

## A look at Theophoric elements in Neo-Assyrian names

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[https://github.com/finlandiana/DHProject\\_PNA\\_Onomastics](https://github.com/finlandiana/DHProject_PNA_Onomastics)

### 1.1 Introduction

The data used in this project was originally collected as part of the Prosopography of Neo-Assyrian (PNA) project which is part of the Neo-Assyrian Text Corpus Project: State Archives of Assyria (SAA). Both SAA and PNA were directed by Simo Parpola at the University of Helsinki. PNA includes names from all the known Neo-Assyrian sources. The texts are from the Neo-Assyrian period, from 883 BC to 602 BC. The name corpus does not only contain names that are in Akkadian, but names in at least ten different languages are in the corpus. The corpus of names was published in three volumes from 1998 to 2011 edited by Karen Radner (volume 1) and Heather D. Baker (volumes 2-3).<sup>1</sup> Some of the data has already been published at the Open Richly Annotated Cuneiform Corpus (ORACC), but most of the corpus is still missing from the online corpus.<sup>2</sup> The

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<sup>1</sup> <http://assyriologia.fi/natcp/pna/> 24.4.2021

<sup>2</sup> <http://build-oracc.museum.upenn.edu/pnao/index.html> 24.4.2021

data has been further processed by Dr Tero Alstola and Dr Heidi Jauhiainen who are part of the Centre of Excellence in Ancient Near Eastern Empires' Team 1<sup>3</sup>.

The dataset is basically a list of each individual who is attested in Neo-Assyrian texts. In addition to the name, it also lists the gender of the name which is usually very easy to determine as names are almost always accompanied with determinatives. Feminine and masculine names have their own distinctive determinatives. The origin of the name is also listed. It is not possible to tell the origin of each name, but in many cases names of different origins can be distinguished, for example by theophoric elements. The time period of the text where the name is attested is also given in the data. The time periods are mostly divided by different rulers. A "profession" is also given for each individual and often it is clarified in the description field. The profession is determined by the context in which that individual appears in the documents. The number of unknown professions is quite large. The location where the document was written is also listed in the dataset.

## 1.2 Background

It is difficult to state the exact year when the Neo-Assyrian Empire came to be, but commonly *Aššūr-dan* II (934-912) is seen as the first ruler of the Empire. During his reign Assyrians started aggressively expanding their territory and these expansions were carried out until the end of the reign of Shalmaneser III (*Salmānu-ašarēd* in Assyrian) (858-824). Tiglath-Pileser III (*Tukulti-apil-Ešarra* in Assyrian, 745-727) expanded the Neo-Assyrian Empire even further with his extensive military campaigns by conquering for example most of the Levant. Later he even conquered the city of Babylon. At its largest the Neo-Assyrian Empire included areas from eastern Anatolia to the Gulf of Persia and from Egypt to the Armenian highlands.<sup>4</sup> The Neo-Assyrian Empire came to its end when Neo-Babylonian and Medians conquered back their territories from Neo-Assyrians. The last king of Neo-Assyrian Empire was *Aššur-uballit* II (612-610). Soon the heartlands of Assyria were seized by Neo-Babylonians and Assyrian cities such as Nineveh and Kalhu were destroyed.<sup>5</sup>

All names, even modern ones, mean something. We just do not really think about it these days, because the origins of our names might be Greek, or Hebrew and the written forms of our names have changed quite a bit from the original form. Ancient Mesopotamian names were most often single words or sentence-like constructions in Akkadian. Names that make up sentences could be something like *Nabû-na'id* 'Nabû is attentive' or *Abu-ul-īde* 'I don't know the/my father'. Sometimes names were constructed with a genitive which resulted in names like *Arad-Bābu* 'Servant of Bābu'. Single word names could have all kinds of meanings from attributes, such as Dullupu 'sleepy', to indicators of the carrier's social status, *Līdānu* 'bastard'. Names of animals were also used often, one example is *Murašû* 'wild cat'. Names are not usually translated in text editions, but they are just written in transliterated Akkadian. This means that quite often the meanings of these names go unnoticed. Names can be acquired from multiple different textual sources, but the most common sources are administrative and legal texts. Names are quite easy to

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<sup>3</sup> <https://www2.helsinki.fi/en/researchgroups/ancient-near-eastern-empires/researchers/team-1-digital-humanities-approaches>

<sup>4</sup> Frahm 2017, 165-179.

<sup>5</sup> Frahm 2017, 191-193.

recognize in texts, because they tend to have determinatives that also indicate whether the carrier of the name was female or male.

### 1.3 Research questions

There are some questions I wanted to answer in this research paper, but they turned out to be a bit too difficult to answer. During the process I had to adjust my question so that it was something I was able to answer with the data, methods, and skills I have. Throughout the process my main interest has been in the theophoric elements of names. This is because they are easy to spot and reveal something about Neo-Assyrian society. Here I will present some of these questions that I wanted to answer but was not able to do so in all cases. Many of the preliminary questions involved the concept of social class and later I will explain why this whole idea of higher and lower social classes proved to be tricky.

Neo-Babylonian society, and especially names, have been studied more extensively than Neo-Assyrian names. For Babylonians Marduk was one of the most important deities. Therefore, it has been argued that the theophoric element *Marduk* was less attested in slave names than in the names of people belonging to higher social classes. Earlier scholars even suggested that Marduk was never used in names of slaves, but this theory has been challenged since. I thought it would be interesting to see if this sort of restriction also applies to Neo-Assyrian names. *Aššūr* was the most important deity in Neo-Assyrian society. So, it would make sense that if any theophoric element had restricted use, it would have been Aššūr. Another question I had relating to the social structure of the Neo-Assyrian society was if the same theophoric elements are common in lower and higher strata of society.

The PNA data also states the location of the document. This means that some aspects related to geographical locations could also be studied. One possible question would be to see if certain theophoric elements are used more in certain areas or cities. In Mesopotamian cultures city patrons or deities were often seen as the most important ones. In Neo-Babylonian names the importance of city patrons is also visible and for example *Marduk* is quite a common element in the names of Babylonians. However, in Neo-Assyrian empire Aššūr was the main deity, and city patrons were not as important in Neo-Assyrian times as they were in Neo-Babylonia. So, it might be that theophoric elements of city patrons were not as common in Neo-Assyrian names as they were in Neo-Babylonian names.<sup>6</sup>

If similar rules in naming practices were effective in both Neo-Assyria and in Neo-Babylonia, it also means that there were possibly some restrictions in using the name of the ruling king. This theory is not fully accepted yet, but in the light of current evidence it seems that it was not very common in Neo-Babylonia to name one's child the same way the king was named. This means that names such as *Aššūr-aḫa-iddina* (Esarhaddon, 'Aššūr has given me a brother'), *Sîn-ahhī-erība* (Sennacherib, 'Sîn has replaced the brothers') or *Aššūr-bāni-apli* (Ashurbanipal, 'Aššūr is the creator of the heir') should not be found from the data during or right after their rule.

Mesopotamian deities were classified as either male or female. The names of deities had determinatives in front of them in the same way as the names of people had. In addition to revealing

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<sup>6</sup> Baker 2002, 2.

the gender of the deity, another determinative was used to show that the name refers to a deity. In Neo-Babylonian society it was not unusual for males to have theophoric elements of feminine deities in their names. However, there are no signs that females could have had masculine theophoric elements in their names. It seems very likely that this kind of pattern would apply to Neo-Assyrian names as well. Another possible thing that could be studied about gender and theophoric elements is if the spouses of central Assyrian deities were used in names of females. For example, *Marduk* and *Nabû* were quite popular elements in masculine names, so it would be interesting to see if the names of their spouses *Zarpānītu* or *Tašmētu* were equally popular in feminine names.

After these questions the study could be expanded to see if these patterns changed at different times. Just by looking at Neo-Assyrian data it might not be possible to see these changes as the time period is not very long. But because Neo-Babylonian names have been studied more and the two empires shared quite a similar culture, the study could be expanded to Neo-Babylonian period as well. Of course, the special characteristics of both empires would have to be taken into consideration, but still some patterns or peculiarities could possibly be seen.

## 2 Previous research

Mesopotamian names and name giving practices have not been extensively studied. Listings of names have been made and some analysis on the networks of these people have been made. But larger studies have not really been made.

C. Thissen wrote his MA thesis ‘Family life of the 1st Millennium Babylonian Private Slave’ at Vrije University in 2011. The study included 450 slaves belonging to 196 different “families”. He studied private slaves and their names from the Neo-Babylonian period. Thiessen compared the names of Neo-Babylonian slave families to Roman slave families, because Roman slave families have been previously studied. The distinction between the names of bought and house-born slaves was important, but this is not often mentioned in Neo-Babylonian texts. The term *mār bīti* ‘son of the house’ does not necessarily always indicate that the slave had been born in that house. Thissen noticed that the names of slaves were different from the names of free men. One difference was that certain deities seemed to be used more often as theophoric elements in the names of slaves, such as *Nanâ* and *Bānītu*. Also, some adverbials were more commonly used in slave names, such as *patānu* ‘to strengthen’. Terms such as *qātē* ‘hands’ and *šēpē* ‘feet’ mostly seemed to be used in slaves’ names. However, most of these features were apparent only in male names, female names were not as exclusive as male names. Thissen also noticed that slaves’ names were as unique as those of free men. Sometimes masters would change the name of a slave after making the purchase.

Nielsen’s study ‘Sons and descendants: a social history of kin groups and family names in the early neo-Babylonian period, 747-626 BC’ from 2011 focused on kin group names in Babylonia. Kin group refers to a group of people that use the same last name. The study included 620 documents, mostly legal and administrative texts. During the studied time period the popularity of family names seemed to grow as larger amounts of family names appeared, especially in legal texts. The form of family names also changed from two-tier genealogies to three-tier genealogies. The names in the studied tablets included mostly names of “urban bourgeoisie”, so these changes might not have been as visible in other social classes.

Baker 2002 studied the throne names of rulers. Throne names were names that kings took when they were enthroned to show their legitimacy for the throne. It was quite common for names to be associated with a specific office, profession, or class. So, when an individual was appointed to a certain status, they got a new name matching the status. Some individuals received these types of names at birth. In addition to their official names, people could also have alternative names. Nicknames are attested in Babylonian texts, but they seem to be missing in Assyrian texts. It is possible that some names, such as royal ones, were restricted for only certain people. One peculiar naming feature in Neo-Babylonia was the order in which boys in the family were named: the first son had the theophoric element *Marduk* in their name, second born *Nabû*, and the third the element *Nergal*. Of course, this was not used in all families, but it was quite a common practice. In texts *Marduk* and *Bēl* could be used interchangeably, but in names they both had their specific uses.

### 3.1 Setting up RStudio

The dataset was given to me as a Gephi file. As I was not interested in looking at networks, but at names, I had to export the data from Gephi. I tried doing it using the export function of Gephi, but this created problems with special characters as they did not look as they should have. So, I figured the easiest way was just to manually copy the data from Gephi's data lab (the one with the data in tabular form) and paste it into Excel. After successfully doing that, I transformed the data to csv format. I installed RStudio and imported the data there. But again, I was having issues with special characters. After consulting an expert on this matter, it was clear that the easiest way to solve this problem was to do this project on Linux. I decided to try it and switched to Ubuntu. Downloading RStudio to Ubuntu was a bit of a challenge at first, because the instructions were not that clear. Luckily, I found better instructions<sup>7</sup>, and installing it was quite quick and easy. I opened my data in RStudio in Linux and all the special characters were displayed correctly. So, this was an easy fix for a big problem.

### 3.2 Origins of names

The data set lists all the names that are attested in the Neo-Assyrian texts. This means that not all names in the list are in Akkadian. The data includes for example Aramean and Egyptian names as well. As my research question focuses on theophoric elements of Mesopotamian deities, the non-Akkadian names were not relevant for me. My next step in processing the data was to remove all the names that were not in Akkadian. This was easy to do, as the data lists the supposed origin of each name. I trust that the people who have gathered and processed the PNA data have expertise in the matter, so I had no reason to doubt the classifications of the origins of the names. Also, as I am looking at all the relevant names as samples, one or two names with false origin do not affect the results. The number of names with unknown origin was relatively small as there were only about 1290 of those.

Filtering out the non-Akkadian names was very easy to do with R, especially since my data was in clean tabular form. The code I used for this was very basic. After this step I was left with 11923

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<sup>7</sup> <https://blog.zenggyu.com/en/post/2018-01-29/installing-r-r-packages-e-g-tidyverse-and-rstudio-on-ubuntu-linux/>

names. As I said earlier, theophoric elements were used differently in feminine and masculine names. Thus, I also decided to filter my dataset so that only the names classified as masculine remained. Of the 11923 names only under 40 did not have this classification at all, and approximately 320 names could be either one. I am not sure why some of the names do not have clear gender classification, it could be due to breakage in the original clay tablet.

### 3.3 “Professions” / Social classes

My original idea was to divide the data by the attested professions into two social classes. This would have allowed me to see if certain theophoric elements were used more in certain classes. I had planned to divide the data by classifying certain professions to higher social class and others to lower social class. This sounds very simple, but it proved to be nearly an impossible task. The list of different professions listed in the PNA dataset is presented at the end of this paper, in brackets is also included how many individuals are classified to each category.

First problem with this division is that there are quite a few professions listed in the data that cannot be classified as belonging to either class. Professions like this are such as ‘deportees’, ‘family relationships’, and ‘unknown’. There is no way of knowing if these people were part of the higher or lower social class. Also, the social class attested in the text might not be the same as the social class to which they were born to. This means that the way an individual was named would reflect the naming patterns common for the social class of his/her parents. Another issue was that I was told that the professions listed in PNA are not “uniform” (not quite sure yet how and why). It is also difficult to know how these professions were perceived in the Neo-Assyrian society, because this topic has not been studied very much. For example, ‘deportee’ could be a slave or someone from a higher social class. Also, categories such as ‘family relationship’ and ‘unknown’ cannot be classified to either higher or lower social class for obvious reasons. Also, this is a bit problematic because the person bearing the name could have been born (= named) in a different class than what their profession indicates. Even if these issues could have been tackled, the biggest issue was that there just is not simply enough studies on Neo-Assyrian society and classes. Making assumptions on how lower and higher social classes were classified in the Neo-Assyrian society requires a lot of study and source materials. I did not want to base my classifications on guessing, so I decided it was best to abandon this aspect and focus on something else.

### 3.4 Time periods

The time periods were quite messy in the data as they were divided by the rulers. Which in a way is quite an informative way to do it, but it was not very clear in this study. Partly because there were so many different possibilities that the tables looked a bit messy and some of the periods in the data were overlapping. The names of the rulers also make the table slightly hard to read, which can be seen from Fig 1. Dividing the data into nice clean categories based on the time period was quite difficult, because as said some of the original categories were overlapping. Luckily, some of the problematic time categories included very few names, so it is likely that they do not affect the results dramatically. The largest attestation of names falls to the period of 668-631. 2754 names were classified into that period, of which half should be classified to 699-650 and the other half to 649-600. A problematic example is the original category of 782-727 of which half belongs to 810-755 and the other half to 754-700, but as it only contained one name, it was not very critical to



which category it was put into. So, I just decided to include it into the earlier period. There were some other problematic categories, such as 799-700 which had 291 names. Or 668-600 which included 929 names. From the table displaying the distribution of all Akkadian male names by their time of attestation, it becomes quite clear that the overall distribution of names is very uneven between different periods.

The new division of time periods is not perfect, but it does clear up things quite a bit. Most of the new periods are approximately 50 years, so they are more comparable. But of course, the numbers represent just the names that are from documents that have been studied, translated and added to the database. So, it is not fully representative, but rather a sample of the data is available at the moment. The data is biased because there might be a lot of data that we still do not know of, that could change the results drastically. However, after assigning the new time periods it became clear that most of the names in the data, 50%, are from the time 649-600 BC which is the most recent period of all the possible periods. So, most names are from at the end of the Neo-Assyrian period.

### 3.5 Theophoric elements

Many deities that were worshiped in Neo-Assyria were similar to deities that were worshiped in Babylonia. Neo-Assyrian kings often felt it was important to emphasize the connection between Assyrian and Babylonian cultures. This means that it is quite difficult to differentiate between Assyrian and Babylonian elements.<sup>8</sup> It cannot be taken for certain that all the naming practices and traditions were the same in Assyria and Babylonia. However, some similarities can be assumed. For example, there is a claim that the deity *Marduk* is not attested in Neo-Babylonian slave names, but it does not necessarily mean it would also apply to Neo-Assyrian names. But it raises the question of whether something similar was common in Neo-Assyria as well.

This study is by no means comprehensive as it does not include all the possible theophoric elements. This is more of a test to see if looking at them with this method might provide some promising results. I wanted to keep the number of studied elements quite small, so I just chose some possibilities quite randomly. The most obvious theophoric elements to look at were of course Assyria's main deity *Aššur* and Babylonian main deity *Marduk*. I also decided to look at how popular deities such as *Nergal*, *Adad*, *Nabû*, *Bēl* and *Sîn* were as theophoric elements in the data set.

Again, I used very basic and simple code in searching for all the names with a certain theophoric element. It was very easy to do with this data set, because the data had already been cleaned and harmonized which meant that I did not have to bother with spelling variants. It was even easier because all the theophoric elements were capitalized, so they were super easy to find. The total number of names with the chosen theophoric elements was 4991, so more than half of masculine names of Akkadian origin did not include any of these theophoric elements.

Not very surprisingly, *Aššur* was used quite often as a theophoric element, 1261 times to be exact. The popularity of *Nabû* (1768 attestations) was quite surprising, because I had expected *Aššur* to be the most frequent element in the studied period. What is notable is that during the Neo-Assyrian period the theophoric element *Sîn* was very popular in royal names. During previous periods only very, few kings had used this element in their names. First Neo-Assyrian king with *Sîn* in their

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<sup>8</sup> Maul 2017, 336.

name was Sennacherib (*Šîn-ahhē-erība* in Akkadian) ‘Šîn has replaced the brothers’. The popularity of *Šîn* in personal names during the Neo-Assyrian period might be because of the royal names using it, or it might be just because more material has been saved from this period than from other periods.<sup>9</sup> The total numbers of each theophoric element and their chronological distribution can be seen from figures at the end of this paper.

Then with another very simple code I made some visualizations of the findings.<sup>10</sup> I tried a few different styles of visualizations but decided that a horizontal bar chart might be the best form for this type of data. First, I made tables with the quantity of each theophoric element. I noticed that the frequencies vary quite a lot from name to name and some names have only a few dozen attestations whereas certain names might appear hundreds of times. The frequency of the name obviously tells a lot about its popularity. I made another set of horizontal bar charts showing the temporal and percentual distribution of each studied theophoric element.

I don’t think either the tables with quantity or the tables with percentage are better than other, because they highlight different aspects of the distribution of the names. For clarity I added only the tables with the percentual distributions at the end of this paper. The tables with quantities talk more about the possible popularity of each theophoric element. For example, it can be seen that *Šamaš* is not attested nearly as often as *Nergal*. Or that *Nabû* and *Aššur* had the highest frequencies in all the studied time periods. Whereas the tables with percentages make the different elements more comparable to each other. They also show that the percentage of each element in each period quite nicely follows the total amount of names, so that throughout the whole period the popularity of each element remained quite similar. The period 649-600 BC holds the highest percentage of names, and all the theophoric elements appear most in that same period. So, it does not seem that any element drastically lost or gained popularity during these times. One exception is the element *Aššur*. Its popularity grew relatively more in the period of 649-600 than the popularity of any other element.

Just because one theophoric element is more attested in a certain period does not necessarily mean anything, but it might reveal some changes that happened in the society. Most of the names are from administrative and legal documents, so it is likely that most names attested are those of adults. This means that if there are some patterns visible, the changes in the society might have happened some decades earlier than what the attestation of the name indicates.

## 4.1 Conclusions

There are many possible ways in which this study could be expanded. As the names are mostly constructed in a uniform way, it would be possible to examine other elements in them. For example, the term “*arad*” meaning servant is quite a common element. So, it could be studied with which theophoric elements it is most often attested with. Names such as *Arad-Marduk* (servant of *Marduk*) and *Arad-Šîn* (servant of *Šîn*) can be found from the source materials. Other elements than *Arad* could also obviously be studied, for example the terms feet and hand, which were popular in Neo-Babylonian slave names. The aspect of social class still interests me very much and especially if social class had any influence on naming practices. But as discussed earlier, this approach has many issues that I do not have the expertise to solve.

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<sup>9</sup> Härtinen 2022, 226-228.

<sup>10</sup> I found very good instructions from here: <https://rkabacoff.github.io/datavis/index.html>



It would also be possible to expand this to the Neo-Babylonian period. As I said earlier, the Neo-Babylonian period and its names have been studied more than the Neo-Assyrian period. This would obviously help in finding suitable background information. It could also offer an interesting comparison to Neo-Assyrian names. These two periods could be studied comparatively to see if similar trends of using theophoric elements can be seen.

## 5.1 Resources

R Programming for Beginners: <https://www.youtube.com/watch?v=BvKETZ6kr9Q>

R for Data Science: <https://r4ds.had.co.nz/strings.html>

Visualizing data with R: <https://rkabacoff.github.io/datavis/index.html>

Computational Historical Thinking: <https://dh-r.lincolnmullen.com/>

Basic Textual Processing with R: <https://programminghistorian.org/en/lessons/basic-text-processing-in-r>

Data wrangling & management in R:  
[https://programminghistorian.org/en/lessons/data\\_wrangling\\_and\\_management\\_in\\_R](https://programminghistorian.org/en/lessons/data_wrangling_and_management_in_R)

Oracc: <http://oracc.museum.upenn.edu/pnao/index.html>

Prosobab: <https://prosobab.leidenuniv.nl/>

Persia & Babylonia: <http://persiababylonia.org/>

Neo-Assyrian bibliography: [https://www.zotero.org/groups/277030/neo-assyrian\\_bibliography/items/ZVXRT22U/library](https://www.zotero.org/groups/277030/neo-assyrian_bibliography/items/ZVXRT22U/library)

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