate Fakharani's existing obligations, the work under his supervision at Marea was conducted on an intermittent schedule over about six weeks.

Upon arriving at the site at 0800 on 17 April for the first day of digging, we saw, and filmed, that the stakes had been shifted by Fakharani, skewing them from their original orientation, and extending the original dimension by a meter on the western and eastern sides. This almost went unnoticed since, against all agreements digging had already begun prior to our arrival. (See Illustration Nine)

In defense of these actions, Fakharani claimed that the move was necessary to assure that both sides of the walls – if walls there were – would be excavated. Faced with an accomplished fact there was little we could do. An examination of the site showed no signs of walls in any orientation, consequently the triple-blind conditions still prevailed. McMullen was asked to go over the sites again,

and he stated that the general orientation was still approximately correct, although the excavation would now not quite parallel the line of the walls.

ADDITIONAL REMOTE VIEWING AFTER EXCAVATION HAD BEGUN



Within inches of the depth predicted, walls appeared. It was also possible to see there were multiple rooms, and that Hammid's strange column was present.

On the first day of excavation, 17 April, when approximately 10cm of the column was showing, and before we had any idea what we were dealing with, McMullen was asked to Remote View it. He said immediately that it was connected with "heat... and fire." [68] (See Illustration Eight)

On 26 April, when excavations were at about .46m (1.5 feet) two other Remote Viewing points were volunteered by McMullen:

- 1.) At about eight to ten feet (2.44-3.05m) a ledge running around the walls would be found.
- 2.) Something we would find was associated with baths or bathing. He stressed that he was unclear what this meant, but emphasized the strength of this impression.

Illustration Eight

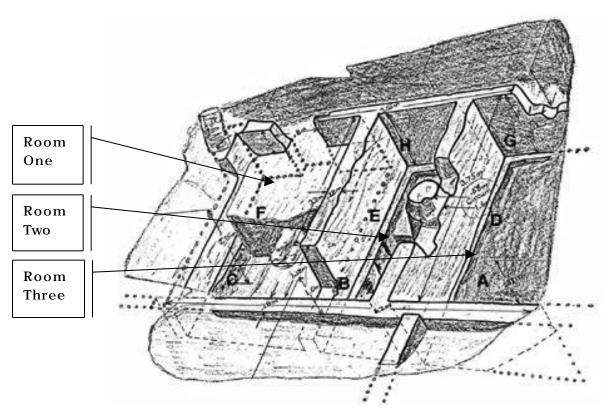
On 27 April, McMullen, while standing in the partially excavated site, was asked to Remote View it again concentrating on decorations. He volunteered, "This is generally Roman, and I would say this is a steam bath..." ⁶⁹ He could not reconcile the apparent contradiction between his earlier statements describing the site as Byzantine, nor explain why he suddenly was perceiving imagery about steam baths. He said he simply felt that both observations were accurate.

EXCAVATION RESULTS AND EVALUATIONS

Since there was no productive location data at all from any aspect of the electronic remote sensing, the historical review, or the topographic survey specific to this site there is nothing to evaluate beyond the failure of these

approaches to locate what was actually found. Only the Remote Viewing information provided positive testable data. It is also worth noting that no electronic remote sensing technology could have produced comparable data to the Remote Viewing material pertaining to colors, culture, and artifacts.

- 1.) Walls: Both Remote Viewers had predicted walls would be encountered at a depth of "between three and four feet (0.91m-1.22m)." This statement was made by McMullen in reference to the western wall he had staked out through Quadrants A, B, and C. Hammid did not specify a particular wall, only the depth at which they would be found. Excavation revealed wall tops at 3 feet four inches (1.01m). (See Illustration Eight)
 - 2.) Orientation: On 25 April, the first part of what later proved to be a wall emerged. It was found in Quadrant G (See Illustration Nine), and closely approximated, and was parallel to, the original stake orientation laid out by McMullen. It was oriented on a northeasterly slant 0.7m (at the southeast corner Quadrant G) out-of-line relative to the reoriented stakes.



Field sketch of the site completed. Bold printed letters denote quadrants.

Illustration Nine

3.) **Multiple rooms/part of a larger structure:** Over the next week, additional walls were uncovered clearly defining three distinct



Dig in its final phase, showing all three rooms doorways, ledges, and Hammid's "column." In the uppper left center of the picture one of McMullen's corner stakes is still visible.

Illustration Ten

rooms, which were obviously part of a larger structure. (See Illustration Ten)

4.) Byzantine vs. Roman: though the wall stone was well-dressed, from the beginning it was obvious this site was not the remains of a Roman acropolis. Fakharani continued maintain for some days longer his belief that the site was transitional, that is late Roman early Byzantine. or very However, this position also became increasingly untenable as masses of pottery sherds emerged. This material was judged to be fill, but almost all of it was of Byzantine origin, and late Byzantine at that.⁷⁰ (See Illustration Eleven)



One of the several hundred Byzantine sherds to emerge.

Illustration Eleven

5.) The issue was further defined when a red and white cross in a circle was found painted on the foundations of Room 2. (See Illustration Twelve) Whether this is a consecration mark, or a quarry mark, has not been settled, but the structure's Christian origins have been settled. Months later, in November 1979, Rodziewicz, who had by then evaluated the site in detail, reported his conclusions: it was "6th Century Byzantine," which confirmed the Remote Viewing data⁷¹



The red cross found on the "ledge" at the bottom of the foundation.

Illustration Twelve

- 6.) Corners: The locations outlined through Remote Viewing by McMullen and Hammid who confirmed McMullen's location of the northwest corner proved to be highly accurate. (See Illustration Ten)
- 7.) **Green:** At a depth of 1.5m (4.92 feet), primarily in Room 2 in Quadrant H,

substantial quantity (about two-thirds of a rubber worker's basket) of a green clay-like substance was discovered. This material, found in roughly rectangular chunks, crumbled easily between the fingers. Fakharani felt it was a pottery or tile glaze. Whether this meant the room had been used for making pottery or tile, or the material was fill originating at another site, he was not prepared to say. A single piece of dark greenish tile was found in Quadrant A on 25 April. Whether it was *in situ* or not has yet to be determined. What is unequivocal is that at a site notable mostly for its tans and sand desert colors, the color that stood out the most was green.

- 8.) Wall Tiles: Other than the one green tile, no wall tiles were recovered at this site, and this could be considered the greatest "miss" in the Remote Viewing data. However, in light of the outcome of the floor data, it is also possible that wall tiles had been stripped from the building before it was abandoned.
- 9.) Doorway: A doorway was found leading into Room 3, exactly where it had been staked out by McMullen. (See Illustration Thirteen) This was apparently a later, and cruder exterior entrance than the building's original entrance, which was not in the section excavated.

A doorway was found directly under McMullen's "doorway" stake.

10.) Freestanding cylindrical object/ column: On 26 April, workers taking down Quadrant E, uncovered a domed round shape, which proved to be the top of a column. Not a structural column, but one formed of a brown unglazed low-grade pottery, sufficiently sturdy that it maintained its structural integrity throughout the excavation. It was clearly not original to this site, and was free standing in a crude breach notched between the wall separating Rooms 2 and 3. It tapered from bottom to top, measuring approximately 1.6m in circumference near the base, and 0.58m at the top.

Excavations over the next week revealed that the "column" was unquestionably a late addition, added long after the building had been abandoned by its Byzantine builders, since the wall breach only went down about 0.45m, and the column measured about 0.4m in height. It would have toppled over unless one assumed that at the time the breach was made (with no attempt to redress the stone) the bottom of the gap was essentially the building's floor – the lower portion of the structure having by then been filled with material from other sites at Marea, as well as accumulated sand and dirt blown in by the frequent winds. As of the writing of this report, none of the members of the Historical/Archaeological Team has been able to come up with a definitive explanation of its use and identity.

A plausible explanation, however, came from a worker of Libyan heritage. He said it resembled a type of oven he had seen his grandmother use, both for heating and for baking bread. Essentially a primitive kind of thermal bank it allowed a village woman to eke out every joule of thermal energy in a land where wood was scarce and even animal droppings were hard to come by. He said it was his grandmother's practice to build a solid pillar of "poor pottery" around which coals were heaped to heat it. When the coals were scraped away, he said, flat loaves of bread were laid directly on the pottery form to bake.⁷⁴

Of all the finds made in the course of this excavation, the discovery of this column caused the most excitement amongst the Remote Viewing Research Team. Its very anomalousness – though confusing to the archaeologists – made it attractive to the Remote Viewing Research Team. Such an object could not have been anticipated, and accurate data concerning its presence was, for that reason, all the more impressive. Hammid's final grace note, that the column was "broken," was accurate.⁷⁵

11.) Alcove column room: Hammid said the column would be in a kind of "alcove room" and Room 2 appeared in just this configuration in relation to the size of the other two rooms. This

was, as she predicted, also where the column would be found. (See Illustration Fourteen)

12.) Ledges: On 27 April, McMullen's statements about the ledges was proven out. A ledge was discovered in Room 3 at 1.1m below the top of the wall. The next day, ledges were found in Room 2, at



The "ledges" described by the Remote Viewers were located as predicted. This was the level of the original floor.

Illustration Fourteen

approximately the same distance below the top of its walls. (See Illustration Fourteen) A ledge was subsequently found in Room 1. McMullen had seen these ledges as in some way related to seating. This was incorrect and, possibly a example of one of the major sources of "noise" affecting the Remote View signal – the tendency of Remote Viewers to interpret what they perceive, rather than just reporting the image.

13.) Floor...no floor: McMullen's concern about the floor question was resolved at the same time the ledges were discovered. In Rooms 1, 2, and 3 a white gypsum-like hard chalk surface was uncovered. Fakharani felt that this was a sub-floor and that the floor covered which had rested on it had later been stripped away.⁷⁶ This layer was broken through and, from that point to below the foundation no other sign of a floor was discovered. In light of this

sub-floor discovery, in the absence of the main flooring, McMullen's "floor but no floor" comments suddenly made sense.

April, he had given a brief description of small floor tiles. He augmented this during the session of 17 April by his drawing and his comments about the tiles. To 29 April, while workers were taking down Quadrant C, in Room 1, they hit the gypsum sub-floor. In the northwest corner of Quadrant C, intermixed with the gypsum and just below it they found three circular marble objects, rather like thick quarters. Over the next two days a total of eight more of their objects was located. (See Illustration Fifteen) Each one was either red, black, or white.

Each of these disks was 3 cm (1 3/16 inches) by 1 cm (25/64 inch) – McMullen had estimated prior to excavation that they would be 5/8 inches across. He was incorrect in his perception that the tiles were square, but correct that they were smooth on one side, rough on the

other, and used on top of a chalky sub-floor. Both he and Hammid were consensually accurate in their description of the tiles as being of one color each, and marble.

Fakharani, who had been notably skeptical of the idea that someone could describe a tile buried several meters into the earth, at first maintained the objects that were weights. Closer examination by Daoud and Rodziewicz, and subse-



Small tiles were found as predicted by McMullen, who was correct in describing them, except he saw them as square and they were round, and he was 5/8s of an inch off in their size.

Illustration Fifteen

quent conversations with Fakharani produced the consensus that they were, as McMullen and Hammid had predicted, mosaic tiles.⁷⁸

- 15.) **Debris:** In almost every Remote Viewing session there was a clear sense on the part of the Remote Viewers that "a lot of debris" would be found in the site and a great deal was, in fact, located particularly masses of pot sherds. There were also pieces of marble uncovered, which were evaluated by Fakharani as being Roman debris. The author, at the time of the interviews, neglected to properly follow up on these observations in order to elicit further imagery. The Remote Viewers, however, on one topic volunteered data, as is seen in the next item.
- 16.) **Bath...bathing...steam bath:** From the very first session at Marea the Remote Viewers had provided data related to "baths and bathing". Hammid had felt it so strongly that she thought it must a kind of analytical overlay suggested by the guidance query about tiles.⁷⁹

As with the debris question the issue of baths benefited from subsequent study by members of the Historical/Arch-aeological Team. In November 1979, Rodziewicz said that he had examined both the site and the artifacts. (See Illustration Sixteen) He had not been told about the observations of the Remote Viewers concerning baths,

bathing, and steam baths. He reported that he felt that a great deal of the material, particularly the marble fragments, were debris that had originally come from the Roman "baths down the hill...."80

Prior to our work at Marea. Fakharani had just begun excavating a structure at the foot of the hill, across the road from our site. When we were there he said it was a church, observation with which McMullen disagreed. Work on Fakharani's site was suspended while we were there but, after we had left Marea, it resumed. When we returned to eight months Egypt later.



Marble fill found at the site, but later determined to have come from the baths, when they were subsequently identified at the foot of the hill.

Illustration Sixteen

Fakharani, after consultation with Rodziewicz, had changed his mind, and now believed the site he was working was a public baths probably dating to the Roman period. Rodziewicz particularly pointed out evidence he had found of hydraulic mortar, and suggested that the pieces of marble found at our site were probably debris that had originally come from these baths.⁸¹

DISCUSSION

Comparison of search technologies: Which approaches, electronic remote sensing or Remote Viewing, were most accurate and productive? The question is easy to answer in this experiment, because all the electronic and geographical surveys – satellite imagery, magnetometer, and topography – were completely unproductive at this site.

Location accuracy: Remote Viewing was highly accurate in providing information for location. The building was outlined within inches, indeed, any variance is due more to Fakharani's abortive attempt to move the stakes placed by McMullen, than inaccuracy on the part of the Remote Viewer. The location of the door was an extra, and particularly impressive, addition. But, perhaps most elegant of all was the correct location of the corners. Corners are especially difficult, because they represent the intersection of two planes, and must be precisely located.

Descriptive accuracy: In contradistinction to laboratory experiments which can measure the variance from a chance outcome, because they work with known

targets sets, in an applied remote viewing experiment no such baseline exists. Even more importantly, in a laboratory experiment the statistical outcome is the end step, in an applied Remote Viewing experiment, the viewing is the beginning of the project – the source of location and descriptive predictive data. In this setting the evaluation outcome is the expert analysis by knowledgeable specialists.

Researcher error: A close examination of the data reveals the subtlety of the researcher/Remote Viewer transaction. The viewers were asked to concentrate on both a building and decorations, and they did so. But many of those decorations came from another site; not terribly important in this experiment, but potentially very important in others. The failure can be traced to the **premise question.** Properly, the question should have been to describe "decorations original to this building." The Remote Viewers fulfilled their tasks - the excavation demonstrates that - but clearer questions would have elicited clearer answers. The entire issue of how questions are framed so as not to cue or suggest a particular answer, but to precisely elicit the information sought. needs much more thought. This experience also suggests that results which superficially appear to be a failure in Remote Viewing may, in fact, be the failure of the researchers. Finally, it seems to indicate that the apposite way to see this methodology is, again, in engineering terms, in which the researcher/Remote Viewer relationship is, at core, the creation of a bio-circuit. The Marea experiment, along with the Eastern Harbor research are representative of the current state of understanding in applied Remote Viewing. Both experiments display with clarity the strengths and current limitations of this search technology, and its potential in archaeology.

Ultimately the contribution Remote Viewing makes will depend on how honestly archaeologists examine the fruits that it offers, unencumbered by preconception and false perspectives. Archaeology must move beyond serendipity in the finding of sites. Remote Viewing is not a total answer to its location problems, but it is, surely, one piece of the puzzle.

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ACKNOWLEDGEMENTS

The author wishes to thank the University of Alexandria, for granting permission for the fieldwork so essential to this research, and for the cooperation of its faculty. Also thanks are due The University of Warsaw, and the Archaeological Society of Alexandria for graciously making available the several consultants, without whose expertise this project could never have been attempted nor, once attempted, analyzed and properly evaluated. The author also wishes to thank John and Pamela Leuthold, Maragert Pereira, Trammell Crow and Gordon McLendon for the financial support that made this research possible.

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