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Published several times a year by THE SOCIETY FOR EARLY HISTORIC ARCHAEOLOGY at Brigham Young University, Provo, Utah, for the dissemination among its members of information on new discoveries in archaeology throwing light on the origins of civilization in the Old and New Worlds, on the earliest periods of recorded history in the two hemispheres, and on the important historical claims of the Hebrew-Christian and Latter-day Saint scriptures; also news of the Society and its members and of the B.Y.U. department of archaeology and anthropology, of which the Society is an affiliated organization. Included are papers read at the Society's and Department's annual symposia on the archaeology of the Scriptures. All views expressed in this newsletter are those of the author of the contribution in which they appear and not necessarily those of Brigham Young University or the Church of Jesus Christ of Latter-day Saints. Subscription is by membership in the Society, which also includes subscription to other publications.

146.0 REROLLING THE JOSEPH SMITH PAPYRI. By Michael E. McDonald. A paper presented at the Twenty-fifth Annual Symposium on the Archaeology of the Scriptures, held at Brigham Young University on September 24 and 25, 1976.

Editor's Introduction. Early in the nineteenth century a Piedmontese explorer, Antonio Lebolo, discovered a cache of several hundred mummies near Thebes of ancient Egypt, at least 11 of which he removed. Several of these reached his nephew, Michael Chandler, at New York City in 1833. Mr. Chandler found two scrolls of papyrus, a paper-like writing material of the ancient East, wrapped together with two of the mummies. Four mummies, together with the scrolls, came into the hands of Joseph Smith, the Mormon prophet, at Kirtland, Ohio, in 1835. From one of the scrolls he translated the Latter-day Saint scripture called the Book of Abraham, a part of the Pearl of Great Price. (*History of the Church of Jesus Christ of Latter-day Saints*, Vol. 2, pp. 235-236, 348-351.)

On November 27, 1967, the announcement was made worldwide that 11 sheets of papyrus—once in the possession of Joseph Smith—had been rediscovered in the Metropolitan Museum of Art of New York City and had been presented by that institution to the LDS church. There was clear evidence that these sheets had some connection with the origin of the Book of Abraham, also that they had once been part of a scroll or scrolls and later had been separated for convenience in handling.

Animated study of the 1967 find and its implications has continued to the present day. Much of the present issue of the *Newsletter and Proceedings* consists of related materials. Contributions appearing in earlier issues are listed in the Bibliographic Note at the end of Mr. McDonald's paper.

IN SUCH A GATHERING AS THIS I am going to assume that most of those present are well informed as to the history of the ancient Egyptian papyri ac-

quired by the prophet Joseph Smith in 1835 which eventually resulted in the Book of Abraham; also the story of how they were reclaimed from obscurity in 1967 (*News. and Proc.*, 105.0). Attention will be given in this paper to the three related portions of the "Sensen" text known as Fragments 1, 10, and 11, especially to Fragment 1, which seems to be the original of Facsimile No. 1 of the Book of Abraham.¹

BLACK OR WHITE?

Even before the rediscovery of Fragment 1 some scholars postulated, because of certain irregularities in the "Abraham on the altar" scene, that Joseph Smith must have either mutilated it in certain places or it must have already been mutilated prior to coming into the Prophet's hands, thus requiring him to make some rather crude restorations. Objections were raised, for example, to the human-headed priest, the hawk-headed "angel," Abraham's upraised arms, and the apparent sacrificial nature of the scene.² With the rediscovery of the papyri in 1967, allegations of mutilation increased, for most of the very places in question were simply missing from Fragment 1; in their stead only frustrating lacunas were found.

As conclusive as such evidence appeared at first, however, some scholars continued to assume an originally complete vignette, faithfully represented by the 1842 woodcut of Facsimile 1. Evidence did not lack to support such a view, for a glue mark covers the area of the priest's head and left hand, suggesting the prior existence of some precious scrap, now lost. In addition, the possible sacrificial nature of the scene—Abraham's upraised arms, the hawk-headed "angel," and other aspects of the 1842 *Times and Seasons* woodcut—seemed consistent with what remains of Fragment 1 today. Hugh Nibley cited as support the authenticity of the bald-headed human priest and the crescent-shaped sacrificial knife.³

In spite of all that, however, the Egyptologist Klaus Baer maintained that the present Fragment 1 is "probably in about the same condition as in Joseph Smith's time."⁴ However, Dr. Nibley still asserted, in a subsequent *Ensign* article, that Fragment 1 was complete when Joseph Smith possessed it. In 1975, he told me, "It really doesn't matter whether it was complete or not."⁵ Finally, to illustrate the still moot nature of the controversy, I quote again from Dr. Baer: "There is no direct evidence . . . for the condition of the vignette of 'Facsimile No. 1' in Joseph Smith's time."⁶ I feel constrained to disagree, however, with both him and Dr. Nibley. Direct evidence having important historical implications may very well be available.

We have had more than nine years to acquaint ourselves thoroughly with the rediscovered papyrus. However, it now seems clear that we have overlooked some startling discrepancies between Fragment 1 and its supposed counterpart in Reuben Hedlock's 1842 woodcut, the final form of which Joseph must have approved.⁷ In my studies, I have not found a single researcher who made formal note of the fact that the "idolatrous priest of Elkenah" of the original papyrus has a distinctly black skin. Clearly, this priest is not a Caucasoid wearing a tight fitting, black tunic and matching leotard but a black-skinned person wearing the fairly common priestly vestments of ancient Egypt consisting of breeches, leopard-skin girdle, and shoulder straps running over the bare chest and shoulders.

The usual arm band on the priest's left arm further indicates that we are looking at the naked skin.⁸ The band was omitted from the 1842 woodcut, however. Also, time has been generous with us, in that it has left us what may be a small evidence of a necklace on the right side of the priest's throat. Joseph seems to have represented the white strip as a rather odd diagonal white hem on the priest's tunic. A closer look at the original suggests, rather, a segmented ap-

pearance, as in the beautiful multi-tiered necklaces of the ancient gods, nobles, and priestly officials of Egypt.⁹ The fact that Joseph seems to have misinterpreted this conventional dress of Egyptian functionaries indicates his inexperience in things Egyptian; the condition of the papyrus must have been the same then as now.

That subsequent students of the Book of Abraham have also misinterpreted the evidence on this point for so long is a disturbing mystery, a mystery compounded by the fact that Fragment 1 has been carefully analyzed by scholars of the highest caliber—Mormon, non-Mormon, and even anti-Mormon. Yet the conclusion virtually shouts at us from the dusty papyrus: The officiating priest, whoever the original artist intended him to be, is a dark-skinned person wearing the traditional costume proper for the execution of his duties. Whatever head may once have rested on those broad, black shoulders, there is one that we may immediately eliminate as patently out of character: a white one.

REROLLING THE PAPYRI

When I first became a member of the SEHA in 1975, I obtained all the free publications to which I was entitled. In the pile of fascinating discourses was an article by Richley H. Crapo and John A. Tvedtnes entitled "A Study of the Hor Sensen Papyrus" (*News. and Proc.*, 109.0). For the first time I learned that Fragment 11, the small Sensen text, was once a single piece with Fragment 1, which is Facsimile 1 of the Book of Abraham. I filed this fact away in my mind.

Several days later, as I was commuting from my work station in the Arco desert of Idaho, the thought came to me that if the two fragments were indeed once a single piece of the original scroll, and if they had both suffered the same corruptions of time wound together in successive layers, then each should reflect the same pattern of disintegration as its companion fragment. Further, I mused, if the lacuna of Fragment 1 that replaced the head and hand of the priest, along with Abraham's midsection, could be matched by a corresponding lacuna on Fragment 11, then it was probable that time had taken its toll of Facsimile No. 1 and the layers beneath centuries before Michael Chandler ever saw the scroll.

Then a disquieting thought dampened my excitement. Such an obvious conclusion would surely have been tested by scholars long before now and found wanting, for the controversy still persisted.

On arriving home, I approached the photographs of the fragments with anxiety, ruler in hand. To my amazement, I found that the profiles of the gaps and

breaks in the papyri formed clearly repetitive cycles down the length of the fragments at mathematically precise intervals. The lacunas of the upper half of Fragment 1 were repeated not only once but twice on Fragment 11. (See Fig. 1.) I further noted that when a tracing of the outline of Fragments 1 and 11 was made and rolled together like the original scroll, the lacunas and foldline breaks of all succeeding layers patterned precisely as expected.

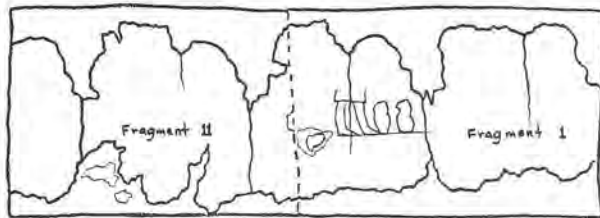


Fig. 1. A portion of the unrolled scroll showing how Fragment 11 (left) fits Fragment 1 as if the two had been cut apart by scissors. Adapted from Klaus Baer in *Dialogue*, Autumn, 1968.

The same pattern of lacunas and breaks could also be seen in Fragment 10, which was pasted to a backing sheet labeled "first one." Although this fragment is somewhat more dilapidated, perhaps having undergone rougher handling after it was mounted to its backing, the clearly similar shape of the disintegrations unmistakably links it to Fragments 1 and 11. (See Fig. 2.)

Evidently the same break penetrated all layers of the scroll. (See Fig. 3.) The fact that the voids in the upper half of the scroll recur at mathematically predictable locations lends strong support to the view that the major damage occurred before it ever reached Joseph Smith, perhaps even while it was still *in situ* on its mummy.

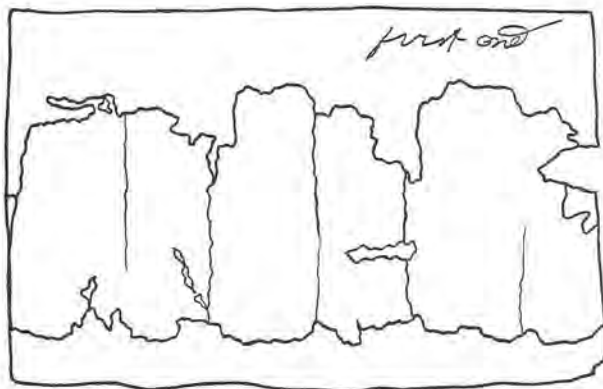


Fig. 2. Outline of Fragment 10. Adapted from the *Improvement Era*, February, 1968.

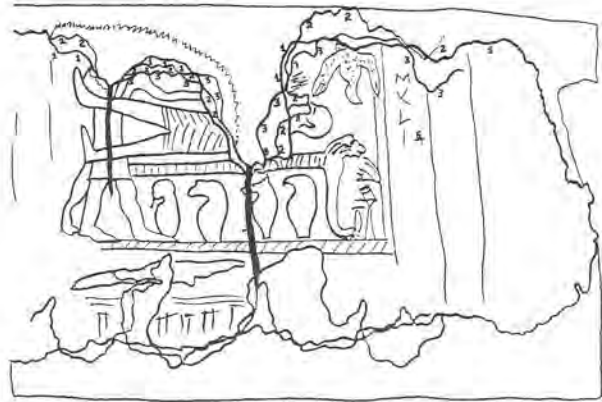


Fig. 3. Overlay of Fragments 1 and 11 illustrating common deterioration pattern. Layer 1, on top, is Fragment 1 (Facsimile 1 of the Book of Abraham). Layer 2 is the right half of Fragment 11 and Layer 3, the left half. The heavy vertical lines, left and center, indicate breaks common to all layers.

This evidence, coupled with the apparent dark skin of the priest, suggests strongly that the white head of the 1842 woodcut was only a guessed-at restoration by a man who was not necessarily an expert in things Egyptian. Joseph Smith's concern was not to make an authentic restoration, but only to illustrate an event which he knew to be factual. The content of the message was more important than the authenticity of any pictorial restoration, as evidenced by the glaring discrepancies between Facsimile No. 3 and Joseph's interpretation of it. In this case, obvious women are labeled as men. I think this is a good indication of the degree to which the document was corrupted after its use as an illustrated story of the patriarch Abraham.

Working within the range of his own limited knowledge, Joseph did the best he could. For lack of a better solution to the problem of filling the void of Facsimile No. 1, he merely copied the head of Abraham and placed it on the shoulders of the priest. The lack of familiarity with ancient Egyptian artistic conventions suggested by his unconvincing restorations paradoxically contrasts with his uncanny marksmanship in many of his interpretations of the same vignette, interpretations that have already been analyzed by more qualified persons than I.¹⁰

RACIAL PREJUDICE?

A favorite criticism of Joseph Smith has been that he used the concocted text of the Book of Abraham to vent his prejudice against the Negro race. Abraham 1:21-26 is seen as an invention by Joseph to

justify exclusion of Negro men from the priesthood.¹¹ But if such were the case, why would he have overlooked so completely the glaring contrast between the dark priest and the white person on the altar in Facsimile No. 1? If he had no real ability to translate, then this simple picture would have been the only easily discernible clue, one that would be apparent even to the most uninitiated observer, suggesting a conflict of black and white. Yet this most obvious of all the aspects of the vignette was wasted on the prophet Joseph Smith, for he blithely gave the dark-colored priest a white head like that of Abraham.

If the conclusion may now be granted that the papyri are in nearly the same condition today as in Joseph Smith's time, then another point of vindication of this avowed prophet comes to mind. Not only did Joseph not tamper fraudulently with the papyri; he carefully preserved them for all the world to scrutinize in future generations. This is perplexing behavior for a hoaxer. No charlatan worth his salt would so carefully and openly preserve a document that, properly translated, could at some future time become the means of exposing the hoax. If I had been a "con man," I would not have slept well at night until that document had met with some unfortunate accident.

One final note: The odd hunchback of the Egyptian priest in the 1842 woodcut is decidedly not in the conventional art style of the Egyptians. In such a vignette, shoulders are nearly always broad and square, and depicted in full front. I believe the reason Joseph saw an odd, hunched appearance in the priest is that he misinterpreted what remains of the back or tail of a ritual mask the priest was wearing in the original scene. Under careful scrutiny the small, slanted section just above the priest's right shoulder seems to exhibit a definite striated appearance, which is what would be expected in the tail part of the hood-mask worn by the deity or priest in the scene.

A quick comparison of the artist's heads of the four canopic jars underneath the altar to the area in question reveals similarities. The jackal head, the third from the left—the most widely favored among scholars as the proper head for Joseph's priest—is the only one of the four that probably would not match, for it has no striations on it. If the artist or scribe held true to his style, then he very likely would not have put striations on the head of the priest either, if indeed the priest had a jackal head. That leaves three other possibilities in the vignette, one of which I am personally drawn to, as I mention in the final paragraph.

Whether or not this particular ancient "Breathing" document may truly have been a proper mode of transmitting the tale of Abraham to future gener-

ations, it undoubtedly supports Joseph Smith's translation better than he knew. Supposing the Book of Abraham to be an authentic derivative of this papyrus, the newly discovered Fragment 1 actually upholds his interpretation better than the 1842 woodcut. The "priest of Elkenah" does have a black skin, in support of such textual references as Moses 7:7-8 and Abraham 1:21-26; thus it more graphically represents the conflict between the false priesthood of Pharaoh and the true priesthood of Abraham. Moreover, Abraham 1:7 states that this priest of the hawk-headed canopic jar, representing the god Elkenah, is also the priest of Pharaoh in a special manner. Perhaps it is only a coincidence that Horus, the ancient Egyptian god who was represented on earth in the person of Pharaoh, was depicted as a hawk. If Joseph had been a little more clever, he would have given the priest of Facsimile No. 1 a hawk mask to wear, as a more foreboding and convincing restoration. (See Fig. 4.)



Fig. 4. Author's proposed reconstruction of Fragment 1 with the priest of Elkenah wearing the hawk mask of the god Horus.

NOTES

1. The numbering of the papyrus fragments here follows that of *The Improvement Era*, February, 1968, pp. 40ff. My own study is based on the excellent color photographs in that issue. It has not been my privilege to examine the original papyri. When this becomes possible some of my conclusions may need to be altered.
2. Jerald and Sandra Tanner, *Mormonism—Shadow or Reality* (Modern Microfilm Co.: Salt Lake City), pp. 348-349.
3. Hugh Nibley in *Improvement Era*, July, 1969.
4. Klaus Baer in *Dialogue: A Journal of Mormon Thought*, Autumn, 1968, p. 128.
5. Long-distance telephone conversation, June 6, 1975.
6. Baer, *ibid.*, p. 132.
7. James R. Clark, *The Story of the Pearl of Great Price* (Bookcraft Inc.: Salt Lake City, 1955), pp. 169-171.
8. Cf. photograph in *Great Ages of Man: Ancient Egypt* (Time, Inc.: New York), p. 70. Although the original painting on the

sculptured relief is much faded, the faint outlines of the aforementioned garb can be clearly seen, complete with multi-tiered necklace.

9. Loc. cit.
10. See, e.g., the series in the *Improvement Era*, "A New Look at the Pearl of Great Price," by Hugh Nibley, beginning in the January, 1968, issue.
11. Tanner and Tanner, *ibid.*, p. 325.

Bibliographic Note: By the editor, Edward H. Ashment (BA in history and anthropology, BYU, and Ph.D. in Egyptology, University of Chicago) is the author of "The Facsimiles of the Book of Abraham: A Reappraisal," in the December, 1979, issue of *Sunstone* (Vol. 4, Nos. 5 and 6, pp. 33-48). Writing three years after Mr. McDonald presented his paper at the 1976 symposium, he reaches similar conclusions, although he now publishes them in a much more fully researched form. Ashment's paper is followed in the same issue, pp. 49-51, by a response from Hugh W. Nibley, in which the latter generally supports Ashment's views.

The rediscovery during the last 15 years of the pit-tomb, the mummies, and the papyri of the "Lebolo-Chandler collection of Egyptian antiquities" has been reported in various issues of the *Newsletter and Proceedings*. Among them are:

No. 101, May 1, 1967, which contains (101.30) Leslie W. Bradshaw's account of his finding definite information concerning eight or nine of the 11 or 12 mummies removed by Antonio Lebolo from Egypt early in the nineteenth century, and even the present location of five of them (four in Turin, Italy, and one in Paris). In the same issue David C. Martin tells (101.31) how he learned about the skull of another of Lebolo's mummies at the Academy of Natural Sciences, Philadelphia, while Claudia Veteto Stillman reports (101.32) her study of ancient Egyptian hypocephali, of which Facsimile 2 of the Book of Abraham is an example. (Cf. 146.1 and 146.2, below.)

No. 105, March 1, 1968, which features the startling discovery of 11 sheets of ancient Egyptian papyrus, once in the possession of the prophet Joseph Smith, in the basement of the Metropolitan Museum of Art, New York City. On December 11, 1967, only two weeks after the find had been announced in the media, shortwave-radio station KBYU-FM broadcast a "Faculty Forum" from Brigham Young University. Chaired by James R. Clark, the forum included Sidney B. Sperry and Ross T. Christensen. The three BYU professors discussed informally their views on the significance of this discovery to the Book of Abraham. No. 105 contains a complete transcript of the broadcast.

No. 109, October 25, 1968, which presents a stimulating hypothesis relating verses of the Book of Abraham, as published with the *Alphabet and Grammar* attributed to Joseph Smith, to the small Senses text (Fragment 11) of the newly found papyri and explaining how 50 or more English words could derive from a single hieratic glyph. The authors, Richley H. Crapo and John A. Tvedtnes, show (1) that the Prophet had a sure knowledge of the morphemic boundaries of the hieratic words; and (2) that the meaning of those words consistently shows up in a relevant way in the juxtaposed verses of the Book of Abraham. Their hypothesis is that the individual characters of the hieratic text served as memory-aid (mnemonic) devices to assist the ancient reader in calling to mind a long, memorized sacred text.

No. 114, June 2, 1969, in which Messrs. Crapo and Tvedtnes continue (114.1) the presentation of evidence in support of their memory-aid hypothesis and assert that parallels between the hieratic characters and the English text exist in every verse.

No. 120, April, 1970, in which Mr. Tvedtnes demonstrates (120.4), with particular reference to the Hebrews, that the transmission of long and complex oral traditions with the help of memo-

ry-aid systems was an ancient and widespread practice, and that the sacred nature of the text was often the reason for the use of such a system, so as not to allow unbelievers to learn its contents.

Jay M. Todd's paper in No. 124, December, 1970, may be regarded as "spin-off" from the research that produced his book, *The Saga of the Book of Abraham* (Deseret Book Co.: Salt Lake City, 1969; briefly reviewed in *NewsL. and Proc.*, 114.2). It consists almost entirely of 30 "clues, tips, and [bits of] information which if pursued will unquestionably resolve some of the major problems of background research on the Book of Abraham" (p. 1). (Emphasis in the original.)

146.1 BOOK OF ABRAHAM FACSIMILES FEATURED IN PAINTING. By Ruth R. Christensen and the editor. In the home of an Orem woman, Mrs. J. R. (Alta H.) Barber, hangs an oil painting by a noted artist depicting the Mormon prophet Joseph Smith discussing facsimiles of the Book of Abraham with a learned French Egyptologist. (See Fig. 5.)

The painting is titled "Joseph's Confrontation With the Critics." The Egyptologist, Theodule Deveria, wrote a skeptical analysis of the facsimiles in 1859, which is perhaps the first serious scholarly effort ever made to study the Book of Abraham. The two men stand facing each other in front of a low platform upon which are four upright mummies. Behind the mummies may be seen a mural of ancient Egyptian motifs. The prophet and the scholar each hold a paper containing their respective explanations. Above and beneath the papers are likenesses of two of the Book of Abraham facsimiles. The painting measures 3 feet 4½ inches high by 6 feet 1 inch wide, not including the frame. It was executed in 1970 by Gary E. Smith.

Mrs. Barber has submitted the following notes:

JOSEPH'S CONFRONTATION WITH THE CRITICS

The artist, born in Baker, Oregon, now lives at Alpine, Utah. He holds the Bachelor of Fine Arts and the Master of Fine Arts degrees from Brigham Young University. He has been an illustrator for the US Army, and a part-time faculty member and the director of the Art Gallery at BYU. He has painted murals for chapels, resorts, etc. Numerous murals hang in local banks. Some of his religious works are in the permanent collection of BYU and in those of the Latter-day Saint church. He has done illustrations and articles for many magazines, including *The Ensign*.

About the painting: This inspired work depicts Facsimiles 1 and 2 of the Book of Abraham flanked by the prophet Joseph Smith on the left and Theodule Deveria of the Egyptian Department of the Louvre Museum, Paris, on the right. Their discussion of the facsimiles symbolizes the contrast between the divine knowledge of the Prophet and knowledge of the world as represented by the savant with his fine grasp of Egyptian etymology. The ultimate message seems to be that Joseph Smith was indeed an inspired prophet. Juxtaposed in the painting are easily read summaries of each of their views, inscribed in English.

"Joseph's Confrontation With the Critics" hung for a time in the Franklin S. Harris Fine Arts Center at BYU. The mural of Egyptian motifs behind the mummies provides an intriguing back-

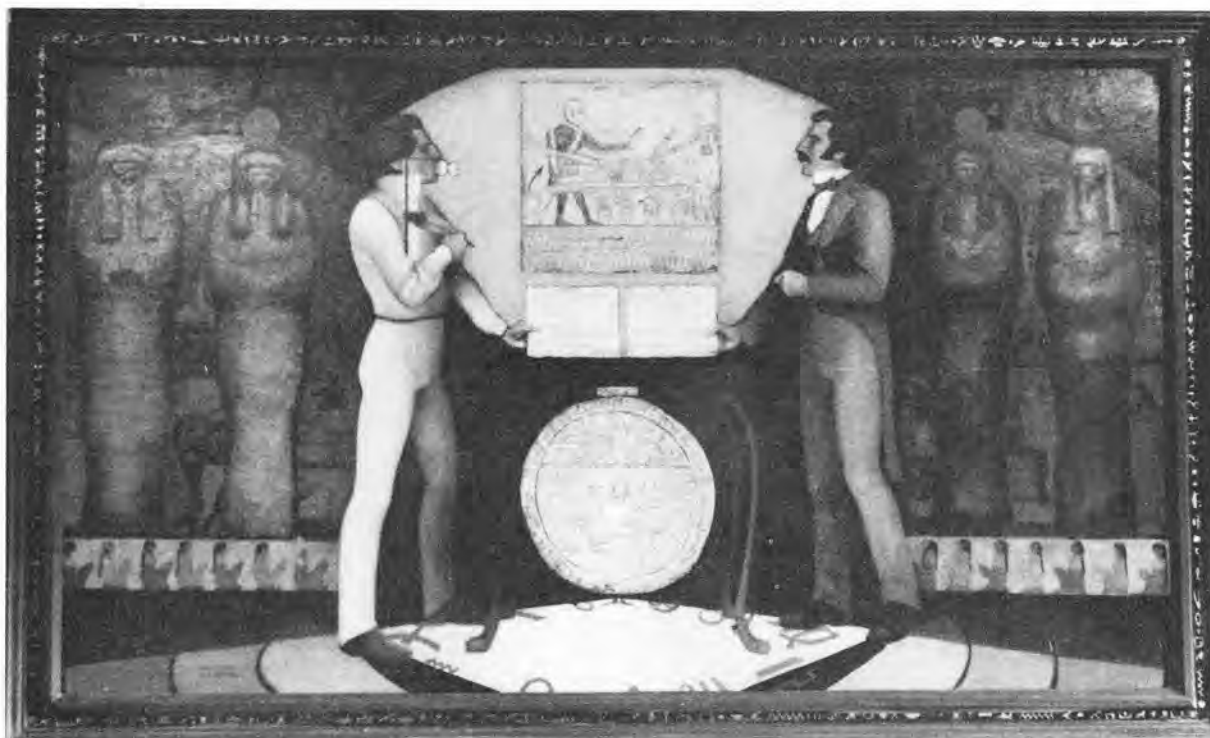


Fig. 5. "Joseph's Confrontation With the Critics." Oil painting by Gary E. Smith. Photograph of painting by Giovanni Tata.

ground, and the deep browns, blues, and greens, together with the band of hieroglyphic figures set in a groove of the wooden frame around the entire perimeter, add beauty to the work. Over the years many of the persons viewing it have shown deep interest.

Mrs. Barber, who lives at 243 Garden Park Drive, Orem, Utah 84057 (tel. 801-224-1690), has lectured frequently on scriptural subjects in the western states. A member of the SEHA since 1970 and at present a Research Patron, she has owned the painting for a number of years but has lately decided to sell it in order to finance a missionary project. Though reluctant to part with it, she feels it should be placed where it can be viewed, studied, and enjoyed by a larger public.

The late Sidney B. Sperry was concerned about the attack made in 1912 by the Rev. Mr. Franklin S. Spalding and others on Joseph Smith as a translator. He encouraged young LDS scholars to take up the study of the ancient Egyptian and Semitic languages in order to prepare themselves to defend the Prophet (*News. and Proc.*, 143.0, p. 4). Mrs. Barber hopes that some interested patron will purchase the painting and hang it in a prominent building, perhaps at BYU, where it may inspire such scholars.

BIBLIOGRAPHIC NOTE

Deveria's commentary was first published in 1860: (1) by Jules Remy and Julius Brenchley in a report of their 1855 trek from California to Utah, *A Journey to Great Salt Lake City* (W. Jeffs: London), Vol. 2, pp. 540-546, accompanied by a plate of Facsimile 3; and (2) by Remy in his *Voyage au Pays des Mormons* (Dentu: Paris), Vol. 2, pp. 462-467.

It was reprinted in Paris in 1896 under the title, "Fragments de Manuscrits Funeraires Egyptiens Consideres par les Mormons Comme les Memoires Autographes d'Abraham," in Vol. 1, pp. 195-207, of Gaston Maspero's *Theodule Deveria: Memoirs et Fragments*. The same volume also contains the papers "Theodule Deveria, 1831-1871: Notice Biographique," by his brother, Gabriel Deveria, pp. i-xlv; and "Notice Additionelle," by Maspero, pp. xlv-xlviii.

Artist Gary E. Smith specializes in scenes of LDS history. Eight of his paintings may be found in the *New Era*, December, 1973, pp. 20-30, together with a brief statement of his theory of art. More recent ones appear on the covers of the August, 1980, issue of the *Ensign* and the spring, 1981, issue of *Dialogue*. Mr. Smith plans to go to Israel in May to do a series of paintings on New Testament subjects.

146.2 SKULL FROM LEBOLO'S MUMMY COLLECTION NOW IN UTAH. A Brigham Young University professor has brought a part of one of the mummies connected with the origin of the Book of

Abraham to Utah, on loan from the University of Pennsylvania. It is the skull of a 16-year-old girl who may have been a member of a royal family. It has been on display at BYU, Provo, for the past several months and will remain for nearly a year longer, according to H. Donl Peterson, professor of ancient scripture, principally at his office in the Joseph Smith Memorial Building. (Fig. 6.)



Fig. 6. Dr. Peterson examining the mummified skull of an ancient Egyptian girl which has been associated with early LDS history.

The mummy to which the skull belonged was one of the 11 taken out of Egypt by Antonio Lebolo but not one of the four acquired by Joseph Smith in 1835. It was dissected before the Academy of Natural Sciences at Philadelphia in 1833. The location of the skull at the Academy was determined by David C. Martin and reported by him at the Society's Sixteenth Annual Symposium on the Archaeology of the Scriptures in 1966 (*News. and Proc.*, 101.31). Mr. Martin's research had been carried out under the direction of James R. Clark, who was his BYU religion professor and had been, 1959-64, a general officer of the University Archaeological Society (now the SEHA).

This skull is the only part of any of the 11 mummies that has actually been located in the United States. In Europe, however, the whereabouts of five of the mummies is known. This was reported by Leslie W. Bradshaw at the same Annual Symposium (*News. and Proc.*, 101.30; see also above, 146.0, "Bibliographic Note").

Dr. Peterson told briefly of his continuing research on the Book of Abraham at the Society's Twenty-seventh Annual Symposium in 1978 (*News. and Proc.*, 143.2, p. 9). Last August he spent some 10 days in further investigations at Dublin and in Turin, Italy.

146.3 STUDIES ARCHAEOLOGY IN ITALY. Giovanni Tata of Taranto, Italy, a staff member of the *Newsletter and Proceedings* since 1979 (see 143.4), is now studying archaeology in his homeland, according to a post card dated February 20. He writes, "My scholarship took me to the University of Turin, where they have a very good program in archaeology." Turin is also the seat of the old Royal Egyptian Museum, where some of the mummies brought out of Egypt by Antonio Lebolo early in the nineteenth century are still to be found (see above, 146.0).

Mr. Tata graduated from Brigham Young University with the BS degree in 1977 and the MS in 1980, both of them in anthropology and archaeology. His principal interest is the Mediterranean area.

146.4 ARCHAEOLOGY IN A SETTING OF SCIENCE AND RELIGION. A review of *Science and Religion: Toward a More Useful Dialogue* (two volumes). Edited by Wilford M. Hess, Raymond T. Matheny, and Donlu D. Thayer. Paladin House Publishers: P.O. Box 387, Geneva, Illinois 60134, 1979. 196 + 241 pp. Price, \$16.95 + \$1.75 postage. Review by Franklin S. Harris, Jr.

Science and Religion (hereafter SR) contains a total of 35 papers divided into the following parts: (1) science and religion as the bases for modern life; (2) the science base for earth chronology; (3) revelations from the earth; (4) earth in the universe; and (5) the prologue of life, in three parts: the search for reconciliations, the science of life, and the crown of creation—man inherits the earth.

The authors' areas of specialization in science are physics and astronomy, four; biology, including geology, 22; and anthropology and archaeology, seven. Twenty-two of the authors have been affiliated with Brigham Young University and eight with other organizations. Six have had connections with the SEHA (*News. and Proc.*, 144.6).

The Mormon point of view presented in this work avoids many of the old theological ideas, such as creation out of nothing, infallibility of the Bible, and lack of revelation since biblical times, and emphasizes positively a universe of law, acceptance of truth from all sources, and the need for education among Latter-day Saints.

SCIENCE AND RELIGION AMONG LDS

The history of the relation between science and religion in the LDS church has not been written in detail. There was little activity in this area until, in the 1890s, LDS students went to eastern universities for advanced training (Ph.D.) in science: in particular, James E. Talmage (geology, Illinois Wesleyan, 1896), Joseph F. Merrill (physics, Johns Hopkins, 1896), John A. Widtsoe (chemistry, Goettingen, 1899), and later Richard R. Lyman (engineering, Cornell, 1905). Merrill and Widtsoe were the first to get regular residence degrees. These men, all members of the Council of the Twelve Apostles, were trained within a few years, and since the death of Widtsoe and Merrill in 1952, science has not been represented in the Quorum. More recently, however, Theodore M. Burton (chemistry) was a sometime Assistant to the Twelve.

The influence of these few men has been great. Talmage is best known for his *The Earth and Man*, 16 pages, published in 1931. A good discussion of this pamphlet, as well as of B. H. Roberts and Joseph Fielding Smith, and of other problems and personalities, is found in Jeffrey, SR 2, 23; see also *Dialogue* 8 (3/4), 41 (1974); 9 (3), 21 (1974). The most detailed and wide-ranging topical treatments have been by Widtsoe in *Joseph Smith as Scientist: A Contribution to Mormon Philosophy* (General Board of the Mutual Improvement Association, Salt Lake City, 1908); *In Search of Truth* (Deseret Book Co., 1930); *Man and the Dragon and Other Essays* (Bookcraft Co., 1945); and *Evidences and Reconciliations*, Vols. 1–3, arranged by G. Homer Durham (Bookcraft, Inc., 1960). Merrill published little except radio talks over Station KSL, given in 1931 under the title, *The Truth Seeker and Mormonism*.

In 1958, Bookcraft, Inc., published *Science and Your Faith in God*, which contained writings and talks by the following scientists: Carl J. Christensen, Henry Eyring, Harvey Fletcher, Franklin S. Harris, Joseph F. Merrill, Frederick J. Pack, and John A. Widtsoe. Pack, a geologist, had also published *Science and Your Belief in God* (Deseret News, 1924) and a series of radio talks in 1932 over Station KSL.

Probably the first book on the subject of science and religion by a member of the LDS church was

Nels L. Nelson's *Scientific Aspects of Mormonism* (G. P. Putnam's, 1904), which I enjoyed reading 50 years ago.

An excellent series of articles by specialists appeared in *The Instructor*, 1965 to 1969. There are two outstanding, very recent, detailed books by active LDS scientists on creation: Frank B. Salisbury (plant physiologist), *The Creation* (Deseret Book Co., 1976), and William Lee Stokes (geologist), *The Creation Scriptures: A Witness for God in a Scientific Age* (Starstone Publishing Co., 1354 Second Ave., Salt Lake City 84103). The treatment in the two is different, but both give numerous supporting references.

No complete LDS bibliography on science and religion is available, but many references to magazine articles can be found in the *Index to Periodicals of the Church of Jesus Christ of Latter-day Saints*, with volumes for 1961–1970, 1971–1975, etc.; see entries under both “religion” and “science.” For earlier articles see the cumulative indexes of *The Improvement Era*. See also the cumulative index and volume indexes to *Dialogue*, and library card catalogues, such as that of BYU, under “Mormon church—religion and science.”

Only one incident of major conflict in this field has occurred in LDS church schools, at BYU in 1911. Several faculty members resigned over the question of what might be taught in biology. (See R. V. Chamberlin, *The Life and Philosophy of W. H. Chamberlin* [Deseret News Press, 1925]). In time, with an increased appreciation of science, it became possible for BYU largely to sponsor the book now under review.

Neither the very early nor the current Church leaders have been trained in science. It is therefore a tribute to them that the Church has officially taken the “wait and see” position of suspended judgment. Quotations are given in *Science and Religion* from Joseph Smith, Brigham Young, Joseph F. Smith, Heber J. Grant, and David O. McKay (see Allen, SR 2, 9; Jeffrey, SR 2, 23.) Strictly speaking, no statement or revelation, even from the president of the Church, is binding on the Church as a body unless its members accept it by vote in conference. This testimony by Joseph F. Smith (quoted by Jeffrey, *Dialogue* 8 [3/4], 70, note 8 [1974]) is not always observed in practice, however.

This position of suspended judgment has characterized many issues, including evolution (as discussed by Allen, SR 2, 9, and Jeffrey, SR 2, 23). The origin of Adam's body has been a matter of great interest. A quotation from 1910 (SR 1, 18; SR 2, 10, 32) says that we do not know the origin of Adam's body and that basically there are three theories: (1) evolved by natural processes to present perfection through the direction and power of God, (2) transplanted from another

planet, and (3) born in mortality as other mortals have been. One might add "cloning," which is replication from a somatic cell, called to the attention of the LDS by Frank B. Salisbury in 1965 (See Jeffrey, *Dialogue* 9 [3], 36 [1974]).

Ray T. Matheny (SR 2, 235) concludes: "In our view, the questions concerning what happened on earth before Adam came, the source of Adam's physical body, and the physical relationship of all of Adam's contemporaries to one another are matters which need not upset religious belief no matter how they are resolved."

FIRST-HAND COMPETENCE

It is refreshing to have so many fine articles by professionally trained, active scientists who are competent to speak first-hand in their own fields, rather than by non-scientists who argue by authority and quotation. It is well known that people outside their own training and professional experience (including Nobel-prize-winning scientists, and theologians) do not have competence when they become "instant experts" in other fields. It is therefore a delight to read a whole series of articles which outline the present status of our scientific understanding of the preparation of the earth and the appearance of increasingly complex forms of life, culminating in man.

When the evidence is considered, including the independent multiple methods of dating, it seems clear that a very long time indeed must have been taken to prepare the earth for man. Further, the impressive amount of early man-like (hominid) material is not to be disregarded in reconstructing the earth's history, even if we do not know Adam's exact relationship to such creatures.

Since the same limitations on credibility and truth apply to both science and religion, it is fortunate that in this volume we have writings of men who are active in both areas. As John H. Gardner says (SR 1, 18), "In man's quest for understanding, the process by which this understanding comes is much the same in science as it is in religion." It would seem that not only food procurement, but also intellectual and spiritual growth, follow the same process: "In the sweat of thy face shalt thou eat bread" (Gen. 3:19).

The remarks of John L. Sorenson (SR 1, 11), that it is important to distinguish between the Gospel, and the Mormon people and their cultural tradition, seemed to me very helpful.

I found the article by John A. Tvedtnes of special interest. As a Semitic scholar he has some interesting linguistic suggestions on Genesis. He further has an excellent collection of references to comments by

Church leaders (most of them early) on catastrophic events, past and future. It is an approach with which many of the other authors might not agree, but it is a point of view which represents ideas held by numerous members of the Church.

There are many good pictures, graphs, and tables, for example, Charts I and II (Warren, SR 1, 96, 98); and Figures 1 and 28 (Johnson, SR 2, 169, 201), which dramatize our long cultural heritage and the many steps in its development. However, it must be said honestly that some articles will be slow reading for the non-specialist.

Not all the problems that occur at the interface between science and religion are discussed in this book. For instance, there are no contributions by psychologists, psychiatrists, or sociologists.

For those who do not have time to read all the material, I suggest the editors' introductory remarks and perhaps Gardner's "The Concept of Science" (SR 1, 15) and Stokes' "A Geologist Looks at Evolution" (SR 2, 129).

This excellent book is highly recommended for thoughtful, careful study.

Editor's Note. Dr. Franklin S. Harris, Jr., for many years a professor of physics at the University of Utah, Salt Lake City, is also the author of *Book of Mormon Message and Evidences* and the co-author with John A. Widtsoe of *Seven Claims of the Book of Mormon*. In 1951 and 1961 he read papers on ancient American metallurgy before the Annual Symposium on the Archaeology of the Scriptures. He was also president of the SEHA, 1956-59, and since 1971 has served as an advisor to the Society's Board of Trustees. (See *UAS Newsl.*, 15.4: 89.2, pp. 3, 5; *Newsl. and Proc.*, 131.3, p. 8; 144.1, p. 6.)

In April, 1980, a mailing to all Society members included a leaflet advertising *Science and Religion*. (See *Newsl. and Proc.*, 144.6.)

146.5 SOCIETY HOLDS 1980 SYMPOSIUM. Papers on Book of Mormon and Old Testament subjects were read at the Society's Annual Symposium last October, as well as reports of current excavations in Guatemala and at Latter-day Saint church-history sites.

The Twenty-ninth Annual Symposium on the Archaeology of the Scriptures and Allied Fields was presented at Brigham Young University on Friday evening, October 10, 1980, and Saturday morning, October 11. The setting was Room 377 in the W. W. Clyde Engineering Sciences and Technology Building.

Dr. Bruce W. Warren, SEHA president and assistant professor of anthropology and archaeology at BYU, organized the Symposium and served as its chairman. Assisting him were BYU archaeology students Gail Hecker (publicity and the printed program) and Ronald Pritch (audio-visual equipment). Carol Lee Christensen was in charge of the sale of

publications and memberships at the entrance. Members of the Society and their partners, and also the general public, were admitted free of charge.

The Guest Address was delivered by John A. Tvedtnes, who had only recently returned from eight years of graduate study in Israel (see below, 146.6). WHERE WAS ABRAHAM'S "UR OF THE CHALDEES"? was suggested in part, the author reported, by his earlier study of a paper on the same topic presented at the Annual Symposium of 1966 and later published by the Society (*Newsl. and Proc.*, 106.0).

Four topics were treated Friday evening: Danel W. Bachman, an instructor at the LDS Institute of Religion, Utah State University, Logan, spoke on THE NEW "ANTHON TRANSCRIPT": BOOK-OF-MORMON DISCOVERY OF THE CENTURY. Mr. Bachman, a historian, is the friend in whom the discoverer of the now famous manuscript found in April, 1980, Mark William Hoffmann, a student at USU, first confided his good fortune (*Newsl. and Proc.*, 145.1). Copies of a 25-page study of this subject by Mr. Bachman were distributed at the Symposium sales table for the first time (see below, 146.8).

Dr. Ray T. Matheny, BYU professor of anthropology, told of his recent excavations in Central America in an UPDATE ON THE EL MIRADOR PROJECT, GUATEMALA. This report was a continuation of his Guest Address delivered at the Annual Symposium in 1979 (*Newsl. and Proc.*, 144.2).

Richard D. Hansen, a field assistant to Dr. Matheny and a candidate for the master's degree in archaeology at BYU, followed with STRUCTURE 34, A PRECLASSIC (BOOK-OF-MORMON PERIOD) BUILDING AT EL MIRADOR.

V. Garth Norman, SEHA trustee and holder of master's degrees from BYU in both ancient scriptures and archaeology, gave the final presentation of Friday evening, TENTATIVE IDENTIFICATION OF THE NARROW STRIP OF WILDERNESS, THE NARROW PASS, AND THE TOWER OF SHERRIZAH IN THE BOOK OF MORMON.

The Saturday morning session heard five papers. Martin H. Raish, instructor of art and design at BYU and doctoral candidate in art history at the University of New Mexico, first read USES OF ANCIENT NEW-WORLD ART IN ATTEMPTS TO VINDICATE THE BOOK OF MORMON.

Fred W. Nelson, Jr., who holds the Master of Arts degree in archaeology from BYU (*Newsl. and Proc.*, 121.1) and for years has been a chemist on the BYU staff, followed with TRADE ROUTES OF ANCIENT MESOAMERICA AS DETERMINED BY FINDS OF OBSIDIAN (VOLCANIC GLASS).

Dr. Dale L. Berge, associate professor of anthropology at BYU and specialist in archaeological sites illustrative of LDS history, next told of his EXCAVATIONS AT THE NINETEENTH-CENTURY VILLAGE OF GOSHEN, UTAH.

M. Alan Overstreet, master's degree candidate studying under Dr. Berge, then reported the excavation of another pioneer LDS settlement in April and May, 1980, in a paper entitled CHESTERFIELD, IDAHO: RECONSTRUCTING AN EARLY MORMON COMMUNITY.

The final presentation of the Symposium was the Guest Address by Mr. Tvedtnes (see above).

The second edition of the guest speaker's book, *The Church of the Old Testament* (Deseret Book Co.:

Salt Lake City, 1980), just off the press, was on sale at the publications table outside the lecture hall. Following the Symposium, the author attended an "autograph party," signing copies of his book for interested friends. (Copies may still be obtained from the SEHA office—at \$6.95 per copy; \$5.95 to Society members. Cf. below, 146.8.)

Selected papers read at the Annual Symposium are published by the SEHA from time to time at the discretion of its editors, usually in the *Newsletter and Proceedings*.

146.6 HEBREW-UNIVERSITY SCHOLAR NAMED TRUSTEE. John A. Tvedtnes, doctoral candidate at Hebrew University, Jerusalem, and author of the Guest Address delivered at the Society's latest Annual Symposium (see above, 146.5), was elected a trustee of the SEHA at its Annual Business Meeting, held on October 11 immediately following the Symposium. (Fig. 7.)



Fig. 7. John A. Tvedtnes.

John Alexander Tvedtnes is a part-time instructor at the Brigham Young University-Salt Lake Center for Continuing Education. Born in Salt Lake City, he attended schools there through 1971, completing two

master's degrees at the University of Utah, one in linguistics and the other in Middle East studies.

For more than eight years, from August, 1971, until his return to Utah in December, 1979, he was a graduate student at Hebrew University in Jerusalem, studying the Egyptian and Semitic languages, and archaeology. He was called to serve as a counselor in the Jerusalem Branch presidency of the LDS church when that branch was created in 1972. He also served as a staff member of the BYU Semester-Abroad Center in Jerusalem and became a well known tour guide in Israel. (*Newsl. and Proc.*, 127.1; 131.3, p. 10.)

Over the past 13 years Mr. Tvedtnes has read seven papers before the Annual Symposium on the Archaeology of the Scriptures: "A Study of the Joseph Smith Papyri" (with Richley H. Crapo, 1968); "The Use of Mnemonic Devices in Oral Traditions, as Exemplified by the Book of Abraham and the Hor Sensen Papyrus" (1969); "Linguistic Implications of the Tel Arad Ostraca" (1970); "A Phonetic Analysis of Book-of-Mormon Proper Names" (1972); "Nephite and Israelite Fortifications" (1976); "Elijah and the Baal Cult" (1978); and the Guest Address reported above in article 146.5 (1980). The first four have been published by the Society (*Newsl. and Proc.*, 109.0, 114.1, 120.4, 127.0, 141.0).

Beginning in 1972 and until the present Annual Business Meeting, he served the Society as an advisor to its Board of Trustees. For the past two years he has also served as a contributor to the *Newsletter and Proceedings*. (*Newsl. and Proc.*, 131.3, 143.4.)

Mr. Tvedtnes is the author of *The Church of the Old Testament* (see above, 146.5), also of "Science and Genesis" in *Science and Religion* (Palidin House: Geneva, Illinois, 1979), Vol. 2. (*Science and Religion* is reviewed in this issue of the *Newsletter and Proceedings*; see above, 146.4). He is also the author of two other books and of articles in the *Newsletter and Proceedings of the SEHA*, *The Ensign*, *The New Era*, *Brigham Young University Studies*, and various other magazines and scholarly journals.

Also elected trustees of the Society at the October 11 meeting were the 12 incumbents: Ross T. Christensen, Ruth R. Christensen, M. Wells Jakeman, Clark S. Knowlton, Victor L. Ludlow, Fred W. Nelson, V. Garth Norman, A. Delbert Palmer, Esther P. Parks, Virgil V. Peterson, Welby W. Ricks, and Bruce W. Warren. Each of the 13 will serve for a one-year term of office ending with the Annual Meeting of 1981, provided membership in the Society is kept current.

146.7 SYMPOSIUM CHAIRMAN, 1981, NAMED. John A. Tvedtnes of Salt Lake City and Jerusalem has

accepted appointment as chairman of the Society's forthcoming Thirtieth Annual Symposium on the Archaeology of the Scriptures, to be held next fall.

Announcement was made by Virgil V. Peterson, SEHA vice-president. (As determined at a recent meeting of the Society's Board of Trustees, selection of the symposium chairman is to be made from year to year by the vice-president as one of the duties of his office.)

Mr. Tvedtnes' background and qualifications are referred to elsewhere in this issue of the *Newsletter and Proceedings* (see above, 146.6).

A symposium committee will be announced at a later date. Mr. Tvedtnes invites all Society members to prepare papers for possible reading. Any subject involving the archaeology of the Bible, the Book of Mormon, or the Pearl of Great Price is suitable, but he expects to emphasize the Old Testament in his selections because of currently heightened interest in this field. Those wishing to accept his invitation should send a one-page abstract or summary of their proposed papers by about September 1. (The final deadline will be announced later.) Write to SEHA Symposium Committee, c/o John A. Tvedtnes, 1185 Jeremy Street, Salt Lake City, Utah 84104.

Further symposium preparations will be reported in the *Newsletter and Proceedings*.

146.8 REPRINTS, PRICE LISTS, MAILED TO MEMBERS. Two reprints of recent archaeology articles have been mailed to SEHA members as benefits in addition to current issues of the *Newsletter and Proceedings*. Also, new printings of both the Society's "blue list" (Publications for Sale) and "green list" (Free Past Publications) have lately been distributed.

"Phoenicians, Then and Now," by Ross T. Christensen, was mailed to all members in September. Reprinted from *International Insight*, July-August, 1980 (Vol. 1, No. 3, pp. 16-20), the article derives largely from the author's sabbatical research in the Mediterranean area on the Phoenician civilization of biblical antiquity (*Newsl. and Proc.*, 115.2, 118.0). *International Insight* is a new journal published six times a year "to encourage study and analysis of the social, political, economic, and historical issues underlying the conflict areas of the world, with special focus on the Middle East." Subscription is \$10 per year. Write to P.O. Box 723, Cleveland, Ohio 44107.

Additional copies of Dr. Christensen's article may be purchased from the Society at \$.60 per copy (\$.50 to SEHA members).

"Sealed in a Book: Preliminary Observations on the Newly Found 'Anthon Transcript,'" by Daniel W. Bachman, was mailed to all members of the Society

late in October. Reprinted from *Brigham Young University Studies*, Summer, 1980 (Vol. 20, No. 4, pp. 321-345), it is an expanded version of the author's paper read before the convention of the Mormon History Association held at Canandaigua, New York, on May 1, 1980, only 15 days after the discovery (*News. and Proc.*, 145.1). Mr. Bachman's paper is stapled together with another brief article from the same issue, pp. 346-347: "And Yet Another Copy of the Anthon Transcript," by Buddy Younggreen.

Additional copies of "Sealed in a Book . . ." are priced at \$1.50 each (\$1.25 to Society members).

An updated version of "Publications for Sale by the Society for Early Historic Archaeology" (blue list) was sent to the entire membership in February. Thirty-six publications are listed, with a price advantage in each case to Society members.

An up-to-date version of "Free Past Publications Available to Members . . ." (green list) was mailed in March to all who had not received copies of the old printing within the preceding year. The "green list" contains 57 titles which may be obtained free of charge at the rate of five per year—in addition to current publications. (Ordinarily the free publications are

available to members of the Society only.) Included are all past issues of the *Newsletter and Proceedings* that are still in print.

Single copies of both the blue list and the green list are mailed individually to each new or renewing member as his fee is processed in the Society office. If a member has mislaid his copy of either, or if he wishes an extra copy, he may obtain it without charge.

146.9 THIS MAY BE YOUR LAST ISSUE OF THE *NEWSLETTER AND PROCEEDINGS*. Last November, a renewal notice was mailed to all SEHA members whose renewal fee was due at the end of 1980. The response was excellent. In early January, the second renewal notice was mailed. The response was good.

Still some 75 members, however, have not yet returned their 1981 membership dues. It is expected that the present mailing of the *Newsletter and Proceedings*—No. 146—for reasons of economy will be the last that can be sent to unrenowned members.

Each person should check his membership card; if he is unrenowned for 1981, he should quickly correct the oversight.

----- (detach and mail) -----

Society for Early Historic Archaeology
P.O. Box 7488
University Station
Provo, Utah 84602

Date _____

Thank you for reminding me! Yes, please do renew my membership. I don't want to miss a single mailing. Enclosed is my check or money order in the amount of \$_____ for:

- _____ Annual Membership (persons), \$10 per year, for _____ year(s).
_____ Institutional Membership (organizations), \$10 per year, for _____ year(s).
_____ Life Membership (persons), \$150.
_____ Research Patronage (persons, IN ADDITION TO membership fees), \$30 per year.

Name _____

Address _____

(3rd renewal notice)