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Lost Kingdoms and Caravan Routes

3 Yishay St.
Abu Tor
Jerusalem, Israel
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Dear Peter,

I had high hopes of seeing some history-making discoveries in Wadi al-Jubah, a remote valley in the Yemen Arab Republic, now being explored by an American archaeological team. Wadi al-Jubah is today a sparsely inhabited borderland on the edge of Arabia's vast Empty Quarter, yet the American expedition has discovered the remains of ancient cities, villages, burial monuments, and sophisticated irrigation systems throughout the valley's entire 12 mile length. These finds are naturally of great importance for the study of the little-known civilization of ancient South Arabia, but my own interest in the project grew from its possible modern significance. As the first foreign expedition granted permission to excavate in North Yemen in more than three decades, the Wadi al-Jubah Archaeological Project marks a dramatic turning point in the history of Yemeni archaeology.

Readers of ICWA newsletters may remember an earlier report on this project, which is sponsored by the Washington-based American Foundation for the Study of Man. Last year, Ken Cline, a Village Reporting Fellow of the Institute, joined the expedition and described the efforts of the various team members to reconstruct Wadi al-Jubah's ancient history. This scientific challenge is especially difficult, for in a country as relatively unexplored as North Yemen, every facet of archaeological analysis-- the dating of pottery, the study of architectural development, the interpretation of settlement patterns-- must be started from scratch. In few other areas of the Middle East are the archaeological finds so plentiful and the archaeological background so thin.

As Ken also observed in his report, the willingness of the Yemeni government to sanction the American expedition is, in itself, something of an achievement. Thirty-three years ago, an earlier expedition of the American Foundation for the Study of Man, led by the organization's founder Wendell Phillips, encountered such intense hostility from the local authorities that they eventually had to abandon their finds and excavation equipment and flee from the country in fear for their lives. Their goal had been the excavation of the ancient city of Marib-- only 20 miles north of Wadi al-Jubah-- the legendary home of the Queen of

Sheba and capital of the most powerful kingdom along the ancient spice and incense route. But after gaining initial permission from the king of Yemen for this exploration, Phillips and the other members of his expedition found themselves harrassed, isolated, and eventually threatened at the instigation of certain xenophobic members of the Yemeni royal court. To these officials, "Archaeology" seemed to be just a pretext for western entanglement in their country's affairs. The antiquities of Marib were "the window through which the world would have looked at us," the Yemeni chief justice reportedly proclaimed after Phillips' hasty departure in 1952. And it was a dangerously transparent window for a country trying to keep itself secluded. "Now we have closed it," the chief justice said.

Today much has changed in North Yemen. The country is no longer ruled by a medieval-style monarchy, but by the bureaucrats of a development-minded "revolutionary" republic, eager to expand North Yemen's contacts with the outside world. The traditional distrust of foreign archaeologists has been replaced by a determination to uncover and to display the country's archaeological heritage. The window of Yemeni antiquities is no longer shut so tightly, and this spring, when I accompanied an eight-member archaeological delegation of the American Schools of Oriental Research on a visit to Wadi al-Jubah, I was interested to see what the new era in Yemeni archaeology reveals about Yemeni society today.

* * *

I might have been ready for the antiquities of Yemen, but I have to admit that I was poorly prepared for the country's modern realities. Our guide and group leader, Dr. James Sauer, current president of the American Schools of Oriental Research and chief archaeologist of the Wadi al-Jubah Project, was out at the dig when we arrived on an afternoon flight from Cairo, but he had arranged that we would spend the first five days of our visit traveling around the country to get a better idea of its present-day culture and geography. Jim later put it well when he expressed the feeling that the Yemen Arab Republic is experiencing "a head-on collision with the 20th century," for during our travels I was constantly aware of the fragmentation of traditional Yemeni culture under the tractor treads and steamrollers of rapid industrialization. And as I later discovered, the massive economic and cultural transformation that North Yemen is now experiencing is one of the important factors behind its new-found interest in archaeology.

The National Museum in the capital city of Sana'a is a clear demonstration of the eagerness of the present government to display the grandeur of the country's heritage without a firm conviction of what that heritage really is. The top floors of the building, which once served as a royal palace, are filled with the knick-knacks and luxury goods acquired by the last of the Yemeni kings. But the glass cases filled with ashtrays, cigarette lighters, watches, firearms, and cere-

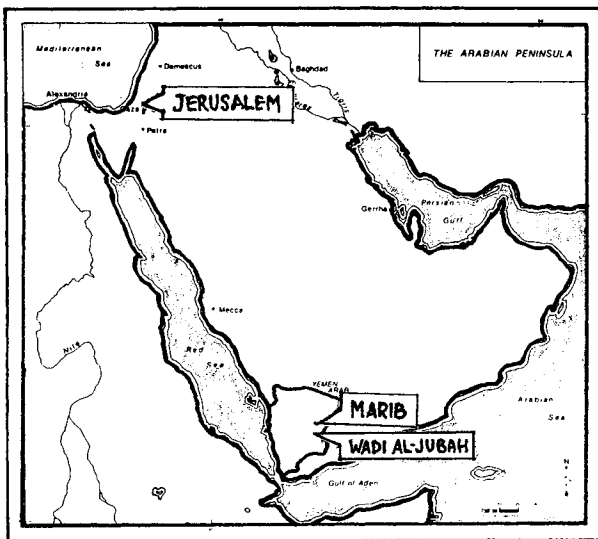
monial robes lack a focus of presentation. From the vaguely written descriptions, it's not clear whether the objects are meant to be viewed with revolutionary contempt or national pride. And on the lower floors, which contain North Yemen's more ancient artifacts, the same ideological confusion prevails. The ancient statues, inscriptions, and pottery gathered from archaeological sites during the last hundred years, are haphazardly labeled and follow no clear chronological order. Like the royal relics on the floors above them, they seem to be just knick-knacks and curiosities lacking a coherent historical context.

This presentational problem reflects the current state of the study of ancient South Arabian culture, not only in the Yemen Arab Republic, but by scholars all over the world. Although thousands of individual artifacts have been discovered and studied, the character of the society that produced them is still largely unknown. The reason is that the most important ancient descriptions of South Arabian civilization were written by outsiders who had only a superficial knowledge of the distant kingdoms from which the incense caravans set out. To the ancient Israelites, the Greeks, and the Romans, South Arabia was a mysterious region on the outer edge of the known world. Mystery was one of its most intriguing attributes, and as a consequence, it is not always easy to disentangle fact from fantasy in the ancient accounts.

Chapter 10 of the First Book of Kings describes the journey of the Queen of Sheba to visit King Solomon in Jerusalem, a record of somewhat questionable historical value, but which nevertheless conveys the impression that ancient South Arabians made on the people living around the Mediterranean rim. According to the Biblical account of the visit, which presumably took place around 950 BC, the queen came "with a very great retinue, with camels bearing spices, and very much gold, and precious stones." The object of this visit was the queen's desire to learn more about Solomon's kingdom; the result was a lucrative commercial exchange. The Israelite king offered the Queen of

Sheba the products of his kingdom and she, in turn, presented him with the gold, spices, and precious stones that she had brought in her caravan. According to the Biblical narrative, this was an event to be remembered, for "never again came such an abundance of spices as these which the Queen of Sheba gave to King Solomon."

The Bible offered no sequel to this business transaction, but the writings of certain Greek and Roman authors did. From the time of Herodotus in the 5th century BC to that of Pliny the Elder in the 1st century AD, South Arabia was known as the source of the precious



frankincense and myrrh, so highly esteemed as perfumes and pungent incense in the temples and palaces of the Mediterranean world. Because of a quirk of climate and geography no less capricious than that which laid down the petroleum fields, the trees bearing the fragrant resins grew only along the southern coast of the Arabian peninsula and along the opposite coast of the Horn of Africa. The Greeks and Romans, like the Israelites before them, knew of the kingdom of Sheba and its incense. But because the people of Sheba-- the Sabeans-- wanted to maintain their monopoly, they carefully guarded themselves from the prying eyes of the outside world. As a result, the ancient legends and accounts about southern Arabia that have come down to us vividly describe the incense and prosperity of the region's kingdoms, but not a great deal more than that.

In the 4th century AD, with the triumph of Christianity and its relatively smokeless ceremonies, the Mediterranean cities no longer had a need for great quantities of Arabian incense and the kingdoms of South Arabia slowly sank into oblivion. All that remained of their former glory were legends, and when the forces of Islam conquered Yemen in 633 AD, those legends were given a decidedly negative twist. The Queen of Sheba, known in the Quran as "Bilqis," became a figure of diabolical power and the fall of her kingdom was attributed not to economic factors, but to its inhabitants sheer sinfulness. The achievements of the ancient civilization of South Arabia were at first disparaged and then, for the most part, forgotten. After all, they belonged to the dark days before the rise of Islam, which the Quran called the Jahiliyah, "the time of ignorance."

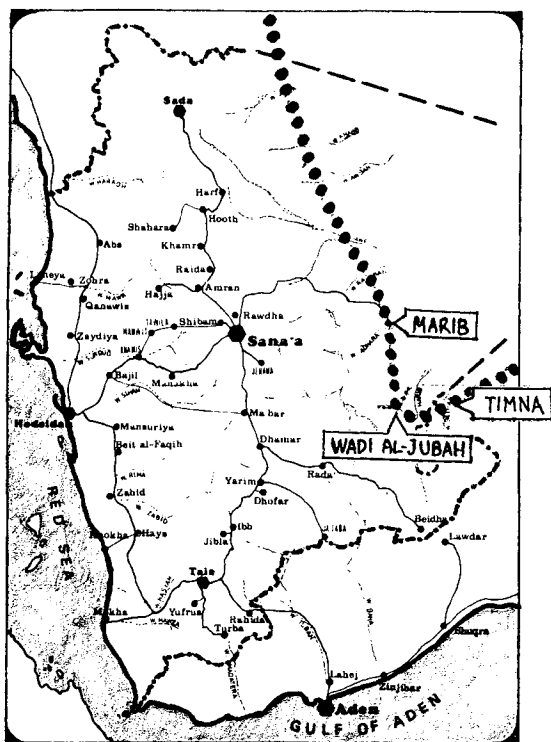
Except for the erudite works of medieval scholars like Wahb ibn-Munabbih and al-Hasan ibn-Ahmed al-Hamdani, it was only in the 19th century that the ancient history of South Arabia began to be studied intensively again. At the same time that many European antiquarians were relentlessly ransacking the ruins of Egypt, Palestine, and Mesopotamia in the quest of Biblical confirmation, a few of their colleagues made their way to Yemen and got their first glimpse of the ancient civilization that had once flourished there. These early explorers found no direct evidence of the Queen of Sheba, but their drawings and photographs of inscriptions and city ruins substantiated a Biblical link. The language of the ancient South Arabian inscriptions was found to be a previously unknown ancient Semitic dialect, distantly related to Phoenician and Biblical Hebrew. And the vast remains of the ancient city of Marib (whose most impressive ruins were known locally as the "throne" and "sanctuary" of Bilqis) testified to the importance and wealth of the Sabean kingdom.

Unfortunately, the remoteness of Yemen and its rulers' religious conservatism discouraged what might otherwise have been fruitful research. From the safe distance of the universities and museums of Europe, scholars pored over the recovered inscriptions and pieced together a rough chronology of Sabean priests and kings. But large-scale excavations at Marib-- or any other South Arabian city-- were impossible.

As long as the Yemeni kings (who took the title Imam, or "prayer leader") ruled the country, there was no need for an investigation of what the Quran had made clear. Wendell Phillips' brief 1951-52 excavation at the "sanctuary of Bilqis" was an exception, but its untimely end proved the rule.

I was surprised to see a few of Phillips' finds from Marib on display in the National Museum. The bronze statues and inscriptions left behind by the fleeing AFSM expedition, once considered evidence of western perfidy, are now among the cornerstones of a new national history. That history is still under construction, but like the modern schools, factories, water systems, and highways we saw during our five days of travel through the country, the new archaeological interest of the Yemeni government seemed to me to be just another element of its ambitious development plans. Ancient legends and knick-knacks are now no longer enough for the Yemen Arab Republic; it's now anxiously seeking a "modern," archaeologically-based past with which to survive its head-on collision with the 20th century.

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..... - SUGGESTED LINE OF CARAVAN ROUTE

The scenery on the ride out to Wadi al-Jubah was spectacular; from the high central plateau of Sana'a, we wound our way down through the eastern mountains or mashrig toward Marib, where deep ravines pour out the flashfloods onto the gentle plain that gradually merges with the arid sands of the Empty Quarter to the east. Jim Sauer, back from the dig with the enthusiasm of a true believer, excitedly described the region's archaeological background and the special significance of the team's selection of Wadi al-Jubah as their first exploratory site.

It was there along the desert fringe that the ancient cities of South Arabia flourished. Only after the early civilization had crumbled did the bulk of the population move up to the central highlands. The desert fringe was able to support thriving population centers only when the rainwater was controlled and used for irrigation. That agricultural self-sufficiency made the ancient South Arabian cities natural caravan stages, ports-of-call along the edge of

an uninhabitable sea.

One of the first challenges facing the 19th century explorers of Yemen was to reconstruct the precise line of the caravan route by a comparison of ancient descriptions with actual topography. According to Pliny the Elder, there were two other kingdoms, to the south and east of Sheba, through which the incense caravans passed. Every autumn, the camels were loaded and set off from the city of Shabwa, capital of the kingdom of Hadhramaut, now within the modern state of South Yemen. The next major stopping place, about 90 miles to the west, was the city of Timna, capital of the kingdom of Qataban. From there, the route led northwestward to Marib in the kingdom of Sheba, but Pliny did not describe its exact path. The most direct way was straight across the desert, but a number of scholars suggested that the fully laden caravans would not have attempted this waterless crossing. A more practical route would have stayed close to the mountain slopes, with their shelter and fresh-water springs.

This passage between Qataban and Sheba is of particular interest to the members of the Wadi al-Jubah expedition, for it has a direct bearing on the valley's historical significance. Pliny mentioned a Qatabanian city called "Nagia" between Timna and Marib, but its location was uncertain until the Austrian scholar Eduard Glaser visited Wadi al-Jubah in the course of his wide-ranging explorations in the 1880's. There, roughly halfway between Timna and Marib on the indirect route, he found a modern village called "Najja"-- a name too suspiciously close to Nagia in both geography and spelling not to suppose that Wadi al-Jubah lay on the path of the ancient caravan route.

Even before the current Wadi al-Jubah Project began its work, there were some additional clues. In a preliminary reconnaissance of the area, Dr. Albert Jamme, a member of the original AFSM expedition to Marib and now the new expedition's epigrapher, found several ancient inscriptions, among which were two dedications to the Qatabanian moon god 'Amm. These finds seemed to substantiate the identification of the valley as an important region on the northern boundary of the kingdom of Qataban. Now, after four years of exploration, few questions have been answered conclusively, but Jim assured us that the AFSM expedition has uncovered a great deal of new information about ancient South Arabian culture and its legendary highway.

We approached Wadi al-Jubah from the direction of Sheba, precisely the opposite direction that the incense caravans would have taken on their journey to the north. After leaving the asphalt road where it ends near the ancient Sabea capital of Marib, we headed south into the stretch of sand dunes that led to the kingdom of Qataban. In the distance rise towering granite mountains, and as we neared them, we could make out the narrow gap beyond which Wadi al-Jubah lies. Within a half-hour our Toyota Landcruiser had made it through the pass and onto the hard-packed washboard surface of the valley, along the path once taken by the caravans of camels loaded down with precious incense.



The entrance to Wadi al-Jubah: no camels but still quite a few caravans.

Wadi al-Jubah is much larger than I expected-- not a narrow valley, convenient for archaeological exploration-- but a self-contained world. Although we were far from the last asphalt surface, we rode through several villages, with schools, shops, and gas stations nestled beneath the valley's steep granite walls. In the centuries since the incense caravans stopped coming this way, little has apparently changed. Jim explained that because the nearby border with South Yemen is in dispute and mostly unguarded, Wadi al-Jubah has become a smugglers' paradise.

As we drove further into the valley, we began to see some of the merchandise brought across the border under the cover of night. A pickup truck roared past us, loaded with barrels of cut-rate Saudi gasoline, and not long after, when we stopped at a gasoline station in the village of Jubah al-Jedidah, we found the inside piled high with cases of canned peach halves in heavy syrup marked "product of the USA." One of our guides, himself a native of the area, proudly described the various ways an ambitious man could make a good living here. He told us, for instance, about all-night drives he and his friends had made up through the canyons to the Saudi border to bring back new cars for resale in Sana'a without the high Yemeni customs fee. I now realized that the ancient caravan route still had a cultural impact; we had entered a world that mimicked its archaeological image-- a world of modern-day caravaneers.

In a side valley called al-Farah, we spotted the shiny new jeep of the expedition team, and although it was already late in the afternoon, Jim couldn't resist the temptation to see what they were doing there. Leaving our Landcruiser at the foot of the rocky slope, we climbed up to meet two members of the expedition who were standing beside a huge pile of stones. Jim introduced us to Barbara Hartmann, a field assistant, and Mike Toplyn, a graduate student from Harvard, who with his drawing board and authoritative manner, was obviously directing the work here. As I later learned, Mike has previously worked on archaeological projects in the Iranian highlands, Saudi Arabia, and the eastern Jordan Valley, and his main interest in Wadi al-Jubah is not its caravan routes. His experience and academic training has equipped him to assess

the settlement patterns and culture of early human societies and he hopes to establish the date and circumstances of the first appearance of civilization here.

Mike explained that the "feature" before us was a cairn, or burial monument, and since they had hoped to begin its excavation the following day, he and Barbara had remained at the site to complete the scale drawing of its surface details before the digging began. This cairn was not chosen for excavation because it is the most impressive of its kind in Wadi al-Jubah, Mike told us, there are at least twenty more around the edges of the valley, each containing a stone-lined chamber in its

center for the burial of a single body and the deposit of grave goods. But all the others so far discovered have been dismantled by the local inhabitants for building stones, or damaged by erosion down the slopes. This cairn alone held out the best possibility for uncovering the skeleton and offerings intact. And if these finds could be dated by Carbon-14 analysis, one of the greatest mysteries in the study of South Arabian archaeology might finally be solved.



The cairn at al-Farah:
a key to South Arabian chronology?

Mike informed us that similar cairns have been found throughout the Arabian peninsula, but the date of their construction and the nature of the society that built them has eluded scholars so far.

In other parts of the Middle East, such structures are dated to the Neolithic period (c. 8000 to c.4000 BC), the era when mankind began to emerge from its dependence on hunting and gathering for its survival, and during which a number of early communities settled down to an agricultural life. The possibility that this cairn may reflect the beginnings of settled civilization in southern Arabia is of more interest to Mike than the mere substantiation of the legends of the caravan routes. He believes that by detaching Wadi al-Jubah's human history from its legendary framework, a clear evaluation of its cultural development will be possible. And with a secure Carbon-14 date, the isolated world of Wadi al-Jubah might be closely linked-- at least in remote antiquity-- with human civilization in the rest of the world.

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Wendell Phillips, the founder of the American Foundation for the Study of Man, didn't live to see the return of his organization to Yemen. It's a question, though, whether he would fit in with the staff of the new expedition, for he was an old-fashioned professional explorer who eagerly lived the life of Indiana Jones decades before Raiders of the Lost Ark ever hit America's movie screens. His academic credentials

were modest (a BA in paleontology from the University of California), but adventure, not academics, was the focus of his career. At age 26, he organized and led a University of California expedition to Africa, and three years later, after having established his own AFSM, he assembled an even more impressive staff of scientists and archaeologists for his head-on assault on the antiquities of South Arabia.



Phillips was not interested in conventional archaeological fieldwork. The fact that no one had ever excavated an ancient South Arabian city attracted him as much as the scientific information that could be gained. For those who knew him, his personality was unforgettable. And his characteristic costume-- an Arab keffiyeh on his head and a pearl-handled Colt .45 in a holster slung low around his waist-- made him, as well as his quixotic foray into the Land of Sheba, a modern archaeological myth. Before digging at Marib, he directed excavations at Timna, then in British-controlled Aden, and uncovered a breath-taking array of ancient statues, jewelry, inscriptions, and architecture that testified to the city's prosperity from the caravan trade. His later lectures on the lure of the ancient incense route and his own daring escape from Marib may be frowned upon by today's generation of archaeologists, but it's the memory of Wendell Phillips they

Wendell Phillips at Marib,
1952. From his book,
Qataban and Sheba

have to thank for being in Yemen today. After his death in 1975, his younger sister Marilyn Phillips Hodgson committed herself to the cause of American exploration in South Arabia, and her fund-raising efforts resulted in the recent rebirth of the American Foundation for the Study of Man.

My first glimpse of most of the staff members of the Wadi al-Jubah Project was a sight reminiscent of Wendell Phillips' heyday. As we waited under the full moon outside the expedition headquarters in the village of al-Wasit, a convoy of pickup trucks roared into the village, each with two or three rifle-toting guards standing up in the truck

beds and clinging onto the roofs of the cabs. This was no ordinary convoy, but the entourage of the governor of the province, al-Bahri bin Hishlah Abdullah Bahri, who was bringing the American archaeologists back to their headquarters after a day spent feasting and celebrating as his personal guests. The team members tumbled out of the trucks in a whirlwind of laughter and high spirits. Jim introduced us to Jeff Blakely, the project director, Bill Stewart, the expedition's botanist, Maurice Grolier and Bill Overstreet, the team geologists, and Abdu Othman Ghaleb, a doctoral candidate in South Arabian archaeology at the University of Pennsylvania, and the current liaison with the YAR Organization for Antiquities.

Close behind was the guest of honor, Marilyn Phillips Hodgson, the moving spirit behind the renewed activity of the AFSM. Even though her elaborate hairdo and frilly party dress were a little bit rumpled after a day spent riding around in the desert, her mood wasn't dampened at all. She had visited her brother's excavations at Timna as a teenager and she was obviously relishing every moment of her return. After telling each of us how happy she was that we were able to visit the expedition, she proudly introduced us to a gnarled old gabili, or tribesman, who claimed-- according to her-- that he had "taken Wendell all around."

As the members of al-Bahri's convoy returned to their pickups and drove off in the darkness, we followed Jeff Blakely and the rest of the expedition members into the expedition compound. Here, the romantic comparisons with Wendell Phillips' adventures ended, for although he, too, had lived under primitive conditions, this was a scene of pioneering utterly lacking in romance. Just inside the entrance to the low stone building was the largest room in the complex, a 15 by 30 foot living space, its beaten earth floor covered with mats and sleeping bags, and its rough stone walls illuminated by a single glaring light bulb. Beyond, was the expedition's social center, an unpaved courtyard, complete with a couple of live chickens pecking around some field cots and camp stools. Most of the group found places to sit and listen to Marilyn's enthusiastic description of her visit with the women of the governor's family, but since I was anxious to talk with Jeff Blakely, I followed him into the expedition's kitchen, a small, dark room quickly made unbearably hot by the gas jet of a portable camp stove.

"Want some hot Tang?" Jeff asked me, in his gracious offer of the specialty of the house. I took tea instead and sat down on a low rush stool as Jeff mixed up his own steaming orange drink. I had met Jeff for the first time several years before in Jerusalem when he was working at Tell el-Hesi, an ancient city mound near the Mediterranean coast. At that time he was just one of several younger staff members on a large excavation, but since then his status has dramatically changed. As the field director of the Wadi al-Jubah Project and as the archaeological heir of Wendell Phillips, he is not only in a position to determine the day-to-day course of this important new expedition, but he is also-- it seemed to me-- in a perfect position to make the future exploration of Yemen the focus of a successful archaeological career.

It isn't really that simple, Jeff quickly countered. Compared to the kind of archaeological work he was used to, this project had a long way to go before it could be the basis of anyone's career. It might have been enough for Wendell Phillips to lead expeditions into unexplored regions, but Jeff Blakely clearly has more sophisticated scientific priorities. Around the rim of the Mediterranean, where Jeff gained his training, the historical sources are abundant, the most important sites are identified with famous cities of antiquity, and the pottery forms are so familiar that digging sometimes becomes just a matter of matching cultural changes with historical events.

Here, though, the ancient descriptions of South Arabia are of questionable accuracy, only two or three cities have been securely identified, and the study of the local pottery hasn't really begun. Jeff's doctoral dissertation, which he hopes to finish this fall, is on the chronology of the late Iron Age pottery of Judea, which he believes he's been able to divide into developmental segments of a decade or less. The situation he faces in Wadi al-Jubah is entirely different; no archaeologist has yet been able to distinguish potsherds that date from the time of Solomon in the 10th century BC from potsherds made in the time of Pliny the Elder, more than a thousand years after that. Jeff Blakely's hope is that he may eventually be able to link the chronologies at the two ends of the ancient incense route.

Science, not adventure, is the focus of the Wadi al-Jubah Project. And it will be accomplished, not with a flourish, but in a steady, methodical way. In some ways, the staff may live in the shadow of Wendell Phillips, but as I discovered the following morning, their preliminary finds have already undermined some of Phillips' most attractive and romantic caravan dreams.

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It's hard to be enthusiastic at 5:00 AM in Wadi al-Jubah, but everyone was trying their best. Over steaming mugs, Jeff and Mike huddled to plan the strategy of the excavation of the cairn, with Jim Sauer offering his own advice. Bill Stewart went through his field notes, and Maurice Grolier and Bill Overstreet conferred about the areas still remaining to be explored for the geological survey. On everyone's mind was the limited time remaining in the expedition's season and with the ominous possibility of blinding sandstorms unexpectedly rising at this time of the year, all were anxious to accomplish as much as possible. But before leaving for the day's exploration, Bill Overstreet modestly surrendered to Jim's prodding and agreed to give us a short talk on Wadi al-Jubah's geology.

Taping two brilliantly colored satellite photographs to the wall of the expedition courtyard, Bill pointed to the tiny dark patch of Wadi al-Jubah and explained that his main challenge was to help the archaeologists understand the physical setting and to suggest the reasons



Scientists, not adventurers:
Bill Overstreet (left), Jim Sauer, and Barbara
Hartmann at the expedition headquarters.

why ancient people came to settle and build a culture in this particular place. According to Bill, the story began about 570 million years ago with the formation of an isolated mass of granite, as he described it, "something like a knot in a wooden plank." Over the next 550 million years, atmospheric conditions altered the initial formation; wind and rain gradually weathered the "knot's" surface, and its center crumbled away. Then came the more recent developments, from a geologist's perspective at least. During the Pleistocene period (c. 700,000 to c. 10,000 BC) the hollow in the granite crater was

filled with fine wind-blown silt. And with the dramatic increase in rainfall that the entire region experienced at the end of the last Ice Age, the silt floor of the valley became rich farming land.

What happened after that is of only marginal concern to Bill Overstreet; his specialty is natural processes, not history. He has devoted his career to analyzing the structure and possible usefulness of geological resources, and because of that expertise, he is no stranger to the Middle East. Now retired from the US Geological Survey, Bill and his colleague Maurice Grolier were called to the Yemen Arab Republic at the beginning of the massive aid programs in the mid-1970's to carry out a geological survey of the entire country. And the map they constructed for the installation of USAID rural water projects has become the basis, practical and philosophical, of their work here.

It's clear that the geological survey is the heart of the Wadi al-Jubah Project this season. It provides a firm framework on which the hazier historical conjectures can finally assume a definite shape. But the new picture that is evolving has little to do with Wendell Phillips' assumption that the romance and mystery of the ancient caravan cities of South Arabia can be brought to life again. By concentrating on the environmental factors within the valley that shaped its development, the current expedition is piecing together a picture that has more relevance to South Arabia's own development than it does to the stories of the Queen of Sheba and her incense caravans. Placed in the context of the favorable conditions for farming in the valley around

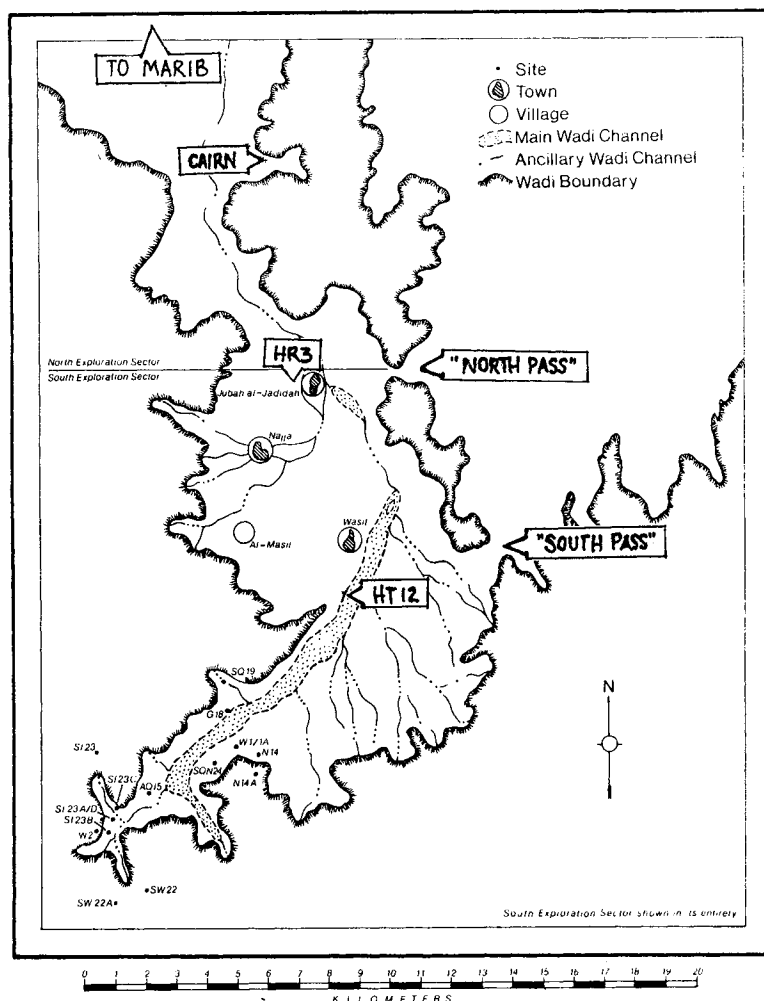
10,000 BC, Mike Toplyn's cairn at al-Farah is of central importance. And as the expedition team gathered together their equipment and left the headquarters and we began our own tour of the valley with Jim Sauer, I finally realized how significant the environmental approach is.

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Had there been no legends or ancient description to rely on, I might have been inclined to think that the ancient civilization in Wadi al-Jubah was a purely agricultural one. As we bumped along the wadi bed, Jim pointed out the remains of dams, water channels, wells, and agricultural terraces that the expedition has discovered and mapped so far. Here and there are mounds of light brownish soil with steep sides sharply carved by the waters of the flashfloods that rush down into the valley from the surrounding mountainsides. These mounds of silt, Jim explained, are the remains of ancient agricultural fields, whose cultivation was based on the intensive and efficient use of the same natural factor that destroyed them: the seasonal run-off of rainwater.

The site numbers recorded in the expedition's reports are listed according to sector and time of discovery, but if they had been assigned in terms of relative importance, Site HT12 would be number one. About a kilometer south of al-Wasit we stopped at the foot of a small settlement mound, locally known as Hajar at-Tamrah, a site that could easily be mistaken for yet another heap of agricultural soil were it not for the dark layers of building stones and ashy deposits mixed with the mud. During the second season of exploration in 1983, the team excavated a narrow section on the slope of the mound to test the nature of the occupation layers and to determine, if possible, its initial and final occupation dates.

The finds themselves were certainly not worthy of exhi-



Map of Wadi al-Jubah, from the expedition's 1982 report.

bition in the National Museum, but they clearly indicated the nature of Hajar at-Tamrah's ancient settlement. In addition to a scatter of potsherds were the skeletal remains of goats. The lack of any evidence of trade might have disappointed an archaeologist looking for the incense connection, and even more disconcerting was this agricultural village's date. Because charcoal is the perfect medium for Carbon-14 testing and HT12 is so rich in this commodity, it has threatened to overturn the most fondly held preconceptions in South Arabian archaeology. Its lowest layer yielded a Carbon-14 date of 1330 BC \pm 110 years, which, because of a basic inaccuracy of all dates before 1200 BC, has been "calibrated," or adjusted to c. 1600-1500 BC.

This new date would suddenly place the rise of towns in Wadi al-Jubah in a completely different context than previously thought. The accepted ideas about the beginnings of urban settlement in South Arabia are based roughly on the date of the Queen of Sheba's visit to Jerusalem, that is to say, not more than a century or two before 950 BC. But according to the Carbon-14 evidence, the settlement at Hajar at-Tamrah would have been established in the Bronze Age, more than half a millennium earlier, and its origins could be attributed not to the northern demand for incense, but to the indigenous technological development that made the harnessing of rainwater for agriculture possible for the first time.

This finding was not the only surprise to come from the charcoal samples of Hajar at-Tamrah; the date of its abandonment, even more than that of its origins, now threatens to upset the conventional theories about the valley's connection to the incense trade. The samples from the upper levels indicate that the last occupation and final abandonment of the village took place between 500 and 400 BC, that is, more than 500 years before Pliny the Elder wrote so glowingly of the power, wealth, and trade of the Qatabanians.

And what of the Qatabanian caravan city of Nagia, so confidently identified with the village of Najja? Another disappointment for the seekers-after-caravan-routes, it seems. The expedition's initial explorations in and around Najja failed to uncover any evidence of occupation that was more than two or three centuries old. All was not lost, though, for as the explorations moved eastward, the team located and mapped a site that seemed to fit the ancient descriptions perfectly: a huge city mound, which the local inhabitants call Hajar ar-Rayhani and the archaeologists call HR3. And as Jim took us to see it, I realized how my own preconceptions about South Arabian antiquity had colored my expectations of the Wadi al-Jubah Project.

HR3 is certainly impressive; the remains of its ancient city wall still stand in some places to a height of 13 feet. Directly to the east is a gap in the mountains, through which many scholars believe that the ancient caravans passed on their way to Marib. If any site fit the description of the caravan city of Nagia, between the Qatabanian capital of Timna and the border of the kingdom of Sheba, HR3 seemed to be it. But as we walked over the 10 acre surface of the mound, winding our way

through the litter of ancient building stones and modern garbage from the nearby town of Jubah al-Jedidah, Jim's description of the results of the recent excavations put an abrupt end to my romantic notions of incense caravans.

Jim explained that as the team dug through the superimposed levels of the city, they uncovered a pattern of development similar to that of Hajar at-Tamrah, except on a much larger scale. Surrounding the site are vast stretches of agricultural silt that testify to extensive ancient farming activity. And although the mound itself yielded remains of an urban character-- a massive city gate on its northern side-- nowhere among the many artifacts recovered from its layers was there any evidence for the legendary caravan trade. At both Timna and Marib, Wendell Phillips' excavations discovered characteristic Roman pottery and Greek-inspired sculpture that were apparently brought southward from the centers of Mediterranean civilization where the Arabian incense was sold. But Wadi al-Jubah did not share in this prosperity; the layers of HR3 did not contain a single sherd of readily identifiable Greek or Roman pottery. And the reason for this surprising lack of outside influences came from the Carbon-14 samples taken from HR3's latest occupation level. They revealed that HR3, like the village of Hajar at-Tamrah, was abandoned between 500 and 400 BC.

The identification of the site with the caravan city of Nagia--thriving in the 1st century AD--was therefore impossible and the archaeological facts had to speak for themselves. HR3, Hajar ar-Rayhani, or whatever its ancient name might have been, served as a central point of redistribution for a rich agricultural region, in other words, a provincial market town. Beginning some time in the Bronze Age (or perhaps earlier, if the excavation of the cairn pushes the date of the earliest human settlement in the valley further back), the ancient inhabitants of Wadi al-Jubah established an efficient system of flashflood irrigation, which, from all archaeological indications so far, was their primary means of subsistence. Yet around 450 BC, something destroyed this enclosed economic system. Could that "something" have been the caravan trade itself?



The northern gate of HR3,
with silt fields beyond.
Caravan stop or market town?

Just at the time that the kingdoms of Qataban and Sheba were rising in power, shipping their incense northward, and linking their fate to the economies of the Mediterranean world, the settlements in Wadi al-Jubah were abandoned, not to be occupied again until relatively modern times. The caravans loaded with incense may have passed through the valley, but it had become just a highway, emptied of most of its former inhabitants. Jim and the other members of the expedition tend to see the cause of Wadi al-Jubah's decline in a territorial conflict between Qataban and Sheba, but there may be another explanation. The rise of the caravan trade with its reliance on the export of raw materials and massive infusions of foreign capital, might simply have made Wadi al-Jubah's subsistence system irrelevant. The price of economic and cultural change is often paid by marginal areas, and what might have been true of Wadi al-Jubah may have been true in other parts of the region as well. In fact, the break-up of traditional culture in the face of massive foreign influence is one of the most serious threats facing the Yemen Arab Republic today.

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As we left Hajar ar-Rayhani and headed back across the sand dunes toward Marib, Jim explained how the traditional village culture of Wadi al-Jubah is about to change dramatically. He told us that the government has approved plans for the construction of a highway from Marib to the town of Jubah al-Jedidah, and that is a prospect that the local inhabitants fear. The geographical isolation that has preserved the essential character of the valley since the time of its modern resettlement will quickly vanish. The young people will leave in even greater numbers for Sana'a, the cities of the Gulf States and Saudi Arabia for the lucrative, hard-cash-paying jobs that are easily obtainable there. And with the highway will come closer government supervision; a paved road, eventually extending to the border with South Yemen, will make it much harder to supplement meager agricultural incomes with trade in smuggled goods.

Since next year is the last of the AFSM's five-year concession, the expedition team will probably move on to other archaeological frontiers before the coming economic and cultural changes overwhelm life in Wadi al-Jubah. With their first project successfully completed, they hope that Wendell Phillips' original dream of digging at the city of the Queen of Sheba might finally be realized. The AFSM has already made tentative overtures to the Yemeni Organization for Antiquities, and the indications look promising for a new concession to excavate at the site from which Phillips fled: the "sanctuary of Bilqis," an imposing ancient temple built with the revenues from the incense trade.

The terms and length of such a concession are, of course, entirely up to the Yemeni government and they will be dictated by the needs of the the country today. For the Yemen Arab Republic is a country filled with expectation, fearfully confident that its development dreams will

come true. Right now that development is tied to the recent discovery of petroleum and if the projections of the Hunt Oil Company are realized, construction will soon begin on a pipeline from the site of their recent strike east of Marib across the country to the Red Sea coast. Not long after that, tankers will begin chugging northward filled with Yemeni crude. If and when that happens, the YAR will be more connected than ever with the industrialized world, and the myth of the Queen of Sheba and her rich caravans of incense may yet seduce the Yemenis themselves.

In the meantime, the archaeological activity continues, and the new era in the history of Yemeni archaeology has already progressed too far to turn back. The Wadi al-Jubah Project is just a beginning; even more spectacular discoveries at Marib lie ahead. And the fact that potsherds, Carbon-14 dates, and geological analyses have become the building blocks of North Yemen's national history is, in itself, a symptom of profound cultural change.

Best Regards,

Nail

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