A recent issue of the AJBA carried a note on the 1972 excavations at Tell Siran and the Ammonite inscription discovered there. The inscription has been extensively studied, and we can now add a few further comments. The initial study suggested that the text was in the Phoenician script which relates directly to Dr. Frank Cross' judgment that the script and language are pure Canaanite. A detailed survey of published inscriptions shows that the Siran script is closest to Aramaic of c. 700 B.C. However, Cross (who is undoubtedly the world's leading expert in ancient Near East epigraphy), claims that Ammonite had an independent development from the parent Aramaic from c. 750 on. Diagnostic forms fell 100 years behind so that the Siran inscription dates c. 600 B.C. shortly before this Ammonite script was destroyed by the Babylonians and replaced by Aramaic. What is not clear in his discussion is when does a branch of Aramaic become pure Canaanite and how does a conquering army destroy a script? The uncertainty here is probably academic, however, since one can agree with Cross' date of 600 B.C. on other grounds. But first let's look at the details of Siran.

As noted earlier, the Siran inscription is the first complete Ammonite inscription ever discovered. Its 92 letters also make it one of the longest. The Citadel inscription has a dot which may be a 'ayin making a total of 93 letters but if it's only a dot, the 92 extant letters make it of equal length. The letter forms of Siran are clearly later. Cross dates the Citadel inscription to 850 B.C. while Horn dates it earlier.

The Letter Forms

As shown in the table of Siran letters, the aleph is the common Syro-Palestinian form. In Aramaic, the form changes c. 650 B.C. The Siran form compares with inscriptions from Gezer, Nerab, Gibeon, the Mesha Stele, the Ammonite seal of "'w' bn MR'L" (though the "b" here is earlier), the Ammonite Elisha seal, and the Amman Theatre inscription.

The Siran "b" is the open "y" form. The older form has a closed head (see the first letter in line 2). In Aramaic, this change comes c. 700-675 B.C. The Ammonite seal of "Adoni-pelet, the servant of Amminadab" has one open and one closed
“b” while the Theatre inscription has an open “b”. The “g” is standard and not helpful for dating. The “d” is unique to the Siran inscription though close parallels are common. The older closed head opened at the top in Aramaic between 700-675 B.C.4

The “h” is a new form but Cross notes that it is in the tradition of the Deir ‘Alla inscription which he now dates shortly after 700 B.C. He calls Deir ‘Alla Ammonite cursive and Siran lapidary (carving as in stone or metal, cursive as in hand-writing). The lapidary maintained archaic forms longer than the cursive. The “u” is an older form. In Aramaic, the right shoulder begins to disappear c. 700 B.C. The hard “h” (heth) has 2 bars. The

1. Tell Siran. The inscription bottle as found in the soil, 27/4/72. (Photograph by H. O. Thompson.)
3. The inscription.
Amman Citadel inscription has both 2 and 3 bar forms while Deir 'Al'Alla has 2 bars. Ammonite seals have both 2 and 1 bar forms. The 2 bar form appears in Aramaic c. 750 B.C. and moves rapidly to the 1 bar form c. 700 B.C. The three “y’s” of Siran have no exact parallels elsewhere but they are in the Aramaic tradition of c. 700 B.C.\(^5\)

The triangular head of the “k” may appear at Deir 'Al'Alla and in Aramaic in the Nimrud Ostracon and the Sefire tablet (571 B.C.). A head forming a horizontal “v” extending to the left is a common form, e.g., the Amman Citadel inscription. The “l” is common to the Iron Age. The “m” is common to the 9th-7th centuries. The Ammonite seals and the Deir 'Al'Alla forms are comparable with the double “u” horizontal head and the curving down stroke. C. 725 B.C., the middle vertical of the double “u” starts extending clear through the horizontal head. This shift is complete c. 600 B.C. This form appears in the extant Ammonite corpus c. 525 B.C. by which time Cross (as noted earlier) thinks the distinctive Ammonite script had been wiped out and replaced by the current Aramaic. The 12 “n’s” are similar to the “n” of the Saqqarah papyrus which dates quite explicitly to 605 B.C. Line 1:7 has a little “tick” but in the original this seems to be a slip of the engraver’s knife.\(^6\)

Within the Ammonite corpus, the 'ayin takes the form of the round circle except for the open “u” on the Elisha seal, one of two examples on the Citadel inscription, and the Theatre in-
scription (one example). In Aramaic, the change comes mostly c. 725-700 B.C. though the change from closed to open begins in the 8th and continues into the 6th centuries. In Phoenician, the open form is a very late development. The single Siran example is the first *tsade* in Ammonite. Exact parallels appear in Nineveh and Assur clay tablets (Aramaic) between 700-650 B.C., and on the 7th century Phoenician seal of Abinadab. The single “q” is nearly unique though one from Deir ‘Alla is similar as are examples from Nineveh and Assur dating c. 725 and 650 B.C. (Aramaic).7

The open head on the “r” is very rare in Ammonite. In Aramaic, the change from closed to open head comes c. 725-700 B.C. The last letter of line 4 is listed here as an “r” but this is uncertain. It may be an “n”. Note the discussion of “athr” below. The shin is common to the Iron Age form but in Aramaic a development occurs about 575 B.C. The “t” is also a common form with a seeming exception in line 4:13 on which see “athr” below. In Aramaic, the left arm starts dropping off and this is the well established form by c. 650 B.C.8

5. The Tell Siran Inscription bottle after it was opened, 12/2/73. (Photograph: Dept. of Antiquities.)

**Dating on the Basis of Letter Form**

The Ammonite corpus is dated internally on the basis of pottery typology, and by letter forms in relation to outside examples such as Aramaic. The exceptions are the two seals of
Adonipelet and Adoninur which refer to Amminadab, and the Theatre inscription which may refer to Baelys (c. 580 B.C.—Jeremiah 40:14). The Amminadabs of the two seals have been assumed to be the same and to be identical with the Amminadab of the Assyrian inscription of 667 B.C. With the Siran inscription addition of 2 more Amminadabs, however, this assumption must be freshly re-examined. Thus within the Ammonite corpus of inscriptions, there is no absolute dating. If Aramaic is a guide to the development of letter forms, then one can say that the closed “b”, “d”, “ayin, and “r” are earlier. The Elisha seal and the Theatre inscription do not have an “r” but their open “b” and “ayin suggest contemporaneity with Siran. If the single letter examples extant in these two are completely representative, the continuing tendency to closure (especially in “d”) in Siran, may suggest an older date. Other Ammonite materials are presumably older. A strict comparison with Aramaic would date Siran to 700 or 650 B.C. at the latest. Cultural lag and/or deliberate archaizing could easily put Ammonite 50-100 years behind its northern neighbour. There is little room for dogmatism. Historical considerations allow a date of 600 B.C. for Siran but first a few comments on the inscription itself.

The Message

The first line reads: “The works of Amminadab, the King of the Ammonites”. The term “mībd” is taken as the plural construct masculine of “do, make”. With a suffix, the word occurs in Job 34:25 and Daniel 4:34. The name Amminadab appears frequently in the Bible (Exodus 6:23, Ruth 4:19f, etc.). As noted, he is named as King of Ammon by Ashurbanipal and the name appears on the seals of Adonipelet and Adoninur. It may mean “my kinsman is noble (generous)”. A South Semitic (Qatabanite, Thamoudie, Safaitic) deity is named ēAmm. He occurs in the theophorous name ēAmm-ēAnas. So Amminadab may mean “my god ēAmm is generous (noble)”. “mlk bn ēmn” is a common form. The “bn ēmn” appear in Assyrian and Ugaritic, Northern Syrian and South Semitic inscriptions as well as in the Bible. The Ammonite deity is called Milcom. If this is a title, it is possible that ēmn was the personal name and the Ammonites thought of themselves as the “sons of the god ēmn”.

Line 2 reads: “the son of Hissal-El, the King of the Ammonites”. This is a new name for the Ammonite king list. The transliteration is that of Cross. The name may mean El delivers or protects—compare “hassalah” in Esther 4:14.

Line 3 reads: “the son of Amminadab, the King of the Ammonites”.

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4. Table of characters.
Line 4 reads: “the vineyard and the garden(s) and the ’thr”. The terms “krm” and “gn” are the common words for vineyard and garden. In our time, making vineyards and gardens may not seem a suitable activity for a king but things were different in ancient times. In the Bible we have the infamous story of Ahab wanting Naboth’s vineyard (I Kings: 21). In Ecclesiastes 2:4ff, we find a close parallel to the Siran labours:

I made great works ("m’shy"): I have built houses and planted vineyards ("krnym") for myself; I made myself gardens ("gnot") and parks, and planted all kinds of fruit trees. I made myself pools ("brkot mym") from which to water the forest of growing trees.

The last word of Line 4 bends over the rounded base of the bottle. This raises a doubt as to the exactness of the letter forms. The aleph is clear and so is the “t” though it varies slightly from the others. Cross has suggested the possibility of an incomplete samekh. There is not the faintest hint of a 2nd cross arm but if it is an “s” we could have the attractive “shr”, to be translated as wall. This would go very well with the garden. If the letter is indeed a “t”, Cross notes that we have a new semitic root. If the last letter is a deformed “n”, we could have “’thn”, meaning throne or dais. Since the garden would be a nice place for a summer throne, this too would be attractive. One can also draw attention to the hollow verb “hr” or “hôr” meaning hollow and hence a hole or storage place. This would go well with the context as a kind of fruit cellar. The little tick on the left side of the leg of the last letter remains unexplained by any derivation and is assumed to be a slip of the engraver’s knife.12

Line 5 reads: “cisterns”. This is the fourth of Amminadab’s works. The word appears in the singular in the Mesha stele (Line 9:8) and Eccles. 50:3.

Line 6 reads: “May he rejoice and be glad”. The words “gyl” and “smh” are individually common and also appear as a pair. P. Humbert has noted the Biblical significance of the terms. Building on this and their common occurrence in poetic contexts, Dr. Fawzi Zayadine has suggested a cultic significance for the terms, in relation to the agricultural festivals (cf Dt. 16:13; Hos. 9:1; Is. 9:3; Joel 2:23; Ps. 118:24). The barley (c. 60%) and wheat (c. 40%) inside the bottle adds support to this cultic significance.13

Line 7 reads: “for many days and years”. Line 8: “long/many”. These are common terms. Cross translates Ezek. 12:27 as “For many days to come and in times far off.” He notes a
similar expression in Ugaritic: “Thy grace in the midst of Ugarit as long as the days of the sun and moon and the pleasance of the years of El.”

Lines 6-8 suggest a standard blessing formula. The contents of the bottle suggest that the blessing is a prayer for the continuance of the king's fertility. The bottle was opened on 12 February, 1972 by Mr. Thomas Weatherly, then of Boeing Aircraft in Amman, who created special tools to work loose the rivet and the corroded cap of the bottle. It was emptied in the laboratory of Dr. Wayatek Popiel at the University of Jordan. The contents weighed 46.2 grams. At first it appeared to be dirt. A spectrographic analysis of the brown material suggested organic matter. After a portion of it dried in open petri dishes, it appeared to be grain. Initial examination by Dr. Loutfy Boulos suggested wheat and barley. This was confirmed when the entire sample was studied by Dr. Hans Haelbek of the Danish National Museum. Dr. Haelbek identified Emmer wheat (Triticum dicoccum), Bread wheat (Triticum aestivum) and Hulled six-row barley (Hordeum vulgare). He considered Einkorn (Triticum monococcum) a possibility but the general deterioration of the material did not allow positive identification.

The current interpretation of the wheat and barley is that they are a portion of the first fruits offered to the local deity. As sacred grain, it would be efficacious in ensuring the king's fertility (long life) over which he could rejoice. We might note the possible presence of a copper scroll inside the bottle. This speculation is based on the particles of copper corrosion mixed with the grain. The scroll would presumably have included an incantation in addition to the blessing formula on the outside. The particles could have come from corrosion of the inside of the bottle, of course. However, the particles were thoroughly mixed with the grain when it was removed. Dr. Popiel's analysis of the bottle and cap showed an alloy of copper, lead, and tin. The small particles of metal inside were of lead and copper with traces of silicon, iron, and possibly tin.

The Kings of Ammon

The Siran inscription gives us two and possibly three more names of Ammonite Kings. The previous list contained Nahash (1000 B.C.), Hanun (990), (?) Shobi, the son of Nahash (II Sam. 17:27), Ruhubi (850), (?) Ba'asa, the son of Ruhubi (850), Shanip (733), Bod'el (700), Amminadab (667), (?) Hanan'el (620), Ba'llys (580). The Siran inscription interests go back as far as Shanip who paid tribute to the Assyrian king, Tiglath-pileser. He may be referred to in II Chron. 27:5. Zayadine has added two
more King names, Yerahâ‘azar, son of Zakir, son of Shanib (Shanip), by a re-study of the Yerahâ‘azar statue in Amman. Sennacherib refers to Buduili from Beth Ammon while Esarhaddon refers to Puduil as King of Beth-Ammon. The two names are usually taken as referring to the same person as the Bodâ‘el mentioned by Ashurbanipal in 668 B.C. The next year, Ashurbanipal gives Amminadab as the king of the Ammonites. The proximity suggests a father-son relationship of Bodâ‘el and Amminadab but the Assyrians sometimes got behind on king relationships. They considered Jehu to be of the House of Omri though Jehu had destroyed the Omride dynasty. Hananâ‘el appears on an Ammonite seal. The similarity of the name to Hanun suggests kingship by analogy. As noted above, BaClys appears in Jer. 40:14.

In an unpublished paper (1970), Dr. James Sauer suggests that the Theatre inscription refers to BaClys and speculates further on a restoration that suggests BaClys as the son of Amminadab. The open “b” and â‘ayin in the Theatre inscription were compared earlier. This paleographic similarity and Sauer's ingenious reconstruction combine to date the Siran inscription c. 600 B.C., the date suggested by Cross. The seals of Adoninur and Adonipelet are paleographically earlier and this adds some substantiation. Thus the Amminadab of Siran Line 1, is c. 600 B.C. while the Amminadab of Line 3 may be the king of Ashurbanipal's record of 667. Cross speculates on Line 3 as dating 635 and the Amminadab of 667 as an Amminadab I. The Hissalâ‘el of Siran Line 2, may crowd out Hananâ‘el or may simply be an addition since some kings' reigns were admittedly very short.

This historical consideration assumes archaizing or cultural lag in the development of Ammonite letter forms. If that is denied and the contemporaneity of the Aramaic forms is insisted upon, one can date Line 1 Amminadab to c. 650 and push the others back accordingly. While this crowds things a bit, quick kingly turnover was not uncommon in ancient times (or modern!). For the present, I accept the earlier reconstruction and date the Siran inscription c. 600 B.C.


7. The Deir cAlla information comes from a work sheet provided the Department of Antiquities of Jordan by the Deir cAlla excavator Dr. H. J. Franken. The plaster inscription in the Amman Museum has a "half-cup", form of "q". On Nineveh and Assur cf. Stephen J. Lieberman, "The Aramaic Argillary Script in the Seventh Century", BASOR, 192 (1968), 26, Fig. 1, and also Naveh, op. cit.


11. Cross, op. cit.


15. "Grain from Tell Siran, Amman, Jordan", forthcoming, ADAJ.


17. “Ammonite Inscriptions”, prepared for the Graduate School, Harvard University.