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MaozNews No. 150
November 2020

Published every quarter or so
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The Scene in Israel

Protests continue against Netanyahu's mismanagement of the Government, his erosion of the democratic institutions of the country and his apparently corrupt conduct (for which he now stands trial). The coalition Government, held together by nothing more than a fear of what might be the results of the next round of elections, may well collapse due to its inability to function:

Israel has operated without a national budget for two years now; the budget for 2021 has not been presented; senior posts in the army, police, Treasury, Justice and Health Ministries are vacant, and the economy is reeling under a series of Covid-19 outbreaks and country-wide closures. Public adherence to health instructions is negatively impacted by often contradictory injunctions and overt political considerations which are allowed to override medical and economic concerns.

Israel has undergone three surges in the pandemic and, like many other countries, is seeking a path that would enable the economy to function and, at the same time, stem the spread of the disease. Contracts have been signed for the provision of vaccines developed by 2-3 companies around the world, but Israel is also far advanced in developing a vaccine of its own. Having such would reduce national expenses and free the country from dependence on outside cooperation. The vaccine being developed is not as volatile as Pfizer's, and therefore may have an important edge.

Tensions on our northern (Hezbollah and Iran in Lebanon and Syria) and southern (Gaza, ISIS in Sinai) borders remain high while the military seeks to maintain both its ability to respond to immediate threats and its preparedness for those in the more distant future – a difficult task in view of the pandemic and the potential of its spreading through the troops. IEDs planted on the Syrian front of our northern

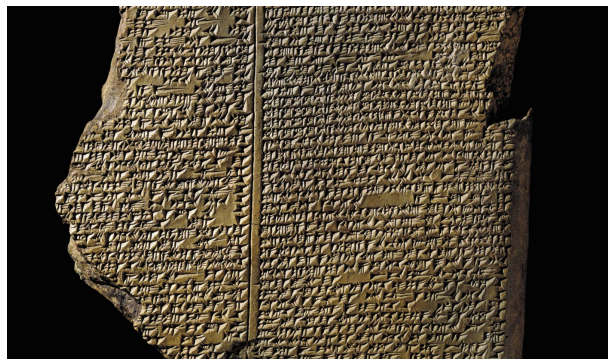
border (most likely by Iran's protégé', Hezbollah) was countered by an immediate Israeli response, targeting Syrian and Iranian posts in various locations in Syria.

On the other hand the Palestinian Authority (PA), which had suspended security cooperation with Israel has announced that, following written confirmation from Israel that it views all previous agreements with the PA in force, such cooperation will be renewed. The PA had also refused to accept excise taxes collected by Israel for goods to be delivered to the PA territories because Israel subtracted from the sum collected an equivalent to the monies the PA transferred to families of those killed in the course of attacks on Israel. Straitened for funds, the PA has now agreed to accept the remaining credit and has commenced feeling the ground with a view to possible renewal of peace talks. Hit by COVID-19, the lack of funds and growing international isolation, the Palestinians have little wriggle room left. Hamas, representing the Islamist faction in Palestinian society, has decried the PA's "capitulation". In addition, in response to the killing of Hezbollah operatives in Syria a year ago, Hezbollah has repeatedly tried to stage attacks on Israel forces. Consequently, Israel's military maintains high alert on the Lebanese, Syrian and Gaza borders, and has already foiled a number of attacks.

Artificial Intelligence in the Service of Babylonian Tablets

Artificial intelligence can be trained to plausibly restore missing words in Babylonian texts

Adapted from an article by Ruth Schuster, Ha'Aretz, November 5, 2020



Broken Babylonian tablet telling the tale of flood of Gilgamesh
Credit: The Trustees of the British Museum

Understanding texts written in an unknown system in a tongue dead for thousands of years is a challenge. Reconstructing missing bits of the ancient text is even harder. Filling in missing text starts with being able to read and understand the original text. An Israeli team¹ led by Shai Gordin of Ariel University in the West Bank, harnessed artificial intelligence to help complete fragmented Akkadian cuneiform tablets. Their paper, "Restoration of Fragmentary Babylonian Texts Using Recurrent Neural Networks," was published in the [Proceedings of the National Academy of Sciences in September](#).

“Neural networks” is a software inspired by biological nervous systems, a concept that dates back more than 70 years. The basic idea is to teach machines to learn, evaluate and make decisions. In this case, the computer determine the plausible completion of missing text.

We humans can recognize letters and numbers, although written in differing handwritings whereas machine repeatedly fail. We can also intuit, reasonably concluding that “...ow is your moth...” isn’t to be understand as the quest "how is your mothball". Machine can't really think, they need to be fed mathematical probabilities. Gordin and his team feed their machine transliterations of the extant Babylonian texts, assuming what the text would have sounded like when spoken, and then prodded the machine to fill in the missing consonants, vowels or words.

Pseudo-writing in Uruk

Sometime ,over 10,000 years ago, inhabitants of the Near East began to settle down, grow and develop agriculture, which led to trading. Trading might have inspired the earliest recognized form of communication: there are findings of “pseudo-writing” on small bits of clay in Mesopotamia inscribed some 7,000 years ago. The clay bits were shaped into simplistic imagery such as a cow or other ancient commodities. These were later imprinted on clay bullae (pieces of clay that functioned as tokens). Next in line were abstract signs; repetitive strokes or depressions believed to be numbers (prices or quantities, for example); and possibly personal names, using the first sounds of different imprints to join into words that cannot be drawn. Such tokens represent the earliest known administrative use of markings.

We don’t know who invented the token, but Egypt and Sumer were major polities, able to amass enough human and material resources to require complex administration, Gordin explains: “The tag shows a drawing of what it represents. You don’t need writing to do that”.

Pseudo-writing was followed by what scholars call proto-writing: figurative proto-cuneiform inscribed on tablets, which arose about 5,500 years ago in the city of Uruk, an ancient city for Sumer in Mesopotamia.



**A Proto-Elamite token, Uruk period
found in the Susa acropolis**
Credit: Marie-Lan Nguyen







Proto-cuneiform evolved, becoming increasingly schematic. Figurative hieroglyphic began to appear in various places and in ancient Egypt at about the same time, some 5,000 years ago. It is unclear which came first, Gordin says. Proto-cuneiform and proto-hieroglyphics may have arisen contemporaneously and independent of each other. But it is likely that the two influenced each other as countries traded with each other. Thus was born cuneiform: a “wedge-shaped,” logo-syllabic script made by impressing the sharpened point of a reed into moist clay.

Mercenaries in Canaan

As from 5,000 to a mere 2,000 years ago, cuneiform writing was enlisted to serve unrelated languages from all over the ancient Levant and Eastern Mediterranean. In the course of time some 3,800 years ago, international relations led not only to the adoption of a single writing system for the different languages but to the adoption of Akkadian as the lingua franca of the Near East.

The Canaanites also used cuneiform alongside what appears to be the earliest alphabetic script. Traces of early alphabetic signs were found in Wadi el-Khol in Egypt's western desert. In Sinai, an alphabetic writing system called proto-Sinaitic was found from a period that may well go back for as long as 3,850 years. Their inventors were Semitics, plausibly Canaanite, workers and/or soldiers in the Egyptian army. Gordin explains that this is a likely conclusion because the values of the alphabetic writing are Semitic, not Egyptian". For example, references to deities in proto-Sinaitic are clearly Semitic.

Thus, cuneiform came to the Levant from the north and the proto-alphabet from the south. And the early alphabetic systems from Egypt spread into Israel, where they are known as proto-Canaanite. Sea-traders from Phoenicia introduced the consonantal alphabet throughout the Mediterranean region and northern Asia Minor. Sometime between 3,800 to 3,200 years ago, an alphabetic written form appeared in southern Mesopotamia. To date no one has discovered how to read it or able to tell us what language is served.

Word	Proto-Sinaitic	Phoenician	Latin
'alp ("ox")			A
mem ("water")			M
'en ("eye")			o

Credit: Rozemarijn van L

Meanwhile ...

One obstacle to interpreting cuneiform tablets is that this form of writing served more one language. It became the writing system for cultures all around the Levant and Mediterranean, speaking unrelated languages that were used between 5,000 to 2,000 years ago. However, international trade and the resultant international relations led to nations adopting the same writing system. At the same time, it made Akkadian the lingua franca of the Near East from about 1,800 years B.C.E.

The Canaanites used cuneiform as well as what seems to have been the earliest alphabetic script in the world. In fact, they may have invented alphabetic writing. Traces of early alphabetic signs were found in Wadi el-Khol in Egypt's western desert. And in Sinai, an alphabetic writing system called proto-Sinaitic was found that may go back as long as 3,850 years ago. The inventors were obviously Semites, plausibly Canaanite, workers, soldiers in the Egyptian army, or both. The reason Gordin concludes that the Semites, not the Egyptians, invented the alphabet,

because the values of the alphabetic writing are based on Semitic, not Egyptian, phonetics and names. The names of deities, for example, written in proto-Siniatic, are all Semitic. Thus, cuneiform came to the Levant from the north and the proto-alphabet from the south while early alphabetic systems spread into Israel, where they are known as proto-Canaanite.

In the next stage, Phoenician sea-traders introduced an important novelty: the consonantal alphabet, which spread throughout the Mediterranean region and the north of Asia Minor. Another form of alphabetic writing suddenly appeared 3,800-3,200 years ago in southern Mesopotamia, but we know nothing of this language and its scripts remain sealed to scholars.

Hail to the Great King

In 1789, Napoleon Bonaparte arrived in Egypt. His engineers began documenting ancient Egyptian culture. The Rosetta Stone, a stele engraved with a priestly decree deifying Egypt's King Ptolemy V Epiphanes in 196 B.C.E., in ancient Egyptian hieroglyphic demotic writing (a cursive form of hieroglyphics) and ancient Greek. found in July 1799.

Another important discovery was the gigantic multilingual inscription in Behistun, Iran, 15 meters (49 feet) high by 25 meters wide, and 100 meters up a cliff on the road connecting Babylon and Ecbatana. In this inscription Darius the Great describes his exploits in three different cuneiform scripts: Old Persian, Elamite and Akkadian. Crucially, copies of the text were also found in Aramaic and ancient Greek.

"The texts would all start with Darius the Great King," Gordin explains. Thus, the laborious process of interpretation began with recognizing that a given set of markings spelled out the king's name: it was written in syllables. Syllabic writing has dozens of possible symbols in cuneiform.



Darius I the Great's inscription at Behistun
Credit: Aryobarzan



The highly inaccessible inscription of Darius the Great
Credit: علم جو

Delving into dead languages needs a lot of raw material. Vast amounts of cuneiform tablets have been found. "More than 10 million words are attested on some 600,000 inscribed clay tablets and hundreds of monumental inscriptions". "After discovering the city of Nineveh, knowledge exploded," Gordin says. Since then linguists slowly learned to interpret the languages of Babylon and Assyria. (Some claim that writing

proper was first invented in the Indus Valley. Extensive trade was conducted in the third millennium B.C.E. between ancient Sumer and the Indian subcontinent, where they, too, used tokens, not proto-writing).

Language and the Machine

When humans reconstruct missing text, their interpretation may be subjective. To be human is to err with bias, and quantifying the likely accuracy of the completion is impossible. Interpreting a dead language by way of a machine is a matter of mathematics. Neural networks are a computerized model that understand text by converting each symbol or word into a number. The different elements of this electronic neural network communicate between themselves by way of numbers and create thereby a model of the language.

The team chose to seek proof of concept with Late Babylonian texts from the Achaemenid period because there are so many from that period, and they are very formulaic. The model was “trained” on around 2,000 of these texts, and then asked to complete newly introduced sentences. The machine proved capable of identifying sentence structures to a higher level than expected, making semantic identifications on the basis of context-based statistical inference, Gordin explains.

The system's abilities were further confirmed by designing a completion test, in which the model had to answer a multiple-choice question: which word fits in the blank space of a given sentence. We are now reasonably convinced that we have a reliable tool that will enable us to make sense of texts damaged in the course of time by filling in the missing parts. Presumably, this will enable us to decipher texts and to confirm or correct readings of ancient texts that will shed still further light on the world in which biblical events occurred, leading to a clearer understanding of the biblical text.

Ministry News

Having completed a **Bible Studies series, taught to one of the congregations in Israel** via Zoom I am now teaching the same church a series on **the doctrine of God**, with a small but growing number from other churches joining it. I intend later to convert the series into a book. The Banner of Truth magazine (Scotland) has just published an article I wrote, **Grace is More than a Doctrine**, and Founders Magazine (Cape Coral FL) has published my article on **Humility**. Dr Tom Nettles provided an Editor’s comment on the latter article, which I bring below in part:

We include an article on humility by Baruch Maoz who warns us against any kind of doctrinal hubris arising from our convictions about truth. We affirm that we believe Scripture and accept the confession as an excellent synthesis of some of the important themes of Scripture. But lest we think we have achieved perfect understanding and are beyond further instruction, we should heed the pertinent and experienced admonitions given by Baruch in his reflections on scriptural warnings against foolish confidence ...

[I]t can be a great danger to posture oneself as exhaustively competent and immutably set in doctrinal knowledge. Preachers and theologians who pursue

their callings in the context of public proclamation and assertion of truth by means of spoken and written words must look carefully at the warnings of James 1:19 and 3:1,2.

Though God has revealed himself as the one true God and has given us an inexhaustible admixture of literary styles in which the web of divine power and wisdom is displayed in a tapestry of propositional truth blending the wonder of creation, the certainty and purpose of providence, the mercy and justice of redemption, and the unwavering clarity of divine knowledge manifest in judgment, we must be careful not to go beyond what is revealed. In fact, we must beware of posturing our ministry in a way that seems to say, “No one can instruct me; I have mastered all the mysteries of revealed truth.” It is true that in every sphere of our lives and even in the reality of our personal existence we can ask, “What do we have that we did not receive?” [This] exposition of humility, arising from careful attention to the Bible ... and caring interaction with fellow Christians, should penetrate our daily call to confession of revealed truth.

In our **translation of the New Testament into Hebrew** and, by the time you receive this letter, we will have just about completed the final form of the Gospel of John. My Greek editor and I have completed our work on Acts. The next stage will be working with my Literary editor on the final form of that biblical book, at which I hope we will have arrived by the end of January 2021.

The **Bible notes project** is likewise progressing apace. I’ve completed work on the Zachariah and, by the end of next week expect to have completed work on Malachi. The plan is then to deal with Daniel and the Psalms before turning to the New Testament. Again, I am pleased with progress on this task. Unless asked to undertake more than we have contracted, upon completion of notes on the New Testament, I will have brought an end to my mandated undertaking some 6-12 months ahead of schedule. This may well imply a significant loss of our monthly income but will spare the publisher considerable cost. In an effort to bring the project forward, I have devoted to this work far more hours per week than contracted.



My **commentary** (in Hebrew) on **Galatians** is now available under the title “It Is Finished”. Please pray that this book will be used to promote a clearer understanding of the fullness of the salvation Christ secured for us by grace, made ours through faith alone, leaving no room for human merit while calling for dedicated human effort in the service of God and of one another. Following is the text of advertisement used in an endeavor to promote the book. Founders Press is coming out with the same book in English, under the same title.

What is the place of the Law and of tradition in the Christian life in general and in the life of Jewish believers in particular. What is the role of the Messiah in relation to these two questions? Paul offers his answer in his letter to the Galatians. The Apostle, who loved the Messiah and therefore also loved his church, discusses the issues with characteristic warmth and clarity that meaningfully touch our lives in the here and now.

Work on my book on **hermeneutics** is also progressing' however, at a slower pace than intended. My hopes to complete another chapter or two by the end of December have been dashed by the need to read, re-read and re-think some important issues. As I said in the previous MaozNews, "reading and rethinking, honing and correcting my perceptions so as to articulate them clearly must be a cautious process". Not only so, but, I must "be as true to God's word as the Lord will enable me to be". Some issues have been further clarified, others challenged, and others are under review. Your prayers for his delicate task are certainly welcome.

Family News

Maya is now about to enlist in the Israel Defense Forces, where she has been slated to be an Operations Assistant — a potentially fascinating task with much responsibility. She surprised us all by appearing without prior intimation of her intended two-week visit before being enlisted. **Avital** has decided to take some months off of work to be with family, particularly as **Micah**, Noam's beau, hopes to spend the next few months with Avital and Eran at their home, getting to know the extended family and learning what it might be like, living in the Seattle area. **Noam** is doing extremely well at college and **Nadav** is excelling at school. They are all well.

Shlomit and Keith are busy. Keith continue to struggle with ill health while working 16-18 shifts as a locksmith and seeking more reasonable employment. However, he is grateful to be able to put food on the table.. Shlomit teaches at a Christian school where **All three children** are enrolled and are doing very well but, needless to say, their two parents are exhausted.

Tamar is home-schooling Avishai and Yotam, while overseeing Eliya's schooling via Zoom. That remains quite a task in light of Yotam's special needs and the vast age difference between the children. **Marcus'** employment with Boeing does not seem to be threatened. He continues to work from home but is able to be as productive as ever, if not more so, while studying for his Masters' degree in Engineering.

Bracha and I have moved into our **new home**, to be our earthly permanent home for as far as we can see. We had to do quite a bit of work on the house before moving in: a new kitchen new appliances, replacing the hardwood, the carpets and one of the windows, replacing a rotted deck, paint the house But it is now all done, and, except for curtains, everything is in place.

We have left further work and a bit of replenishing the house to next year so as not to exceed our housing budget more than we already have. Of course, except for the computer, my books, our clothing, our paintings and a dining room set, we brought nothing from Israel, so it has been like newlyweds all over again: pots and pans,

tableware, sheets and towels – I could go on and on. I'm now working on the garden, preparing for spring pruning and planting. While we continue to wait on the authorities regarding Bracha's application for a Green Card. Should any of you have access to someone who could influence the process, please do reach out to us.

Two of the Elders and the wife of one in our church have been **diagnosed with COVID-19**. All three are quite high risk, and we do not know who else might have been infected. We are concerned for these brethren in Christ and will, ourselves, take still further precaution by abstaining from church attendance for the next few weeks, until we know the coast is clear. Of course, we'll follow the service by way of media and remain in close contact with our fellow congregants by the same means.

Katya and Felix are well.

Rose and El'ad in Israel are now embracing their first child, **Omri**. They are as happy as anyone could imagine, but there is some concern for the baby's health, which is presently being investigated. There are some disconcerting issues in his blood count. We prayerfully await diagnosis.



Support for our ministry should no longer be sent to Berean Baptist Church. All support should be sent to **Reformed Baptist Network, 860 Peachcrest Ct. NE, Grand Rapids, MI 49505 USA.** Bank details for direct transfers are **Chase Bank, Plainfield Four Mile 3539 Plainfield Ave. NE Grand Rapids, MI 49525, Account Number: 236738891.** The routing number for domestic wire transfers is **021000021.** The **Swiftcode** for international transfers is **CHASUS33.** Kindly indicate: For Baruch Maoz' ministry

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